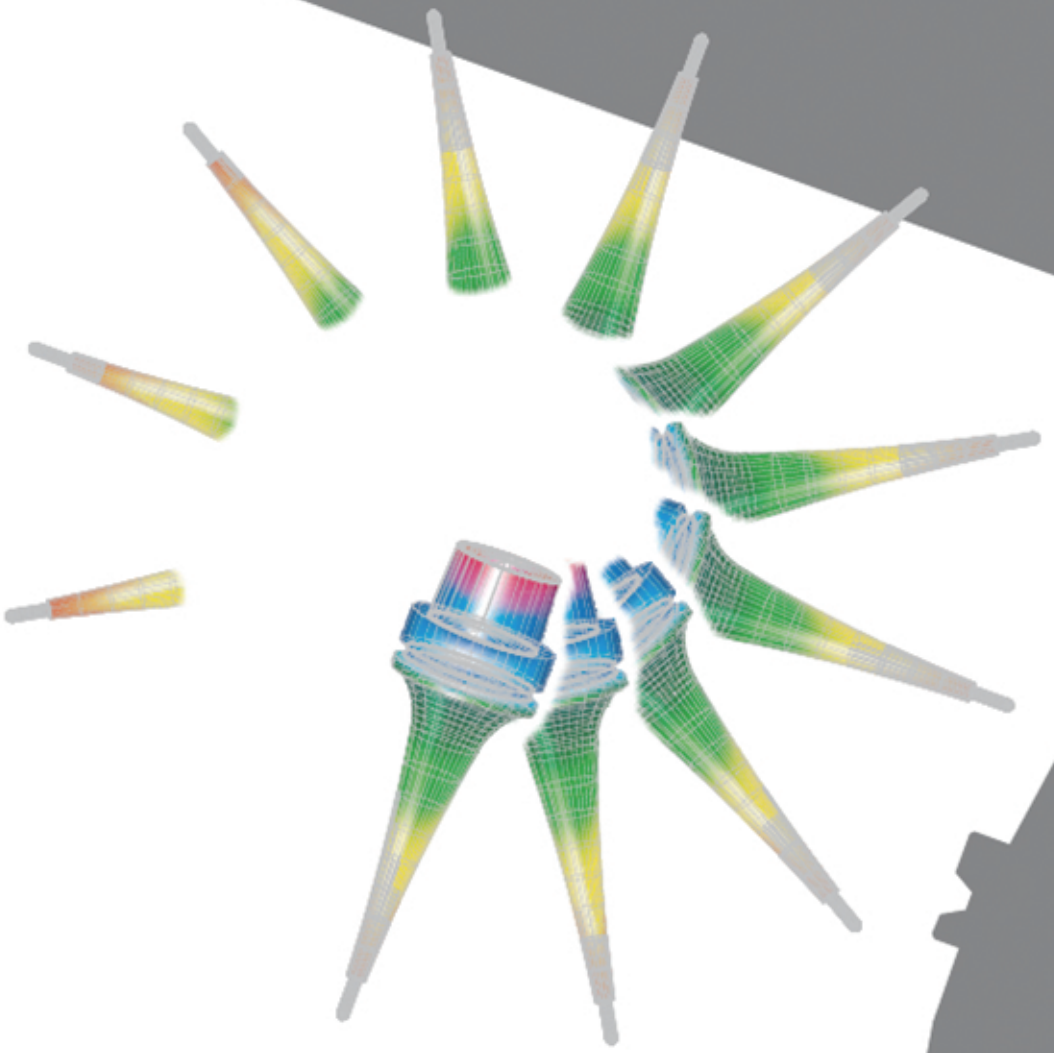
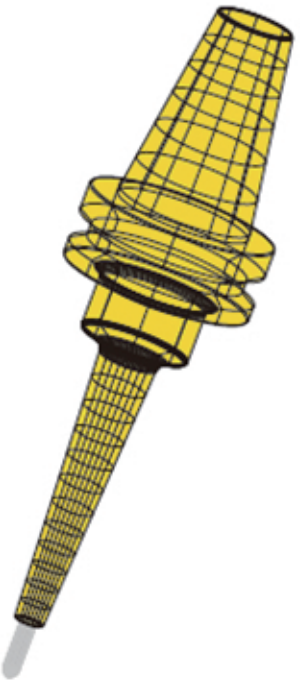
MST



热装式刀柄 SLIMLINE



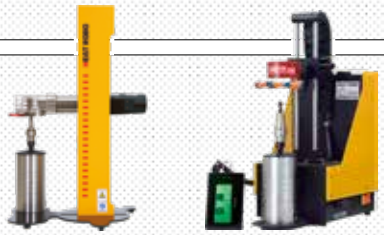
日本恩司迪公司

MST corporation

Vol. 5
2012

篇　目

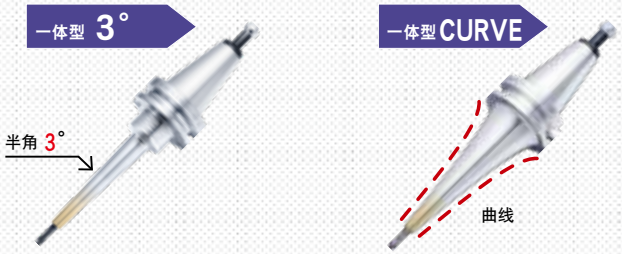
热装刀柄特点说明 4



加热装置
●电磁感应式 温风式

规格・尺寸 10

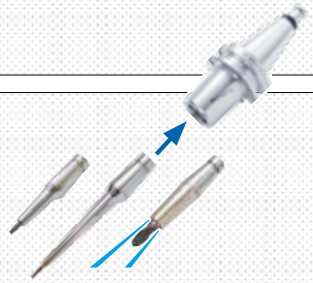
一体型系列
●高精度 高刚性 细长 一体型



特点说明・型号体系 16

尺寸表
- BT30 18
- BT40 21
- BT50 45
- A40 69
- A50 74
- A63 78
- A100 104
- E25 128
- E32 130
- E40 133
- E50 138
- F63 146
- 15T 156
- S20T 157
- RS20 158

2体型系列
●本体·筒夹 交换 组合式



特点说明・型号体系 159

尺寸表
- 6型 160
- 8型 161
- 12型 162

BLACKUNO
●超精密



UNO



特点说明・型号体系 165

尺寸表 166

特点说明・型号体系 167

尺寸表
- 超短型 168
- 重切削型 169

强力型热装刀柄
●夹持力 刚性 强化型



特点说明・型号体系 171

尺寸表 172

特点说明・型号体系 177

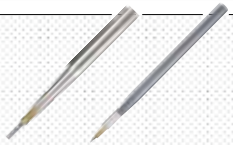
尺寸表 178

Z
●防滑刀 防掉刀构造



DETa-1 超弹性筒夹刀柄 182
弹簧筒夹刀柄 183
面铣刀柄 183
拉钉 184
冷却液导管 186

直柄延长杆
●直柄型



刀具安装工作站 6S工作台 188
刀柄·刀具清洗机 高压清洗机 189
刀具保护套　TCC型 190
铣刀小管家 191
刀柄收纳箱 192
刀具紧固台 193
主轴锥孔用 清洁工具 STAR DUST 194
测试棒 CHECKMATE 195
Goo checker Z轴测量仪 196

相关商品
●弹簧筒夹刀柄
拉钉



周边机器
●清洗机 刀具装载台
测量仪 刀具防护罩



售后服务体制 198
使用时的注意事项 199
SLIMLINE 的刚性 202
高转速的对应 205
SLIMLINE使用案例 206
技术资料 209
海外销售网 212

参考资料

提供值得信赖的刀柄

MST 刀柄在「锥面接触率」「真圆度」「表面粗糙度」「热处理」4个项目
设定了比「JIS规格」和「MAS规格」更严密的MST4精度规格。
通过彻底的品质管理，不断努力提供值得信赖的产品。



● MST「4精度规格」

1 锥面接触率		%	90以上
2 真圆度		μm	0.8
3 表面粗糙度（Rz）		μm	0.6
4 热处理	材　　质		SCM415
	渗碳深度	mm	0.8～1.0
	淬火硬度	HRC	55±2






索引

	型号	商品名	页数
A	ADH-HSK25	适配器	13
	AP40-T30V	刀座用适配器	193
	AP50-T30H	刀架用适配器	193
	AQC-AH-01	水冷组套	15
B	BAA-01	底座	13
	BAS-01	适配器	13
	BLB3	刀柄清洁保护栓	166
C	CBX-01	CLEAN BOX　高压清洗箱	189
	CD40-01	冷却液导管	186
	CF8-3-45	SLIMLINE 筒夹 > 油孔型	159
	CLT-GTA3-5	清洁用具 > 橡胶磨石型	15
	CLT-NT30-G2	主轴锥孔用 清洁工具 STAR DUST	194
	HSK40-CMA20-103	测试棒 CHECKMATE	195
	CN-103	贮存箱	15,188
	CR6-3-30	SLIMLINE 筒夹 > 壁厚型	159
	CS6-3-15	SLIMLINE 筒夹 > 壁薄型	159
	CWBA01	热装操作高效 冷却台套件	15
E	EMO-SET-01	铣刀小管家	191
H	HAJ-3	刀具长度调整器	14
	HBX-A40	刀柄收纳箱	192
	HF-BT30	刀具紧固台 > HF系列	193
	HPY-01	刀具钳子	14
	HRB-01	HEATROBO Baby	12
	HRD-01S	HEATROBO 电磁	11
	HSA-EF	刀具防脱套 > 弹簧圈型	14

	型号	商品名	页数
H	HSB-6	刀具防脱套 > 弹簧片型	14
	HSC-3	刀具防脱套 > 槽孔筒夹型	14
	HTB-01	耐热手套	14
M	MY CUBE	MYCUBE刀具紧固台	193
N	NOZ-M4	2体型 > 中心通冷用喷嘴	162
P	P30T-1	拉钉	184
	PETIT BALL	PETIT BALL刀具紧固台	193
S	SDH-01	刀具冷却台	14
	SDKT-RE	刀柄台	14
	BT30-SLK6-35	2体型 >　本体	159
	E25 -SLRA4-35 U/BU	BLACK UNO / UNO	165
	BT40-SLRA6-120 cv	一体型系列 > 一体型CURVE	17
	BT40-SLRB20S-70-M42	强力型热装刀柄 > 超短型	167
	BT40-SLRB20H-110-M42	强力型热装刀柄 > 重切削型	167
	BT50-SLRA4-90-M22	一体型系列 > 一体型 3°	16
	BT50-SLRA12Z-105	SLIMLINE Z	171
	SPY-01	防脱套夹钳	14
	ST10－SLSA3-80-M35	直柄延长杆	177
T	TW-4	六角扳手	160
	TCC0607-100	刀具保护套　TCC型	190
W	W-135DR	六角扳手	182
Z	BT30-ZPM -165	Goo checker Z轴测量仪	196
0	6SD -01	6S工作台	188

热装式刀柄
SLIMLINE

无论超高速加工中心、高精度五轴加工中心，SLIMLINE热装式刀柄都最适合。

SLIMLINE用于各种各样的加工

微细精密　高速高进给
高速重切削　5轴联动加工
高品质加工　线性电动机驱动

HISION
VMC / MOUS / DFS / H
JINGDIAO
JDGR / JDHGT / JDMR / JDCT / JDVT
中国大陆

AWEA　WELE
FEELER　GENTIGER
Quaser
MV154P / MV series / H-56　KEN
Quick Jet
AV series / GTV series / H-56　APEC
TAKUMI
U25 / H series　CHAMPMILL
YCM
NDV series　HARTFORD
LITZ
LU series
台湾

NICOLAS CORREA
Pantera, Rapid Aero
西班牙

MIKRON
HSM series / MILL S series / XSM series
WILLEMIN-MACODEL
401S2, 401PA / 308S/B, 408S2 / PA/B/MT/MTT, 508S/MT
瑞士

FIDIA
D Range / G996 / HS664 / BSE
意大利
PARPAS
THST series

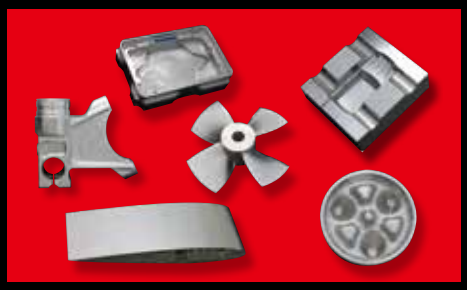
医疗机械　光通信
航空宇宙　汽车·手机
燃料电池　半导体设备

BROTHER
SPEEDIO
DMG MORI
HSC20 / 30 / 70 linear, NVD4000 / NV4000 DCG
HORKOS
NJ35-5AX / NJ50
MAKINO
MAG, MCD V22 / V33*i* / V56*i*, iQ300 / 500, N2-5XA, D200Z
MAKINO J
J3 / L2
MATSUURA
LS-160 / LX-160 / LF-160 / LV-500
MAZAK
UD-400 5X
MITSUBISHI
μV1 / μV5
MITSUI SEIKI
VL30 / VL50
ROKU-ROKU
P12-C genesis, Android II, CEGA/MEGA/HC/Vision Series ZEUS-86
SODICK
UH430L / UH650L, TT1-400A, OPM Series
SUGINO
V9 / NSV9 / H5 / H7 / H9 / SC Dual / Xion α-5AX
YASDA
YMC Series
日本



德国
KERN
Micro, Evo, Pyramid Nano
OPS-INGERSOLL
V5/9, 550/650
ROEDERS
RXP, RXS, RHP, RXD
HERMLE
C series
CHIRON
Series08/12
DIGMA
HSC-Line, HSC-MP-Line
DMG MORI
HSC series, ULTRASONIC20/30 linear

NAK80
因科镍合金　氧化锆
62HRC　Ti-6Al-4V
SKD61　石英玻璃
STAVAX



CINCINNATI MACHINES
SMART-t, MAXOR
HAAS AUTOMATION
VF, UMC
美国

英国　BRIDGEPORT
5AX-400, 500, 630

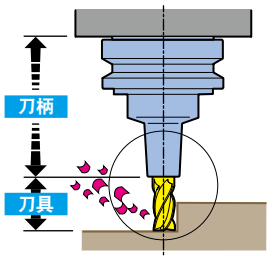
法国　**FOREST-LINE**
Aerostar, Aeromill, Minumac, Vstar, etc.

韩国
Doosan Infracore
NX Series, DVM Series
HWACHEON
SIRIUS Series, M2-5AX
HYUNDAI WIA
Hi-MOLD Series



高精度 高效率 加工 6 大特点

1 最 短
刀柄、刀具长度最大限度放短



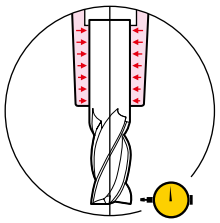
长度 2倍 → 弯曲量 8倍

弯曲量与突出长度3次方成正比

外形细长的

热装式刀柄!

2 选 择
选择高精度且强夹持力刀柄



与筒夹刀柄相比

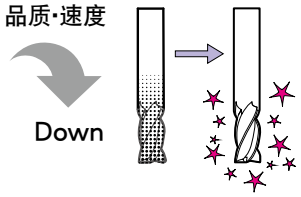
夹持力 3倍

偏摆精度 3μm 以下

高夹持力·高精度的

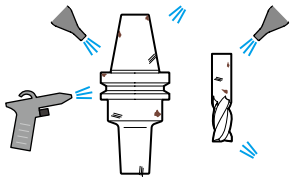
热装式刀柄!

3 新 品
不使用有磨损刀具



更换!

4 清 洁
刀柄、刀具都需清洁保养



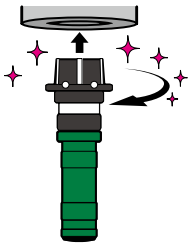
铁屑·油污是 **大敌**

刀柄专用清洗机

使用高压刀柄清洗箱!

P.189

5 清 扫
彻底清除机床主轴油污

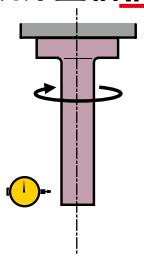


主轴锥孔用 清洁工具

主轴清洁棒型号!

P.194

6 精 度
机床主轴偏摆10μm以下



检测 主轴

机床主轴维护专用检测棒

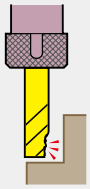
使用CHECKMATE 主轴测试棒!

P.195

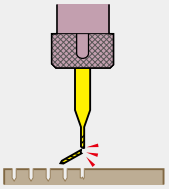
热装式刀柄 SLIMLINE 全部解决!

没有这样的 问题吗

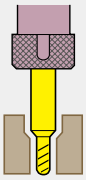
✖ 刀具磨损快



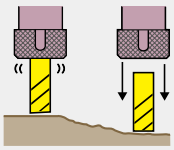
✖ 细小刀具容易断刀



✖ 非标刀具 成本高 货期长

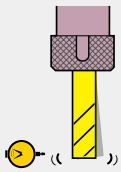


✖ 滑刀,掉刀



工件 报废…

✖ 精度调整困难



✖ 冷却液泄漏…



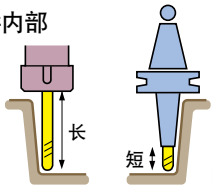
完全没有零部件的简单构造

稳定的夹持力是
筒夹刀柄的3倍
无间隙
无零部件
产生振动刀具也不会脱落。



超纤细形状

刀柄能直接深入工件内部
可以使用标准刀具



高精度

刀具寿命2倍
可放心使用小径刀具
任何人反复操作都可
得到稳定的高精度



MST的热装刀柄 SLIMLINE

是通过对刀柄(钢材)进行加热·冷却,实现高强力且高精度夹持刀具(硬质合金)。与以往紧固刀柄的构造方式完全不同,是利用金属材料热膨胀和收缩特性的跨时代刀柄。

SLIMLINE刀柄材料采用了MST独自开发的**热装专用特殊不锈钢**,**热膨胀系数是普通钢材的1.6倍**,且耐热温度为720度,是最适合热装刀柄的材料。实现**平均300℃的低温热装**,可简单进行装刀和拆刀操作。

另外,热装刀柄SLIMLINE无需螺帽、筒夹等零部件。构造非常简单,前端细长,最薄的单边壁厚为1.5mm,**实现了所有刀柄中最细长的形状**。减少刀柄与工件的干涉,可将刀具突出长度设定为最短,弯曲量小,加工稳定。

它的另外一个独特之处是汇聚有**4000种**不同形状种类,可根据不同工件的加工形状选择最适合的刀柄。

不仅模具加工,零部件加工也可广泛对应。在5轴加工、微细精密加工、重切削加工等多种加工场景下都可发挥其优异性,在提高加工精度、延长刀具寿命、降低成本方面也能做出重大贡献。

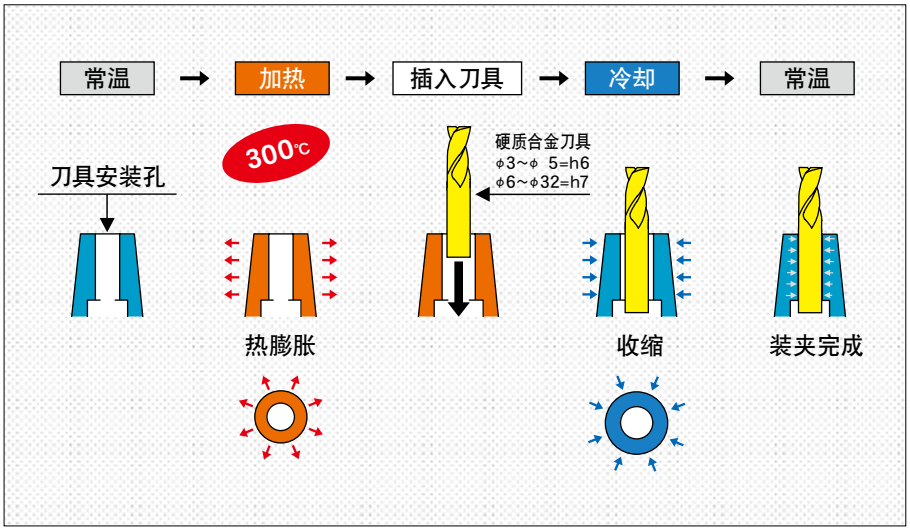


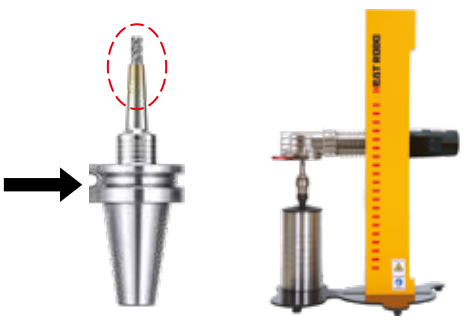
PAT.



热装式刀柄的原理

● 热装式刀柄是利用刀柄的材料(钢材)和刀具(硬质合金)的热膨胀系数之差对刀具进行装卸的夹持系统。





采用热装专用特殊钢材　热膨胀系数是其他品牌的1.6倍

● 热装刀柄「SLIMLINE」采用的是热装专用特殊钢材。该材料的热膨胀系数非常大，可实现比其他品牌更低的温度进行热装。而且，耐热温度极高，刀柄加热后不会产生材料劣化。

热装温度与耐热温度

MST SLIMLINE

耐热温度

● 加热到720℃完全没有问题。

热装温度

● 430℃以下即可实现热装操作，对刀柄寿命不会产生影响。

热膨胀率

1.6倍（与其他公司相比）

● 刀柄（专用特殊钢材）和刀具（硬质合金）之差 … 10.5×10^{-6}mm/℃

其他品牌刀柄

耐熱温度

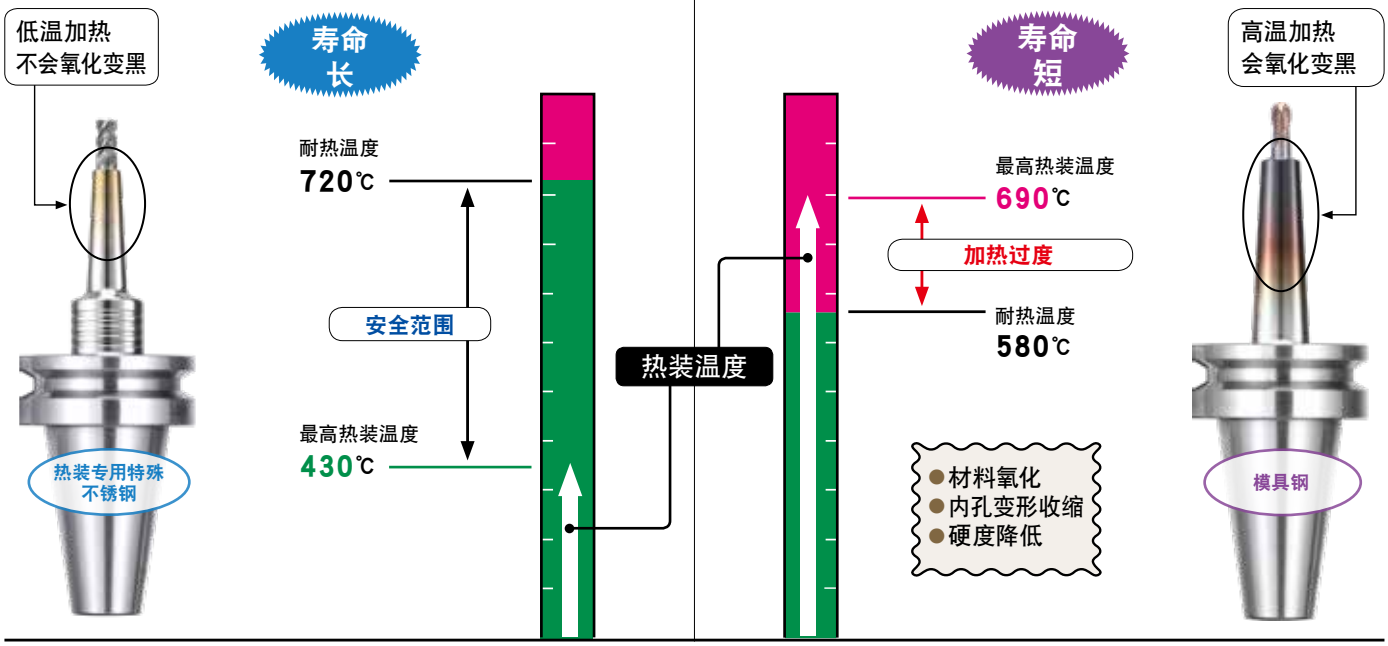
● 580℃，与MST热装专用特殊钢材相比，有20%的差距。

热装温度

● 690℃，产生过度加热现象。由于反复加热、冷却，刀柄安装孔会发生形变（变小），即使加热也无法插入刀具。

熱膨張率

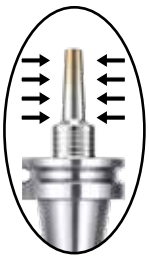
● 刀柄（模具钢）和刀具（硬质合金）之差… 6.5×10^{-6}mm/℃



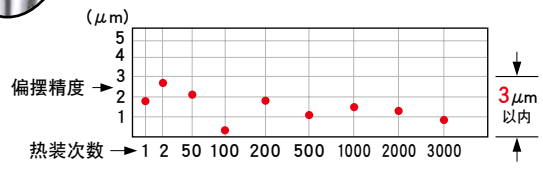
MST与其他品牌刀柄的热装温度和耐热温度的不同（刀具直径φ3mm）

热装式刀柄的寿命

MST SLIMLINE

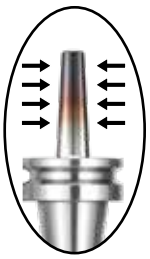


SLIMLINE的热装温度为最大430℃，不会超过材料720°的耐热温度。
反复多次进行热装操作也不会对刀柄产生影响，刀柄精度不会下降。

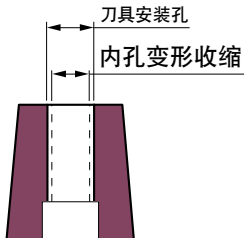


热装卸重复试验

其他品牌刀柄



700℃进行多次加热后



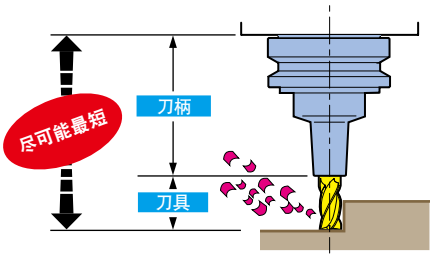
刀具难以插入。
刀柄精度下降。

反复进行热装操作，材质发生变化，刀柄性能降低

高刚性　刀具突出长度设定为最短

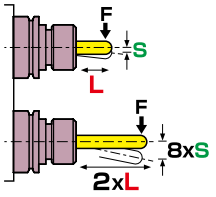
● 刀柄前端壁厚仅为1.5mm，细长的本体形状有效避免了刀柄与工件、夹治具之间干涉。
可将刀具突出长度放至最短，降低了加工时的让刀、振刀、延长了刀具寿命。大幅提高精加工面的光洁度。





弯曲量与突出长度的 3次方成正比

突出长度 2倍 → 弯曲量 8倍



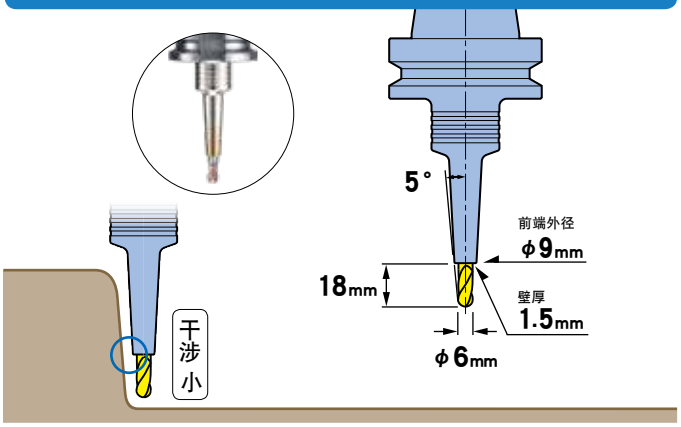
$$S=\frac{6.8\times F\times L^3}{E\times D^4}$$

S：弯曲量　D：轴直径
L：刀具突出长度　F：负荷
E：杨式模量

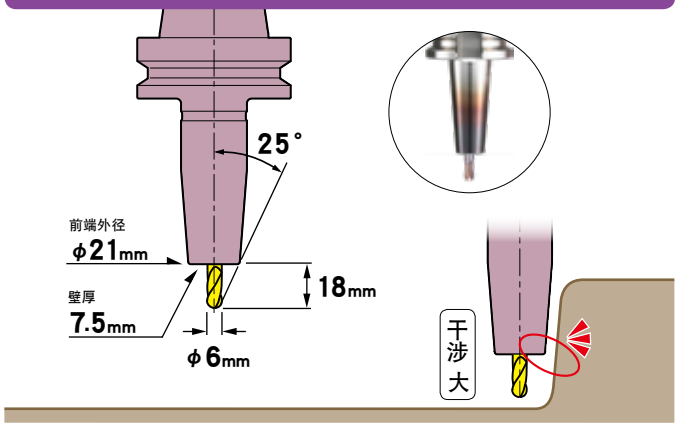
在深腔加工中发挥最大威力

● 利用超细长形状，最大程度减少与工件、夹治具之间的干涉。

MST SLIMLINE



其他品牌刀柄

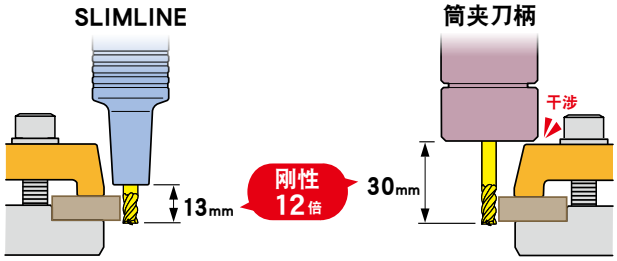


表面粗糙度 Rz=2μm



表面粗糙度 Rz=7.2μm

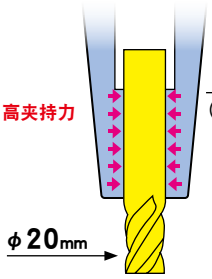




高夹持力　放心使用于重切削加工

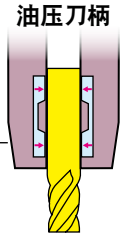




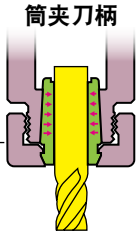


夹持力 3倍

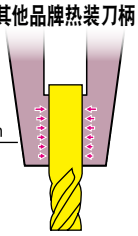
110 kgf·m (1100N·m)
32 kgf·m (320N·m)



35 kgf·m (350N·m)

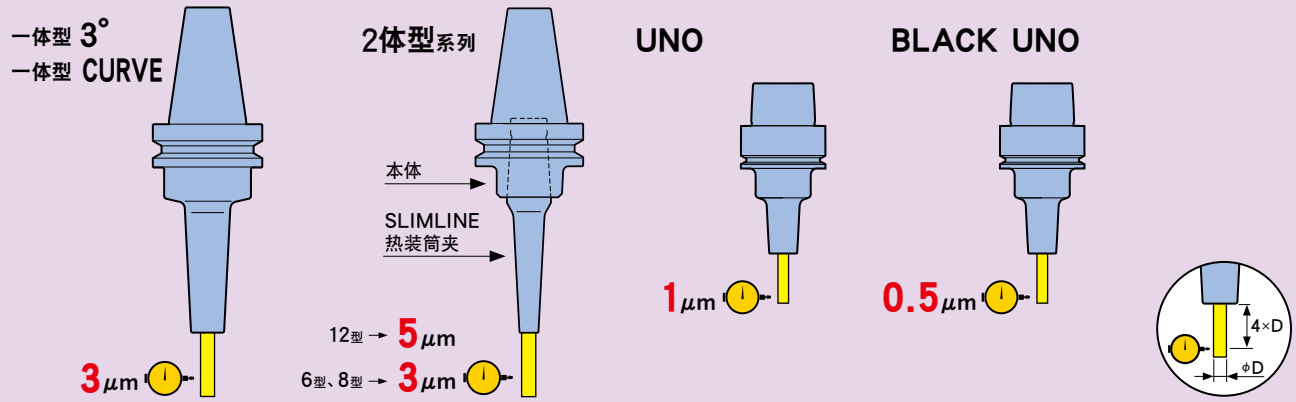


33 kgf·m (330N·m)

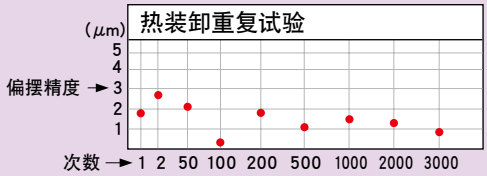


高精度　任何人反复操作都可得到稳定的高精度

● 无螺帽、筒夹等紧固刀具用的零部件。简单构造可持续维持高精度。



反复操作3000次精度也不会下降



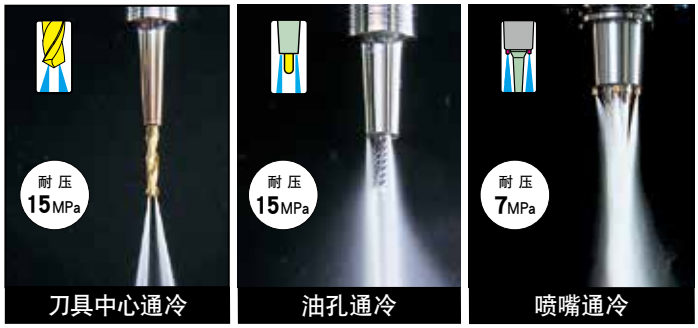
操作简单



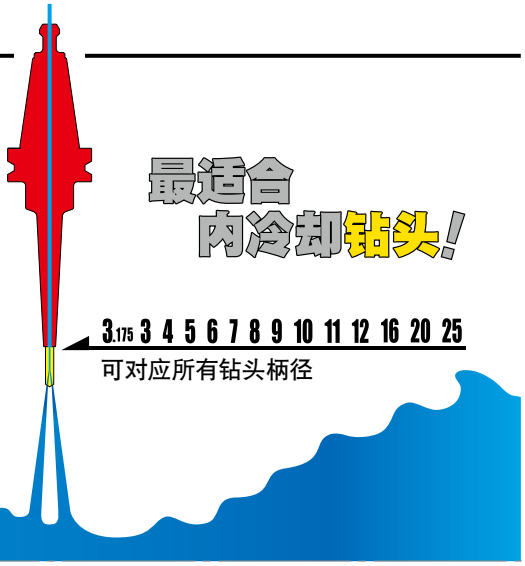
只需插入刀具　无需调整锁紧力

对应中心通冷　耐压15MPa　7MPa（本体喷嘴式）

● 热装刀柄没有筒夹和螺帽，构造简单。
可对应中心通冷功能。



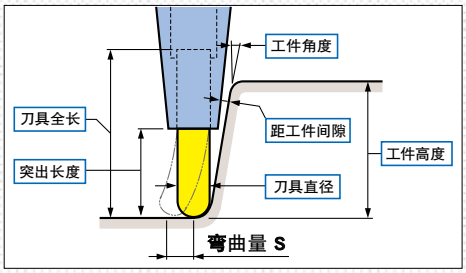
刀尖喷水　刀柄前端喷水　本体喷嘴向刀尖喷水



SLIMLINE 刚性值计算软件　自动选择刀柄

● 输入刀具与工件的数值信息后，
软件会自动按照弯曲量S最小值进行排列，
并选择出最适合的刀柄。

P.204



输入刀具与工件的数值情报

顺序	刀柄名称	弯曲量S
1	BT40-SLSA6-150cv	3.2
2	BT40-SLSA6-120cv	4.8
3	BT40-SLSA6-180cv	5.2
4	BT40-SLSA6-125-M42	5.6
⋮	按照刚性值高低顺序排列出刀柄明细。	⋮

转换为DXF形式数据

自制加工　修改外径形状

● 在标准尺寸刀柄产生干涉的情况下，
客户可自行对刀柄外形进行追加工（自制加工）。

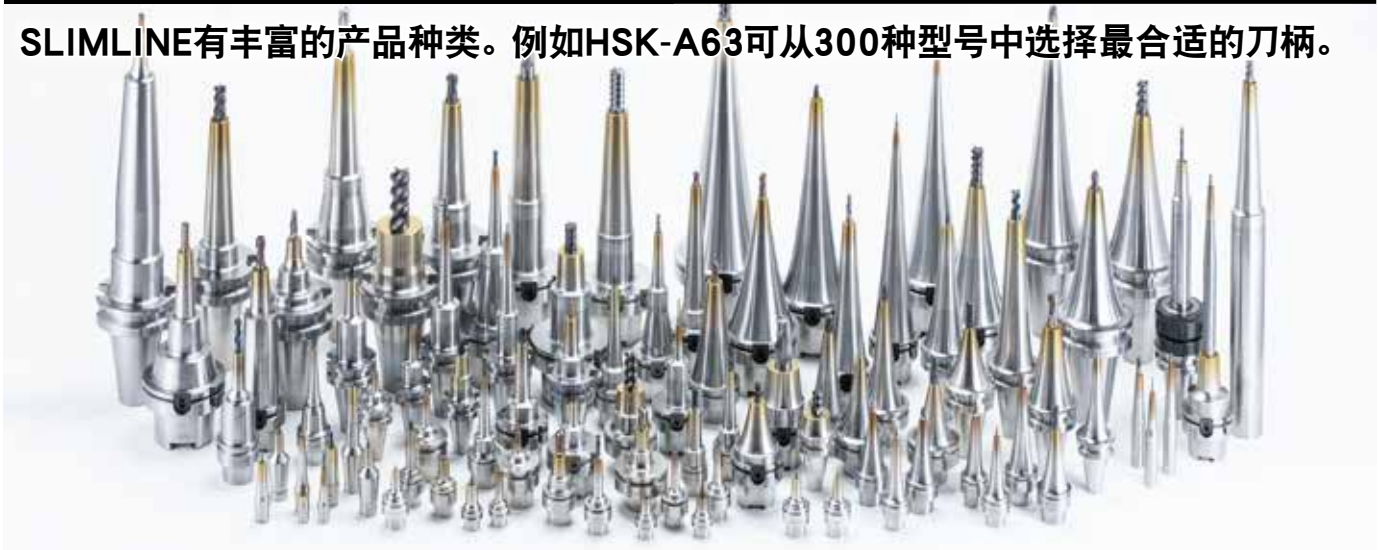


● 敲可可根据客户需要，进行追加工。
● 刀柄形状可更改的尺寸有限制。

P.201

丰富的产品种类 4000种

SLIMLINE有丰富的产品种类。例如HSK-A63可从300种型号中选择最合适的刀柄。

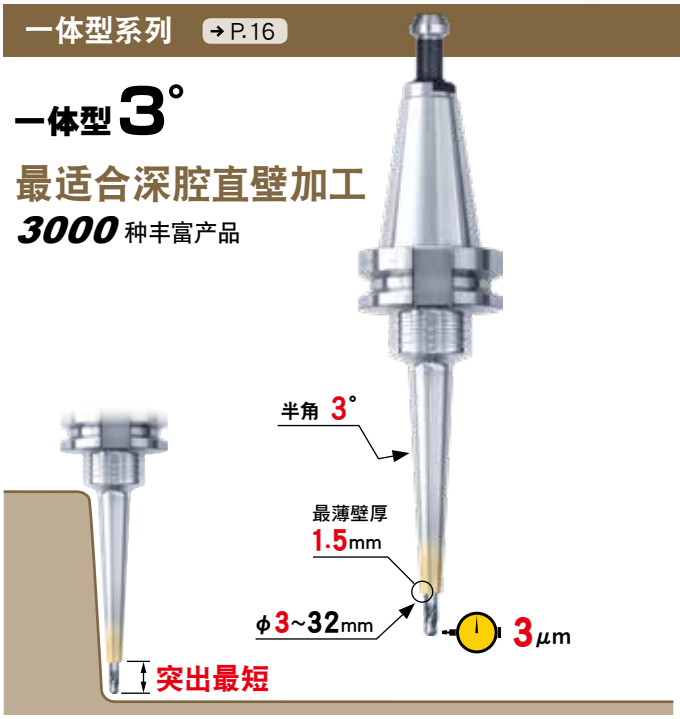


一体型系列 → P.16 一体型

一体型 3°

最适合深腔直壁加工

3000 种丰富产品



一体型 CURVE PAT.

最适合5轴加工

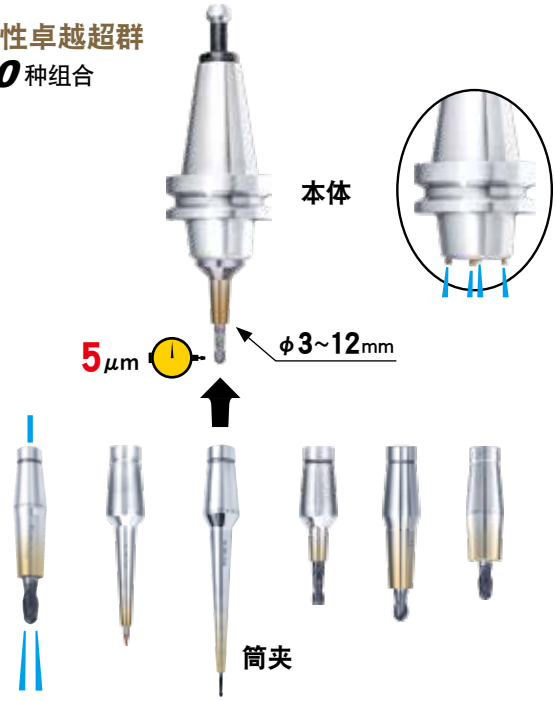
500 种丰富产品



2体型系列 → P.159 分体型

通用性卓越超群

250 种组合



UNO → P.165 一体型

超精密 PAT.



强力型 热装刀柄 → P.167 一体型



Z → P.171 一体型

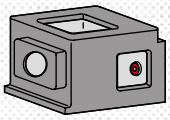
防滑刀·防掉刀构造 PAT.



改善加工 例

事例 1　防止干涉

● 用标准球铣刀替换加长型球铣刀。
提升刀柄刚性、实现无振刀的稳定加工。

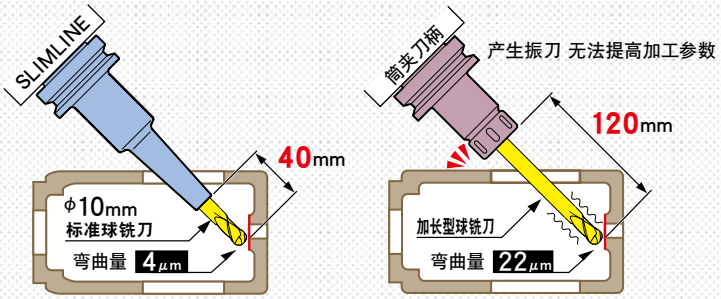


齿轮箱

FC250

降低刀具成本
¥31,600 → ¥11,500

切削进给UP
256 → 860 mm/min



事例 2　偏摆精度 改善

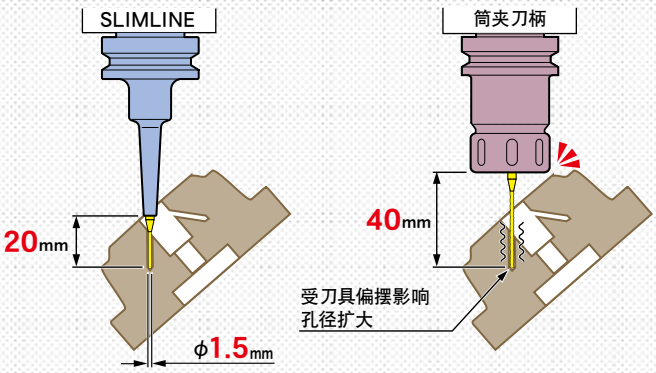
● 通过缩短钻头的突出长度，改善其偏摆精度。
将孔径的扩张控制在最小范围内。



轴承座

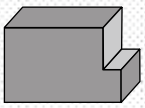
FC300

刀具寿命
2倍延长



事例 3　难加工材料的重切削加工

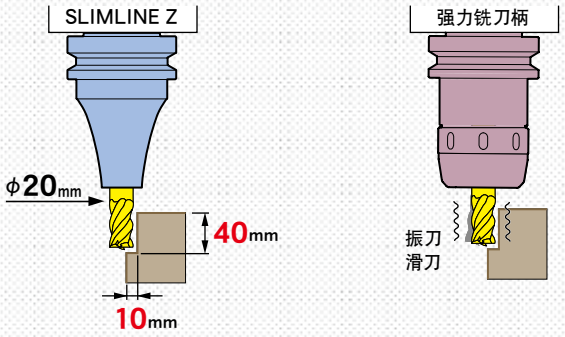
● 在侧面重切削加工中，带有防滑刃·防掉刀结构的SLIMLINE Z
可大幅度提升加工效率。



侧面加工

Ti-6Al-4V

切削量
提升2倍
256 → 504 cm³/min



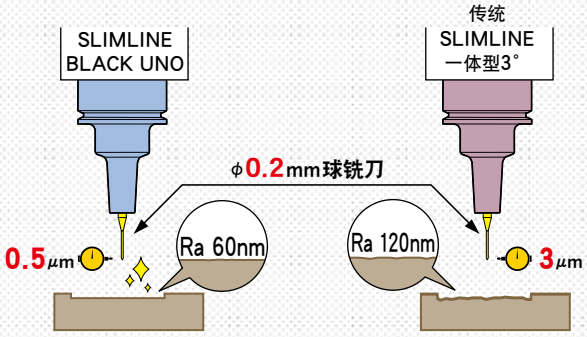
事例 4　镜面精加工

● 通过BLACK UNO实现轴向切深1μm的微细加工。



ELMAX(60HRC)

表面光洁度
提升2倍
Ra 120→60nm



热装装置 HEAT ROBO

刀柄寿命长

300℃ 的低温热装不会损坏刀柄。
经济、轻巧的温风式加热器、操作简单

电磁感应式加热器

HEAT ROBO DENJI 电磁

短时间热装

节省空间 A4尺寸~

触摸屏控制器
操作简单!

防止过度加热功能

更换线圈
自动识别线圈号码.
(电磁5000S)





A3尺寸

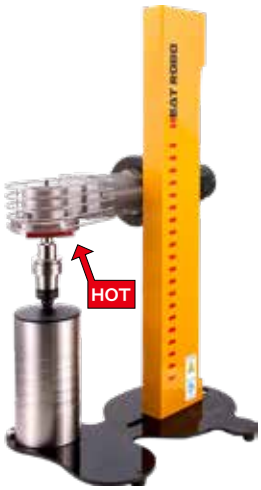


A4尺寸

温风式加热器

HEAT ROBO Baby

实惠
不必担心加热过度!









	DENJI 电磁 5000S	DENJI 电磁 1200S	Baby 3000S	Baby 1200S	Baby 1000
型号	HRD-02SH	HRD-01S-230AS	HRB-03S-230AS	HRB-02S	HRB-01
加热方式	电磁感应式		温风式		
功率	5000w	1200w	3000w	1200w	1000w
额定电压	200-240v	100v	200v	100v	100v
可对应刀具柄径	φ3~32mm	φ3~12mm	φ3~32mm	φ3~12mm	
加热时间 (刀具直径φ6)	18秒(自动设定)	18秒	70秒	120秒	180秒
冷却功能※	○(1分)	○(1分)	○(5分)	▲	▲
尺寸 (WxDxH)	340x470x750 mm	230x410x550 mm	430x330x660 mm	370x260x590 mm	320x160x410 mm

※关于冷却功能 [○]:连接工厂压缩空气冷却 [▲]:使用温风加热器自带冷风模式冷却

■刀柄样式分类 对应表

一体型系列	○	△	○	▲	×
2体型系列	○	○	○	○	○
UNO	○	○	○	○	×
强力型热装刀柄	○	×	○	×	×
Z	○	×	○	×	×
直柄延长杆	○	▲	○	▲	×

[○]:可以加热 [×]:无法加热 [△]:部分型号无法加热 [▲]:更换适配器、底座后可以加热 ※各型号的对应情况请参照型号表确认。

电磁感应式 加热器

DENJI 电磁 5000S

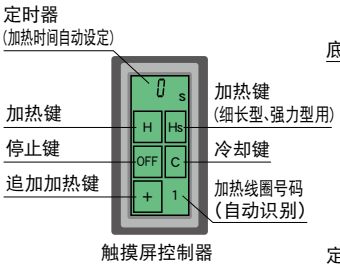
型号	尺寸 (W×D×H)	额定电压 (三相)	Kg
HRD-02SH	340×470×750㎜	200-240v	30

■选购品
- ●加热线圈(HRD2-CL) ●请从P.13页～选购品中选择。

■标准附属品
- ●耐热手套 ●装卸用镊子

■备考
- ●刀具防脱套请选择HSB/HSC型
- ●需要(0.5MPa)工厂气体。(消费气体量:245ℓ/min)
- ●请自行准备连接用气管(外径φ8)和接头等附件。

■注意事项
- ●请自备变压器。





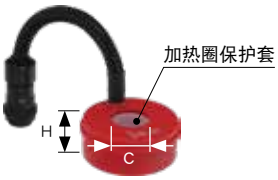
工具径 φ3~32
功率 5000w
刀具直径 φ6 加热 18秒
气体冷却 1分

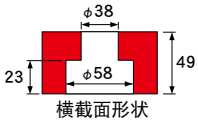
▌加热线圈

型号	可对应刀柄内径	加热时间 (自动设定)	φC	H
HRD2-CL1	φ3~ 6	18 秒	25	33
-CL2	φ7~12※1	28 秒	35	42
-CL3	φ16, 20※2※3	28 秒	45	47
-CL4	φ25	40 秒	55	57
-CL5	一体型系列 ●一体型3° [SLRB・SLFB8/10/12/16-M22]	35 秒	Fig. 1	
-CL6	强力型热装刀柄 ●超短型[所有尺寸] ●重切削型 [φ12・φ16]	40 秒	60	47
-CL7	φ32, 强力型热装刀柄 (●重切削型 [φ20,φ25])	60 秒	70	67

■标准附属品
- ●加热线圈保护套

■注意事项
- ●为保护加热线圈,请务必使用加热线圈保护套
- ●加热线圈CL5、CL6、CL7对应的刀柄型号,无法使用加热线圈CL2、CL3、CL4加热,选择加热线圈时请留意。
- ●※1 [SLRB·SLFB8/ 10/ 12- M22]请使用加热线圈No.5进行加热。
  ※2 [SLRB·SLFB16- M22]请使用加热线圈No.5进行加热。
  ※3 [A50M-SLRB20, F63-SLFB20]请使用加热线圈No.4进行加热。





▌加热圈保护套

型号
HRD2-DN○

○:加热线圈No. 型号例 HRD2-DN2

■备考
- ●加热线圈保护套是消耗品。
  受热变形破损时需要进行更换(选购品)。

DENJI 电磁 1200S

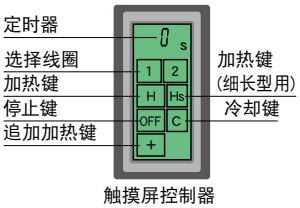
型号	对应地区	尺寸 (W×D×H)	额定电压 (单相)	Kg
HRD-01S	日本	230×410×550㎜	100v	14
HRD-01S-230AS	亚洲		230v	19

■选购品
- ●请从P.13页～选购品中选择。

■标准附属品
- ●加热线圈(HRD-CL1/2) ●耐热手套 ●装卸用镊子

■备考
- ●刀具防脱套请选择HSB/HSC型
- ●需要(0.5MPa)工厂气体。(消费气体量:245ℓ/min)
- ●请自行准备连接用气管(外径φ8)和接头等附件。

■注意事项
- ●电磁1200S型加热器的可加热刀柄型号有限制。
  具体请参考对照P.201





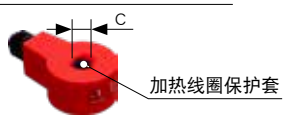
工具径 φ3~12
功率 1200w
刀具直径 φ6 加热 18秒
气体冷却 1分

▌加热线圈

型号	可对应刀柄内径	加热时间	φC
HRD-CL1	φ3~ 6	18 秒	18
-CL2	φ7~12	33 秒	28

■标准附属品
- ●加热线圈保护套

■注意事项
- ●为保护加热线圈,请务必使用加热线圈保护套。



▌加热线圈保护套

型号
HRD-DN○

○:加热线圈No. 型号例 HRD-DN2

■备考
- ●加热线圈保护套是消耗品。
  受热变形破损时需要进行更换(选购品)。

温风式加热器

Baby 3000S

型号	对应地区	尺寸 (W×D×H)	额定电压 (单相)	Kg
HRB-03S	日本	430×330×660mm	200v	9.5
-03S-230NA	北美		230v	
-03S-230AS	亚洲			

■选购品
●φ70加热喷头 ●请从P.13页～选购品中选择。
■标准附属品
●计时器 ●耐热手套 ●装卸用镊子
■备考
●需要(0.5MPa)工厂气体。(消费气体量:245ℓ/min)
●请自行准备连接用气管(外径φ8)和接头等附件。



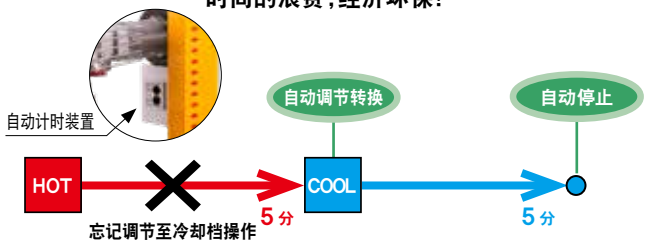
工具径 φ3~32
功率 3000w
刀具直径 φ6 加热 70秒
气体冷却 5分

■ 安全计时器型

防止因忘记切换加热器开关而导致的事故。

型号	对应地区	尺寸 (W×D×H)	额定电压 (单相)	Kg
HRB-03ST	日本	430×330×660mm	200v	9.7
-03ST-230NA	北美		230v	
-03ST-230AS	亚洲			

附带安全计时器，防止过度加热和时间的浪费，经济环保！



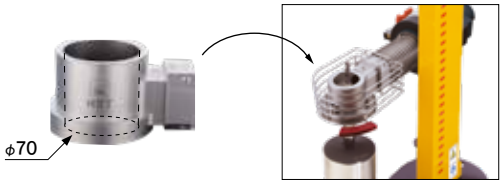
忘记调节至冷却档操作

即使忘记调节至冷却开关，加热开始5分钟后，会自动转成冷却状态，可预防由于过热所引起的故障。

▌φ70 加热喷头

加热一体型3°系列，SLRB32型，超强力型热装刀柄时使用。

型号
HRB-NZL70



Baby 1200S



工具径 φ3~12
功率 1200w
工具径 φ6 加热120秒

型号	对应地区	尺寸 (W×D×H)	额定电压	Kg
HRB-02S	日本	370×260×590mm	100v	8
-02S-120NA	北美		120v	

■选购品
●请从P.13页～选配品中选择。
■标准附属品
●计时器 ●耐热手套 ●装卸用镊子
■备考
●部分刀柄无法使用。(P.13)
■注意事项
●请自备变压器。

Baby 1000



工具径 φ3~12
功率 1100w
工具径 φ6 加热180秒

型号	对应地区	尺寸 (W×D×H)	额定电压	Kg
HRB-01	日本	340×160×410mm	100v	3.5

■选购品
●请从P.13页～选配品中选择。
■标准附属品
●适配器(ADH-SLK) ●计时器 ●加热喷头2个(HNZ-17, HNZ-22)
●耐热手套 ●装卸用镊子
■注意事项
●请自备变压器。

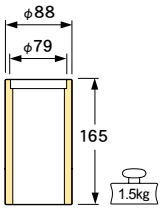
选购品

■ 底座

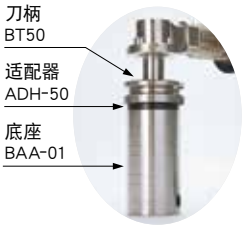
型号

BAA-01

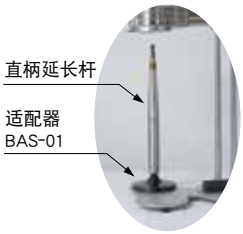




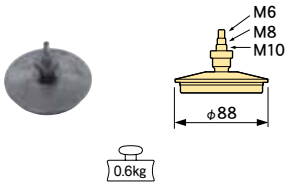
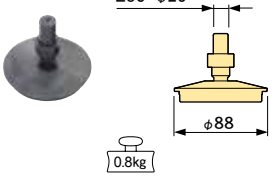
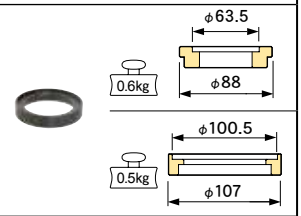
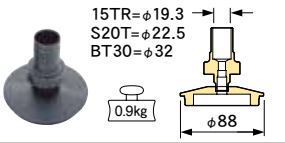
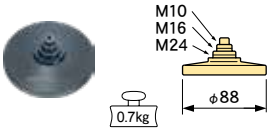
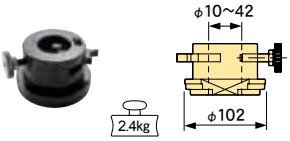
使用例







■ 适配器

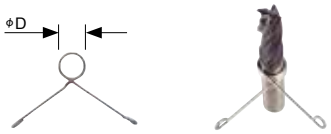
型号	适配器	对应刀柄			加热装置				
			系列	螺丝尺寸	HRD-02SH	HRD-01S	HRB-03S	HRB-02S	HRB-01
ADH-SLK		2体型系列 SLIMLINE 热装筒夹	6型	M6	○	○	○	○	○
			8型	M8					※ 适配器 (ADH-SLK) 为标准附属品， 12型不用底座 BAA-01
			12型	M10					
		直柄延长杆	ST10	M6					
			ST12	M8					
			ST16/20/25	M10					
ADH-HSK25 -HSK32 -HSK40E -HSK40A -HSK50		一体型3° 一体型CURVE 强力型热装刀柄 Z UNO	E25		○	△ ※ 有一部分 无法使用。 请参考产品型号表。	○	△ ※ 有一部分无法使用。 C (max.) M 可进行热装的尺寸 C=φ32 ※只有M22类型最大为φ24。	×
			E32						
			E40						
			A40						
			A50 / E50 / F63						
-40			BT40 / A63 F63 / F80 / F80PD DN40						
-50			BT50 / A100 DN50						
-15TR -S20TR -BT30			15TR3						
			RS20 / S20TR						
			BT30						
BAS-01		直柄延长杆	ST16 / 20 / 25	M10	○	△ ※ 有一部分 无法使用。 请参考产品型号表。	○	△ ※ 有一部分无法使用。 C (max.) M 可进行热装的尺寸 C=φ32 ※只有M22类型最大为φ24。	×
			ST32	M16					
			ST42	M24					
-02			硬质合金柄 ST○○C						

[○]: 可以加热　[×]: 无法加热　[△]: 部分型号无法加热

■ 刀具防脱套

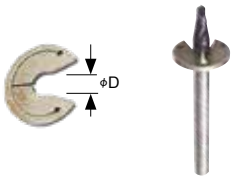
将刀具热装卸到刀柄内孔时，防止刀具掉入内孔。

▮ HSA型（弹簧圈型）



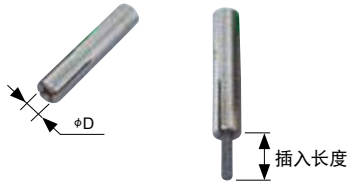
型号	ϕD	套装内容(数量)
HSA-D [型号例：HSA-6]	3, 3.175, 4, 5, 6, 7, 8, 9, 10, 11, 12, 16, 20, 25	同尺寸 各10个/套
-E	3, 4, 6, 8, 10, 12	各1个 共计6个
-F	3, 4, 5, 6, 7, 8, 9, 10, 11, 12	各1个 共计10个
-EF	3, 4, 5, 6, 8, 10, 12, 16, 20, 25	各1个 共计10个

▮ HSB型（弹簧片型）

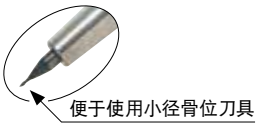


型号	ϕD	套装内容(数量)
HSB-D [型号例: HSB-6]	3, 3.175, 4, 5, 6, 7, 8, 9, 10, 11, 12, 16, 20, 25, 32	各1个
-E	3, 4, 6, 8, 10, 12	各1个 共计6个
-F	3, 4, 5, 6, 7, 8, 9, 10, 11, 12	各1个 共计10个
-EF	3, 4, 5, 6, 8, 10, 12, 16, 20, 25	各1个 共计10个

▮ HSC型（槽孔筒夹型）



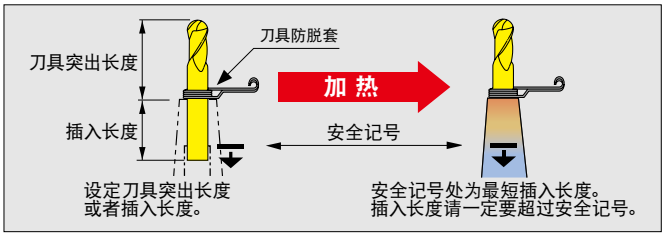
型号	ϕD
HSC-D [型号例: HSC-6]	3, 3.175, 4, 6



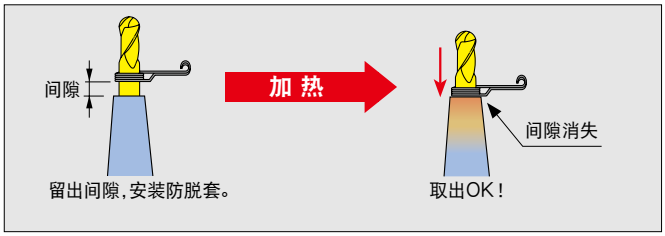
■注意事项

- HSA型无法使用于电磁式加热器

刀具安装时



刀具取出时



▮ 刀具夹钳

无需耐热手套也可简单使用。

型号
HPY-01





▮ 防脱套夹钳

轻松安装HSB型防脱套。

型号
SPY-01

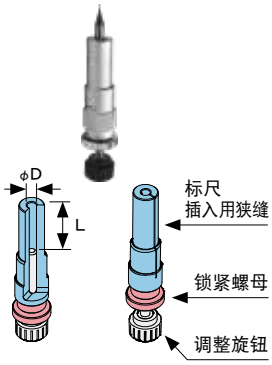




▮ 刀具长度调整器

可以简单设定刀具突出长度和插入长度。

型号	ϕD	L
HAJ-3	3	10~ 30
-3.175	3.175	
-4	4	13~ 30
-6	6	19~ 45
-8	8	21~ 55
-10	10	22~ 70
-12	12	23~ 85
-16	16	26~ 90
-20	20	37~100
-25	25	40~100



▮ 刀具冷却台

放置加热后取出的热刀具，冷却用

型号
SDH-01

尺寸：170×170（mm）

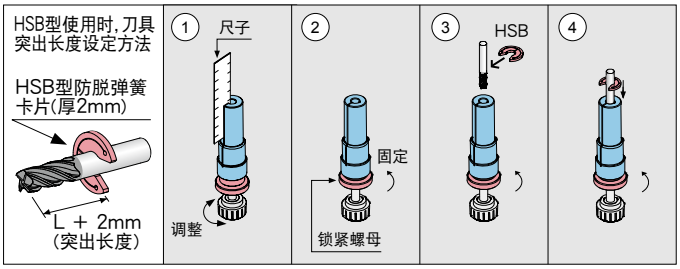


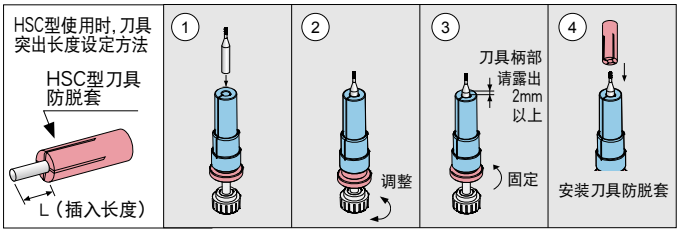
▮ 耐热手套

追加选购品

型号	备考
HTB-01	—
-01-R	右手用
-01-L	左手用







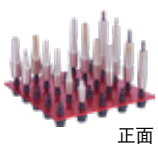
▮ 刀柄台

SLIMLINE筒夹、直柄延长杆、HSK-E25、E32刀柄用安放台。
共有4种颜色，方便分类整理。

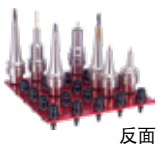
型号	颜色	正面	反面	放置个数
SDKT-RE	红色	SLIMLINE筒夹用 直柄延长杆用	小径刀柄用 (HSK-E25/ E32)	各25支
-BL	蓝色			
-GR	绿色			
-GD	金色			

尺寸：190×190（mm）





正面



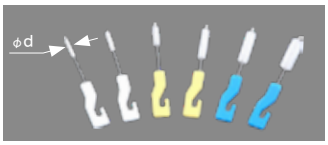
反面

■清洁用具

▌清洁刷

用于清扫装夹孔的尼龙刷

型号	装夹孔径
AQC-BR -SET	3，4，6，8，10，12 (各1 个 共计6 个)
-BR 3-5	3（5支/套）
-BR 4-5	4（5支/套）
-BR 6-5	6（5支/套）
-BR 8-5	8（5支/套）
-BR10-5	10（5支/套）
-BR12-5	12（5支/套）





■注意事项 ●请在常温下使用

▌橡胶磨石型

去除装夹孔内的氧化膜，污垢，以及焦着的油份等。

标准组套

型号	备考
CLT-GTA-01	右边的配件各1个





配件

型号	品名	ϕd	数量
CLT-GTA-GP	握柄	—	1
CLT-GTA 3-5	橡胶磨石	3	5
-GTA 4-5		4	5
-GTA 6-5		6	5
-GTA 8-5		8	5
-GTA10-5		10	5

■ 水冷却

▌水冷组套

SLIMLINE 热装卸时冷却方便的水冷组套

型号	备考
AQC-KIT-01	以下配件各1个

配件

型号	品名	备考
AQC-EK-01-2	水冷专用液	原液2L 请稀释到3%
-AT-01	水冷托盘	筛水板
-AH-01	适配器支架	将刀柄放入水冷专用液的挂钩
CN -245	贮存箱	尺寸:424×291×245(364×242×230)mm
-FT	贮存箱盖	尺寸:421×288×35mm

( ) 内尺寸





■热装作业 效率化套件

提高热装效率，缩短作业时间。支持MST所有类型的加热装置（电磁式、温风式）。

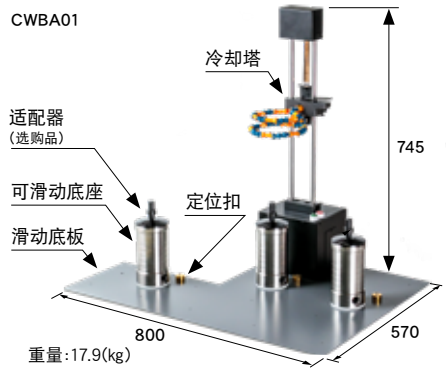
▌A型

型号	冷却塔
CWBA01	1个
CWBA02	2个

■标准附属品
- 滑动底板
- 可滑动底座(3个)
- 定位扣(6个)
- 温度感应贴(7个)
- 连接用压缩气管(ϕ8 长2m)

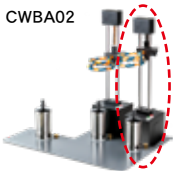
■备考
- 请链接附属的压缩气管。（供给气压:0.5～0.7MPa）

CWBA01



重量:17.9(kg)

CWBA02



双冷却塔款式
重量:24.8(kg)

▌B型

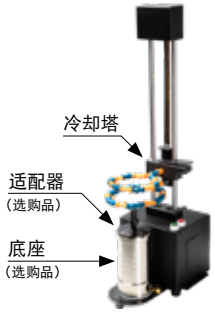
可设置在狭窄空间的紧凑型

型号
CWBB01

■标准附属品
- 温度感应贴(7个)

■备考
- 需要压缩空气

A4尺寸

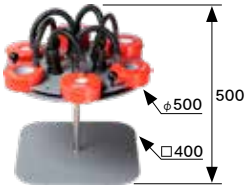


尺寸:218×295×740(mm)
重量:7.3(kg)

▌线圈放置台

用于HRD-02SH的加热线圈放置台

型号
CLSD01



▌消耗品·补充品

冷却塔(追加用※)

型号
CTW01

※可将CWBA01变更为CWBA02



滑动底板

型号
SLT01



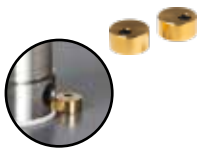
可滑动底座

型号
BAA-01SL



定位扣

型号	数量
SRG01	2个



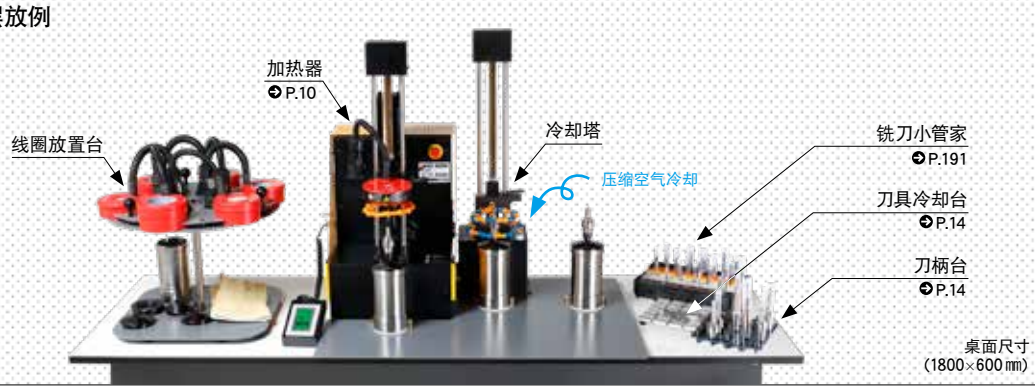
温度感应贴

型号	数量
THR60	7个

加热线圈的温度检测贴纸



摆放例





备有专用目录。
详细信息请咨询敝司。

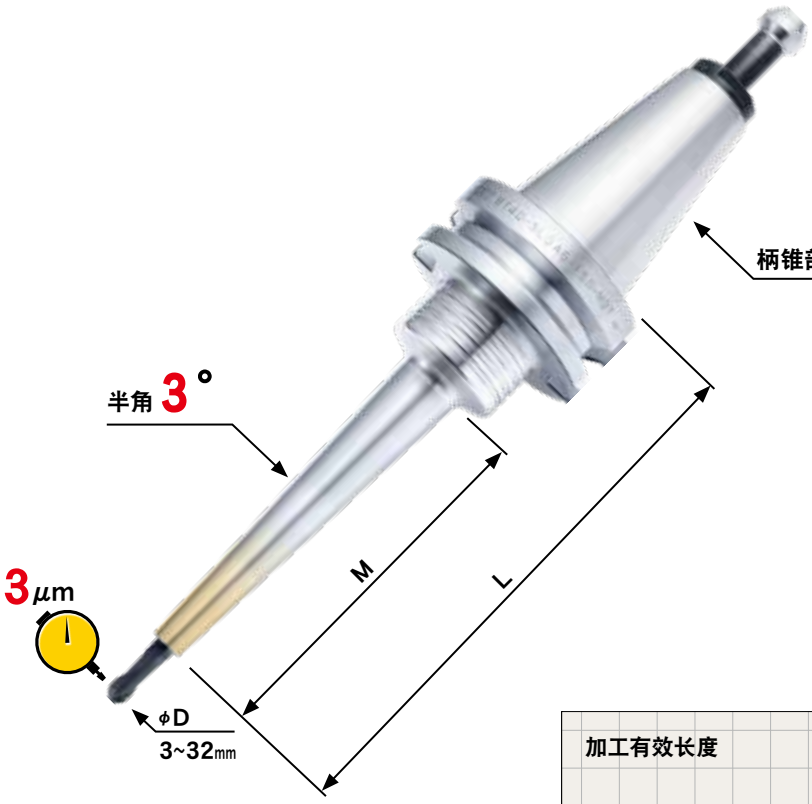
一体型系列

一体型 3°

■针对各种各样加工的丰富产品种类


重切削加工

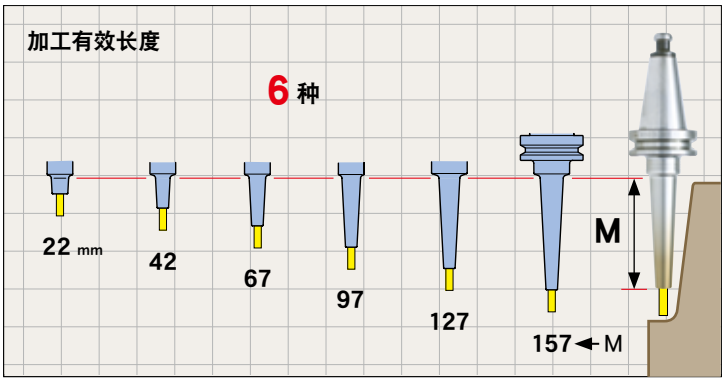

微细加工







3000
种丰富产品



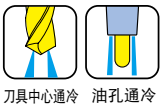
BT50 – SL SA 3 – 110 – M42

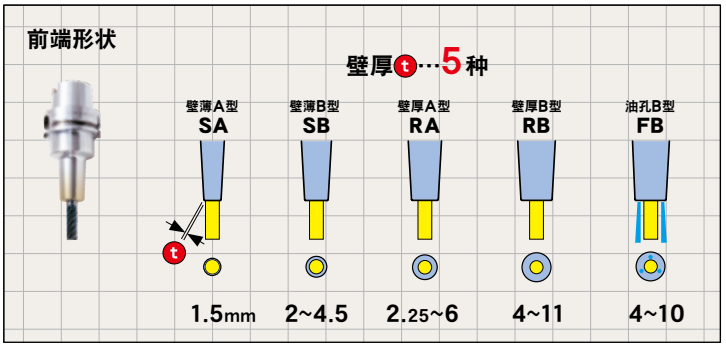
BT50	SL	SA	3	110	M42
柄锥部形状	SLIMLINE		φD	L	加工有效长度

PAGE

18	BT30
21	BT40
45	BT50
69	A40
74	A50
78	A63
104	A100
128	E25
130	E32
133	E40
138	E50
146	F63
156	15T
157	S20T
158	RS20

对应中心通冷


刀具中心通冷　油孔通冷



一体型 CURVE

■前端细长、根部粗壮、长度与刚性兼备的热装刀柄

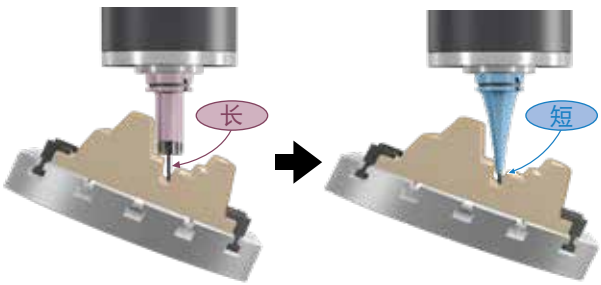






500
种丰富产品

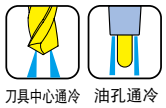
5轴加工



BT50 – SL SA 4 – 165 CV

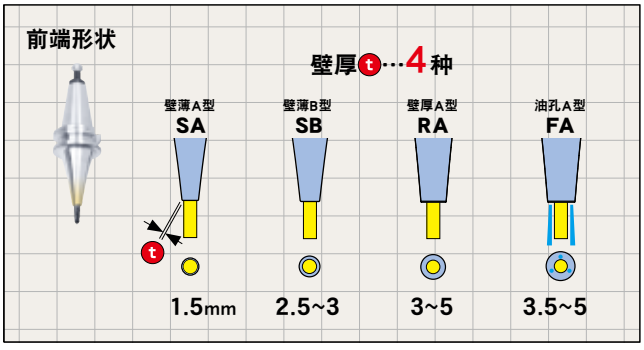
BT50：柄锥部形状　SL：SLIMLINE　SA：前端形状　4：φD　165：L　CV：CURVE

对应中心通冷



刀具中心通冷　油孔通冷

PAGE	
18	BT30
21	BT40
45	BT50
78	A63
104	A100
130	E32
133	E40
138	E50
146	F63



BT30

一体型 3°



刚性值(μm / kgf) P. 202

不平衡量 N P. 205

S

BT30-SLRA10-75-M22

一体型CURVE CV



刚性值(μm / kgf) P. 202

不平衡量 N P. 205

S

BT30-SLSA4-120 cv

Fig. 1

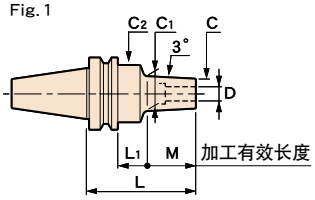
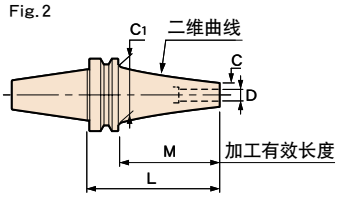
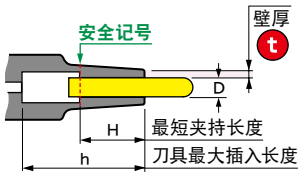


Fig. 2



■选购品
●拉钉→P.184

■注意事项
●拉钉…请在加热时取下,或使用通孔拉钉。
●刀具安装…插入刀具时,请务必将刀具插入比安全记号更深的位置。



CV：曲线　　壁厚

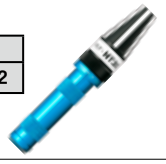
型号	Fig.	φD	φC	t	L	M	L1	φC1	φC2	H	h	Kg	N	S	缩略图
BT30-SLSA3- 75-M22	1	3	6	1.5	75	22	31	8.3	25	9	99	0.4	0.8	4.6	2
- 95-M42					95	42		10.4			119			9.2	3
-120-M67					120	67		13			144	0.5	1.6	14.9	4
-SLRA3- 75-M22	1	3	7.5	2.25	75	22	31	9.8	25	9	99	0.5	1.6	2.8	5
BT30-SLSA3.175-75-M22	1	3.175	6.175	1.5	75	22	31	8.5	25	9	99	0.4	0.8	4.4	6
-95-M42					95	42		10.6			119			8.8	7
BT30-SLSA4- 75-M22	1	4	7	1.5	75	22	31	9.3	25	12	99	0.4	0.8	3.6	8
- 95-M42					95	42		11.4			119			7.3	9
-120-M67					120	67		14			144	0.5	1.6	11.9	10
-SLRA4- 75-M22	1	4	10	3	75	22	31	12.3	25	12	99	0.5	1.6	1.8	11
-SLSA4- 75 CV	2	4	7	1.5	75	53	—	34	—	12	99	0.5	1	1.8	12
- 90 CV					90	68					114		1.1	2.8	13
-120 CV					120	98					144		1.2	6.6	14
-SLRA4- 90 CV	2	4	10	3	90	68	—	34	—	12	114	0.5	1	2	15
-120 CV					120	98					144		1.1	2.9	16
BT30-SLSA6- 75-M22	1	6	9	1.5	75	22	31	11.3	25	18	99	0.4	0.9	2.4	17
- 95-M42					95	42		13.4			119			4.9	18
-120-M67					120	67		16			144	0.5	1.7	8.3	19
-SLRA6- 75-M22	1	6	12	3	75	22	31	14.3	25	18	99	0.4	0.9	1.4	20
-SLSA6- 75 CV	2	6	9	1.5	75	53	—	34	—	18	99	0.5	1.3	1.5	21
- 90 CV					90	68					114		1	2.4	22
-120 CV					120	98					144		1.2	5.6	23
-SLRA6- 90 CV	2	6	13	3.5	90	68	—	34	—	18	114	0.5	1.1	1.6	24
-120 CV					120	98					144		1.2	2.5	25
BT30-SLRA8- 75-M22	1	8	14	3	75	22	31	16.3	25	24	99	0.4	0.9	1.2	26
-SLSA8- 75 CV	2	8	11	1.5	75	53	—	34	—	24	99	0.5	1.1	1.3	27
- 90 CV					90	68					114	0.6	1.6	2.2	28
-SLRA8- 90 CV	2	8	16	4	90	68	—	34	—	24	114	0.5	1.2	1.1	29

型号	Fig.	φD	φC	t	L	M	L1	φC1	φC2	H	h	Kg	N	S	缩略图
BT30-SLRA10- 75-M22	1	10	16	3	75	22	31	18.3	25	30	99	0.4	1	1.1	30
-SLSA10- 75 CV	2	10	13	1.5	75	53	—	34	—	30	99	0.5	1.6	1.2	31
- 90 CV					90	68					114		1.4	2	32
-SLRA10- 90 CV	2	10	19	4.5	90	68	—	34	—	30	114	0.6	1.5	1.1	33
BT30-SLRA12- 75-M22	1	12	20	4	75	22	31	22.3	25	30	99	0.5	1.2	1	34
BT30-SLRA16- 60-M22	1	16	26	5	60	22	16	28.3	34	32	60	0.5	1.6	0.5	35
BT30-SLRA20- 65-M22	1	20	32	6	65	22	21	34.3	40	38	60	0.6	2.1	0.4	36

■主轴锥孔用 清洁工具
STAR DUST

型号
CLT-NT30-G2

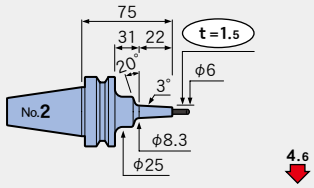
P.194



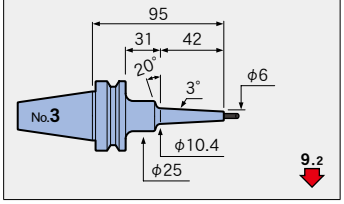
S=1:5

φ3

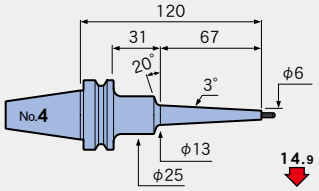
BT30-SLSA3-75-M22



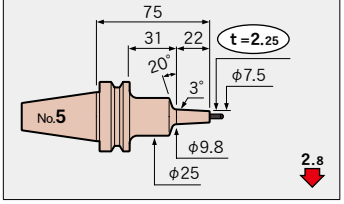
BT30-SLSA3-95-M42



BT30-SLSA3-120-M67

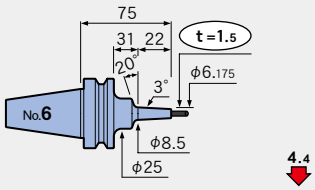


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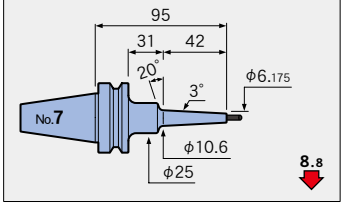


φ3.175

BT30-SLSA3.175-75-M22

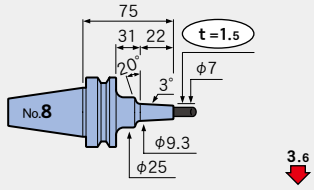


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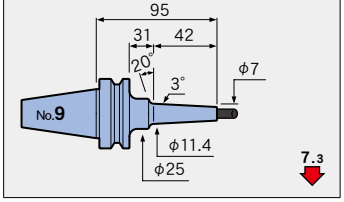


φ4

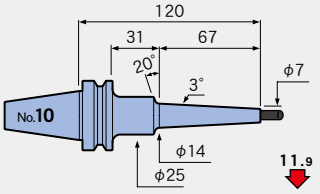
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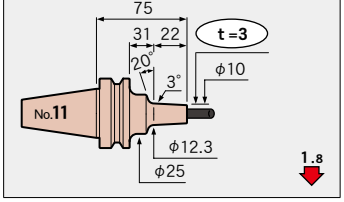
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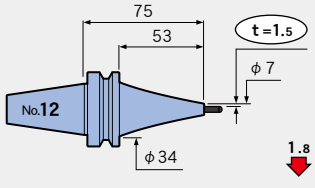
BT30-SLSA4-120-M67



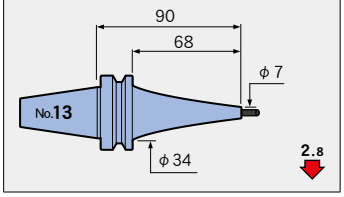
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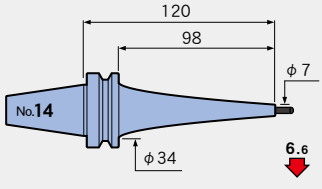
BT30-SLSA4-75 CV



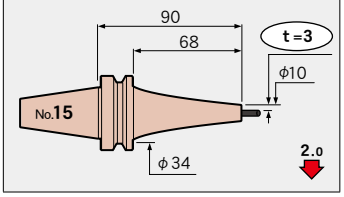
BT30-SLSA4-90 CV



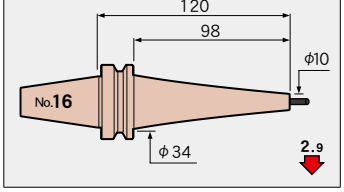
BT30-SLSA4-120 CV



BT30-SLRA4-90 CV



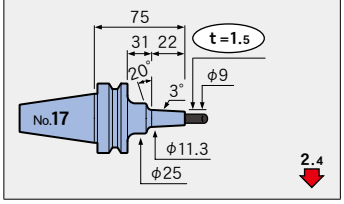
BT30-SLRA4-120 CV



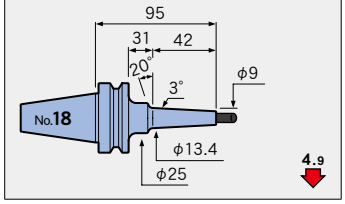
BT30 S=1:5

φ6

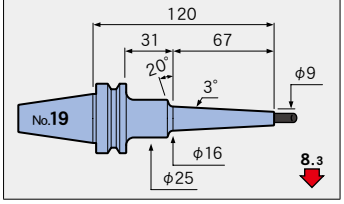
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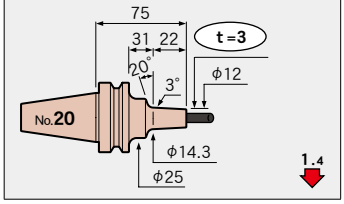
BT30-SLSA6-95-M42



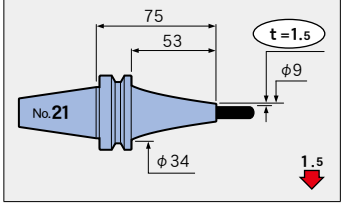
BT30-SLSA6-120-M67



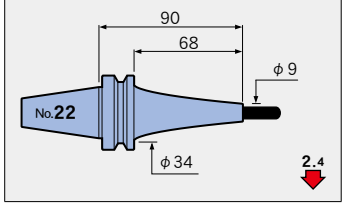
BT30-SLRA6-75-M22



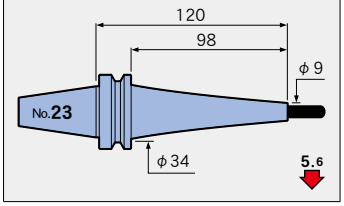
BT30-SLSA6-75 CV



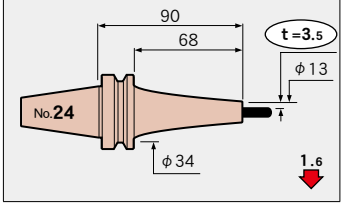
BT30-SLSA6-90 CV



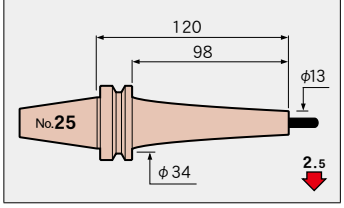
BT30-SLSA6-120 CV



BT30-SLRA6-90 CV

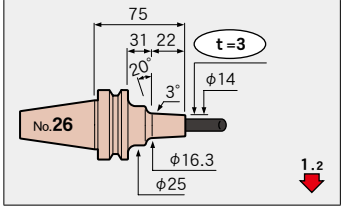


BT30-SLRA6-120 CV

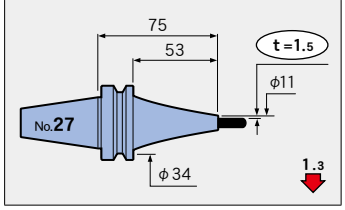


φ8

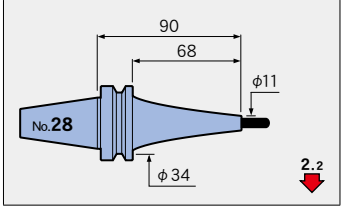
BT30-SLRA8-75-M22



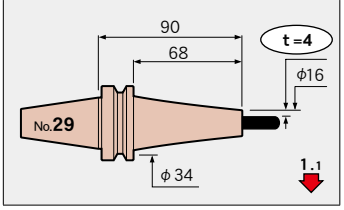
BT30-SLSA8-75 CV



BT30-SLSA8-90 CV

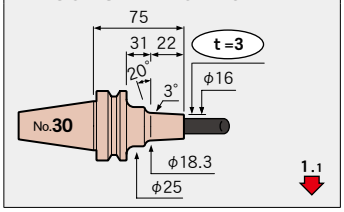


BT30-SLRA8-90 CV

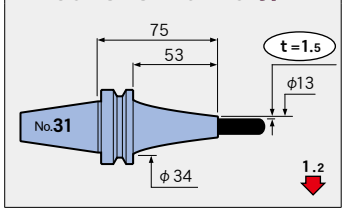


φ10

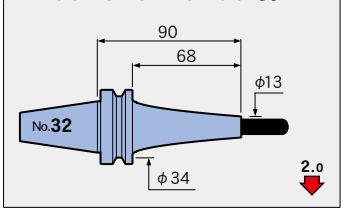
BT30-SLRA10-75-M22



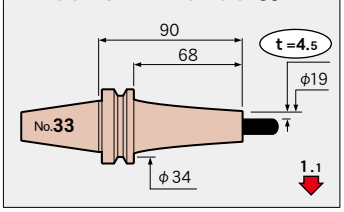
BT30-SLSA10-75 CV



BT30-SLSA10-90 CV

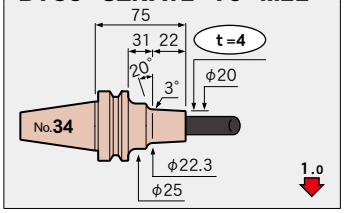


BT30-SLRA10-90 CV



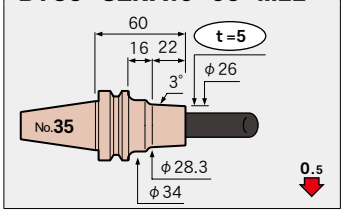
φ12

BT30-SLRA12-75-M22



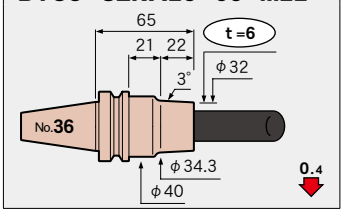
φ16

BT30-SLRA16-60-M22



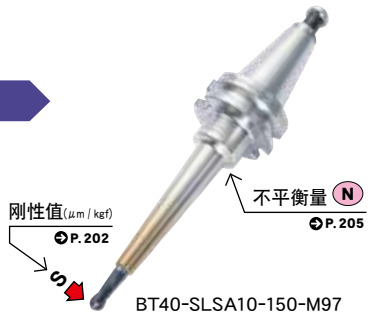
φ20

BT30-SLRA20-65-M22



BT40

一体型 3°



BT40-SLSA10-150-M97

Fig. 1

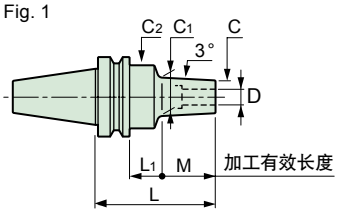
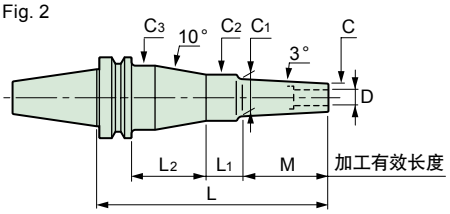
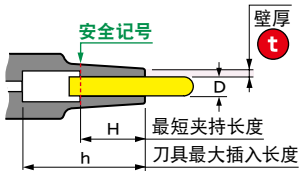


Fig. 2



■选购品
●拉钉→P.184

■注意事项
●拉钉…请在加热时取下,或使用通孔拉钉。
●刀具安装…插入刀具时,请务必将刀具插入比安全记号更深的位置。

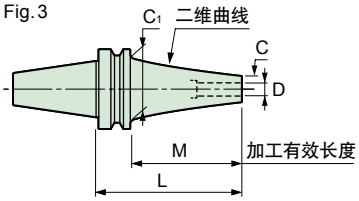


一体型 CURVE CV



BT40-SLFA12-120cv

Fig. 3





HEATROBO电磁 1200S
(HRD-01S-230AS)
电磁式加热器对应表

[○] 可加热 [×] 不可加热
[▲] 垫高加热器后可进行加热→P.201

CV：曲线　　壁厚

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S		缩略图
BT40-SLSA3- 95-M 42	1	3	6	1.5	95	42	26	—	10.4	25	—	9	130	1	2.3	9.1	○	1
-120-M 67					120	67			13				155		3.1	14.6		4
-125-M 42					125	42	56		10.4				160	1.1	2.5	9.7		2
-150-M 67					150	67			13				185		3.2	15.7		5
-M 97						97	26		16.2						4	20.4		7
-155-M 42	2				155	42	33	53	10.4	26	40		190	1.4	2.7	9.9		3
-180-M 67					180	67			13	25	39		215		3.4	15.7		6
-M 97	1					97	56	—	16.2		—			1.2	4.1	22.1		8
-210-M 97	2				210		33	53			39		245	1.4	4.3	22.1		9
-SLRA3- 75-M 22	1	3	7.5	2.25	75	22	26	—	9.8	25	—	9	110	1	2.6	2.7	○	10
- 95-M 42					95	42			11.9				130		2.9	5.3		13
-105-M 22					105	22	56		9.8				140	1.1	2.7	3.2		11
-120-M 67					120	67	26		14.5				155		3.4	8.8		16
-125-M 42					125	42	56		11.9				160		3	6		14
-135-M 22	2				135	22	33	53	9.8		39		170	1.4	2.9	3.2		12
-150-M 67	1				150	67	56	—	14.5		—		185	1.2	3.5	14.5		17
-M 97						97	26		17.7					1.1	4.1	12.8		19
-155-M 42	2				155	42	33	53	11.9		39		190	1.4	3.2	6		15
-180-M 67					180	67			14.5	26	40		215		3.7	9.8		18
-M 97	1					97	56	—	17.7	25	—			1.2	4.2	14.3		20
-M127						127	26		20.8	36				1.1	5.4	15.7		22
-210-M 97	2				210	97	33	53	17.7	25	39		245	1.5	4.4	14.4		21
-M127	1					127	56	—	20.8	32	—			1.4	5.5	16.5		23
-240-M127	2				240		28	58		36	50		275	1.8	5.8	16.3		24

HRD-01S

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S		缩略图
BT40-SLFB3- 75-M 22	1	3	9.5	3.25	75	22	26	—	11.8	25	—	9	110	1	2.4	1.9	○	25
- 95-M 42					95	42			13.9				130		2.7	3.2		28
-105-M 22					105	22	56		11.8				140	1.1	2.5	2.3		26
-120-M 67					120	67	26		16.5				155		3.4	5.3		31
-125-M 42					125	42	56		13.9				160		2.8	3.9		29
-135-M 22	2				135	22	33	53	11.8		39		170	1.4	2.7	2.3		27
-150-M 67	1				150	67	56	—	16.5		—		185	1.2	3.6	6.4		32
-155-M 42	2				155	42	33	53	13.9		39		190	1.4	3	3.9		30
-180-M 67					180	67			16.5	26	40		215		3.8	6.3		33
BT40-SLSA4- 95-M 42	1	4	7	1.5	95	42	26	—	11.4	25	—	12	130	1	3.1	7.1	○	34
-120-M 67					120	67			14				155			11.7		37
-125-M 42					125	42	56		11.4				160	1.1	3.3	7.9		35
-150-M 67					150	67			14				185			12.8		38
-M 97						97	26		17.2						4.1	16.5		40
-155-M 42	2				155	42	33	53	11.4		39		190	1.4	3.5	7.9		36
-180-M 67					180	67			14				215			12.8		39
-M 97	1					97	56	—	17.2		—			1.2	4.2	18.3		41
-210-M 97	2				210		33	53			39		245	1.5	4.4	18.2		42
-SLRA4- 75-M 22	1	4	10	3	75	22	26	—	12.3	25	—	12	110	1	2.7	1.7	○	43
- 95-M 42					95	42			14.4				130		3.1	3.1		46
-105-M 22					105	22	56		12.3				140	1.1	2.8	2.2		44
-120-M 67					120	67	26		17				155		3.9	5.1		49
-125-M 42					125	42	56		14.4				160		3.3	3.8		47
-135-M 22	2				135	22	33	53	12.3		39		170	1.4	3	2.2		45
-150-M 67	1				150	67	56	—	17		—		185	1.2	4	6.3		50
-M 97						97	26		20.2					1.1	4.8	7.7		52
-155-M 42	2				155	42	33	53	14.4		39		190	1.4	3.5	3.8		48
-180-M 67					180	67			17				215		4.2	6.2		51
-M 97	1					97	56	—	20.2		—			1.2	4.9	9.5		53
-M127						127	26		23.3	32					6.8	9.4		55
-210-M 97	2				210	97	33	53	20.2	25	39		245	1.5	5.1			54
-M127	1					127	56	—	23.3	32	—			1.4	7	10.3		56
-240-M127	2				240		30	56			46		275	1.8	7.3	10.4		57
-SLFB4- 75-M 22	1	4	12	4	75	22	26	—	14.3	25	—	12	110	1	2.5	1.3	○	58
- 95-M 42					95	42			16.4				130	1.1	3	2.2		61
-105-M 22					105	22	56		14.3				140		2.7	1.8		59
-120-M 67					120	67	26		19				155		3.8	3.5		64
-125-M 42					125	42	56		16.4				160	1.2	3.1	2.9		62
-135-M 22	2				135	22	33	53	14.3		39		170	1.4	2.9	1.8		60
-150-M 67	1				150	67	56	—	19		—		185	1.2	4	4.7		65
-155-M 42	2				155	42	33	53	16.4		39		190	1.4	3.3	2.9		63
-180-M 67					180	67			19				215	1.5	4.2	4.7		66
-SLSA4- 90 CV	3	4	7	1.5	90	63	—	—	53	—	—	12	125	1.2	3.3	1.8	○	67
-120 CV					120	93							155	1.3	3.8	2.7		68
-150 CV					150	123							185	1.5	4.4	4		69
-180 CV					180	153							215		4.8	6.6		70
-210 CV					210	183							245	1.6	4.9	11.6		71
-240 CV					240	213							275	1.8	5.8	14		72
-SLRA4-120 CV	3	4	10	3	120	93	—	—	53	—	—	12	155	1.3	3.9	1.9	○	73
-150 CV					150	123							185	1.4	4.3	2.9		74
-180 CV					180	153							215	1.5	5.1	4.2		75
-210 CV					210	183							245	1.7	5.7	5.7		76

HRD-01S

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S		缩略图
BT40-SLSA6- 95-M 42	1	6	9	1.5	95	42	26	—	13.4	25	—	18	130	1	3.3	4.8	○	77
-120-M 67					120	67			16				155	1.1	4.4	8		80
-125-M 42					125	42	56		13.4				160		3.5	5.6		78
-150-M 67					150	67			16				185	1.2	4.5	9.2		81
-M 97						97	26		19.2	32				1.1	5.9	11		83
-155-M 42	2				155	42	33	53	13.4	25	39		190	1.4	3.7	5.6		79
-180-M 67					180	67			16				215		4.7	9.2		82
-M 97	1					97	56	—	19.2	32	—			1.3	6.1	11.7		84
-210-M 97	2				210		30	56			46		245	1.7	6.4			85
-SLSB6- 95-M 42	1	6	10	2	95	42	26	—	14.4	25	—	18	130	1	4	3.6	○	86
-120-M 67					120	67			17				155	1.1	5.4	6.1		89
-125-M 42					125	42	56		14.4				160		4.1	4.5		87
-150-M 67					150	67			17				185	1.2	5.5	7.4		90
-M 97						97	26		20.2	32					7.2	8.5		92
-155-M 42	2				155	42	33	53	14.4	25	39		190	1.4	4.3	4.4		88
-180-M 67					180	67			17				215		5.7	7.4		91
-M 97	1					97	56	—	20.2	32	—			1.3	7.4	9.2		93
BT40 -M127						127	26		23.3					1.2	8.9	11		95
-210-M 97	2				210	97	30	56	20.2		46		245	1.7	7.7	9.2		94
-M127	1					127	56	—	23.3		—			1.4	9.1	12		96
-M157						157	26		26.5					1.3	10.6	13.2		98
-240-M127	2				240	127	30	56	23.3		46		275	1.8	9.4	12		97
-M157	1					157	56	—	26.5	36	—			1.7	10.8	14.5		99
-270-M157	2				270		30	56		32	46		305	1.9	11	14.6	▲	100
-SLRB6- 75-M 22	1	6	14	4	75	22	26	—	16.3	32	—	18	110	1.1	3.2	1	○	101
- 95-M 42					95	42			18.4				130		4.3	1.6		104
-105-M 22					105	22	56		16.3				140	1.2	3.3	1.2		102
-120-M 67					120	67	26		21				155		5.6	2.6		107
-125-M 42					125	42	56		18.4				160	1.3	4.4	1.9		105
-135-M 22	2				135	22	30	56	16.3		46		170	1.6	3.6	1.2		103
-150-M 67	1				150	67	56	—	21		—		185	1.3	5.8	3		108
-155-M 42	2				155	42	30	56	18.4		46		190	1.6	4.7	1.9		106
-180-M 67					180	67			21				215	1.7	6.1	3.1		109
-SLFB6- 75-M 22	1	6	14	4	75	22	26	—	16.3	32	—	18	110	1.1	3.2	1	○	110
- 95-M 42					95	42			18.4				130		4.3	1.6		113
-105-M 22					105	22	56		16.3				140	1.2	3.3	1.2		111
-120-M 67					120	67	26		21				155		5.6	2.6		116
-125-M 42					125	42	56		18.4				160	1.3	4.4	1.9		114
-135-M 22	2				135	22	30	56	16.3		46		170	1.6	3.6	1.2		112
-150-M 67	1				150	67	56	—	21		—		185	1.3	5.8	3		117
-155-M 42	2				155	42	30	56	18.4		46		190	1.6	4.7	1.9		115
-180-M 67					180	67			21				215	1.7	6.1	3.1		118
-SLSA6- 90 CV	3	6	9	1.5	90	63	—	—	53	—	—	18	125	1.2	3.3	1.6	○	119
-120 CV					120	93							155	1.3	3.8	2.3		120
-150 CV					150	123							185	1.5	4.3	3.6		121
-180 CV					180	153							215		4.9	5.7		122
-210 CV					210	183							245	1.7	5.7	7.3		123
-240 CV					240	213							275	1.8	5.9	12		124
-SLRA6- 90 CV	3	6	13	3.5	90	63	—	—	53	—	—	18	125	1.2	3.3	1.2	○	125
-120 CV					120	93							155	1.3	4	1.7		126
-150 CV					150	123							185	1.5	4.8	2.1		127
-180 CV					180	153							215	1.7	5.6	2.8		128
-210 CV					210	183							245		5.9	4.8		129
-SLFA6- 90 CV	3	6	13	3.5	90	63	—	—	53	—	—	18	125	1.2	3.3	1.2	○	130
-120 CV					120	93							155	1.3	4	1.7		131
-150 CV					150	123							185	1.5	4.8	2.1		132
-180 CV					180	153							215	1.7	5.6	2.8		133
-210 CV					210	183							245		5.9	4.8		134

HRD-01S

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S		缩略图
BT40-SLSA8- 95-M 42	1	8	11	1.5	95	42	26	—	15.4	25	—	24	130	1	4.6	3.4	○	135
-120-M 67					120	67			18	32			155	1.1	6.3	5.4		138
-125-M 42					125	42	56		15.4	25			160		4.7	4.3		136
-150-M 67					150	67			18	32			185	1.3	6.5	5.9		139
-M 97						97	26		21.2					1.2	8.4	7.9		141
-155-M 42	2				155	42	33	53	15.4	25	39		190	1.4	5	4.3		137
-180-M 67					180	67	30	56	18	32	46		215	1.6	6.7	5.9		140
-M 97	1					97	56	—	21.2		—			1.3	8.6	8.7		142
-210-M 97	2				210		28	58		36	50		245	1.9	8.8	8.4		143
-SLSB8- 95-M 42	1	8	13	2.5	95	42	26	—	17.4	32	—	24	130	1.1	5.3	2.1	○	144
-120-M 67					120	67			20				155		7.4	3.5		147
-125-M 42					125	42	56		17.4	36			160	1.3	5.5	2.3		145
-150-M 67					150	67			20	32			185		7.6	4		148
-M 97						97	26		23.2					1.2	10	5.2		150
-155-M 42	2				155	42	30	56	17.4		46		190	1.6	5.7	2.5		146
-180-M 67					180	67			20				215	1.7	7.9	4		149
-M 97	1					97	56	—	23.2		—			1.4	10.2	6		151
-M127						127	26		26.3					1.3	12.6	7		153
-210-M 97	2				210	97	30	56	23.2		46		245	1.7	10.4	6		152
-M127	1					127	56	—	26.3	36	—			1.5	12.7	7.7		154
-M157						157	26		29.5					1.4	15.1	8.5		156
-240-M127	2				240	127	30	56	26.3	32	46		275	1.8	13	8.1	▲	155
-M157	1					157	56	—	29.5	42	—			1.7	15.3	8.6		157
-270-M157	2				270		28	58			53		305	2.2	15.6	8.7		158
-SLRB8- 75-M 22	1	8	18	5	75	22	26	—	20.3	32	—	24	110	1.1	3.6	0.7	×	159
- 95-M 42					95	42			22.4				130		5.3	1.1	○	162
-105-M 22					105	22	56		20.3				140	1.2	3.8	0.9	×	160
-120-M 67					120	67	26		25				155		7.5	1.7	○	165
-125-M 42					125	42	56		22.4				160	1.3	5.5	1.4		163
BT40 -135-M 22	2				135	22	30	56	20.3		46		170	1.6	4.1	1	×	161
-150-M 67	1				150	67	56	—	25		—		185	1.4	7.6	2.2	○	166
-155-M 42	2				155	42	30	56	22.4		46		190	1.7	5.8	1.5		164
-180-M 67					180	67			25				215	1.8	7.9	2.2		167
-SLFB8- 75-M 22	1	8	18	5	75	22	26	—	20.3	32	—	24	110	1.1	3.6	0.7	×	168
- 95-M 42					95	42			22.4				130		5.3	1.1	○	171
-105-M 22					105	22	56		20.3				140	1.2	3.8	0.9	×	169
-120-M 67					120	67	26		25				155		7.5	1.7	○	174
-125-M 42					125	42	56		22.4				160	1.3	5.5	1.4		172
-135-M 22	2				135	22	30	56	20.3		46		170	1.6	4.1	1	×	170
-150-M 67	1				150	67	56	—	25		—		185	1.4	7.6	2.2	○	175
-155-M 42	2				155	42	30	56	22.4		46		190	1.7	5.8	1.5		173
-180-M 67					180	67	28	58	25	36	50		215	1.9	7.9	2		176
-SLSA8- 90 CV	3	8	11	1.5	90	63	—	—	53	—	—	24	125	1.2	3.3	1.4	○	177
-120 CV					120	93							155	1.3	4	2		178
-150 CV					150	123							185	1.5	4.8	2.7		179
-180 CV					180	153							215	1.6	4.9	5		180
-210 CV					210	183							245	1.7	5.8	6.6		181
-240 CV					240	213							275	1.9	6.7	8.3		182
-SLRA8- 90 CV	3	8	16	4	90	63	—	—	53	—	—	24	125	1.2	3.8	0.7	○	183
-120 CV					120	93							155	1.4	4.2	1.2		184
-150 CV					150	123							185	1.6	4.9	1.8		185
-180 CV					180	153							215	1.7	5.7	2.6		186
-210 CV					210	183							245	1.8	6.5	3.5		187
-SLFA8- 90 CV	3	8	16	4	90	63	—	—	53	—	—	24	125	1.2	3.8	0.7	○	188
-120 CV					120	93							155	1.4	4.2	1.2		189
-150 CV					150	123							185	1.6	4.9	1.8		190
-180 CV					180	153							215	1.7	5.7	2.6		191
-210 CV					210	183							245	1.8	6.5	3.5		192

HRD-01S

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S		缩略图
BT40-SLSA10- 95-M 42	1	10	13	1.5	95	42	26	—	17.4	25	—	30	130	1	5.5	2.6	○	193
-120-M 67					120	67			20	32			155	1.1	8.1	4		196
-125-M 42					125	42	56		17.4	25			160		5.7	3.6		194
-150-M 67					150	67			20	32			185	1.3	8.2	4.6		197
-M 97						97	26		23.2					1.2		6		199
-155-M 42	2				155	42	30	53	17.4	25	39		190	1.4	5.9	3.6		195
-180-M 67					180	67	28	58	20	36	50		215	1.8	8.5	4.4		198
-M 97	1					97	56	—	23.2	32	—			1.3		6.9		200
-210-M 97	2				210		30	56			46		245	1.7				201
-SLSB10- 95-M 42	1	10	16	3	95	42	26	—	20.4	32	—	30	130	1.1	6.3	1.4	○	202
-120-M 67					120	67			23				155	1.2	9.3	2.4		205
-125-M 42					125	42	56		20.4				160	1.3	6.4	1.8		203
-150-M 67					150	67			23				185		9.5	3		206
-M 97						97	26		26.2						13	3.6		208
-155-M 42	2				155	42	30	56	20.4		46		190	1.6	6.7	1.9		204
-180-M 67					180	67			23				215	1.7	9.8	3		207
BT40 -M 97	1					97	56	—	26.2		—			1.4	13.2	4.5		209
BT40 -M127						127	26		29.3	42					17.4			211
-210-M 97	2				210	97	30	56	26.2	32	46		245	1.8	13.5			210
-M127	1					127	56	—	29.3	42	—			1.6	17.9	4.9		212
-M157						157	26		32.5					1.5	21.1	5.6		214
-240-M127					240	127	86		29.3	50			275	2.1	18.5	5	▲	213
-M157						157	56		32.5					1.8	21.7	5.8		215
-270-M157	2				270		28	58		42	53		305	2.3	22.2	6.3		216
-SLRB10- 75-M 22	1	10	22	6	75	22	26	—	24.3	32	—	30	110	1.1	3.8	0.6	×	217
- 95-M 42					95	42			26.4				130	1.2	6.3	0.8	○	220
-105-M 22					105	22	56		24.3				140	1.3	4		×	218
-120-M 67					120	67	26		29	42			155		9.4	1.1	○	223
-125-M 42					125	42	56		26.4	32			160		6.5	1.2		221
-135-M 22	2				135	22	30	56	24.3		46		170	1.7	4.3	0.9	×	219
-150-M 67	1				150	67	56	—	29	42	—		185	1.5	9.6	1.3	○	224
-155-M 42	2				155	42	30	56	26.4	32	46		190	1.7	6.8			222
-180-M 67					180	67	28	58	29	42	53		215	2.1	9.8	1.4		225
-SLFB10- 75-M 22	1	10	22	6	75	22	26	—	24.3	32	—	30	110	1.1	3.8	0.6	×	226
- 95-M 42					95	42			26.4				130	1.2	6.3	0.8	○	229
-105-M 22					105	22	56		24.3				140	1.3	4		×	227
-120-M 67					120	67	26		29	42			155		9.4	1.1	○	232
-125-M 42					125	42	56		26.4	32			160		6.5	1.2		230
-135-M 22	2				135	22	30	56	24.3		46		170	1.7	4.3	0.9	×	228
-150-M 67	1				150	67	56	—	29	42	—		185	1.5	9.6	1.3	○	233
-155-M 42	2				155	42	28	58	26.4	36	50		190	1.9	6.8	1.1		231
-180-M 67					180	67			29	42	53		215	2.1	9.8	1.4		234
-SLSA10- 90 CV	3	10	13	1.5	90	63	—	—	53	—	—	30	125	1.2	3.3	1.8	○	235
-120 CV					120	93							155	1.5	4.3	1.3		236
-150 CV					150	123							185	1.6	4.9	2.2		237
-180 CV					180	153							215	1.7	5.6	3.4		238
-210 CV					210	183							245		6	6		239
-240 CV					240	213							275	2	7.9	5.8	▲	240
-SLRA10- 90 CV	3	10	19	4.5	90	63	—	—	53	—	—	30	125	1.3	3.8	0.7	×	241
-120 CV					120	93							155	1.4	4.6	0.9	○	242
-150 CV					150	123							185	1.6	5.4	1.4		243
-180 CV					180	153							215	1.8	6.3	2		244
-210 CV					210	183							245		7.2	3.1		245
-SLFA10- 90 CV	3	10	19	4.5	90	63	—	—	53	—	—	30	125	1.3	3.8	0.7	×	246
-120 CV					120	93							155	1.4	4.6	0.9	○	247
-150 CV					150	123							185	1.6	5.4	1.4		248
-180 CV					180	153							215	1.8	6.3	2		249
-210 CV					210	183							245		7.2	3.1		250

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S	HRD-01S	缩略图
BT40-SLSA12- 95-M 42	1	12	15	1.5	95	42	26	—	19.4	32	—	30	130	1.1	7.1	1.8	○	251
-120-M 67					120	67			22				155		10.7	3.3		254
-125-M 42					125	42	56		19.4				160	1.2	7.3	2.3		252
-150-M 67					150	67			22	36			185	1.4	10.9	3.6		255
-M 97						97	26		25.2	32				1.2	15.3	4.9		257
-155-M 42	2				155	42	30	56	19.4		46		190	1.6	7.5	2.3		253
-180-M 67					180	67			22				215	1.7	11.2	3.9		256
-M 97	1					97	56	—	25.2		—			1.4	15.5	5.8		258
-210-M 97	2				210		30	56			46		245	1.7	15.8			259
-SLSB12- 95-M 42	1	12	19	3.5	95	42	26	—	23.4	32	—	30	130	1.1	8	1.1	○	260
-120-M 67					120	67			26				155	1.2	12.2	1.8		263
-125-M 42					125	42	56		23.4				160	1.3	8.2	1.5		261
-150-M 67					150	67			26				185		12.4	2.5		264
-M 97						97	26		29.2	42					17.9	2.4		266
-155-M 42	2				155	42	30	56	23.4	32	46		190	1.7	8.4	1.6		262
-180-M 67					180	67	28	58	26	36	50		215	1.9	12.6	2.2		265
-M 97	1					97	56	—	29.2	50	—			1.7	18.4	2.6		267
-M127						127	26		32.3	42				1.5	22.9	3.3		269
-210-M 97	2				210	97	28	58	29.2		53		245	2.1	19	2.9		268
-M127	1					127	56	—	32.3	50	—			1.9	23.5	3.5		270
-M157						157	26		35.5	42				1.7	27.9	4.1		272
-240-M127					240	127	86		32.3	50			275	2.2	24	3.8	▲	271
-M157						157	56		35.5	42				1.9	28.5	4.7		273
-270-M157	2				270		28	58			53		305	2.4	29.1	4.8		274
-SLRB12- 75-M 22	1	12	26	7	75	22	26	—	28.3	42	—	30	110	1.2	6.9	0.4	×	275
- 95-M 42					95	42			30.4				130		8.7	0.6		278
-105-M 22					105	22	56		28.3	50			140	1.4	7.5	0.5		276
-120-M 67					120	67	26		33	42			155		12.9	0.8		281
-125-M 42					125	42	56		30.4				160	1.5	9.3	0.7		279
-135-M 22					135	22	86		28.3	50			170	1.8	8.1	0.6		277
-150-M 67					150	67	56		33	42			185	1.6	13.5	1.1		282
-155-M 42	2				155	42	28	58	30.4		53		190	2	9.9	0.8		280
-180-M 67					180	67			33				215	2.1	14.1	1.1		283
-SLFB12- 75-M 22	1	12	26	7	75	22	26	—	28.3	42	—	30	110	1.2	6.9	0.4	×	284
- 95-M 42					95	42			30.4				130		8.7	0.6		287
-105-M 22					105	22	56		28.3				140	1.4	7.5	0.5		285
-120-M 67					120	67	26		33				155		12.9	0.8		290
-125-M 42					125	42	56		30.4				160	1.5	9.3	0.7		288
-135-M 22	2				135	22	28	58	28.3		53		170	1.9	8.1	0.6		286
-150-M 67	1				150	67	56	—	33		—		185	1.6	13.5	1.1		291
-155-M 42					155	42	86		30.4	50			190	2	9.9	0.8		289
-180-M 67	2				180	67	28	58	33	42	53		215	2.1	14.1	1.1		292
-SLSA12- 90 CV	3	12	15	1.5	90	63	—	—	53	—	—	30	125	1.3	3.7	1.5	○	293
-120 CV					120	93							155	1.5	4.6	1.2		294
-150 CV					150	123							185		4.9	2.4		295
-180 CV					180	153							215	1.7	5.7	3.3		296
-210 CV					210	183							245	1.9	6.6	4.6		297
-240 CV					240	213							275	2	8	5.5	▲	298
-SLRA12- 90 CV	3	12	22	5	90	63	—	—	53	—	—	30	125	1.3	3.9	0.6	×	299
-120 CV					120	93							155	1.6	5.1	0.7		300
-150 CV					150	123							185	1.7	6	1.1	○	301
-180 CV					180	153							215		6.9	1.9		302
-210 CV					210	183							245	1.8	7.7	2.8		303
-SLFA12- 90 CV	3	12	22	5	90	63	—	—	53	—	—	30	125	1.3	3.9	0.6	×	304
-120 CV					120	93							155	1.6	5.1	0.7		305
-150 CV					150	123							185	1.7	6	1.1	○	306
-180 CV					180	153							215		6.9	1.9		307
-210 CV					210	183							245	1.8	7.7	2.8		308

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S	缩略图
BT40-SLSB16- 95-M 42	1	16	24	4	95	42	26	—	28.4	42	—	32	105	1.2	12.4	0.7	309
-120-M 67					120	67			31				130	1.3	19.3	1.1	312
-125-M 42					125	42	56		28.4				135	1.4	13	0.9	310
-150-M 67					150	67			31				160	1.5	19.8	1.4	313
-M 97						97	26		34.2					1.4	27.6	1.7	315
-155-M 42	2				155	42	28	58	28.4		53		165	1.9	13.5	1	311
-180-M 67					180	67			31				190	2	20.4	1.5	314
-M 97	1					97	56	—	34.2		—			1.7	28.1	2.1	316
-M127						127	26		37.3	53					35.8	2.1	318
-210-M 97					210	97	86		34.2	50			220	2.1	28.7		317
-M127						127	56		37.3					2	36.4	2.5	319
-M157						157	26		40.5	53				1.9	44.1	2.7	321
-240-M127					240	127	86		37.3				250	2.5	37	2.6	320
-M157						157	56		40.5	50				2.2	44.7	3.1	322
-270-M157					270		86			53			280	2.7	45.3	3.5	323
-SLRB16- 75-M 22	1	16	32	8	75	22	26	—	34.3	42	—	32	85	1.2	6.9	0.3	324
- 95-M 42					95	42			36.4				105	1.3	12.5	0.5	327
-105-M 22					105	22	56		34.3				115	1.4	7.5		325
-120-M 67					120	67	26		39				130	1.5	19.4	0.7	330
-125-M 42					125	42	56		36.4				135	1.6	13		328
-135-M 22	2				135	22	28	58	34.3		53		145	2	8.1	0.5	326
-150-M 67	1				150	67	56	—	39		—		160	1.7	20	0.9	331
-155-M 42	2				155	42	28	58	36.4		53		165	2.1	13.6	0.7	329
-180-M 67					180	67			39				190	2.3	20.5	1	332
-SLFB16- 75-M 22	1	16	32	8	75	22	26	—	34.3	42	—	32	85	1.2	6.9	0.3	333
 - 95-M 42					95	42			36.4				105	1.3	12.5	0.5	336
-105-M 22					105	22	56		34.3				115	1.4	7.5		334
-120-M 67					120	67	26		39				130	1.5	19.4	0.7	339
-125-M 42					125	42	56		36.4				135	1.6	13		337
-135-M 22					135	22	86		34.3	50			145	1.9	8.1	0.5	335
-150-M 67					150	67	56		39	42			160	1.7	20	0.9	340
-155-M 42					155	42	86		36.4	50			165	2	13.6	0.7	338
-180-M 67	2				180	67	28	58	39	42	53		190	2.3	20.5	1	341
-SLSB16- 90 CV	3	16	21	2.5	90	63	—	—	53	—	—	32	100	1.3	4.2	0.6	342
-120 CV					120	93							130	1.5	5.5	0.8	343
-150 CV					150	123							160	1.6	6.2	1.5	344
BT40 -180 CV					180	153							190	1.9	7.5	1.9	345
-210 CV					210	183							220	2	8.2	3	346
-240 CV					240	213							250	2.2	9.5	3.7	347
BT40-SLSB20- 95-M 42	1	20	29	4.5	95	42	26	—	33.4	42	—	40	105	1.2	14.2	0.6	348
-120-M 67					120	67			36				130	1.3	24.5	0.9	351
-125-M 42					125	42	56		33.4				135	1.5	14.8	0.8	349
-150-M 67					150	67			36				160	1.6	25	1.2	352
-M 97						97	26		39.2	53					36.8		354
-155-M 42	2				155	42	28	58	33.4	42	53		165	2	15.3	0.9	350
-180-M 67	1				180	67	86	—	36	50	—		190		25.6	1.2	353
-M 97						97	56		39.2					1.9	37.4	1.4	355
-M127						127	26		42.3	53				1.8	50	1.6	357
-210-M 97					210	97	86		39.2				220	2.4	38		356
-M127						127	56		42.3	50				2.1	50.5	1.9	358
-M157						157	26		45.5					2	62.3	2.1	360
-240-M127					240	127	86		42.3				250	2.4	51.1	2.3	359
-M157						157	56		45.5						62.9	2.4	361
-270-M157					270		86						280	2.7	63.5	2.9	362

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S	缩略图
BT40-SLRB20- 95-M 42	1	20	38	9	95	42	26	—	42.4	53	—	40	105	1.5	14.3	0.4	363
-120-M 67					120	67			45				130	1.7	24.6	0.5	366
-125-M 42					125	42	56		42.4				135	1.9	14.9		364
-150-M 67					150	67			45	50			160	2	25.2	0.7	367
-155-M 42					155	42	86		42.4	53			165	2.2	15.4	0.6	365
-180-M 67					180	67			45	50			190	2.3	25.7	0.9	368
-SLFB20- 95-M 42	1	20	38	9	95	42	26	—	42.4	53	—	40	105	1.5	14.3	0.4	369
-120-M 67					120	67			45				130	1.7	24.6	0.5	372
-125-M 42					125	42	56		42.4				135	1.9	14.9		370
-150-M 67					150	67			45	50			160	2	25.2	0.7	373
-155-M 42					155	42	86		42.4				165	2.1	15.4		371
-180-M 67					180	67			45				190	2.3	25.7	0.9	374
-SLSB20- 90 CV	3	20	26	3	90	63	—	—	50.5	—	—	40	100	1.3	4.4	0.5	375
-120 CV					120	93			53				130	1.5	5.8	0.8	376
-150 CV					150	123							160	1.6	6.7	1.3	377
-180 CV					180	153							190	1.9	8	1.8	378
-210 CV					210	183							220	2.1	9.4	2.3	379
-240 CV					240	213							250	2.4	10.7	3	380
BT40-SLRB25- 95-M 42	1	25	45	10	95	42	26	—	49.4	53	—	45	105	1.5	16.4	0.3	381
-125-M 42					125		56						135	1.9	17	0.4	382
-155-M 42					155		86						165	2.3	17.5	0.6	383
-SLFB25- 95-M 42	1	25	45	10	95	42	26	—	49.4	53	—	45	105	1.5	16.4	0.3	384
-125-M 42					125		56						135	1.9	17	0.4	385
-155-M 42					155		86						165	2.3	17.5	0.6	386
BT40-SLRB32- 95-M 42	1	32	54	11	95	42	26	—	58.4	63	—	50	87	1.8	4.7	0.3	387

▮主轴锥孔用 清洁工具
STAR DUST

型号
CLT-NT40-G3

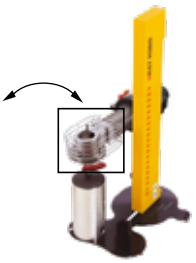
P.194



▮φ70 加热喷头 (HRB-03S-230AS)
SLRB32刀柄加热时必需品

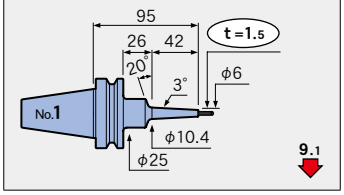
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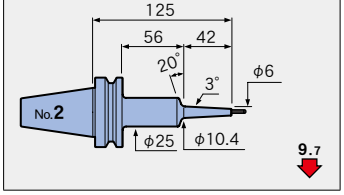


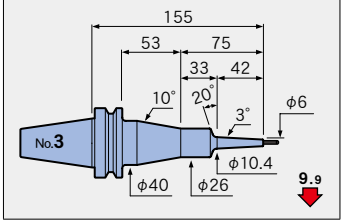


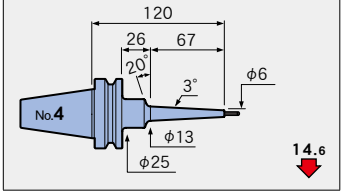
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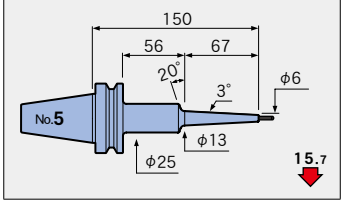
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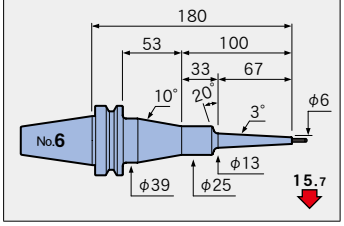
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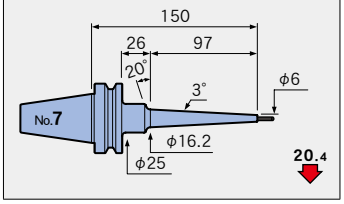
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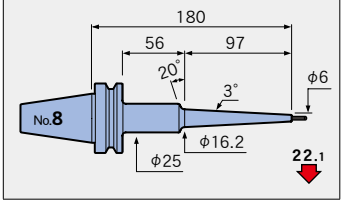
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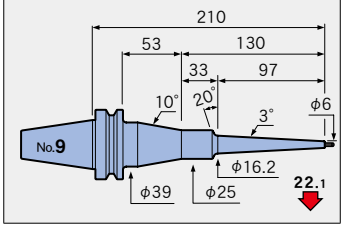
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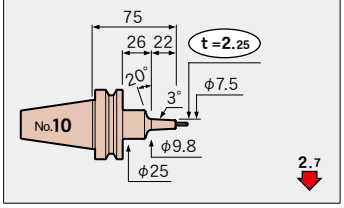
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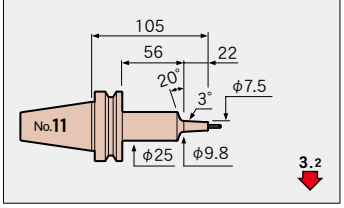
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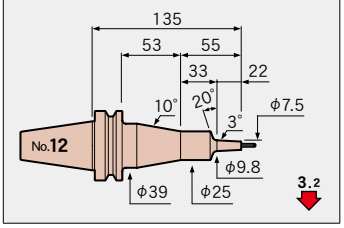
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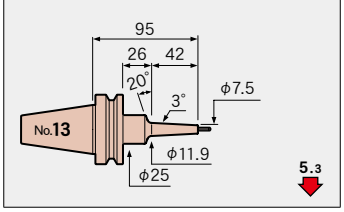
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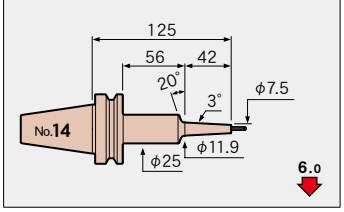
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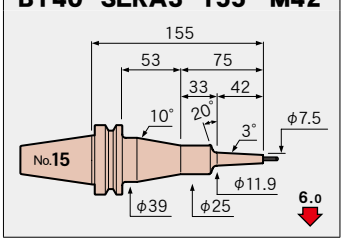
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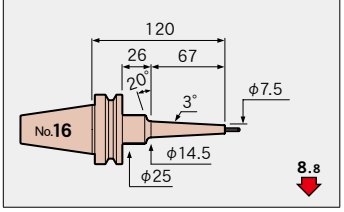
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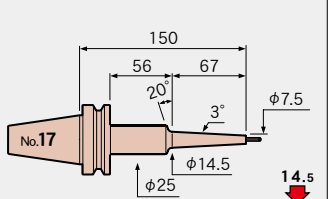
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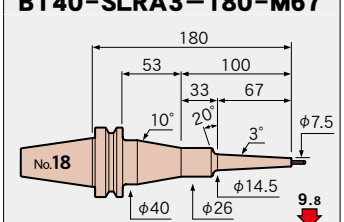
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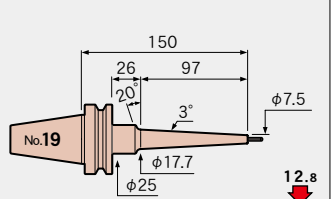
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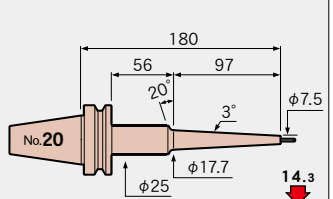
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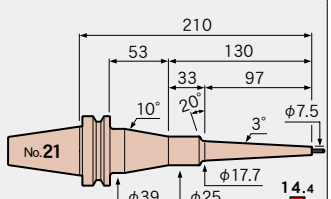
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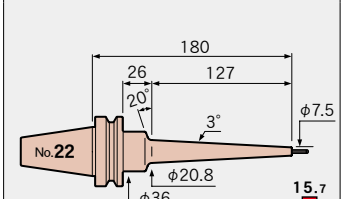
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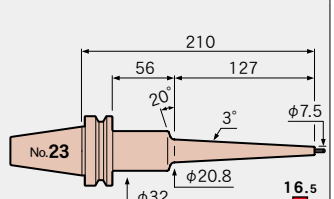
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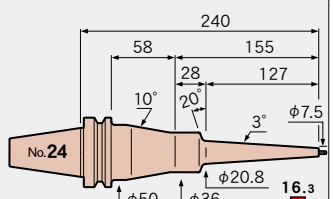
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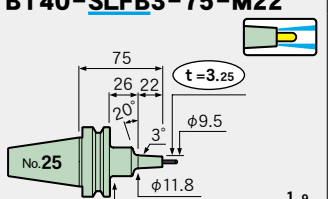
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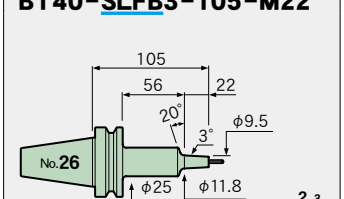
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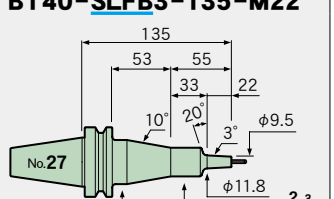
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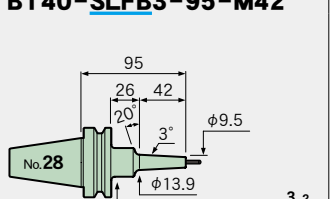
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BT40-SLRA3-240-M127


BT40-SLFB3-75-M22


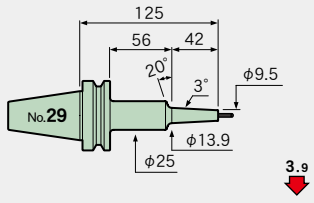
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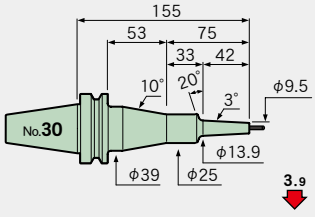
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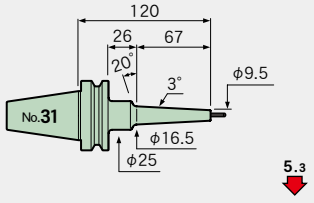
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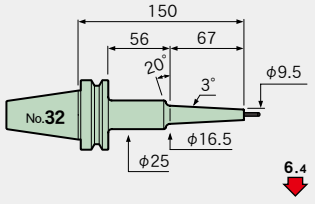
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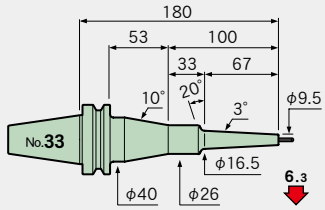
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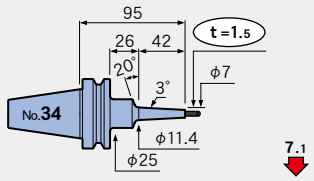


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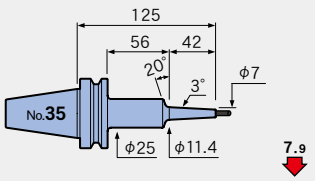


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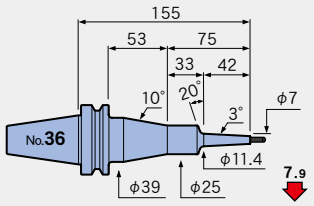
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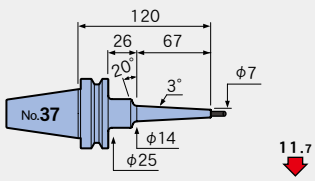
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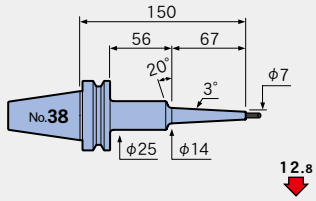
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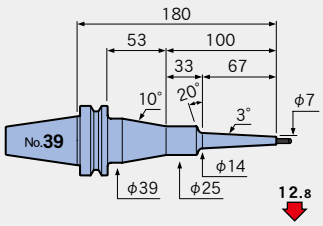
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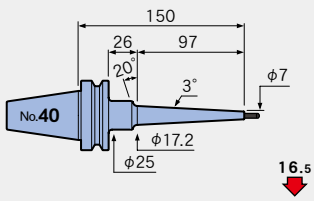
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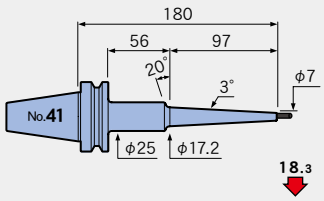
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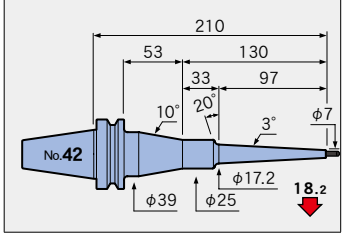
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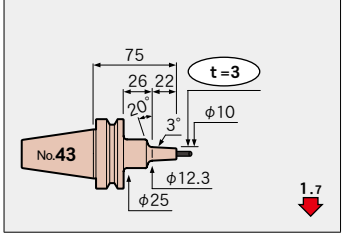
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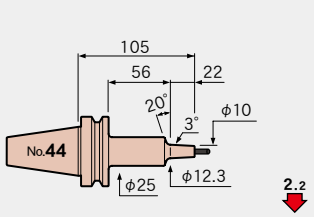
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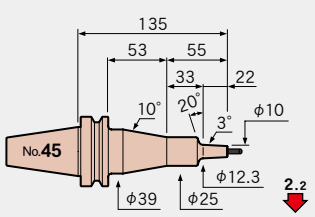
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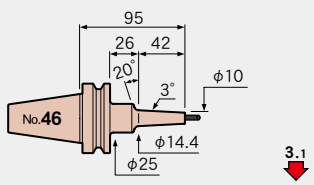
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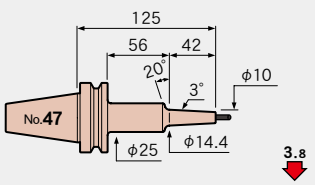
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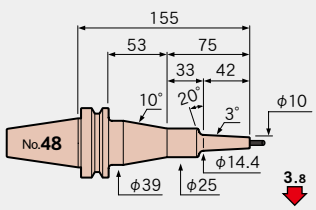
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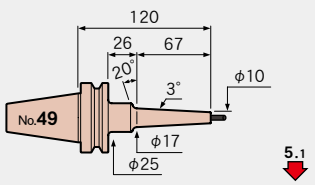
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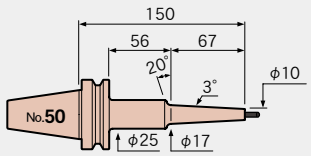


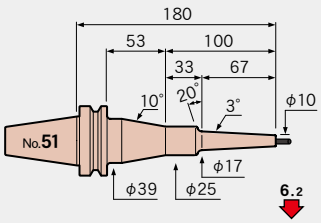
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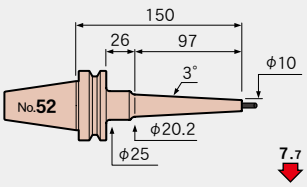


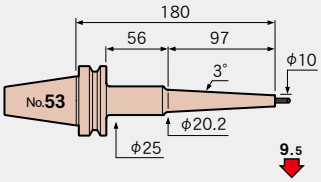
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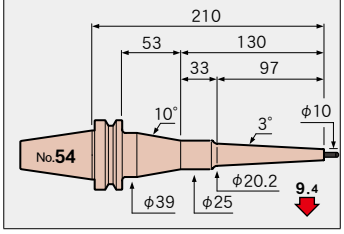


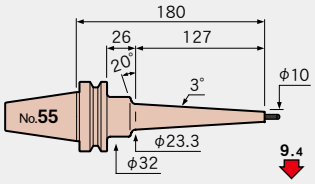
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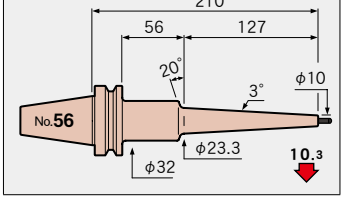
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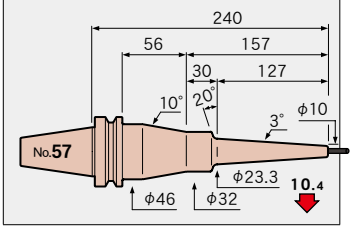
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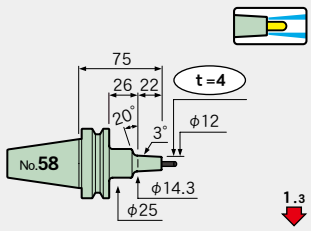
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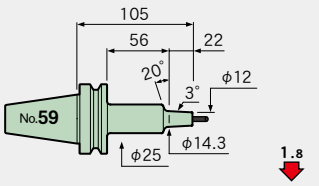
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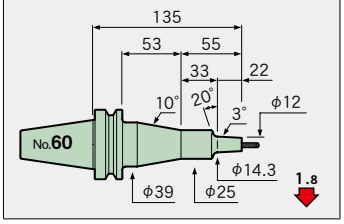
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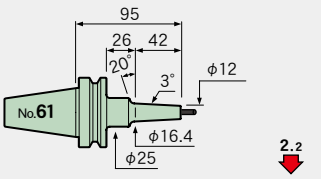
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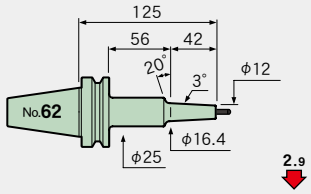
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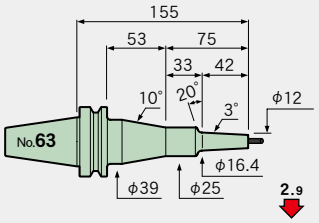
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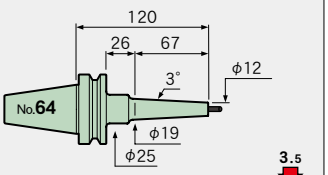
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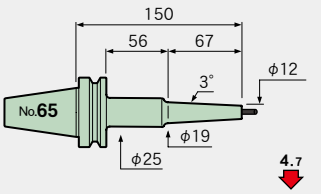
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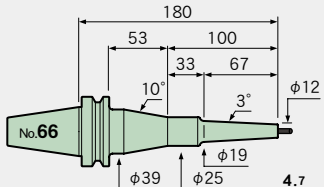
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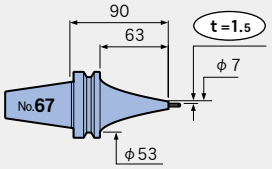
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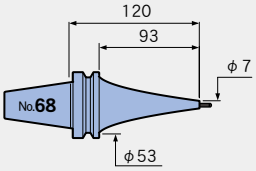
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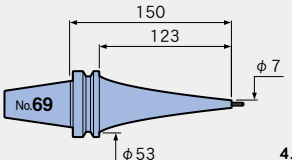
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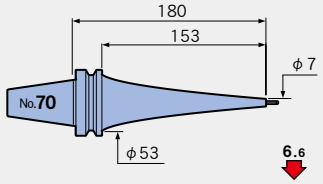
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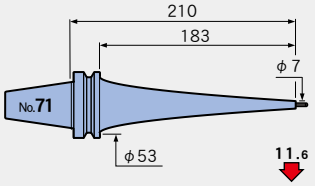
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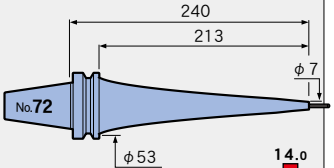
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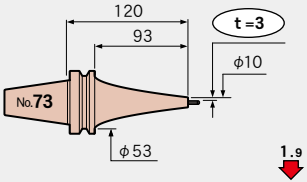
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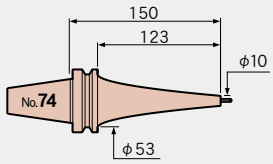
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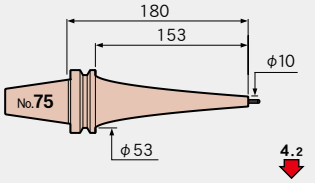
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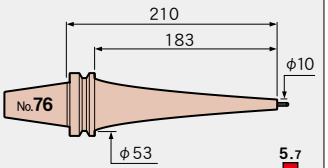
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BT40-SLSA4-240 CV


BT40-SLRA4-120 CV


BT40-SLRA4-150 CV


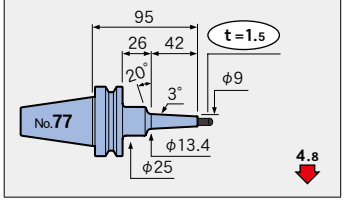
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BT40-SLRA4-210 CV


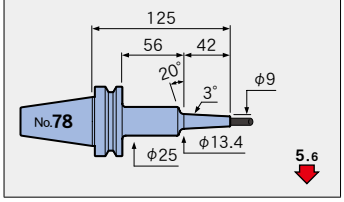
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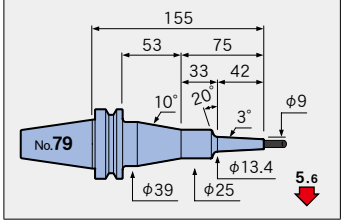
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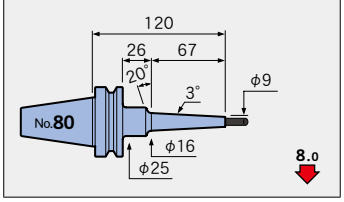
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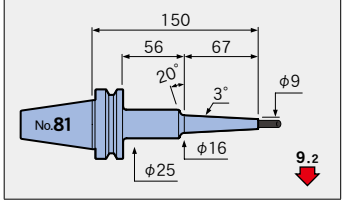
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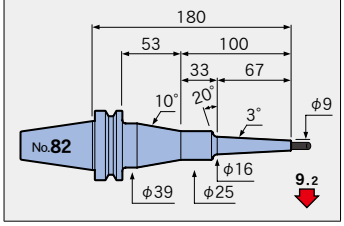
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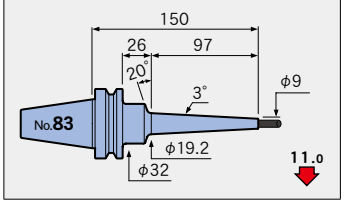
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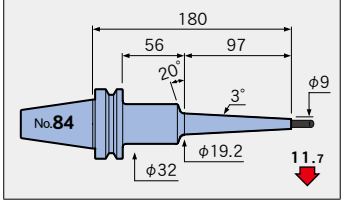
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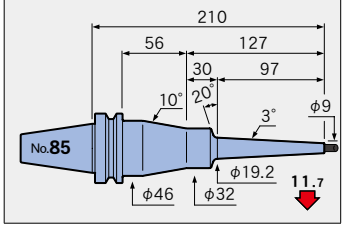
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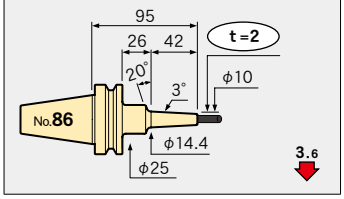
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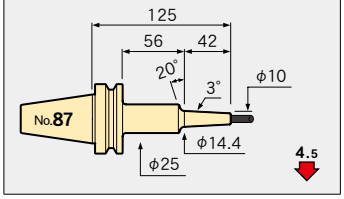
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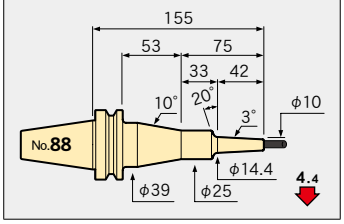
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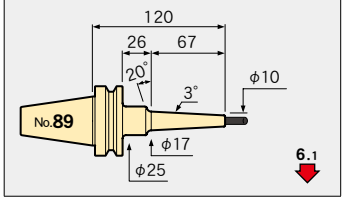
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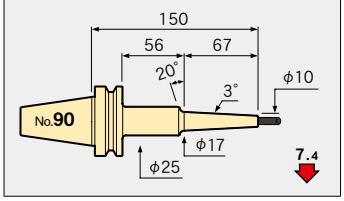
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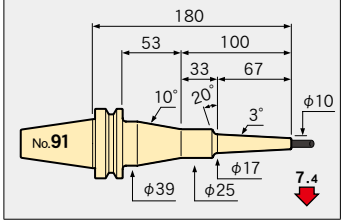
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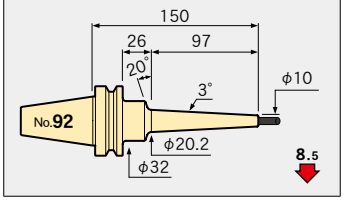
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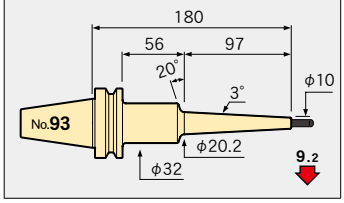
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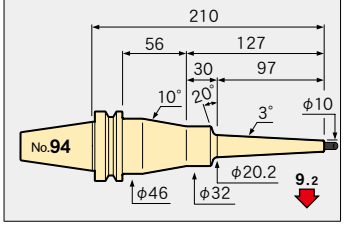
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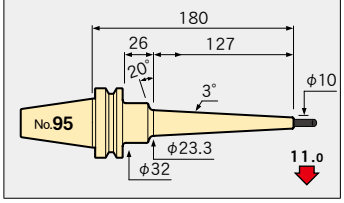
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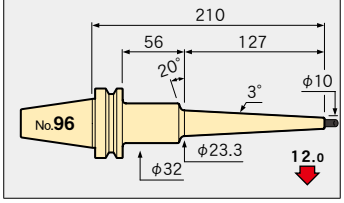
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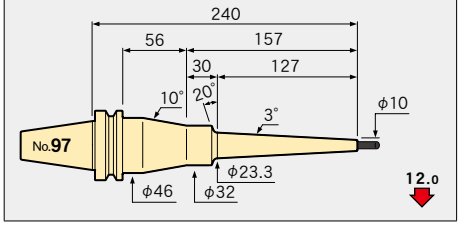
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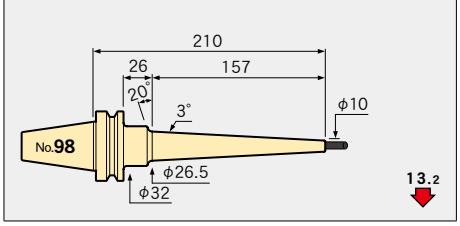
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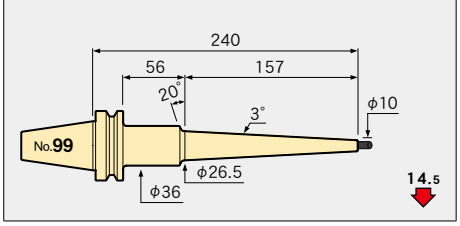
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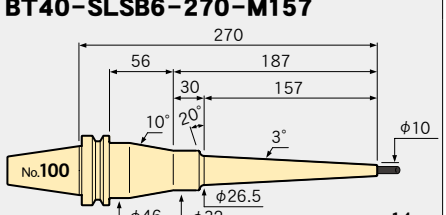
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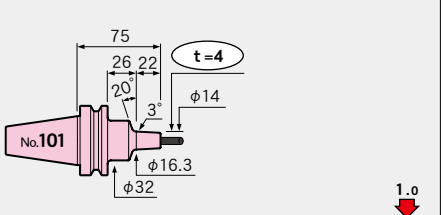
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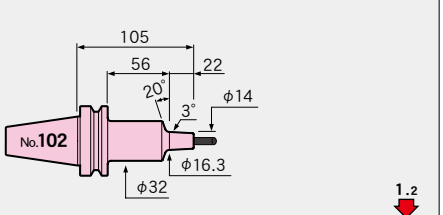
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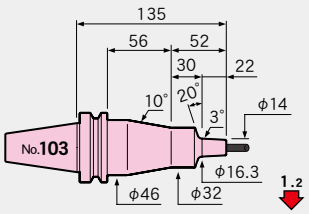
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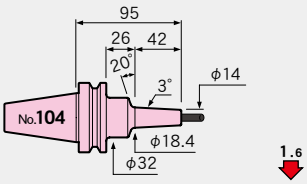
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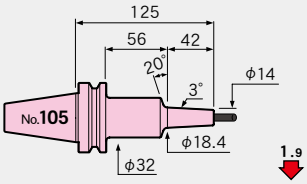
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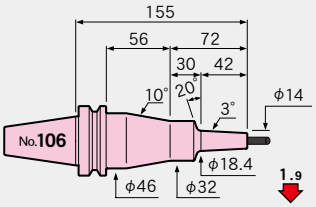
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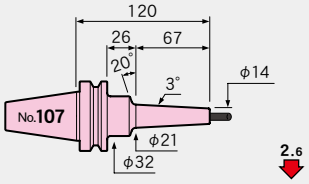
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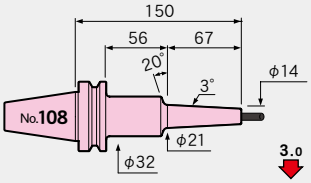
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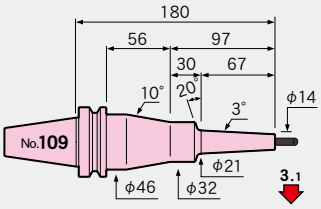
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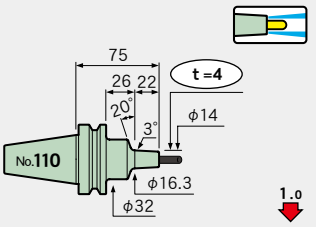
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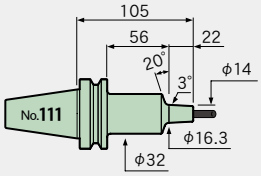
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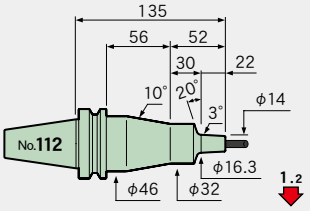
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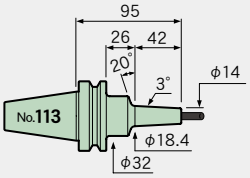
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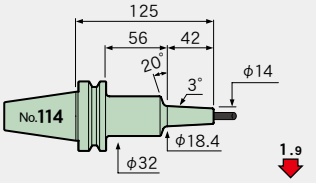
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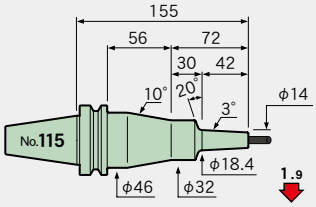
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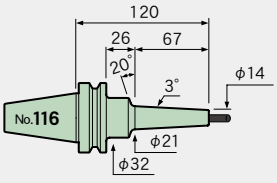
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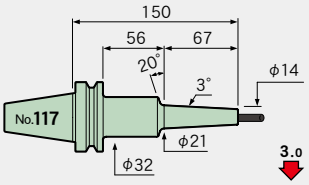
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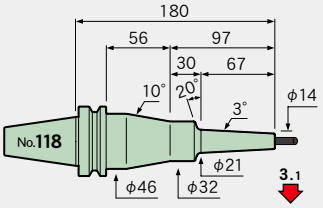
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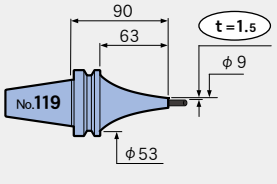
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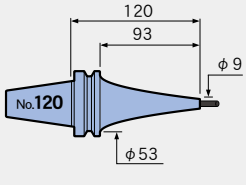
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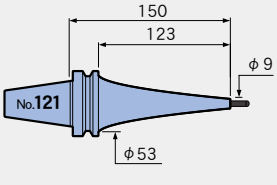
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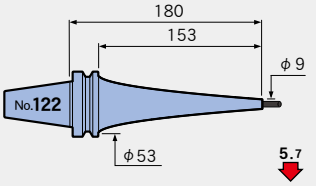
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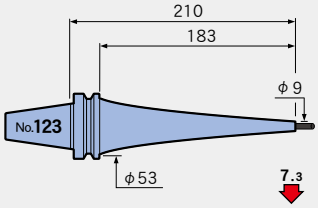
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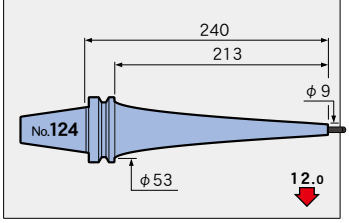
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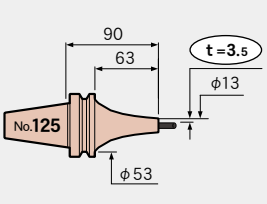
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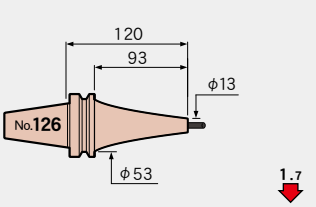
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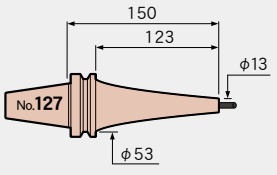
BT40-SLRA6-90 CV



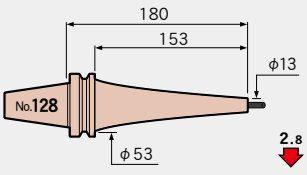
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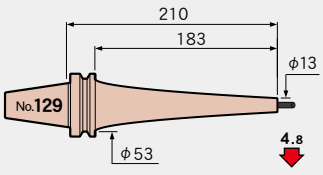
BT40-SLRA6-150 CV



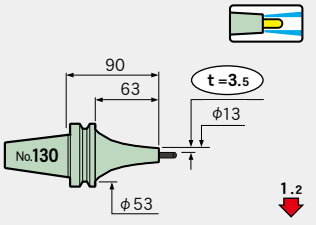
BT40-SLRA6-180 CV



BT40-SLRA6-210 CV

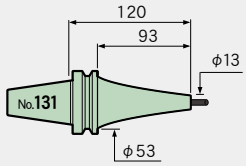


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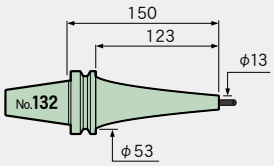


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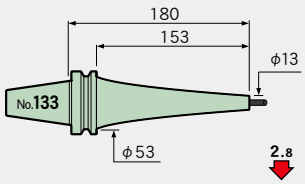
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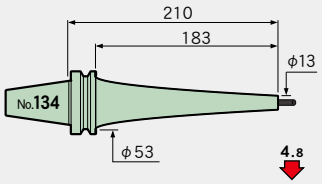
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BT40-SLFA6-180 CV

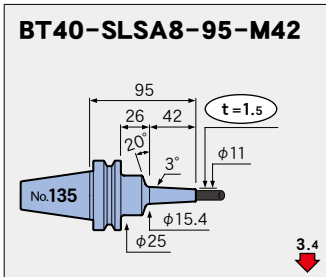


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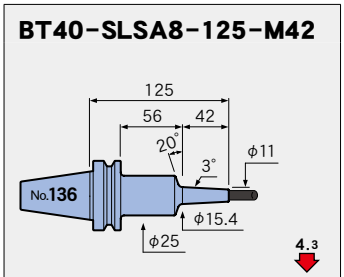


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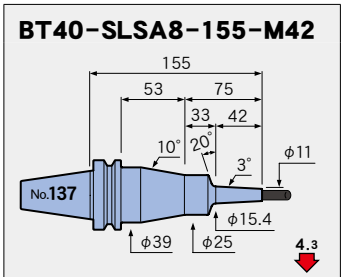
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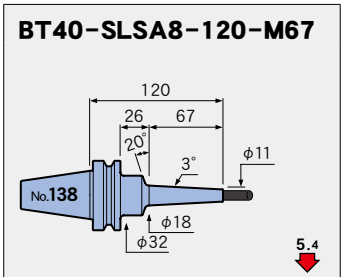
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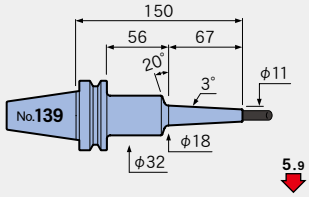
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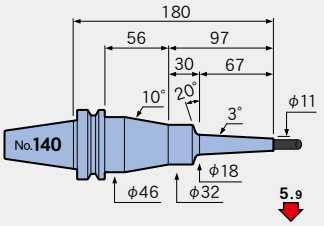
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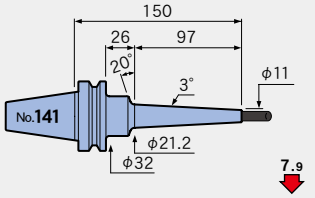
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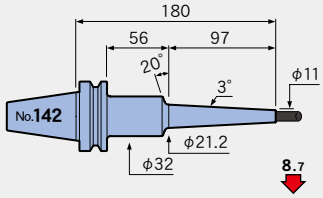
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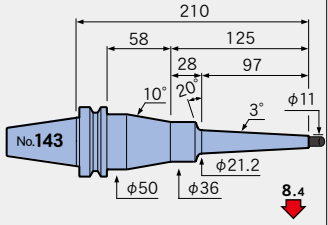
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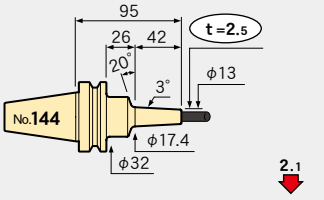
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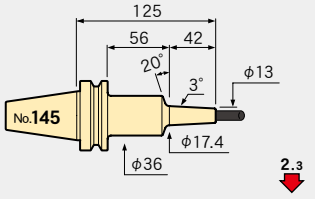
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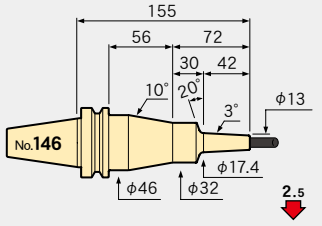
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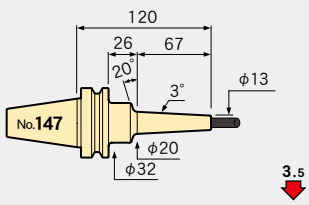
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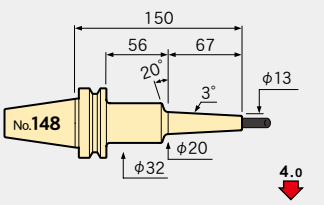
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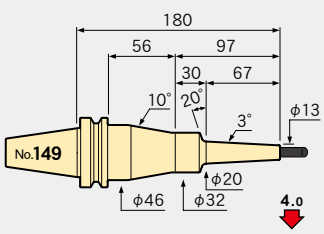
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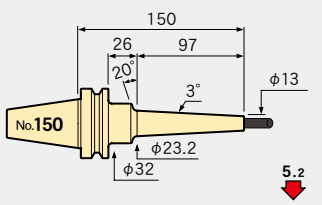
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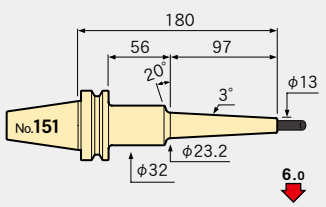
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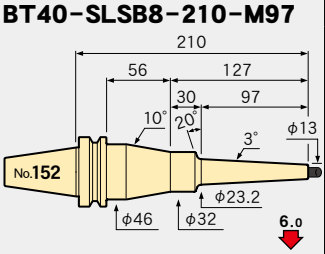
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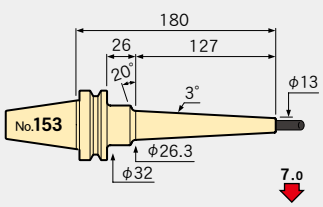
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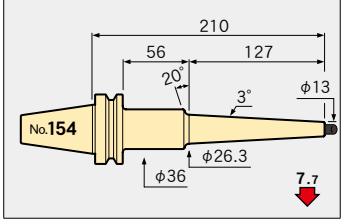
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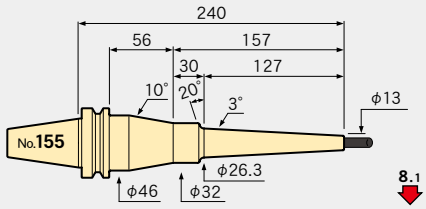
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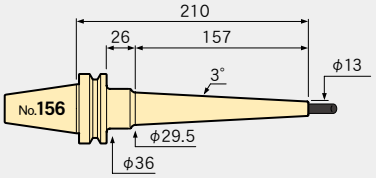
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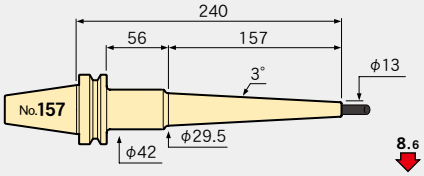
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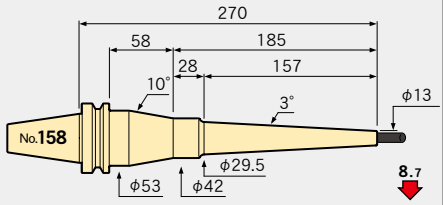
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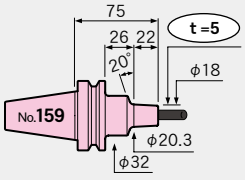
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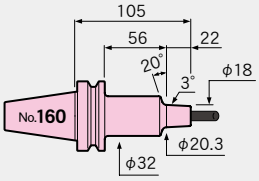
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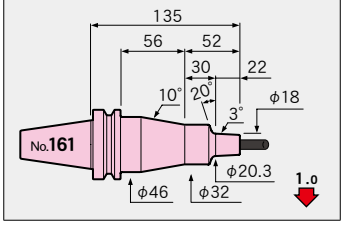
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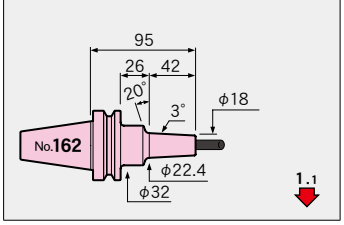
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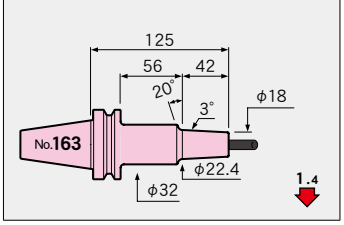
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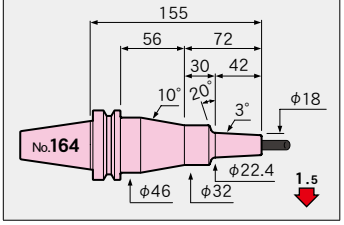
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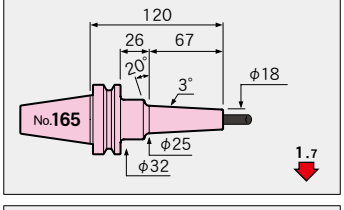
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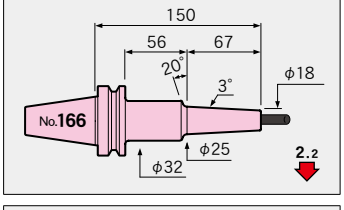
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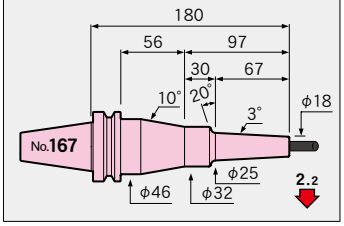
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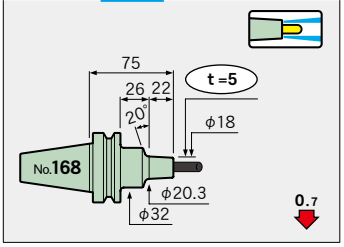
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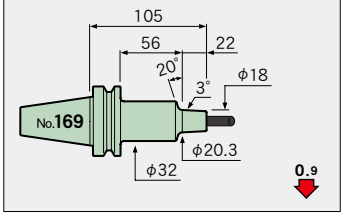
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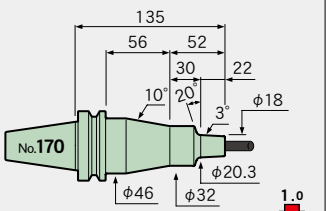
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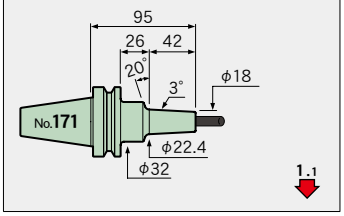
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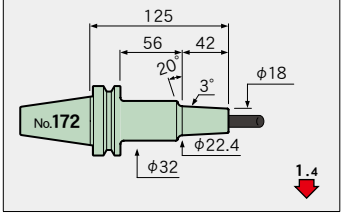
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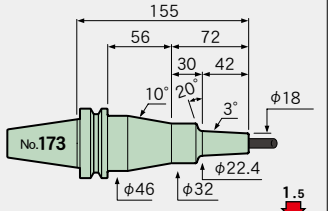
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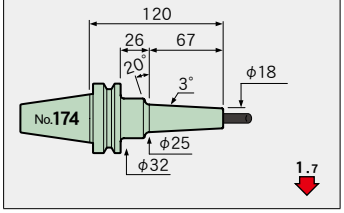
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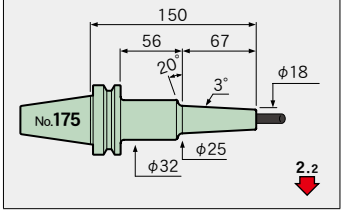
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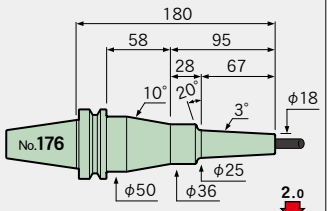
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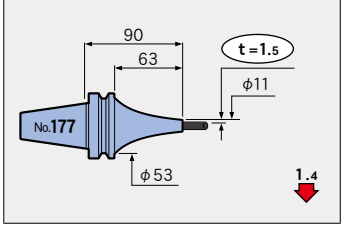
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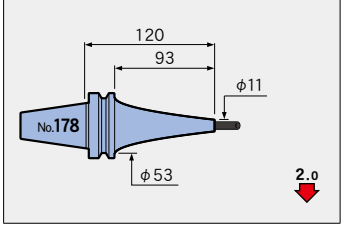
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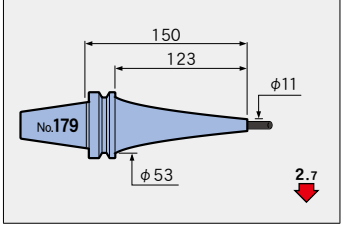
BT40-SLSA8-90 CV



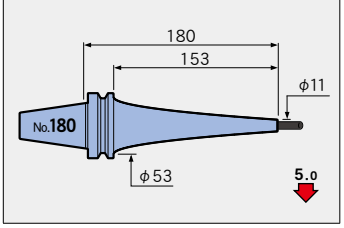
BT40-SLSA8-120 CV



BT40-SLSA8-150 CV

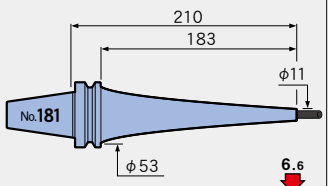


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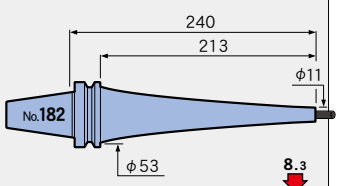


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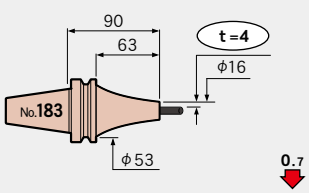
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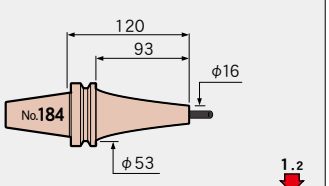
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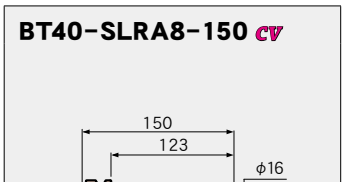
BT40-SLRA8-90 CV



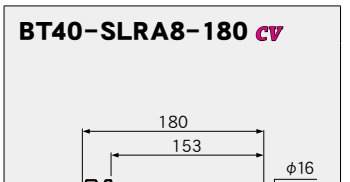
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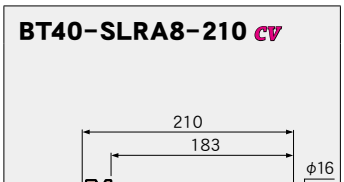
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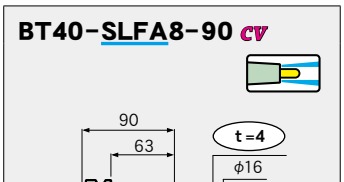
BT40-SLRA8-180 CV



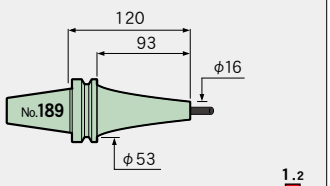
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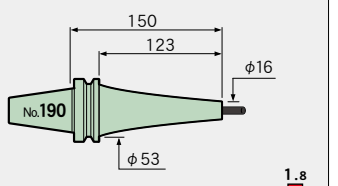
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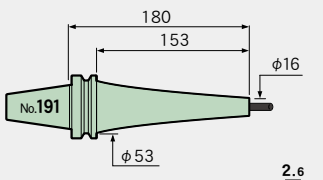
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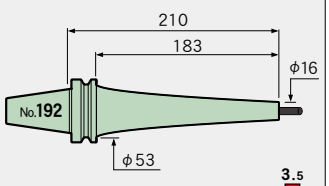
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BT40-SLFA8-180 CV

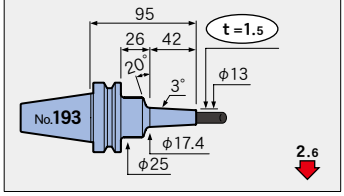


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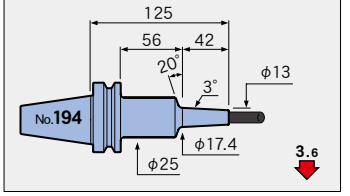


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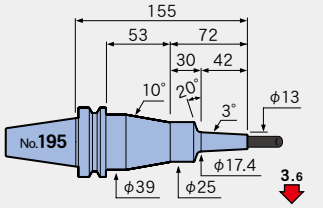
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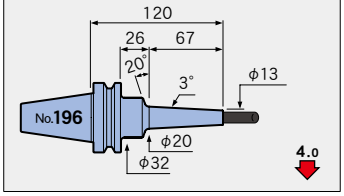
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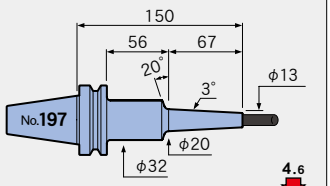
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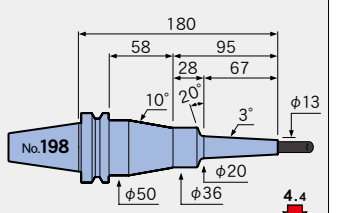
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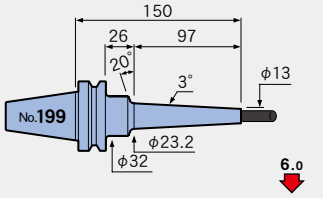
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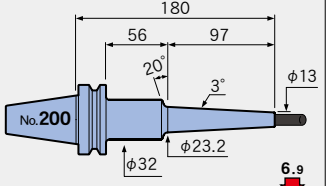
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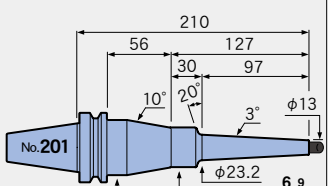
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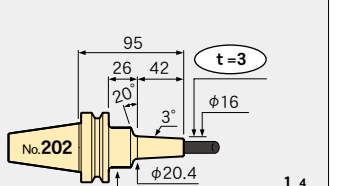
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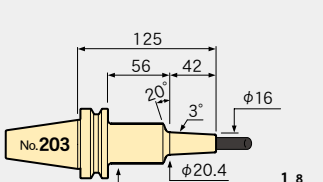
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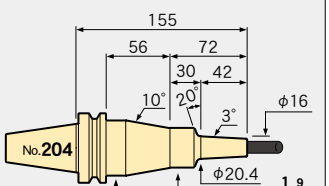
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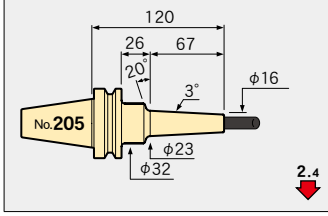
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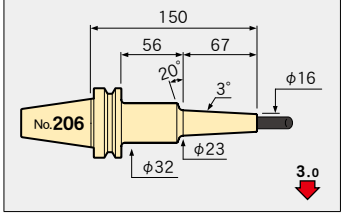
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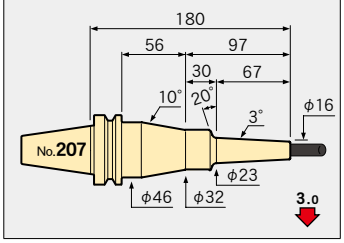
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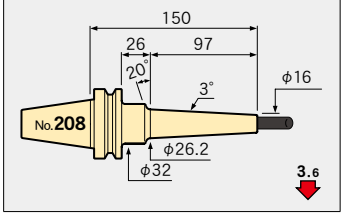
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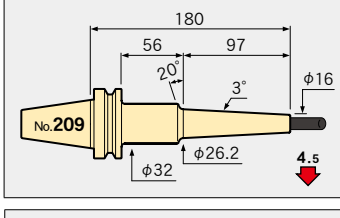
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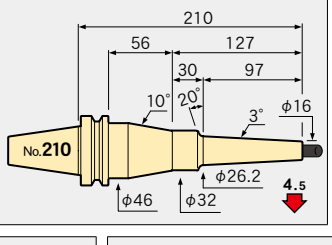
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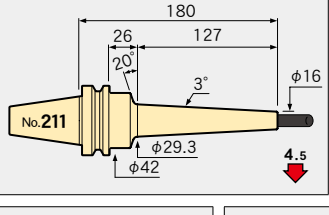
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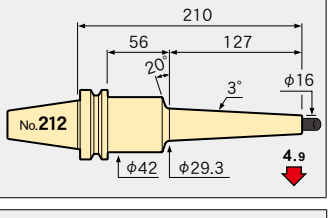
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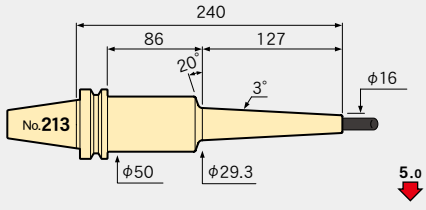
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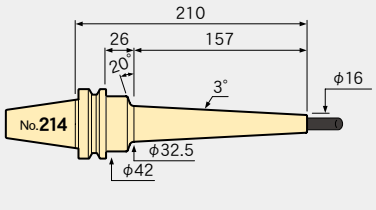
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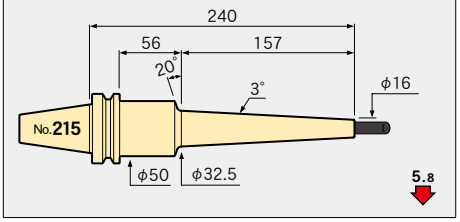
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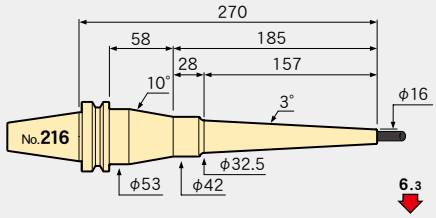
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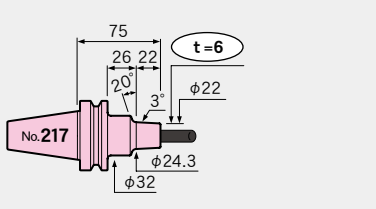
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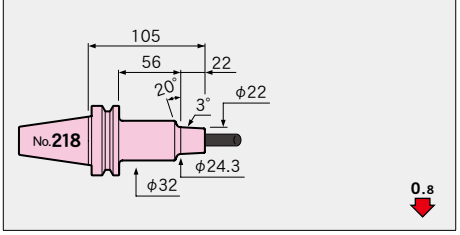
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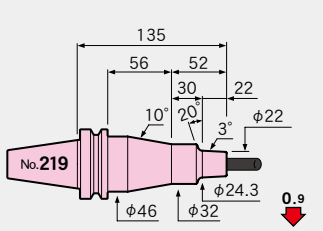
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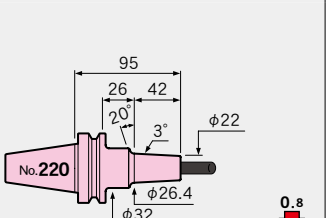
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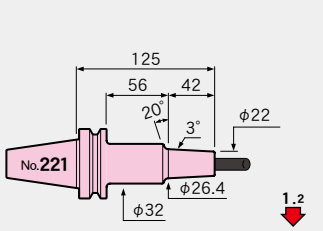
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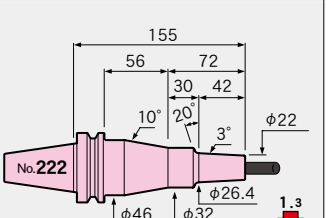
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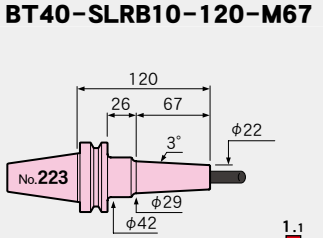
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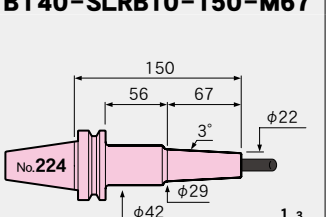
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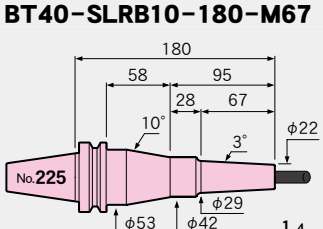
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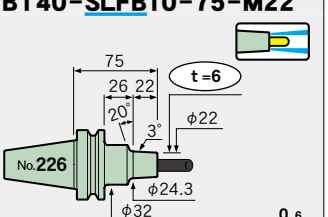
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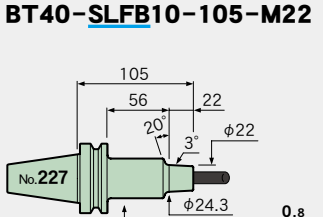
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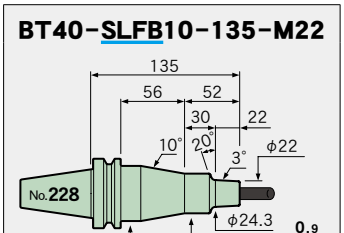
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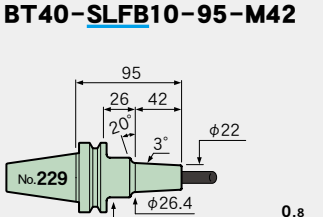
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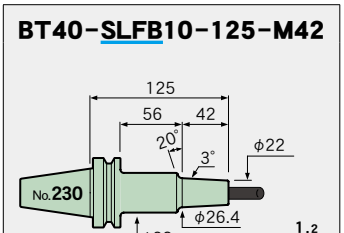
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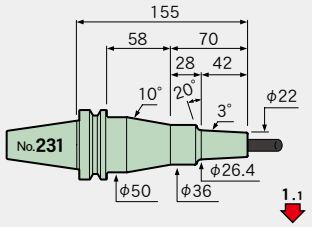
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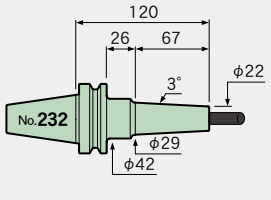


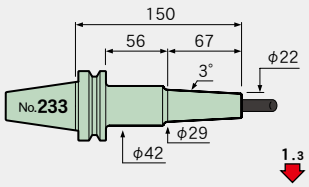
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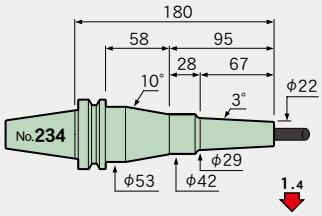


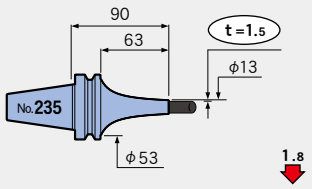
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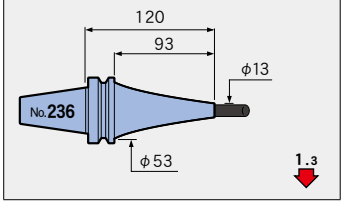
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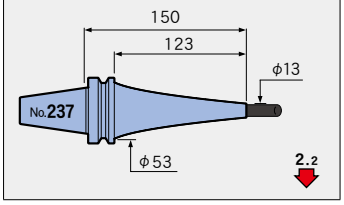
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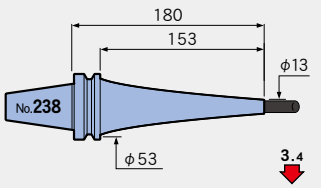
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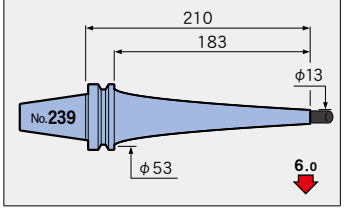
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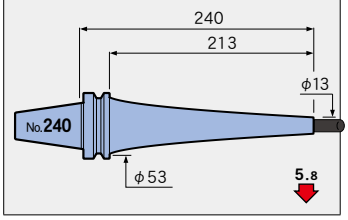
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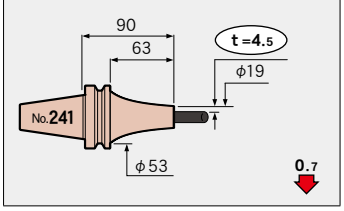
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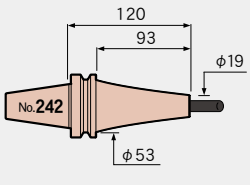
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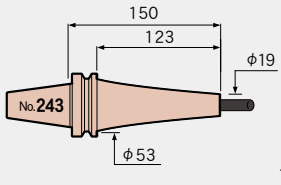
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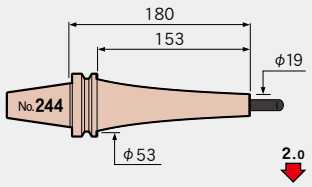
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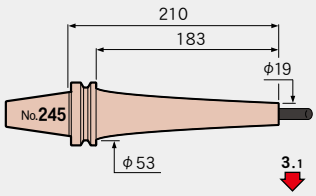
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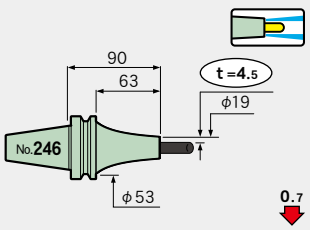
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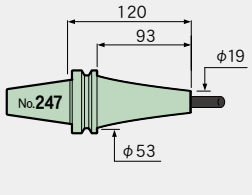
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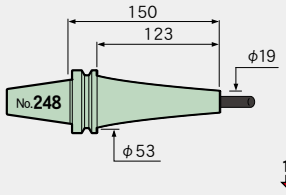
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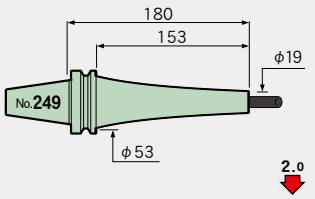
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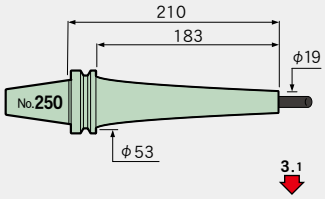
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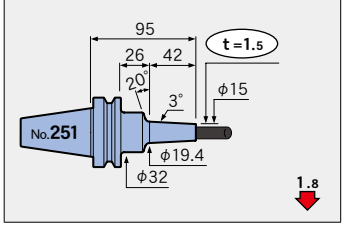
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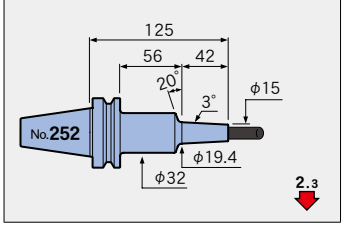
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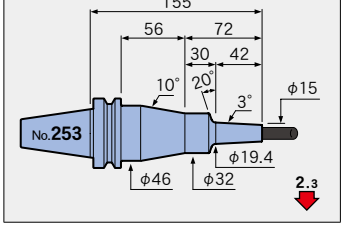
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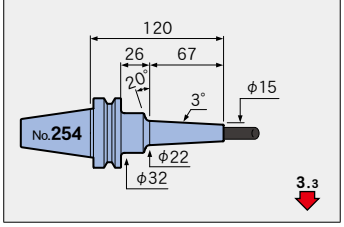
BT40-SLFA10-210 CV


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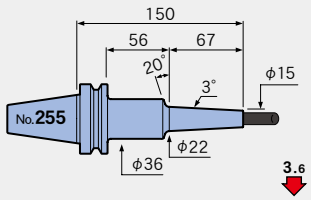
BT40-SLSA12-95-M42


BT40-SLSA12-125-M42


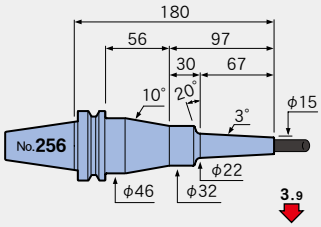
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BT40-SLSA12-120-M67


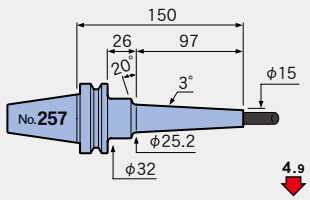
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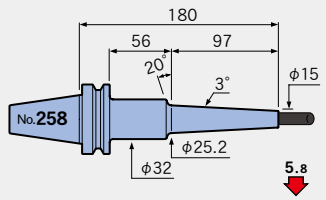
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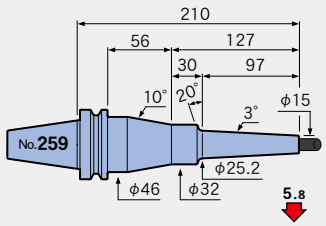
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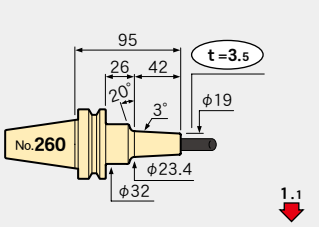
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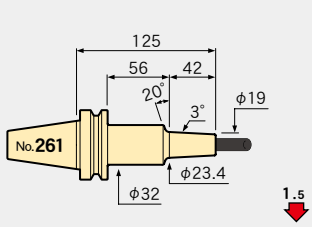
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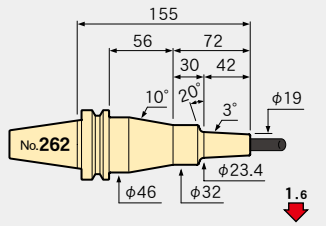
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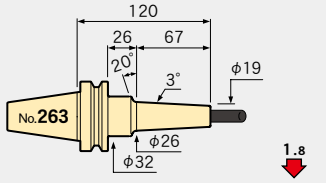
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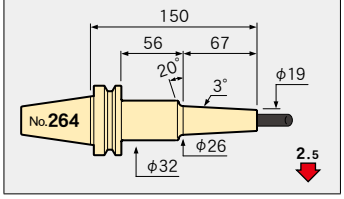
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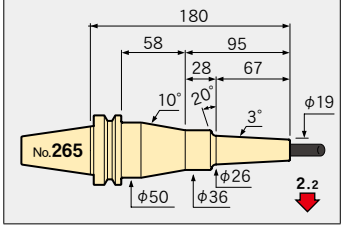
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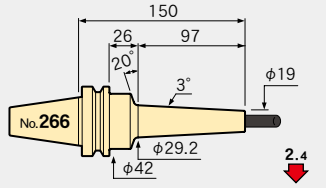
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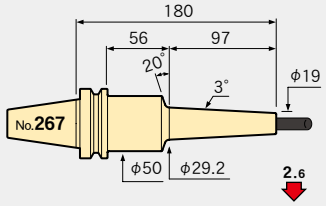
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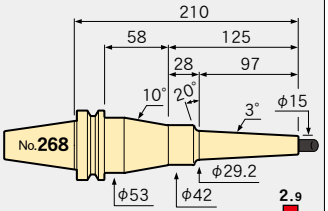
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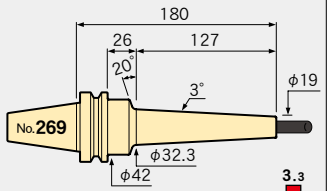
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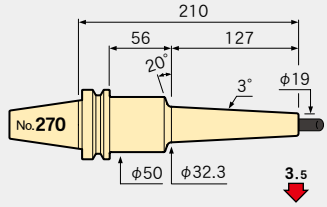
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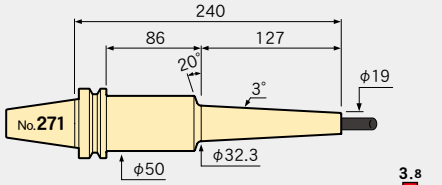
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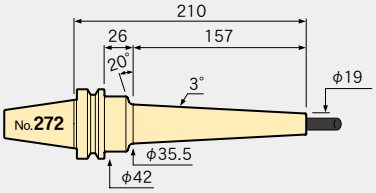
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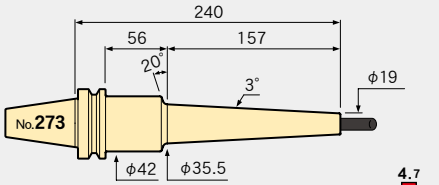
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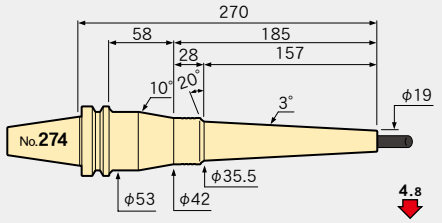
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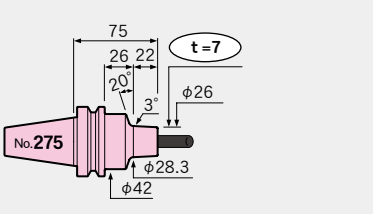
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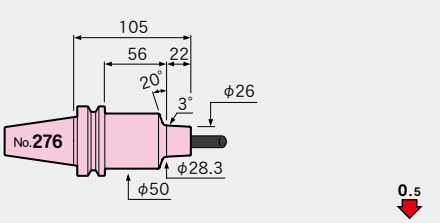
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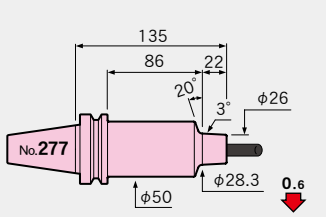
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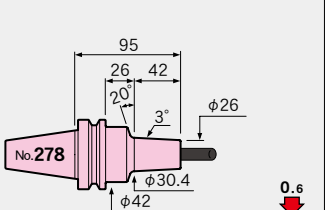
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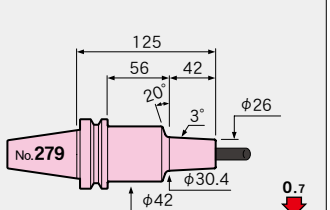
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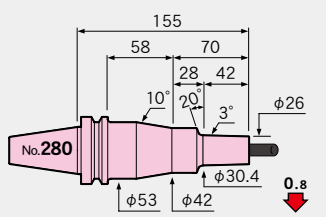
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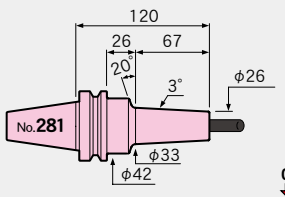
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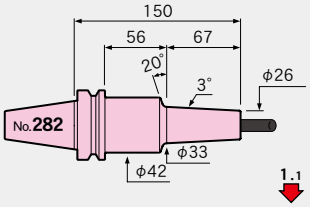


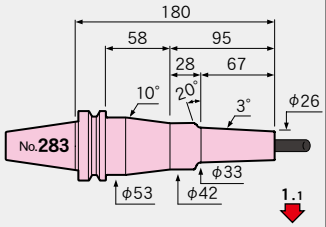
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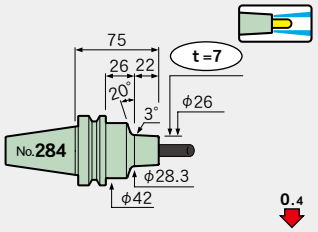


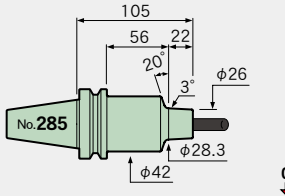
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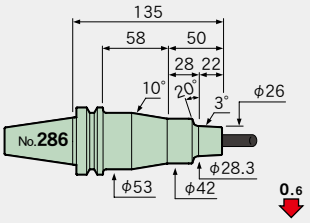
BT40-SLRB12-120-M67


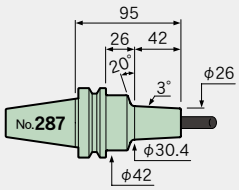
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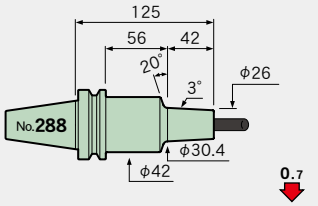
BT40-SLRB12-180-M67


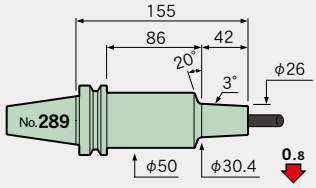
BT40-SLFB12-75-M22


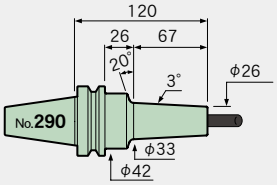
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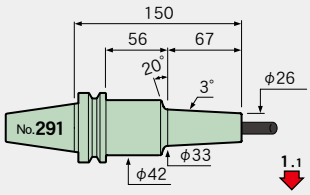
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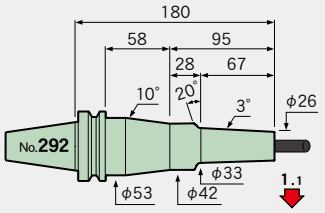
BT40-SLFB12-95-M42


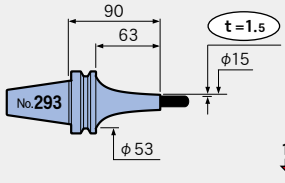
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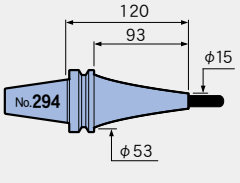
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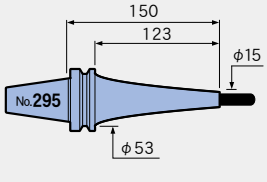
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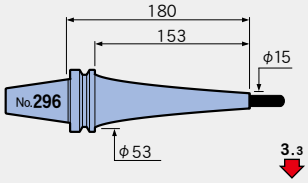
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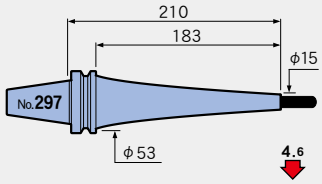
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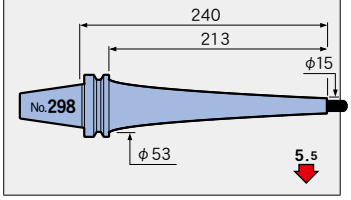
BT40-SLSA12-90 CV


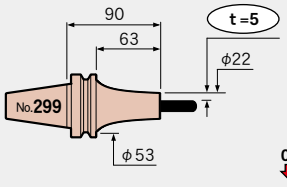
BT40-SLSA12-120 CV


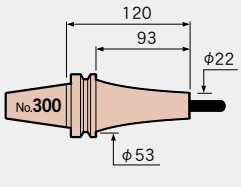
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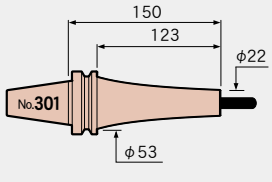
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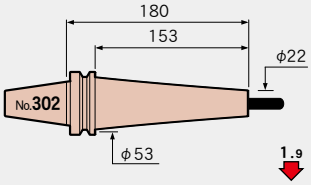
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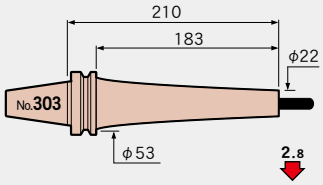
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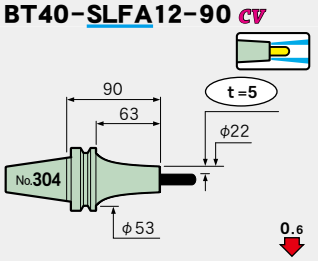
BT40-SLRA12-90 CV


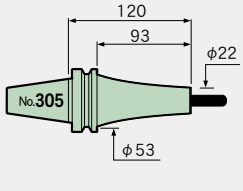
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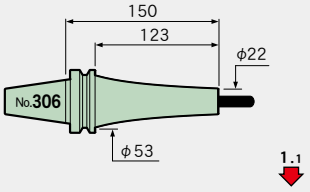
BT40-SLRA12-150 CV


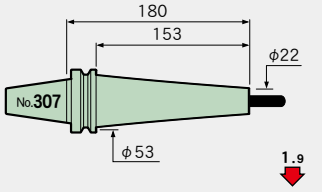
BT40-SLRA12-180 CV


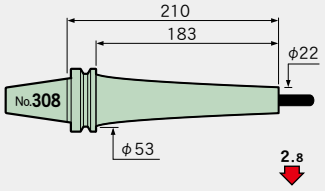
BT40-SLRA12-210 CV


BT40-SLFA12-90 CV


BT40-SLFA12-120 CV


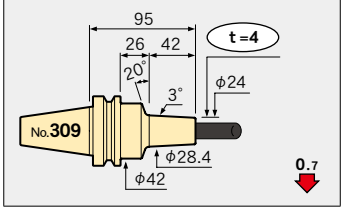
BT40-SLFA12-150 CV


BT40-SLFA12-180 CV


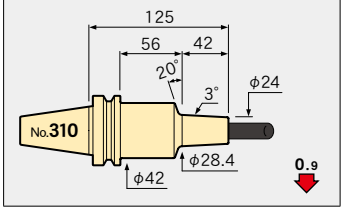
BT40-SLFA12-210 CV


φ16

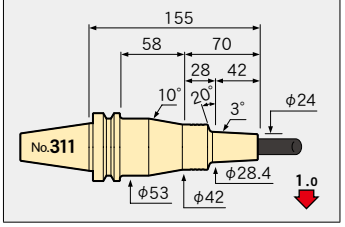
BT40-SLSB16-95-M42



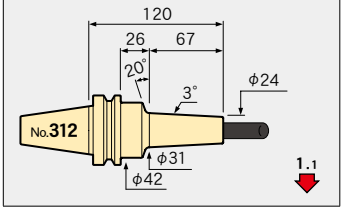
BT40-SLSB16-125-M42



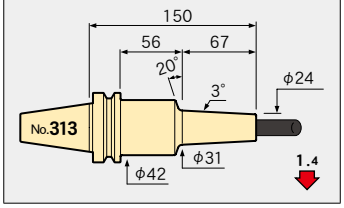
BT40-SLSB16-155-M42



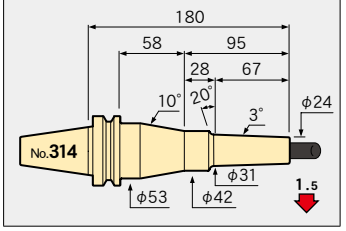
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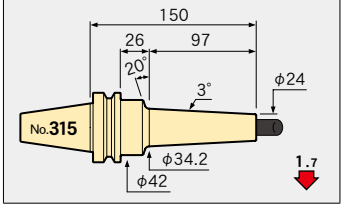
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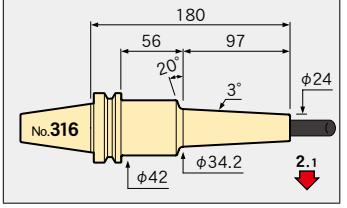
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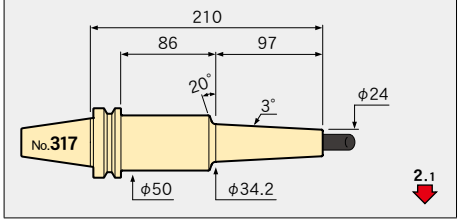
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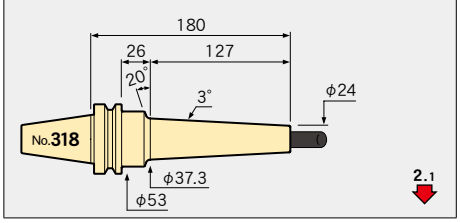
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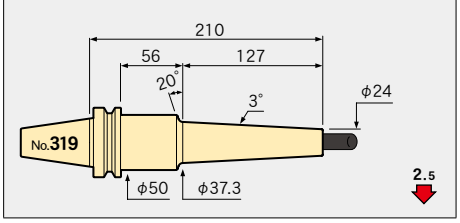
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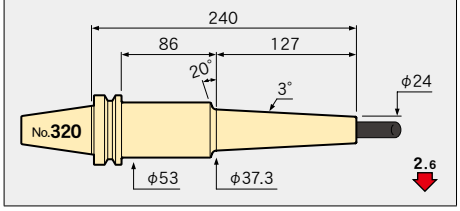
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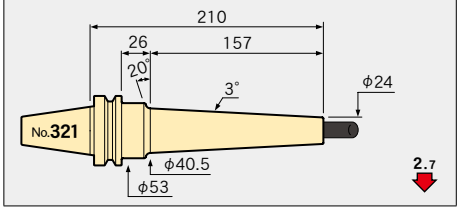
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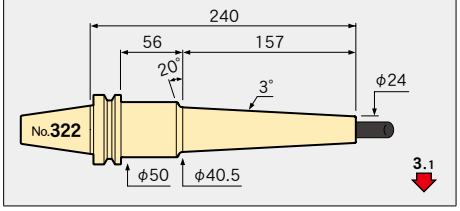
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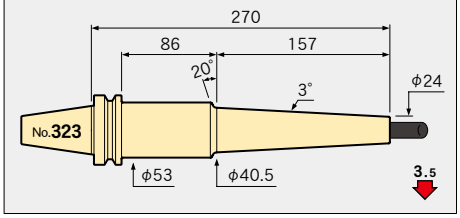
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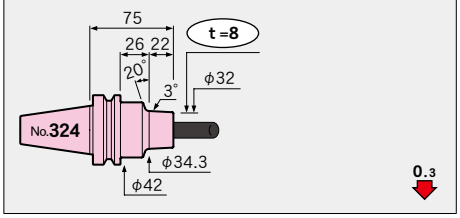
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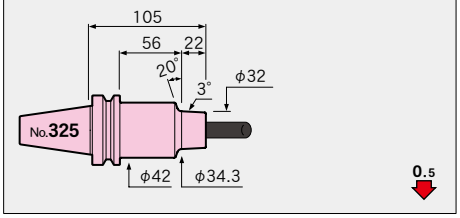
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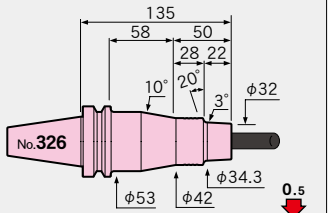
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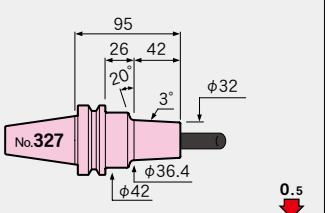
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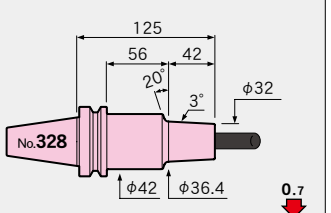
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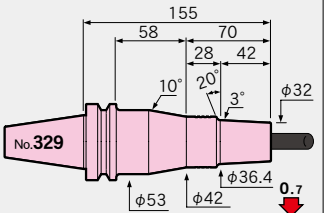
BT40-SLRB16-95-M42



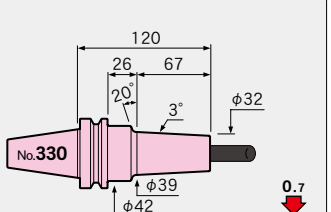
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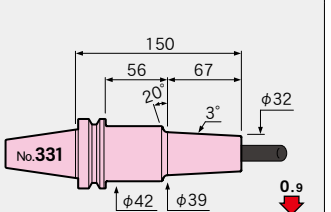
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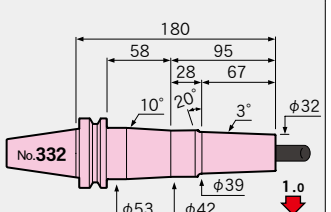
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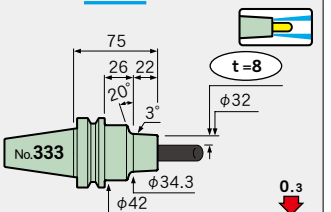
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BT40-SLRB16-180-M67

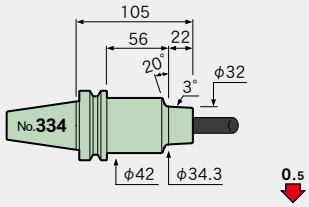


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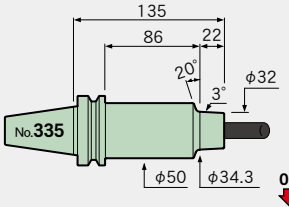


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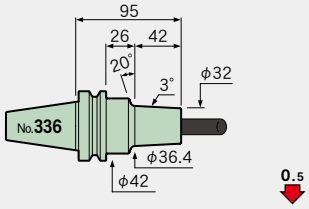
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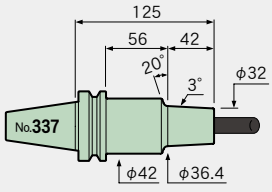
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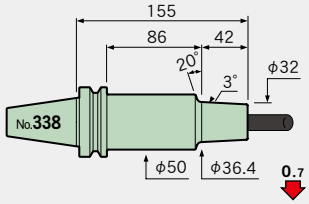
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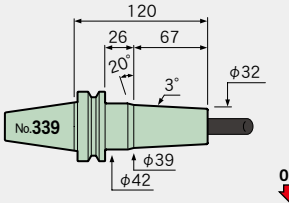
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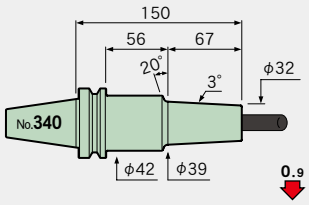
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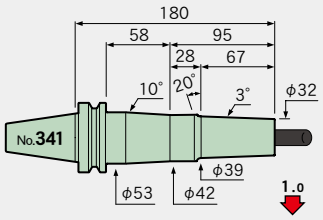
BT40-SLFB16-120-M67



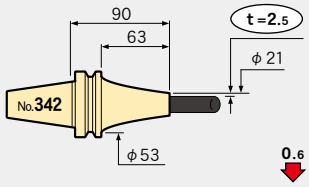
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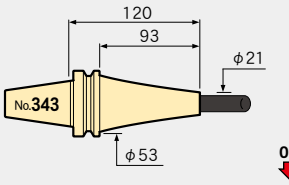
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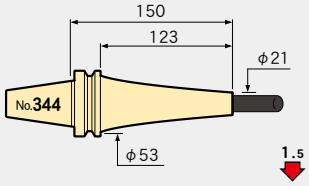
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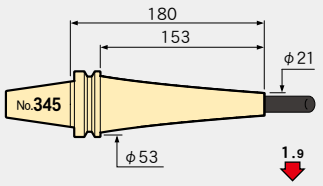
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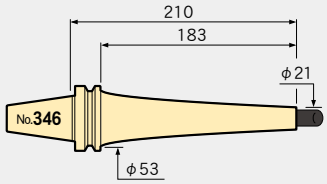
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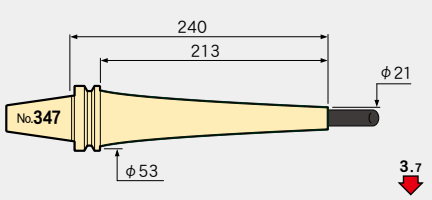
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BT40-SLSB16-210 CV

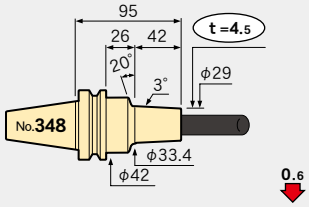


BT40-SLSB16-240 CV

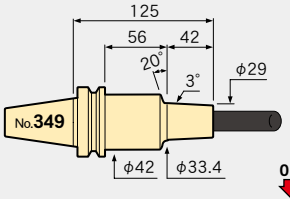


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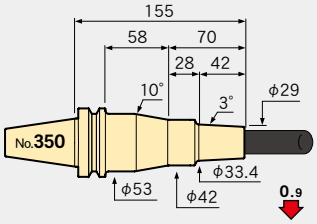
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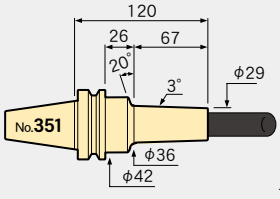
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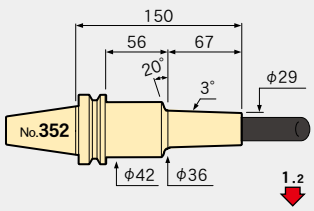
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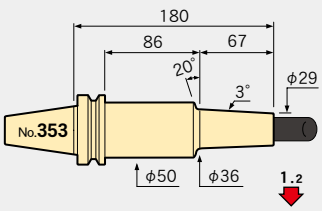
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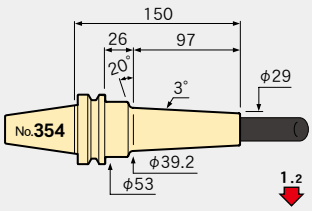
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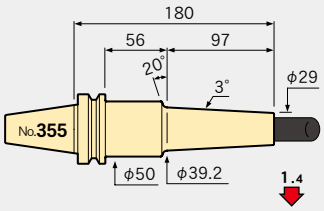
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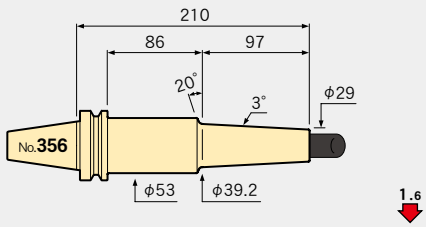
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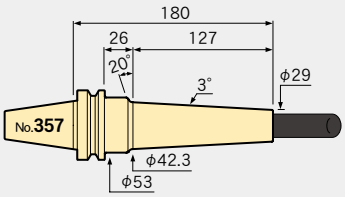
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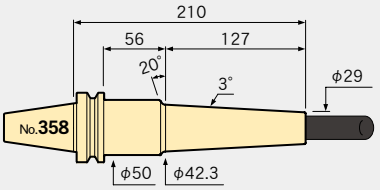
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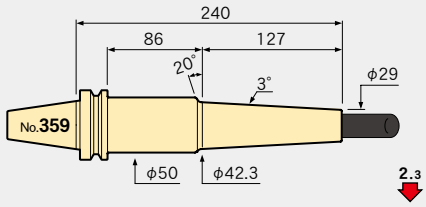
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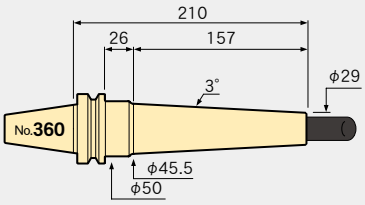
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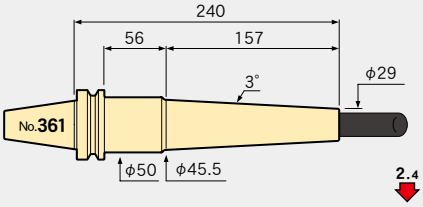
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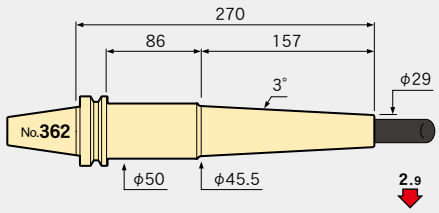
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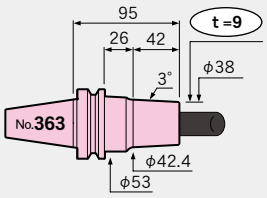
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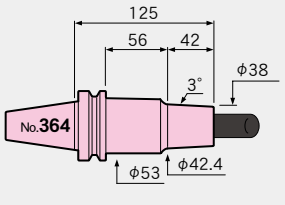
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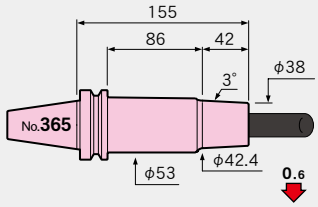
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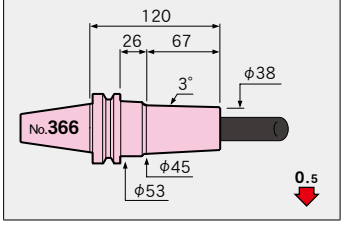
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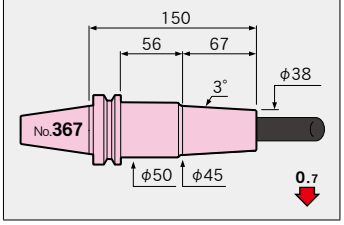
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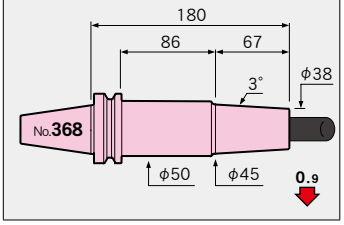
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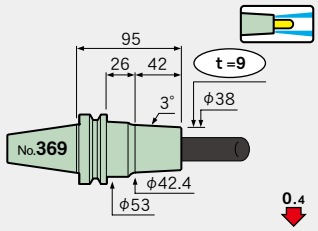
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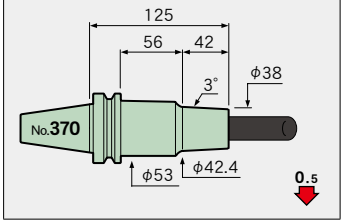
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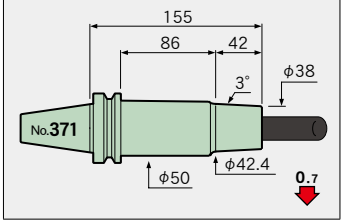
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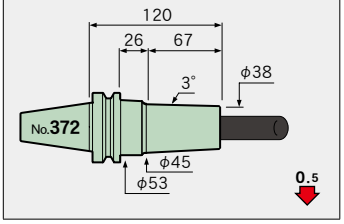
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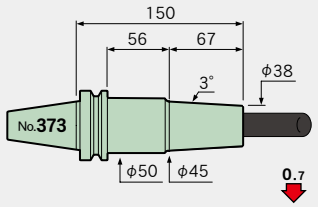
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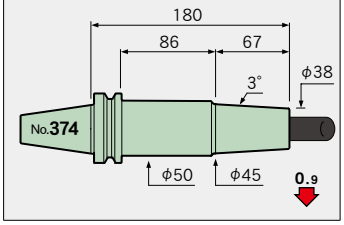
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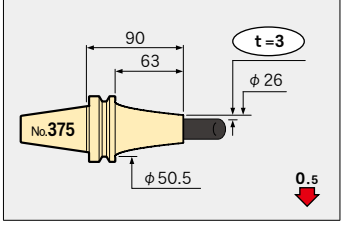
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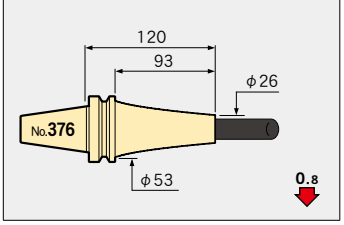
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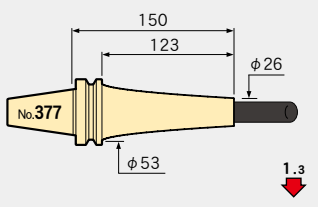
BT40-SLSB20-90 CV



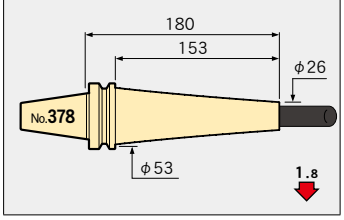
BT40-SLSB20-120 CV



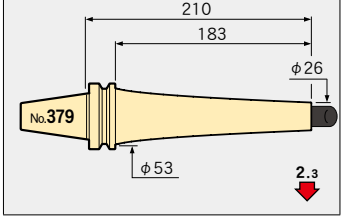
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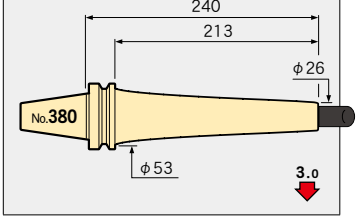
BT40-SLSB20-180 CV



BT40-SLSB20-210 CV



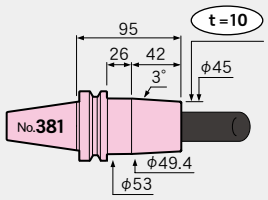
BT40-SLSB20-240 CV



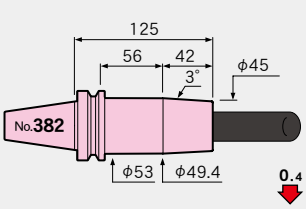
BT40 S=1:7

φ25

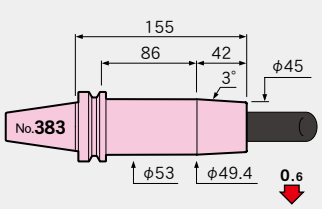
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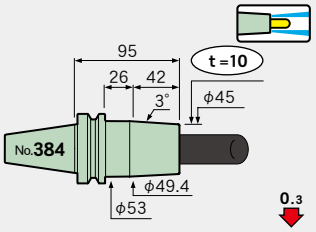
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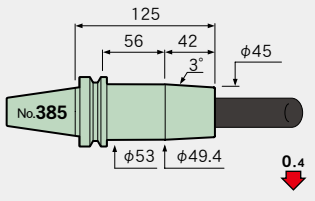
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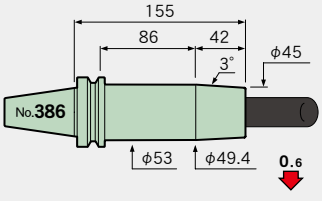
BT40-SLFB25-95-M42



BT40-SLFB25-125-M42

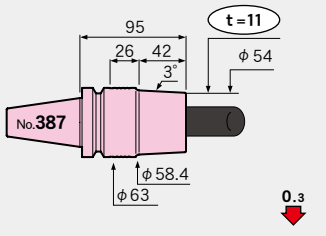


BT40-SLFB25-155-M42



φ32

BT40-SLRB32-95-M42

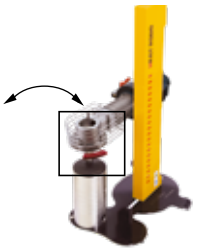


φ70 加热喷头 (HRB-03S-230AS)

SLRB32刀柄加热时必需品

型号
HRB-NZL70





HEAT ROBO Baby3000S

BT50

一体型 3°



BT50-SLSB16-225-M157

Fig.1

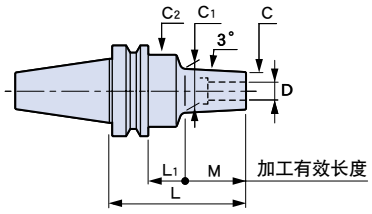
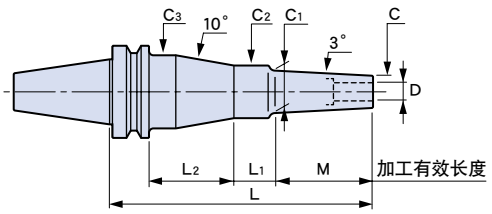
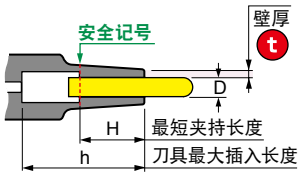


Fig. 2



■选购品
●拉钉→P.184

■注意事项
●拉钉···请在加热时取下,或使用通孔拉钉。
●刀具安装···插入刀具时,请务必将刀具插入比安全记号更深的位置。

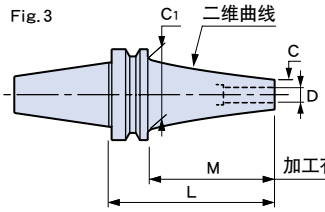


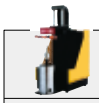
一体型 CURVE CV



BT50-SLSA6-225 cv

Fig. 3





HEATROBO电磁 1200S
(HRD-01S-230AS)
电磁式加热器对应表

[○] 可加热 [×] 不可加热
[▲] 垫高加热器后可进行加热→P.201

CV：曲线　　壁厚

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S	○	缩略图
BT50-SLSA3-110-M 42	1	3	6	1.5	110	42	30	—	10.4	25	—	9	165	3.6	4.4	9.1	○	1
-135-M 67					135	67			13				190		5.1	14.7		4
-140-M 42					140	42	60		10.4				195	3.7	4.4	9.8		2
-165-M 67					165	67			13				220		5.2	15.9		5
-M 97						97	30		16.2	26					6	20.8		7
-170-M 42	2				170	42	33	57	10.4		40		225	4.1	4.6	9.9		3
-195-M 67					195	67			13				250		5.4	15.8		6
-M 97	1					97	60	—	16.2		—			3.8	6.1	22.3		8
-225-M 97	2				225		33	57			40		280	4.1	6.2	22.1		9
-SLRA3- 90-M 22	1	3	7.5	2.25	90	22	30	—	9.8	25	—	9	145	3.6	4.6	2.8	○	10
-110-M 42					110	42			11.9	26			165	3.7	4.9	5.4		13
-120-M 22					120	22	60		9.8	25			175		4.7	3.2		11
-135-M 67					135	67	30		14.5	26			190		5.4	9		16
-140-M 42					140	42	60		11.9				195	3.8	5	6		14
-150-M 22	2				150	22	33	57	9.8	25	39		205	4	4.9	3.2		12
-165-M 67	1				165	67	60	—	14.5		—		220	3.8	5.5	10		17
-M 97						97	30		17.7	26				3.7	6.1	13		19
-170-M 42	2				170	42	33	57	11.9		40		225	4.1	5.1	6		15
-195-M 67					195	67			14.5				250		5.7	9.8		18
-M 97	1					97	60	—	17.7		—			3.8	6.2	14.5		20
-M127						127	30		20.8	32					7.7	15.7		22
-225-M 97	2				225	97	33	57	17.7	25	39		280	4.1	6.3	14.4		21
-M127	1					127	60	—	20.8	36	—				7.7	16.3		23
-255-M127	2				255		30	60		32	46		310	4.4	8	16.5		24

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S	HRD-01S	缩略图
BT50-SLFB3- 90-M 22	1	3	9.5	3.25	90	22	30	—	11.8	26	—	9	145	3.6	4.4	1.9	○	25
-110-M 42					110	42			13.9				165	3.7	4.7	3.3		28
-120-M 22					120	22	60		11.8	25			175		4.5	2.4		26
-135-M 67					135	67	30		16.5	26			190		5.4	5.4		31
-140-M 42					140	42	60		13.9	25			195		4.8	4		29
-150-M 22	2				150	22	33	57	11.8		39		205	4	4.6	2.3		27
-165-M 67	1				165	67	60	—	16.5	26	—		220	3.8	5.5	6.4		32
-170-M 42	2				170	42	33	57	13.9	25	39		225	4	4.9	3.9		30
-195-M 67					195	67			16.5				250	4.1	5.7	6.4		33
BT50-SLSA4-110-M 42	1	4	7	1.5	110	42	30	—	11.4	25	—	12	165	3.6	5.1	7.2	○	34
-135-M 67					135	67			14				190		5.2	11.8		37
-140-M 42					140	42	60		11.4				195	3.7		8		35
-165-M 67					165	67			14				220			13		38
-M 97						97	30		17.2						6.1	16.7		40
-170-M 42	2				170	42	33	57	11.4		39		225	4	5.4	7.9		36
-195-M 67					195	67			14				250			12.8		39
-M 97	1					97	60	—	17.2	26	—			3.8	6.2	18.4		41
-225-M 97	2				225		33	57		25	39		280	4.1	6.3	18.2		42
-SLRA4- 90-M 22	1	4	10	3	90	22	30	—	12.3	25	—	12	145	3.6	4.7	1.7	○	43
-110-M 42					110	42			14.4				165		5.1	3.1		46
-120-M 22					120	22	60		12.3				175	3.7	4.8	2.2		44
-135-M 67					135	67	30		17				190		5.9	5.2		49
-140-M 42					140	42	60		14.4				195		5.2	3.9		47
BT50 -150-M 22	2				150	22	33	57	12.3		39		205	4	5	2.2		45
-165-M 67	1				165	67	60	—	17		—		220	3.8	5.9	6.4		50
-M 97						97	30		20.2					3.7	6.8	7.9		52
-170-M 42	2				170	42	33	57	14.4		39		225	4	5.4	3.8		48
-195-M 67					195	67			17				250	4.1	6.1	6.2		51
-M 97	1					97	60	—	20.2		—			3.8	6.9	9.7		53
-M127						127	30		23.3	32					9.2	9.4		55
-225-M 97	2				225	97		60	20.2	25	39		280	4.1	7.1			54
-M127	1					127	60	—	23.3	32	—			4	9.2	10.4		56
-255-M127	2				255		30	60			46		310	4.4	9.5	10.3		57
-SLFB4- 90-M 22	1	4	12	4	90	22	30	—	14.3	25	—	12	145	3.6	4.6	1.4	○	58
-110-M 42					110	42			16.4				165	3.7	5	2.2		61
-120-M 22					120	22	60		14.3				175		4.6	1.9		59
-135-M 67					135	67	30		19	26			190		5.8	3.6		64
-140-M 42					140	42	60		16.4				195	3.8	5.1	2.9		62
-150-M 22	2				150	22	33	57	14.3	25	39		205	4	4.8	1.8		60
-165-M 67	1				165	67	60	—	19		—		220	3.8	5.9	4.8		65
-170-M 42	2				170	42	33	57	16.4	26	40		225	4.1	5.3	2.8		63
-195-M 67					195	67			19				250	4.2	6.1	4.5		66
-SLSA4-165 CV	3	4	7	1.5	165	127	—	—	85	—	—	12	220	5.2	15.4	1.8	○	67
-195 CV					195	157							250	5.3	15.9	2.6		68
-225 CV					225	187							280	5.5	16.4	3.8		69
-255 CV					255	217							310	5.6	16.9	5.7	▲	70
-285 CV					285	247							340	6.4	19.5	5.9		71
-315 CV					315	277							370	8.3	26	7.7		72
BT50-SLSA6-110-M 42	1	6	9	1.5	110	42	30	—	13.4	25	—	18	165	3.6	5.4	4.8	○	73
-135-M 67					135	67			16				190	3.7	6.4	8.1		76
-140-M 42					140	42	60		13.4				195		5.4	5.7		74
-165-M 67					165	67			16				220	3.8	6.5	9.4		77
-M 97						97	30		19.2	32				3.7	8.3	11		79
-170-M 42	2				170	42	33	57	13.4	26	40		225	4.1	5.6	5.5		75
-195-M 67					195	67			16	25	39		250	4	6.6	9.2		78
-M 97	1					97	60	—	19.2	32	—			3.9	8.2	11.7		80
-225-M 97	2				225		30	60			46		280	4.3	8.5			81

HRD-01S

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S		缩略图
BT50-SLSB6-110-M 42	1	6	10	2	110	42	30	—	14.4	25	—	18	165	3.6	6	3.7	○	82
-135-M 67					135	67			17				190	3.7	7.4	6.2		85
-140-M 42					140	42	60		14.4				195		6.1	4.6		83
-165-M 67					165	67			17				220	3.8	7.4	7.6		86
-M 97						97	30		20.2	32					9.6	8.5		88
-170-M 42	2				170	42	33	57	14.4	25	39		225	4	6.2	4.4		84
-195-M 67					195	67			17				250	4.1	7.6	7.3		87
-M 97	1					97	60	—	20.2	32	—			3.9	9.6	9.2		89
BT50 -M127						127	30		23.3					3.8	11.3	11.1		91
-225-M 97	2				225	97		60	20.2		46		280	4.3	9.9	9.2		90
-M127	1					127	60	—	23.3		—			4	11.2	12.1		92
-M157						157	30		26.5					3.9	13	13.3		94
-255-M127	2				255	127		60	23.3	32	46		310	4.4	11.5	12	▲	93
-M157	1					157	60	—	26.5		—			4.1	12.9	14.7		95
-285-M157	2				285		30	60			46		340	4.5	13.2	14.5		96
-SLRB6- 90-M 22	1	6	14	4	90	22	30	—	16.3	32	—	18	145	3.7	5.5	1	○	97
-110-M 42					110	42			18.4				165		6.6	1.6		100
-120-M 22					120	22	60		16.3				175	3.8	5.5	1.2		98
-135-M 67					135	67	30		21				190		8	2.6		103
-140-M 42					140	42	60		18.4				195	3.9	6.6	1.9		101
-150-M 22	2				150	22	30	60	16.3		46		205	4.2	5.8	1.2		99
-165-M 67	1				165	67	60	—	21		—		220	3.9	8	3.1		104
-170-M 42	2				170	42	30	60	18.4		46		225	4.3	6.9	1.9		102
-195-M 67					195	67			21				250		8.3	3		105
-SLFB6- 90-M 22	1	6	14	4	90	22	30	—	16.3	32	—	18	145	3.7	5.5	1	○	106
-110-M 42					110	42			18.4				165		6.6	1.6		109
-120-M 22					120	22	60		16.3				175	3.8	5.5	1.2		107
-135-M 67					135	67	30		21				190		8	2.6		112
-140-M 42					140	42	60		18.4				195	3.9	6.6	1.9		110
-150-M 22	2				150	22	30	60	16.3		46		205	4.2	5.8	1.2		108
-165-M 67	1				165	67	60	—	21		—		220	3.9	8	3.1		113
-170-M 42	2				170	42	30	60	18.4		46		225	4.3	6.9	1.9		111
-195-M 67					195	67			21				250		8.3	3		114
-SLSA6-165 CV	3	6	9	1.5	165	127	—	—	85	—	—	18	220	5.1	15.1	1.5	○	115
-195 CV					195	157							250	5.2	15.5	2.4		116
-225 CV					225	187							280	5.7	16.8	2.9		117
-255 CV					255	217							310	5.9	18.4	4	▲	118
-285 CV					285	247							340	6.2	19.5	5.2		119
-315 CV					315	277							370	8.4	26.8	6.9		120
BT50-SLSA8-110-M 42	1	8	11	1.5	110	42	30	—	15.4	25	—	24	165	3.6	6.9	3.5	○	121
-135-M 67					135	67			18	32			190	3.7	8.7	5.4		124
-140-M 42					140	42	60		15.4	25			195		6.9	4.4		122
-165-M 67					165	67			18	32			220	3.9	8.6	5.9		125
-M 97						97	30		21.2					3.8	10.8	7.9		127
-170-M 42	2				170	42	33	57	15.4	25	39		225	4	7.2	4.3		123
-195-M 67					195	67	30	60	18	32	46		250	4.3	8.9	5.9		126
-M 97	1					97	60	—	21.2		—			3.9	10.7	8.7		128
-225-M 97	2				225		28	62		36	50		280	4.5	11	8.3		129

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S	HRD-01S	缩略图
BT50-SLSB8-110-M 42	1	8	13	2.5	110	42	30	—	17.4	32	—	24	165	3.7	7.7	2.1	○	130
-135-M 67					135	67			20				190		9.8	3.5		133
-140-M 42					140	42	60		17.4				195	3.8	7.6	2.4		131
-165-M 67					165	67			20				220	3.9	9.8	4		134
-M 97						97	30		23.2					3.8	12.4	5.3		136
-170-M 42	2				170	42		60	17.4		46		225	4.3	7.9	2.4		132
-195-M 67					195	67			20				250		10.1	4		135
BT50 -M 97	1					97	60	—	23.2		—			4	12.3	6.1		137
-M127						127	30		26.3					3.9	14.9	7.1		139
-225-M 97	2				225	97		60	23.2		46		280	4.4	12.6	6		138
-M127	1					127	60	—	26.3		—			4	14.9	8.2		140
-M157						157	30		29.5	42					17.5	8		142
-255-M127	2				255	127		60	26.3	32	46		310	4.5	15.2	8.1	▲	141
-M157	1					157	60	—	29.5	42	—			4.3	17.5	8.5		143
-285-M157	2				285		28	62			56		340	4.9	17.8			144
-SLRB8- 90-M 22	1	8	18	5	90	22	30	—	20.3	32	—	24	145	3.7	6	0.7	×	145
-110-M 42					110	42			22.4				165		7.7	1.1	○	148
-120-M 22					120	22	60		20.3				175	3.8	5.9	0.9	×	146
-135-M 67					135	67	30		25				190		9.8	1.7	○	151
-140-M 42					140	42	60		22.4				195	3.9	7.7	1.4		149
-150-M 22	2				150	22	30	60	20.3		46		205	4.3	6.2	0.9	×	147
-165-M 67	1				165	67	60	—	25		—		220	4	9.8	2.2	○	152
-170-M 42	2				170	42	28	62	22.4	36	50		225	4.5	8	1.3		150
-195-M 67					195	67	30	60	25	32	46		250	4.4	10.1	2.2		153
-SLFB8- 90-M 22	1	8	18	5	90	22	30	—	20.3	32	—	24	145	3.7	6	0.7	×	154
-110-M 42					110	42			22.4				165		7.7	1.1	○	157
-120-M 22					120	22	60		20.3				175	3.8	5.9	0.9	×	155
-135-M 67					135	67	30		25				190		9.8	1.7	○	160
-140-M 42					140	42	60		22.4				195	3.9	7.7	1.4		158
-150-M 22	2				150	22	30	60	20.3		46		205	4.3	6.2	0.9	×	156
-165-M 67	1				165	67	60	—	25		—		220	4	9.8	2.2	○	161
-170-M 42	2				170	42	30	60	22.4		46		225	4.3	8	1.4		159
-195-M 67					195	67			25				250	4.4	10.1	2.2		162
-SLSA8-165 CV	3	8	11	1.5	165	127	—	—	85	—	—	24	220	4.9	14.7	1.4	○	163
-195 CV					195	157							250	5.3	16.1	1.9		164
-225 CV					225	187							280	5.8	17.7	2.3		165
-255 CV					255	217							310		17.9	3.7	▲	166
-285 CV					285	247							340	6	19.1	4.9		167
-315 CV					315	277							370	8.4	28	5		168
-SLRA8-195 CV	3	8	16	4	195	157	—	—	85	—	—	24	250	5.4	17.3	1.1	○	169
-225 CV					225	187							280	5.6	18.3	1.5		170
-255 CV					255	217							310	5.8	19.1	2.2	▲	171
-285 CV					285	247							340	5.9	19.9	3		172
-SLFA8-195 CV	3	8	16	4	195	157	—	—	85	—	—	24	250	5.4	17.3	1.1	○	173
-225 CV					225	187							280	5.6	18.3	1.5		174
-255 CV					255	217							310	5.8	19.1	2.2	▲	175
-285 CV					285	247							340	5.9	19.9	3		176

HRD-01S

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S		缩略图
BT50-SLSA10-110-M 42	1	10	13	1.5	110	42	30	—	17.4	25	—	30	165	3.6	7.9	2.6	○	177
-135-M 67					135	67			20	32			190	3.7	10.4	4		180
-140-M 42					140	42	60		17.4	25			195		7.8	3.7		178
-165-M 67					165	67			20	32			220	3.9	10.4	4.6		181
-M 97						97	30		23.2					3.8	13.6	6		183
-170-M 42	2				170	42	33	57	17.4	25	39		225	4	8.1	3.5		179
-195-M 67					195	67	30	60	20	32	46		250	4.3	10.7	4.6		182
-M 97	1					97	60	—	23.2		—			3.9	13.5	6.9		184
-225-M 97	2				225		30	60			46		280	4.4	13.8	6.8	▲	185
-SLSB10-110-M 42	1	10	16	3	110	42	30	—	20.4	32	—	30	165	3.7	8.6	1.4	○	186
-135-M 67					135	67			23				190	3.8	11.7	2.4		189
-140-M 42					140	42	60		20.4				195	3.9	8.6	1.8		187
-165-M 67					165	67			23				220		11.7	3		190
-M 97						97	30		26.2						15.4	3.7		192
-170-M 42	2				170	42		60	20.4		46		225	4.3	8.9	1.8		188
-195-M 67					195	67			23				250		12	3		191
-M 97	1					97	60	—	26.2		—			4	15.3	4.5		193
-M127						127	30		29.3	42					20			195
-225-M 97	2				225	97		60	26.2	32	46		280	4.4	15.6	4.4	▲	194
-M127	1					127	60	—	29.3	42	—			4.2	20.6	4.9		196
-M157						157	30		32.5					4.1	23.7	5.6		198
-255-M127	2				255	127	28	62	29.3		56		310	4.8	21.1	4.9		197
-M157	1					157	60	—	32.5		—			4.4	24.3	6.1		199
-285-M157	2				285		28	62			56		340	5	24.8			200
-SLRB10- 90-M 22	1	10	22	6	90	22	30	—	24.3	32	—	30	145	3.7	6.2	0.6	×	201
-110-M 42					110	42			26.4				165	3.8	8.7	0.8	○	204
-120-M 22					120	22	60		24.3				175	3.9	6.2		×	202
-135-M 67					135	67	30		29	42			190		11.8	1.1	○	207
-140-M 42					140	42	60		26.4	32			195		8.6	1.2		205
-150-M 22	2				150	22	30	60	24.3		46		205	4.3	6.5	0.8	×	203
-165-M 67	1				165	67	60	—	29	42	—		220	4.1	11.7	1.3	○	208
-170-M 42	2				170	42	28	62	26.4	36	50		225	4.5	8.9	1		206
-195-M 67					195	67			29	42	56		250	4.7	12	1.3		209
-SLFB10- 90-M 22	1	10	22	6	90	22	30	—	24.3	32	—	30	145	3.7	6.2	0.6	×	210
-110-M 42					110	42			26.4				165	3.8	8.7	0.8	○	213
-120-M 22					120	22	60		24.3				175	3.9	6.2		×	211
-135-M 67					135	67	30		29	42			190		11.8	1.1	○	216
-140-M 42					140	42	60		26.4	36			195	4	8.6	1		214
-150-M 22	2				150	22	30	60	24.3	32	46		205	4.3	6.5	0.8	×	212
-165-M 67	1				165	67	60	—	29	42	—		220	4.1	11.7	1.3	○	217
-170-M 42	2				170	42	30	60	26.4	32	46		225	4.3	8.9	1.2		215
-195-M 67					195	67	28	62	29	42	56		250	4.7	12	1.3		218
-SLSA10-165 CV	3	10	13	1.5	165	127	—	—	85	—	—	30	220	4.9	14.9	1.2	○	219
-195 CV					195	157							250	5.5	16.9	1.5		220
-225 CV					225	187							280	5.4	16.8	2.4	▲	221
-255 CV					255	217							310	6.1	19.8	2.6		222
-285 CV					285	247							340	6.3	21.2	3.7		223
-315 CV					315	277							370	8.4	28.6	4.6		224

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S	HRD-01S	缩略图
BT50-SLRA10-165 CV	3	10	19	4.5	165	127	—	—	85	—	—	30	220	5.1	15.9	0.7	×	225
-195 CV					195	157							250	5.2	16.6	1.1	○	226
-225 CV					225	187							280	5.9	19.7	1.2	▲	227
-255 CV					255	217							310	6.1	20.3	1.7		228
-285 CV					285	247							340	6.2	21.1	2.4		229
-SLFA10-165 CV	3	10	19	4.5	165	127	—	—	85	—	—	30	220	5.1	15.9	0.7	×	230
-195 CV					195	157							250	5.2	16.6	1.1	○	231
-225 CV					225	187							280	5.9	19.7	1.2	▲	232
-255 CV					255	217							310	6.1	20.3	1.7		233
-285 CV					285	247							340	6.2	21.1	2.4		234
BT50-SLSA12-110-M 42	1	12	15	1.5	110	42	30	—	19.4	32	—	30	165	3.7	9.5	1.9	○	235
-135-M 67					135	67			22				190		13.1	3.3		238
-140-M 42					140	42	60		19.4				195	3.8	9.4	2.3		236
-165-M 67					165	67			22				220	3.9	13	3.9		239
-M 97						97	30		25.2					3.8	17.7	4.9		241
-170-M 42	2				170	42		60	19.4		46		225	4.3	9.7	2.3		237
-195-M 67					195	67			22				250		13.3	3.9		240
-M 97	1					97	60	—	25.2		—			4	17.7	5.9		242
-225-M 97	2				225		30	60			46		280	4.4	18	5.8	▲	243
-SLSB12-110-M 42	1	12	19	3.5	110	42	30	—	23.4	32	—	30	165	3.7	10.4	1.1	○	244
-135-M 67					135	67			26				190	3.8	14.6	1.9		247
-140-M 42					140	42	60		23.4				195	3.9	10.3	1.6		245
-165-M 67					165	67			26				220		14.5	2.5		248
-M 97						97	30		29.2	42					20.5	2.4		250
-170-M 42	2				170	42	28	62	23.4	36	50		225	4.5	10.6	1.3		246
-195-M 67					195	67	30	60	26	32	46		250	4.4	14.8	2.4		249
-M 97	1					97	60	—	29.2	42	—			4.2	21.1	2.7		251
-M127						127	30		32.3					4.1	25.5	3.3		253
-225-M 97	2				225	97	28	62	29.2		56		280	4.8	21.6	2.8	▲	252
-M127	1					127	60	—	32.3		—			4.3	26.1	3.7		254
-M157						157	30		35.5						30.6	4.1		256
-255-M127	2				255	127	28	62	32.3		56		310	4.9	26.7	3.7		255
-M157	1					157	60	—	35.5		—			4.5	31.1	4.7		257
-285-M157	2				285		28	62			56		340	5.1	31.7			258
-SLRB12- 90-M 22	1	12	26	7	90	22	30	—	28.3	42	—	30	145	3.7	9.5	0.4	×	259
-110-M 42					110	42			30.4				165	3.8	11.4	0.6		262
-120-M 22					120	22	60		28.3				175	4	10.1	0.5		260
-135-M 67					135	67	30		33				190		15.5	0.8		265
-140-M 42					140	42	60		30.4				195	4.1	11.9	0.7		263
-150-M 22	2				150	22	28	62	28.3		56		205	4.6	10.7	0.5		261
-165-M 67	1				165	67	60	—	33		—		220	4.2	16.1	1		266
-170-M 42	2				170	42	28	62	30.4		56		225	4.7	12.5	0.7		264
-195-M 67					195	67			33				250	4.8	16.7	1.1		267
-SLFB12- 90-M 22	1	12	26	7	90	22	30	—	28.3	42	—	30	145	3.7	9.5	0.4	×	268
-110-M 42					110	42			30.4				165	3.8	11.4	0.6		271
-120-M 22					120	22	60		28.3				175	4	10.1	0.5		269
-135-M 67					135	67	30		33				190		15.5	0.8		274
-140-M 42					140	42	60		30.4				195	4.1	11.9	0.7		272
-150-M 22	2				150	22	28	62	28.3		56		205	4.6	10.7	0.5		270
-165-M 67	1				165	67	60	—	33		—		220	4.2	16.1	1		275
-170-M 42	2				170	42	28	62	30.4		56		225	4.7	12.5	0.7		273
-195-M 67					195	67			33				250	4.8	16.7	1.1		276

HRD-01S

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S		缩略图
BT50-SLSA12-165 CV	3	12	15	1.5	165	127	—	—	84	—	—	30	220	4.8	14.6	1.2	○	277
-195 CV					195	157			85				250	5.6	17.6			278
-225 CV					225	187							280	5.8	18.5	1.8	▲	279
-255 CV					255	217							310	6	19.3	2.6		280
-285 CV					285	247							340	6.2	21.2	3.5		281
-315 CV					315	277							370	8.5	29.2	3.6	○	282
-SLRA12-165 CV	3	12	22	5	165	127	—	—	85	—	—	30	220	5.1	16.1	0.7	×	283
-195 CV					195	157							250	5.6	18	0.8		284
BT50 -225 CV					225	187							280		18.6	1.3	▲	285
-255 CV					255	217							310	5.8	20.7	1.6		286
-285 CV					285	247							340	6.1	22.4	2.1		287
-SLFA12-165 CV	3	12	22	5	165	127	—	—	85	—	—	30	220	5.1	16.1	0.7	×	288
-195 CV					195	157							250	5.6	18	0.8		289
-225 CV					225	187							280		18.6	1.3	▲	290
-255 CV					255	217							310	5.8	20.7	1.6		291
-285 CV					285	247							340	6.1	22.4	2.1		292
BT50-SLSB16-110-M 42	1	16	24	4	110	42	30	—	28.4	42	—	32	165	3.8	15	0.7		293
-135-M 67					135	67			31				190	3.9	21.9	1.1		296
-140-M 42					140	42	60		28.4				195	4	15.6	0.9		294
-165-M 67					165	67			31				220	4.1	22.5	1.4		297
-M 97						97	30		34.2					4	30.2	1.7		299
-170-M 42	2				170	42	28	62	28.4		56		225	4.6	16.2	0.9		295
-195-M 67					195	67			31				250	4.7	23	1.4		298
-M 97	1					97	60	—	34.2		—			4.3	30.7	2		300
-M127						127	30		37.3	53				4.2	38.5	2.1		302
-225-M 97	2				225	97	28	62	34.2	42	56		280	4.9	31.3			301
-M127	1					127	60	—	37.3	53	—			4.6	39	2.3		303
-M157						157	30		40.5					4.4	46.8	2.6		305
-255-M127	2				255	127	28	62	37.3		67		310	5.5	39.6	2.3		304
-M157	1					157	60	—	40.5		—			4.8	47.3	2.8		306
-285-M157	2				285		28	62			67		340	5.7	47.9	2.9		307
-SLRB16- 90-M 22	1	16	32	8	90	22	30	—	34.3	42	—	32	145	3.8	9.6	0.3		308
-110-M 42					110	42			36.4				165	3.9	15.1	0.5		311
-120-M 22					120	22	60		34.3				175	4	10.1			309
-135-M 67					135	67	30		39				190	4.1	22	0.6		314
-140-M 42					140	42	60		36.4				195	4.2	15.7			312
-150-M 22	2				150	22	28	62	34.3		56		205	4.6	10.7	0.5		310
-165-M 67	1				165	67	60	—	39		—		220	4.3	22.6	0.9		315
-170-M 42	2				170	42	28	62	36.4		56		225	4.8	16.2	0.7		313
-195-M 67					195	67			39				250	4.9	23.2	0.9		316
-SLFB16- 90-M 22	1	16	32	8	90	22	30	—	34.3	42	—	32	145	3.8	9.6	0.3		317
-110-M 42					110	42			36.4				165	3.9	15.1	0.5		320
-120-M 22					120	22	60		34.3				175	4	10.1			318
-135-M 67					135	67	30		39				190	4.1	22	0.6		323
-140-M 42					140	42	60		36.4				195	4.2	15.7			321
-150-M 22	2				150	22	28	62	34.3		56		205	4.6	10.7	0.5		319
-165-M 67	1				165	67	60	—	39		—		220	4.3	22.6	0.9		324
-170-M 42	2				170	42	28	62	36.4		56		225	4.8	16.2	0.7		322
-195-M 67					195	67			39				250	4.9	23.2	0.9		325
-SLSB16-165 CV	3	16	21	2.5	165	127	—	—	85	—	—	32	220	5.4	17.8	0.6		326
-195 CV					195	157							250		17.7	1.1		327
-225 CV					225	187							280	6.3	21.1	1.2		328
-255 CV					255	217							310	6.1	20.9	2		329
-285 CV					285	247							340	7	24.3			330
-315 CV					315	277							370	8.6	30.9	2.6		331

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S	缩略图
BT50-SLSB20-110-M 42	1	20	29	4.5	110	42	30	—	33.4	42	—	40	165	3.8	16.8	0.5	332
-135-M 67					135	67			36				190	3.9	27.1	0.9	335
-140-M 42					140	42	60		33.4				195	4.1	17.4	0.8	333
-165-M 67					165	67			36				220	4.2	27.7	1.2	336
-M 97						97	30		39.2	53				4.1	39.4	1.1	338
-170-M 42	2				170	42	28	62	33.4	42	56		225	4.7	18	0.8	334
-195-M 67					195	67			36				250	4.8	28.2	1.2	337
-M 97	1					97	60	—	39.2	53	—			4.5	40	1.3	339
-M127						127	30		42.3					4.3	52.6	1.5	341
-225-M 97	2				225	97	28	62	39.2		67		280	5.4	40.6	1.3	340
-M127	1					127	60	—	42.3		—			4.7	53.2	1.8	342
-M157						157	30		45.5					4.6	65	1.7	344
-255-M127	2				255	127	28	62	42.3		67		310	5.6	53.7		343
-M157	1					157	60	—	45.5		—			5	65.5	2.2	345
-285-M157	2				285		28	62			67		340	5.9	66.1		346
-SLRB20-110-M 42	1	20	38	9	110	42	30	—	42.4	53	—	40	165	4	16.9	0.3	347
-135-M 67					135	67			45				190	4.2	27.2	0.4	350
-140-M 42					140	42	60		42.4				195	4.4	17.5		348
-165-M 67					165	67			45				220	4.6	27.8	0.6	351
-170-M 42	2				170	42	28	62	42.4		67		225	5.3	18.1	0.4	349
-195-M 67					195	67			45				250	5.5	28.4	0.6	352
-SLFB20-110-M 42	1	20	38	9	110	42	30	—	42.4	53	—	40	165	4	16.9	0.3	353
-135-M 67					135	67			45				190	4.2	27.2	0.4	356
-140-M 42					140	42	60		42.4				195	4.4	17.5		354
-165-M 67					165	67			45				220	4.6	27.8	0.6	357
-170-M 42	2				170	42	28	62	42.4		67		225	5.3	18.1	0.4	355
-195-M 67					195	67			45				250	5.5	28.4	0.6	358
-SLSB20-165 CV	3	20	26	3	165	127	—	—	85	—	—	40	220	5.4	17.4	0.6	359
-195 CV					195	157							250	6.1	20.8	0.7	360
-225 CV					225	187							280	5.8	20.5	1.2	361
-255 CV					255	217							310	6.7	23.9	1.3	362
-285 CV					285	247							340	7	25.4	1.7	363
-315 CV					315	277							370	8.9	32.4	2.3	364
BT50-SLRB25-110-M 42	1	25	45	10	110	42	30	—	49.4	53	—	45	165	4.1	19	0.3	365
-140-M 42					140		60						195	4.5	19.6	0.4	366
-170-M 42	2				170		28	62			67			5.3	20.2		367
-SLFB25-110-M 42	1	25	45	10	110	42	30	—	49.4	53	—	45	165	4.1	19	0.3	368
-140-M 42					140		60						195	4.5	19.6	0.4	369
-170-M 42	2				170		28	62			67			5.4	20.2		370
BT50-SLRB32-110-M 42	1	32	54	11	110	42	30	—	58.4	63	—	50	160	4.0	11.2	0.2	371
-140-M 42					140		60						171	4.6	13.4	0.3	372
-170-M 42	2				170		28	62			77			5.8	19.6		373

主轴锥孔用 清洁工具
STAR DUST

型号
CLT-NT50-G3

P.194



φ70 加热喷头 (HRB-03S-230AS)
SLRB32刀柄加热时必需品

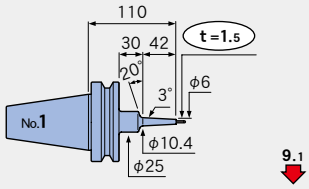
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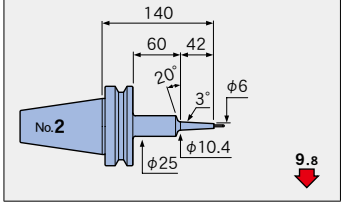


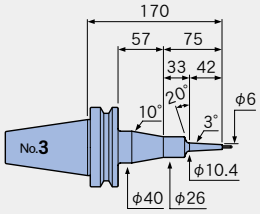


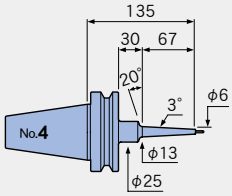
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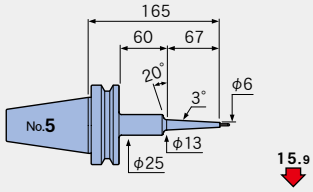
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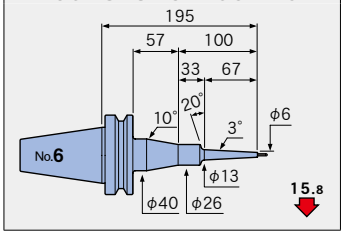
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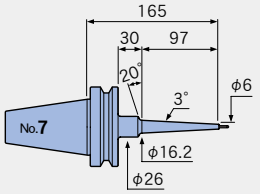
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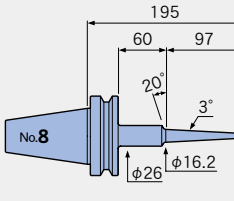
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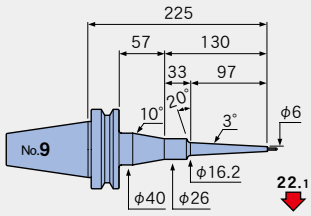
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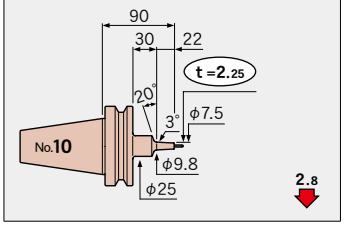
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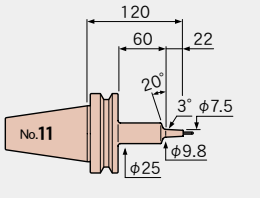
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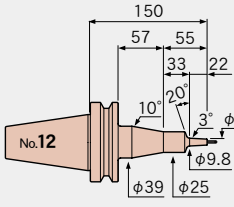
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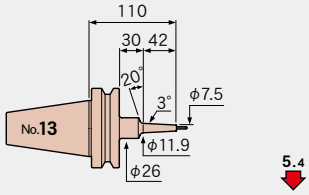
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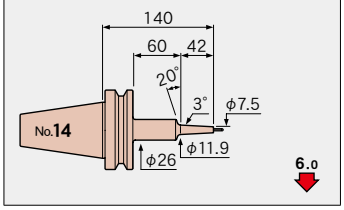
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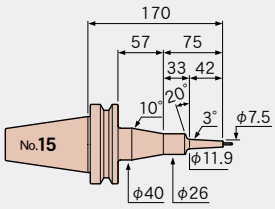
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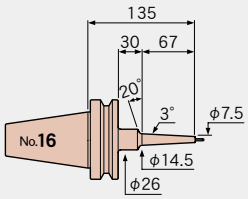
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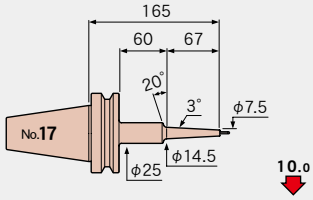
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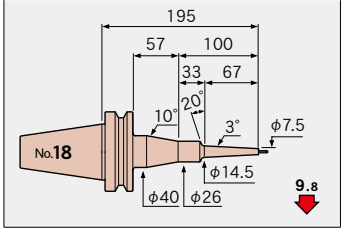
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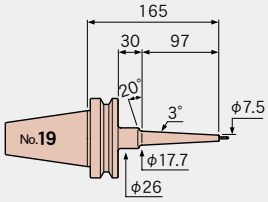
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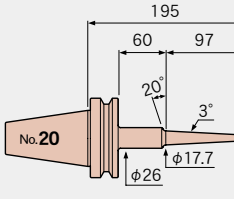
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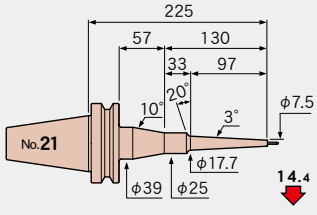
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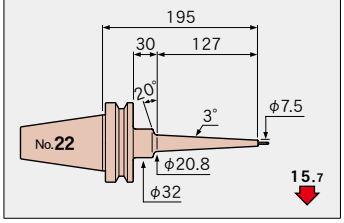
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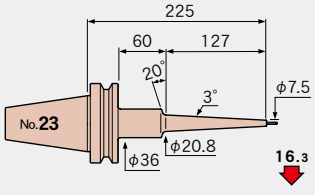
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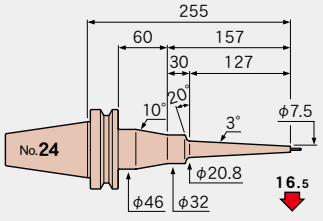
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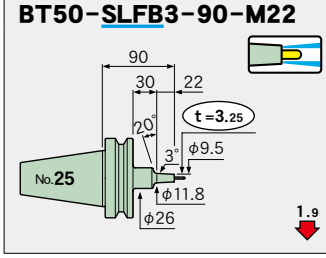
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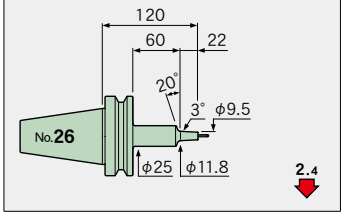
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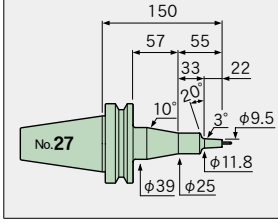
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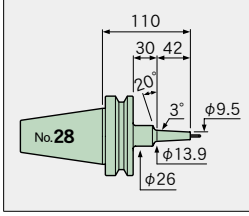
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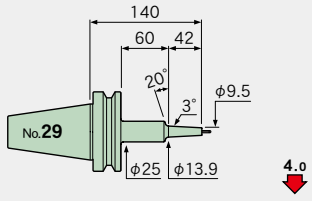
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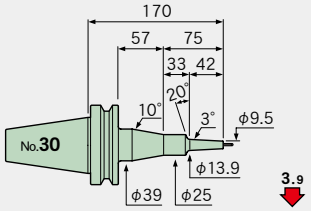
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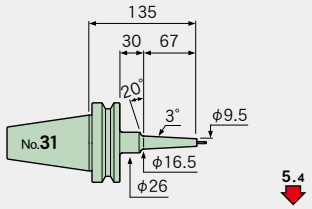
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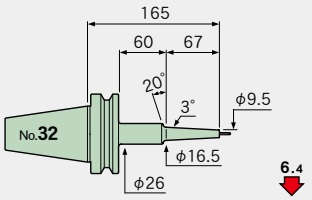
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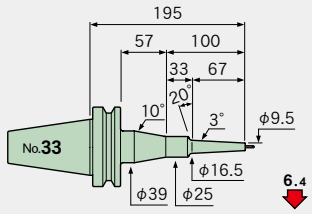
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BT50-SLFB3-165-M67

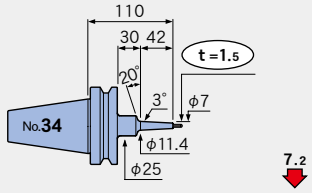


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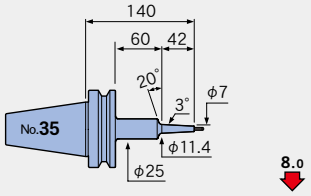


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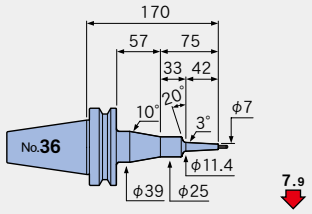
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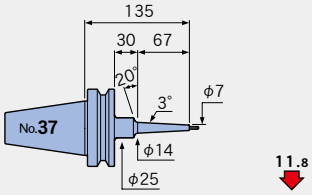
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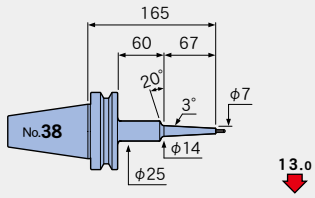
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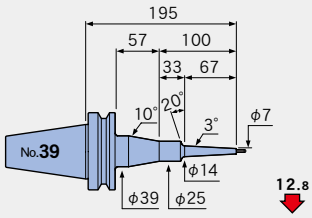
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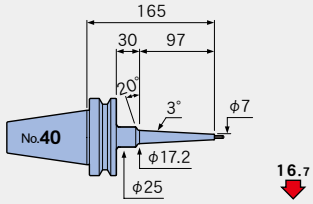
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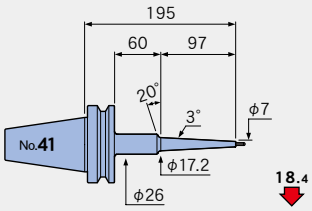
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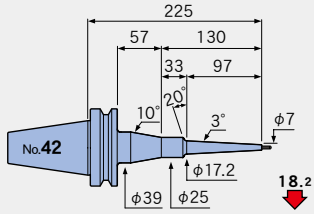
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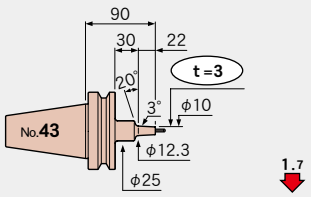
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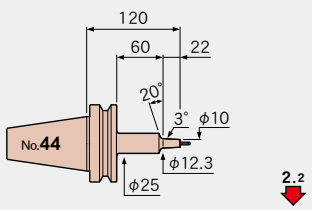
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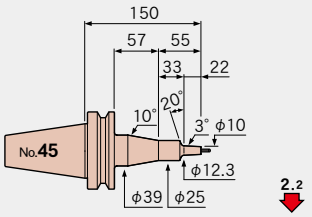
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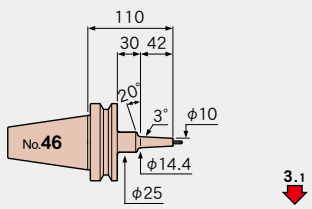
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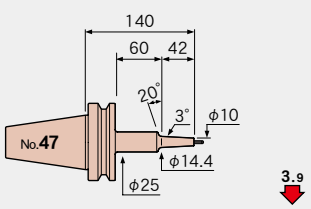
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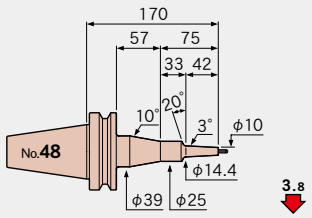
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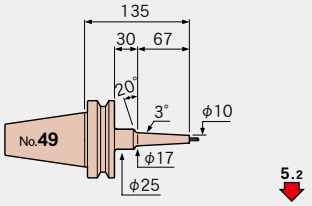
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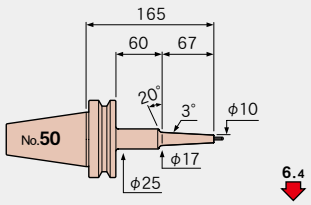
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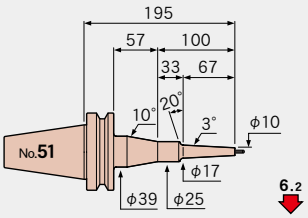
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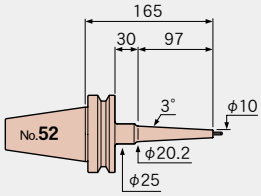
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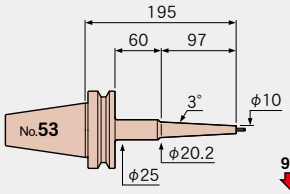
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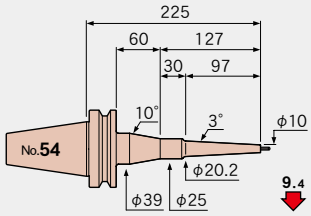
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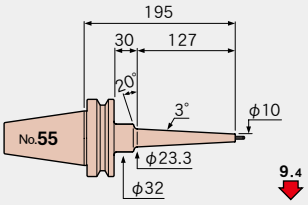
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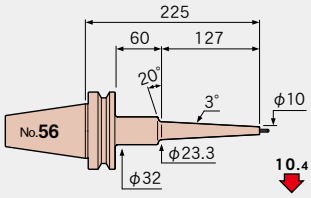
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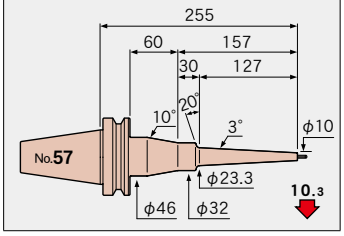
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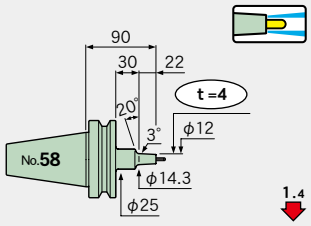
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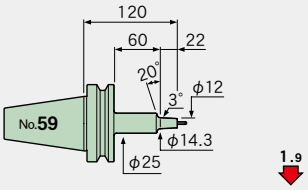
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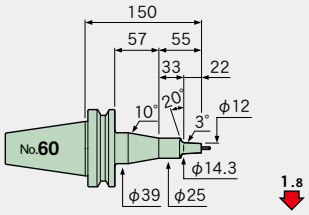
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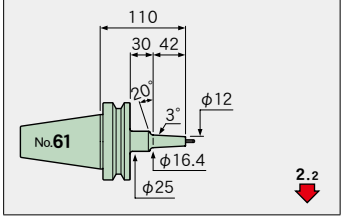
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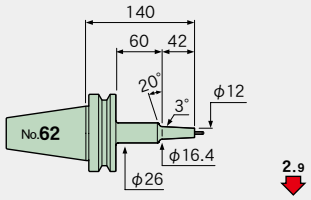
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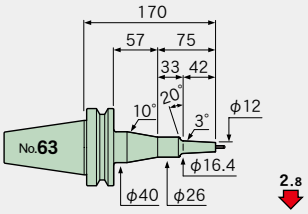
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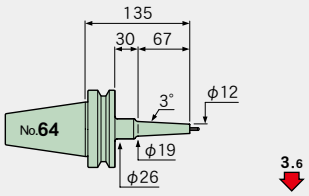
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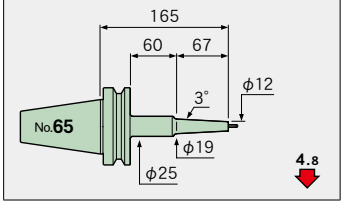
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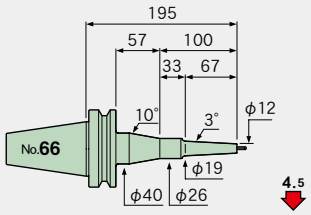
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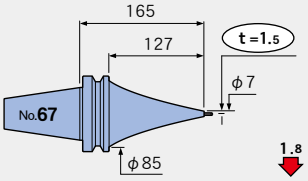
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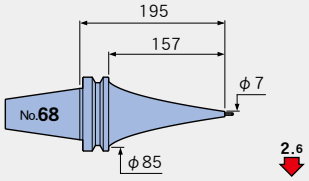
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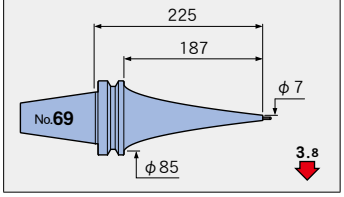
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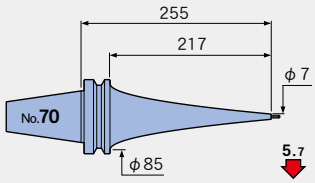
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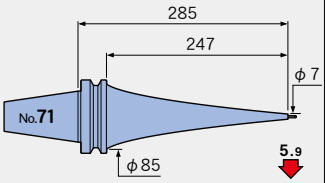
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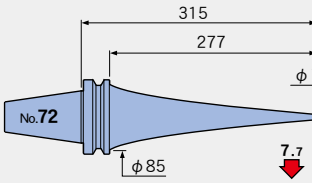
BT50-SLSA4-255 CV



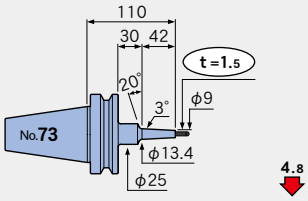
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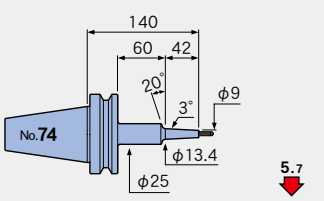


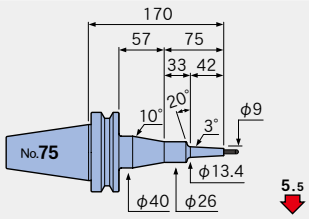
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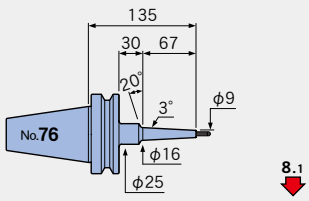


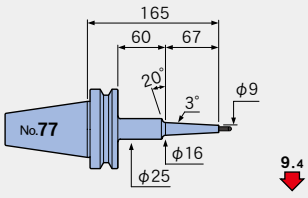
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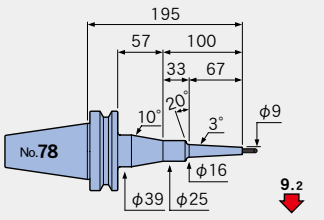
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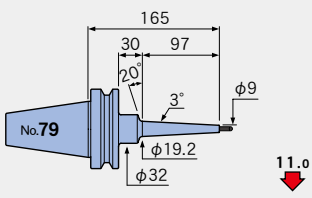
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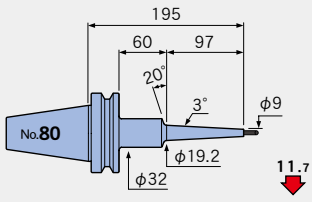
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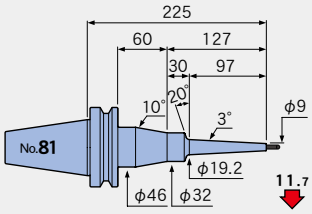
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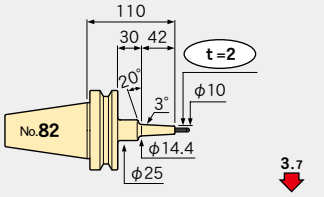
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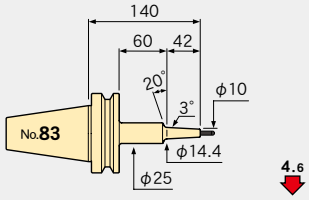
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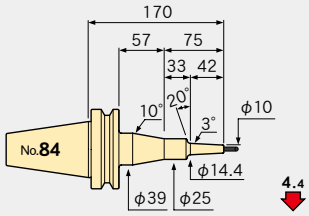
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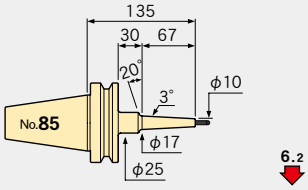
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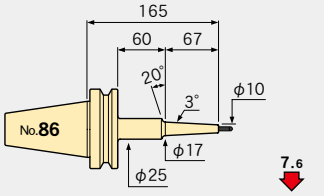
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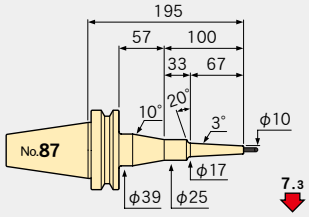
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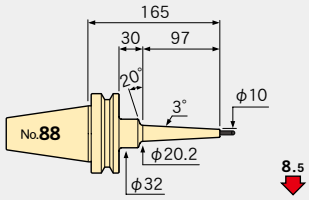
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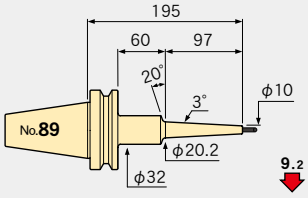
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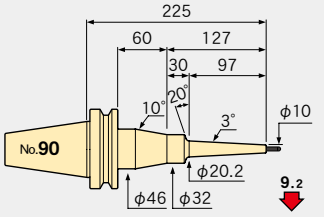
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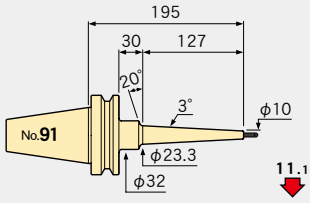
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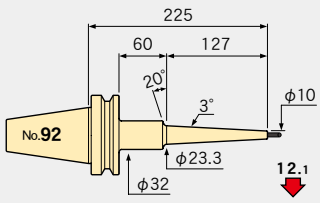
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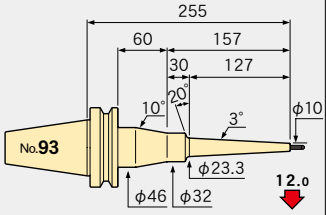
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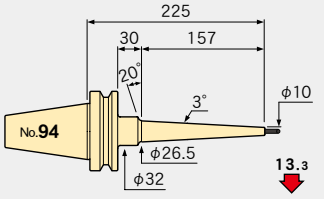
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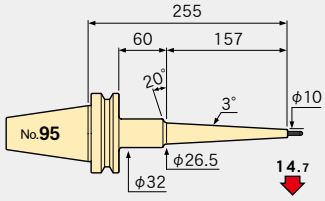
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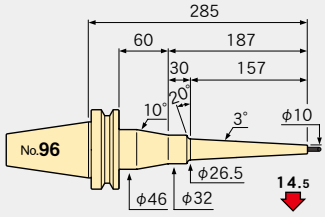
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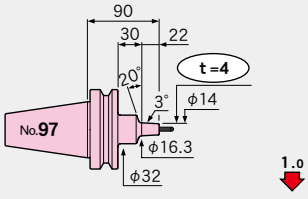
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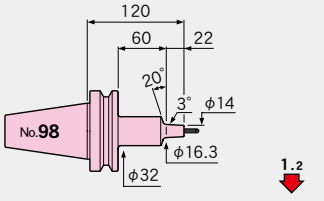
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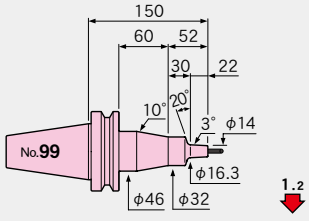
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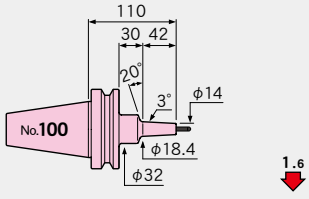
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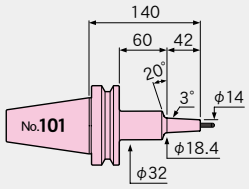
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BT50-SLRB6-120-M22


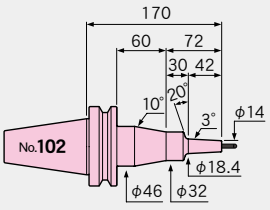
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BT50-SLRB6-110-M42


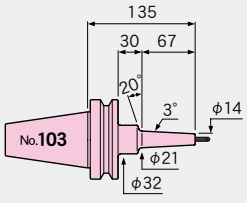
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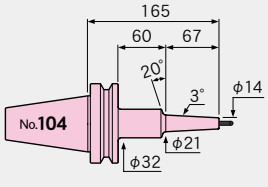
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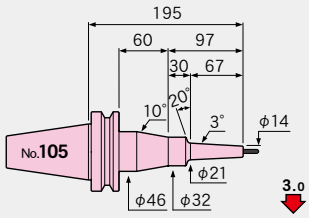
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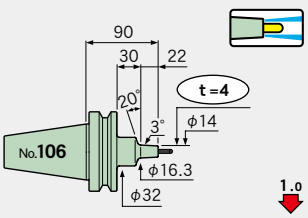
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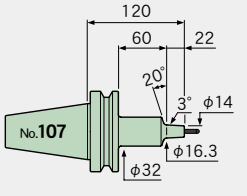
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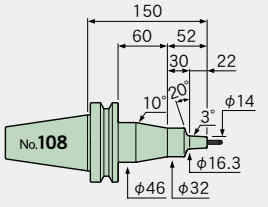
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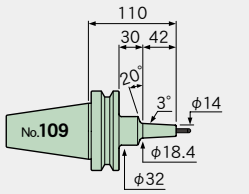
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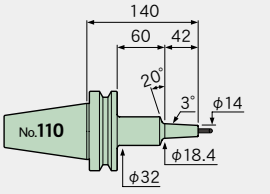
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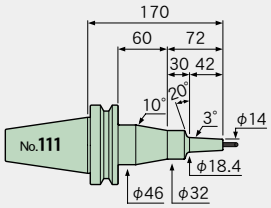
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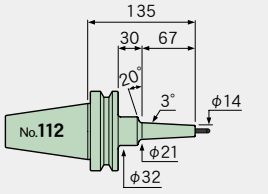
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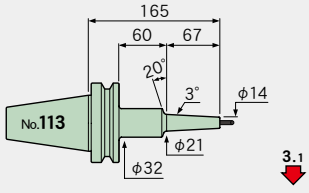
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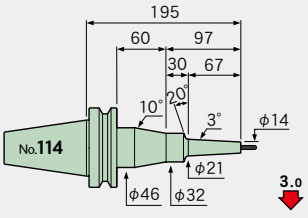
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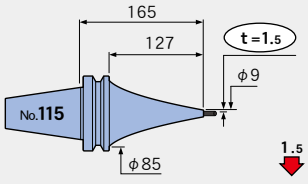
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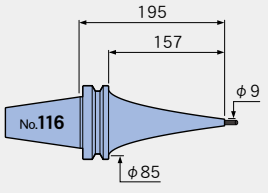
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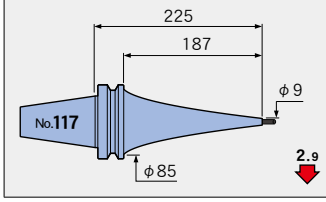
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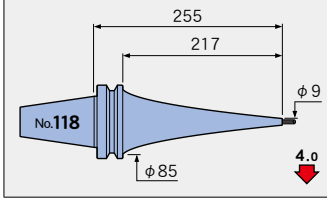
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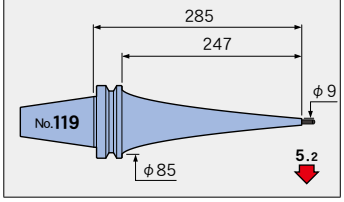
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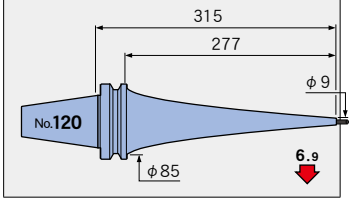
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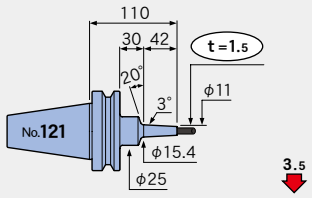
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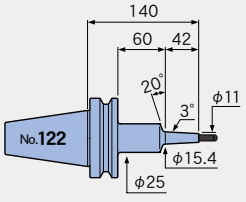


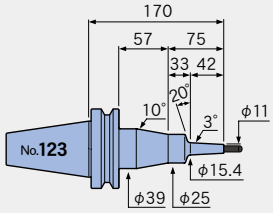
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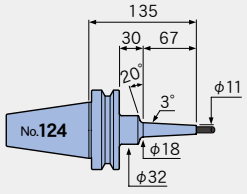


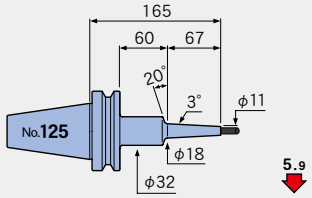
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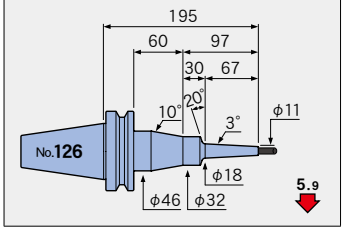
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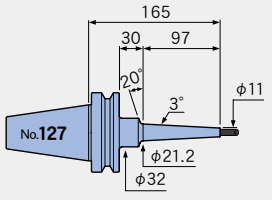
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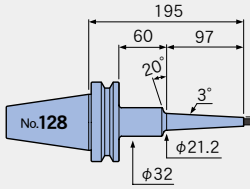
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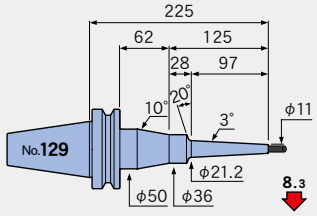
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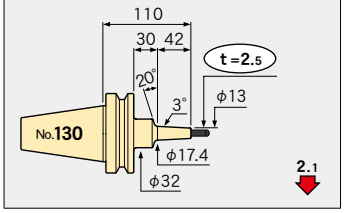
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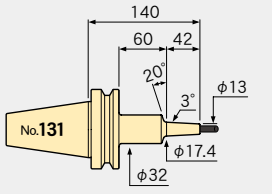
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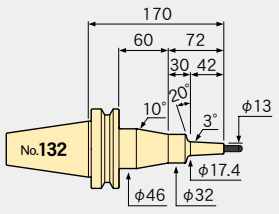
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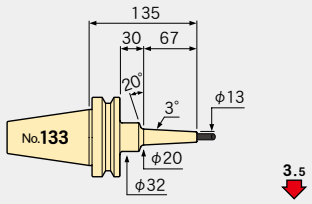
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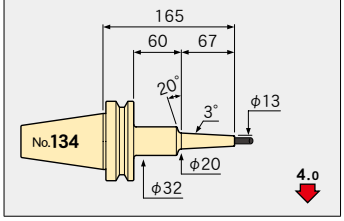
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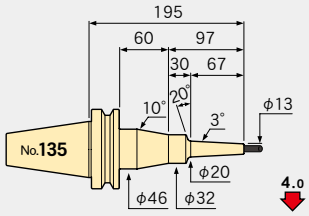
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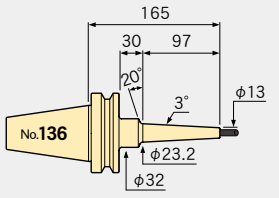
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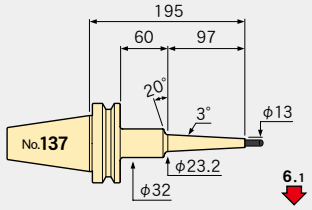
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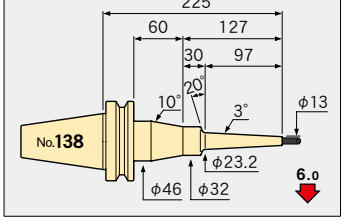
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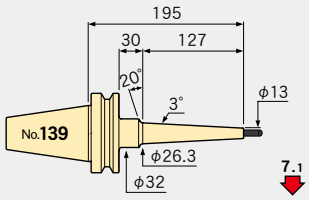
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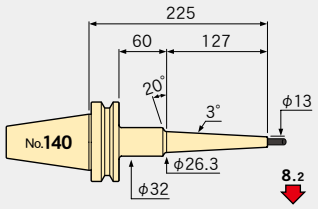
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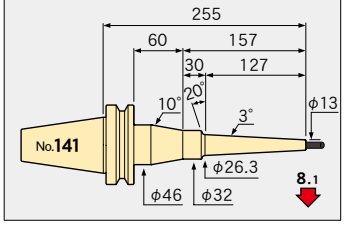
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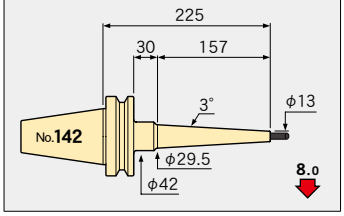
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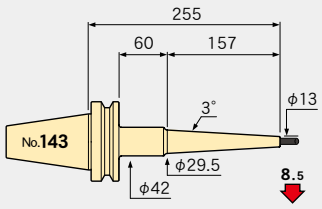
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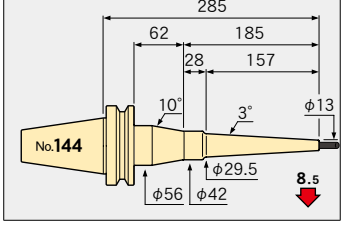
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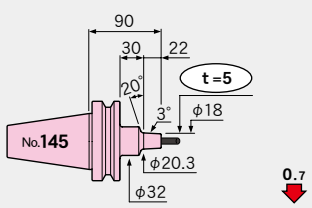
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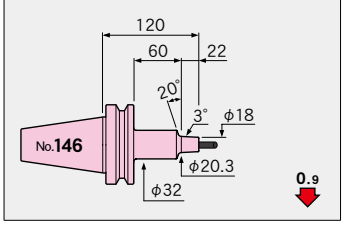
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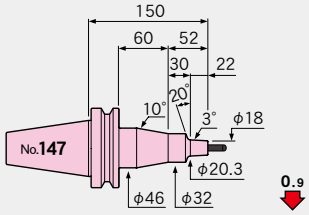
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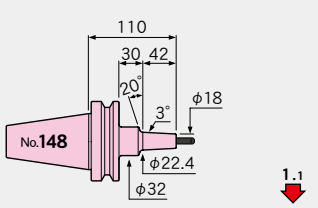
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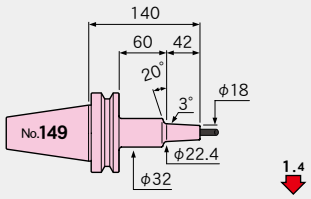
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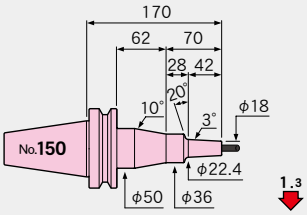
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BT50-SLRB8-110-M42


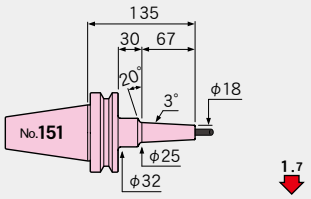
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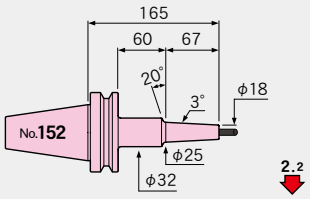
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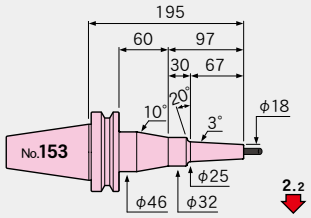
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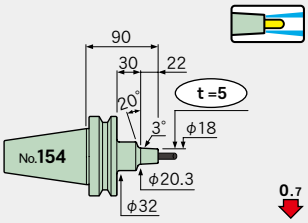
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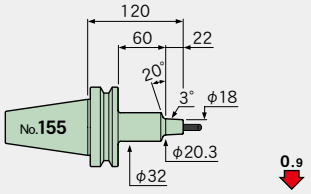
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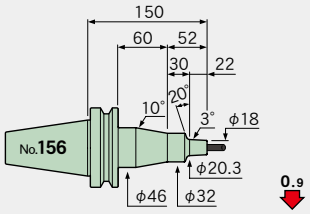
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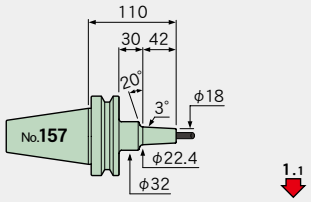
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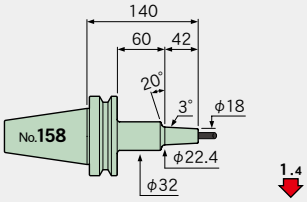
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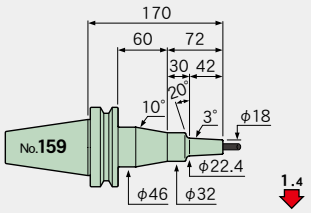
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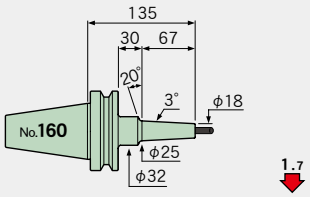
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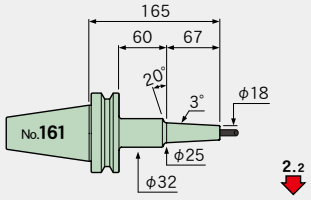
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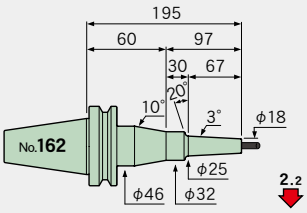
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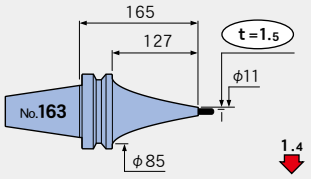
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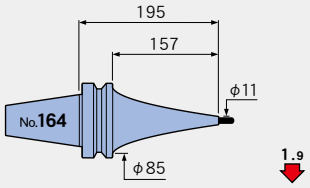
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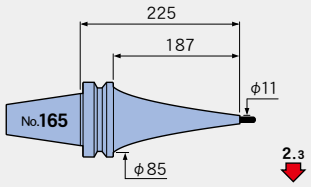
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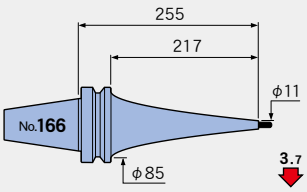
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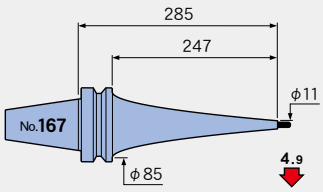
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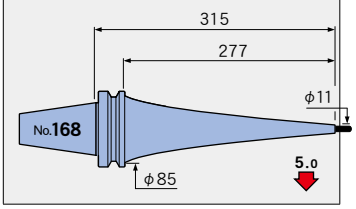
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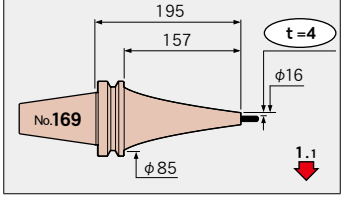
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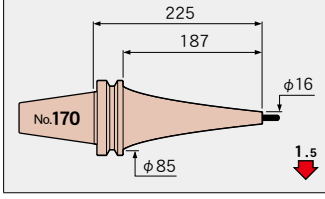
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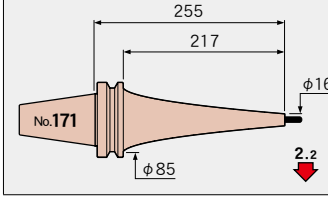
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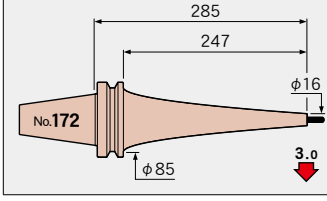
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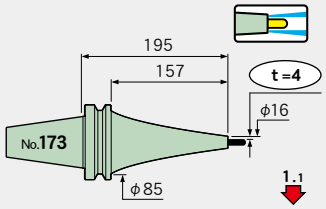
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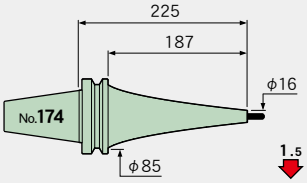
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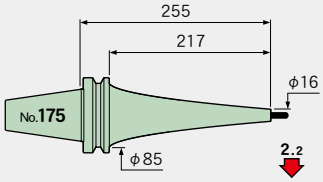
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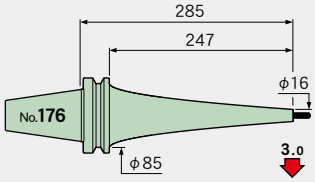
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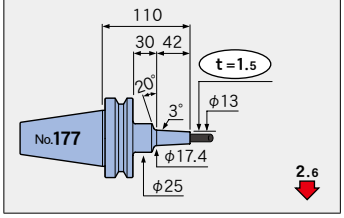


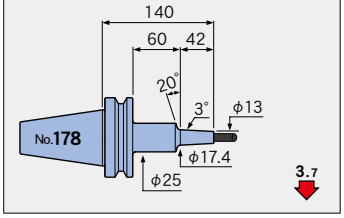
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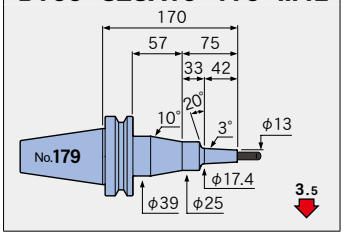


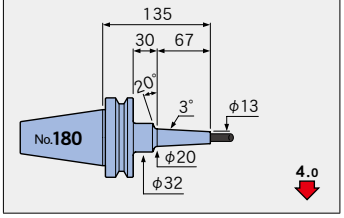
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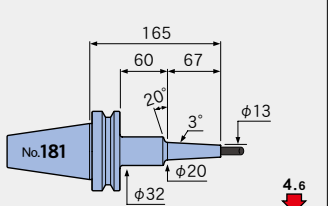
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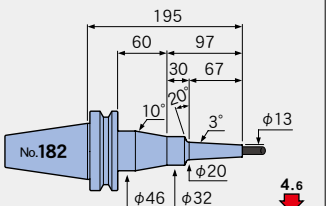
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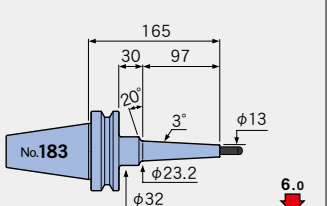
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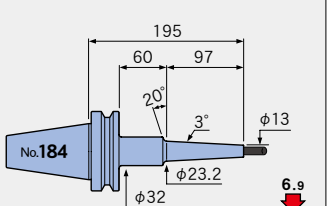
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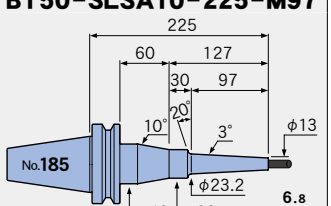
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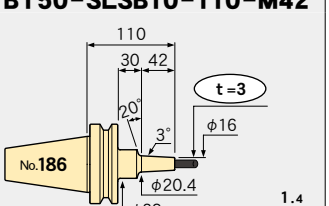
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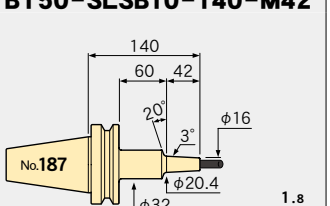
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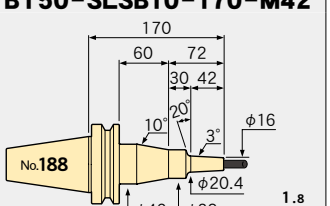
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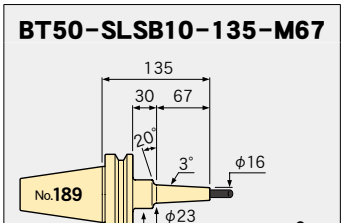
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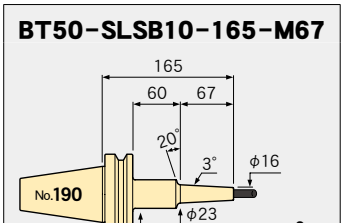
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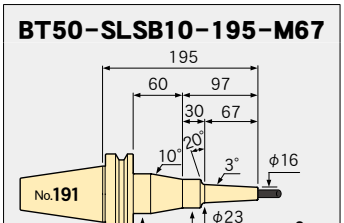
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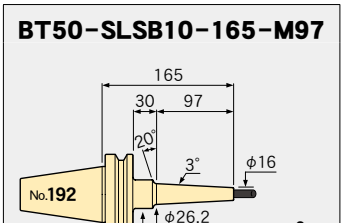
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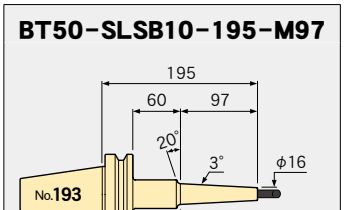
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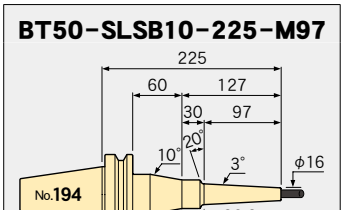
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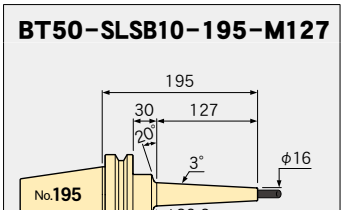
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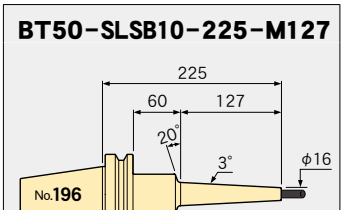
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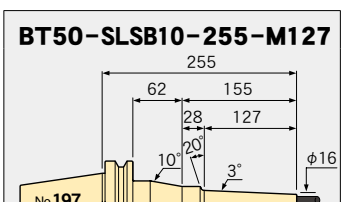
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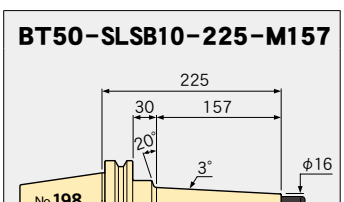
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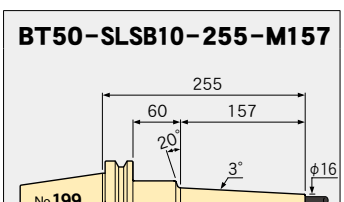
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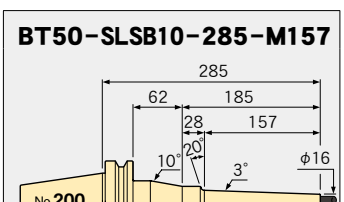
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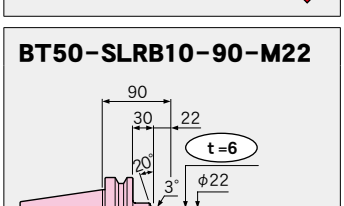
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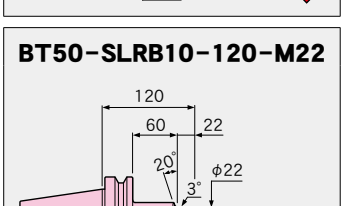
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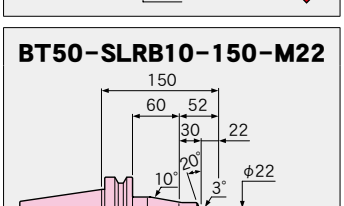
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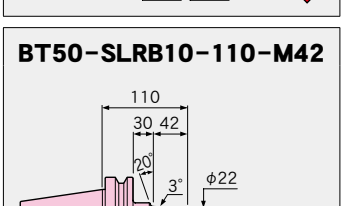
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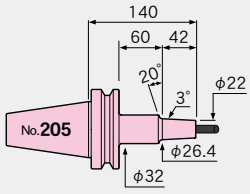
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BT50-SLRB10-120-M22


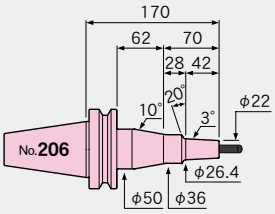
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BT50-SLRB10-110-M42


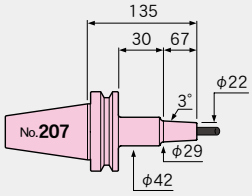
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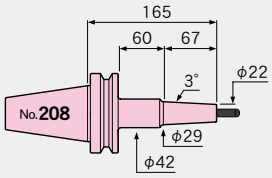
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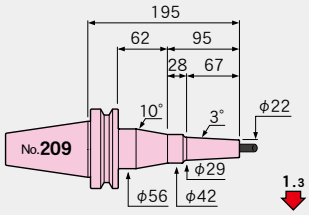
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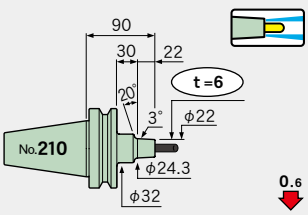
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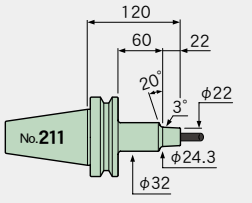
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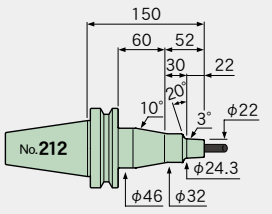
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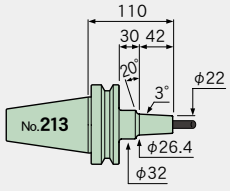
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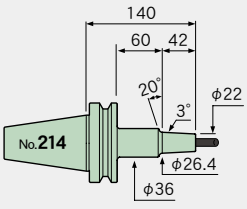
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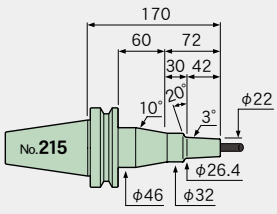
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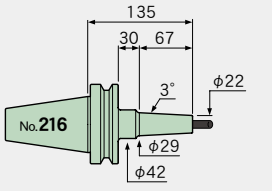
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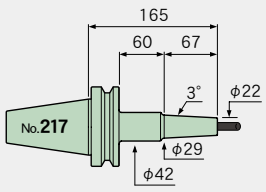
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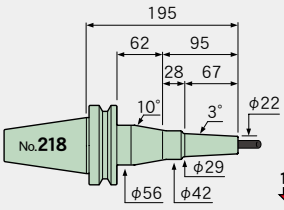
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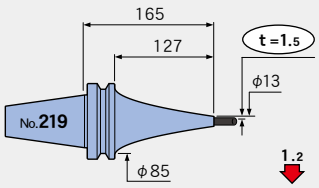
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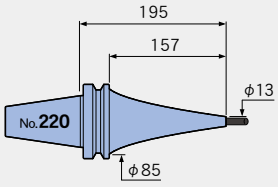
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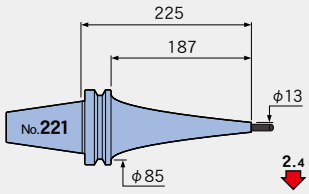
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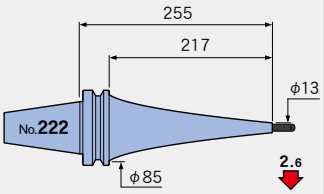
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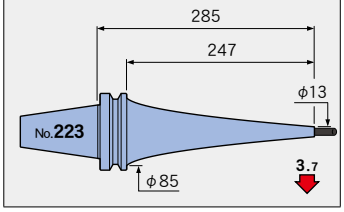
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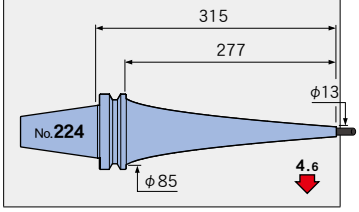
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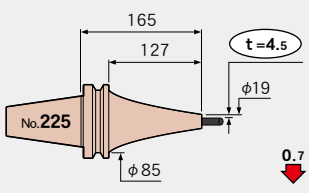
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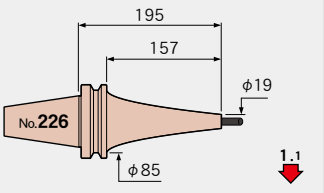
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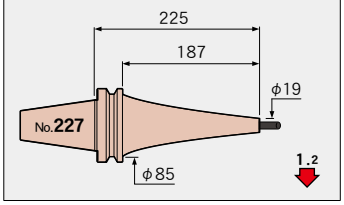
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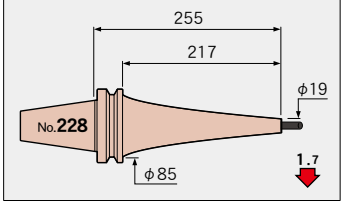
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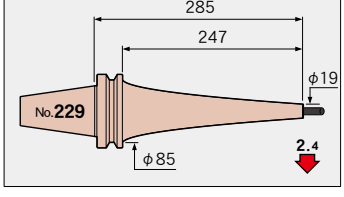
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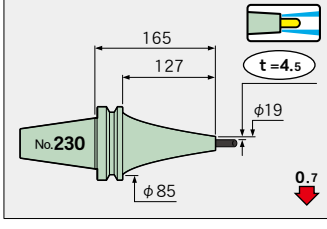
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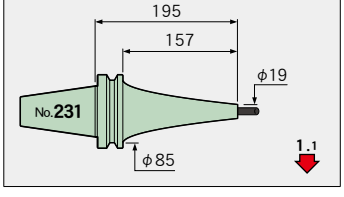
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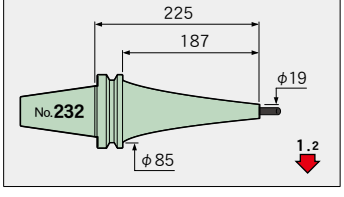
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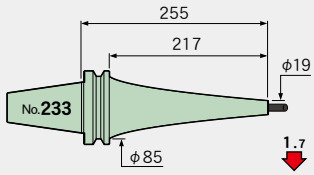


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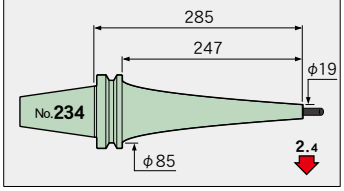


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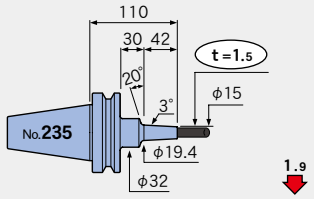


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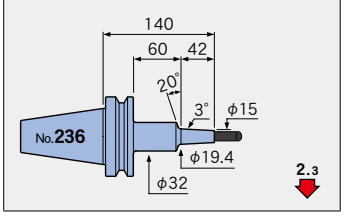


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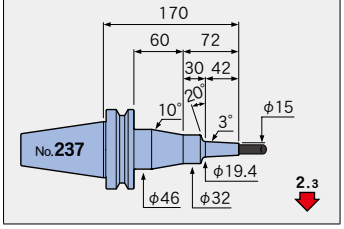
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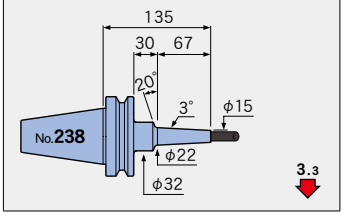
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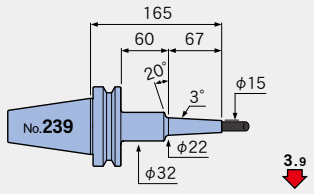
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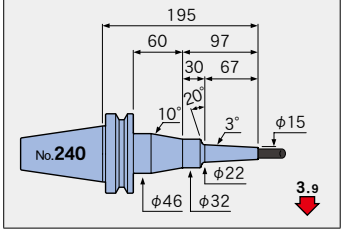
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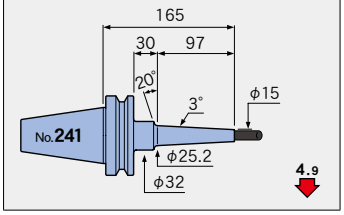
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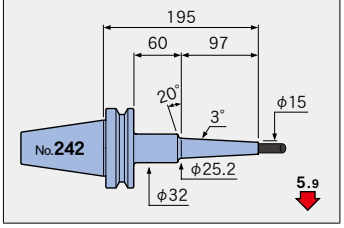
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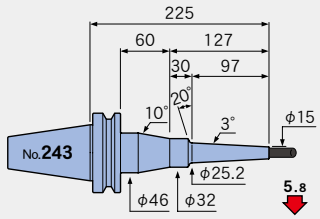
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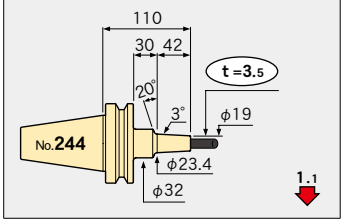
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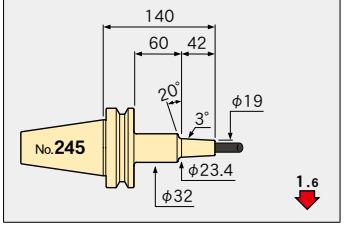
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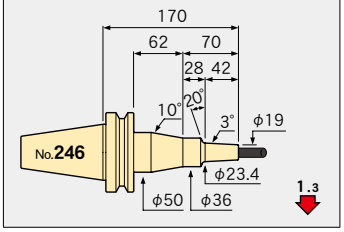
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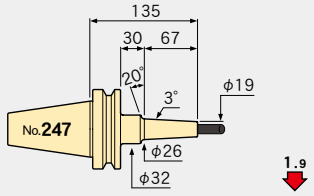
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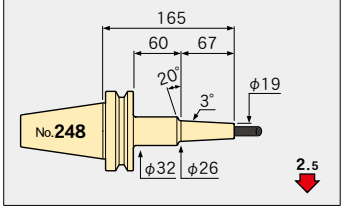
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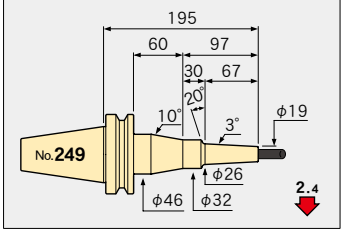
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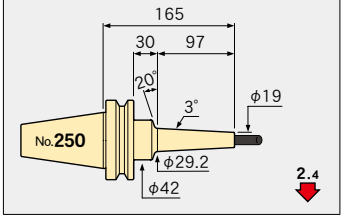
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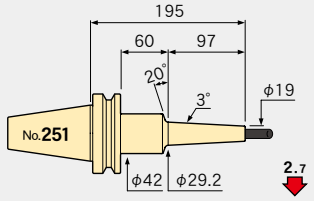
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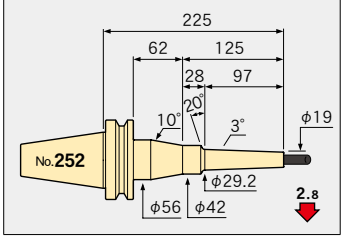
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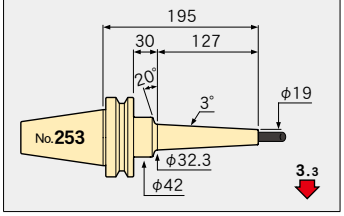
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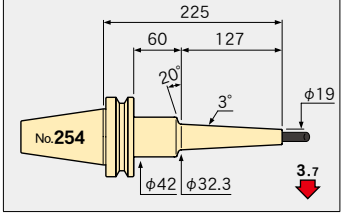
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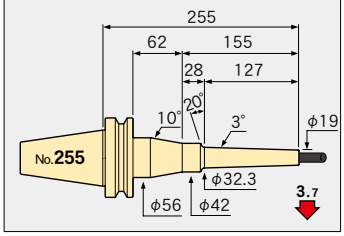
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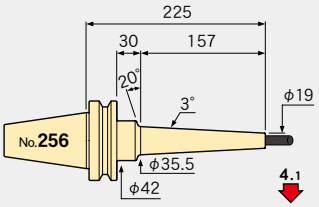
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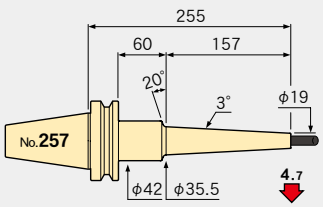
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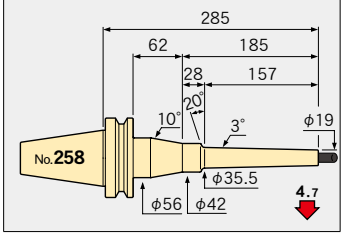
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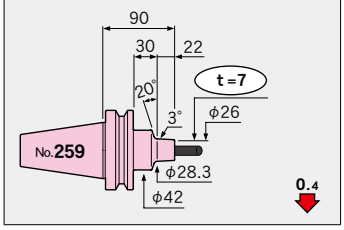
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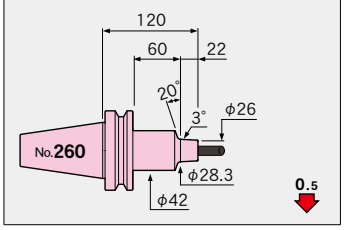
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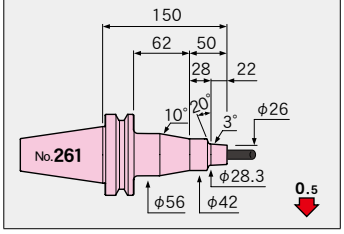
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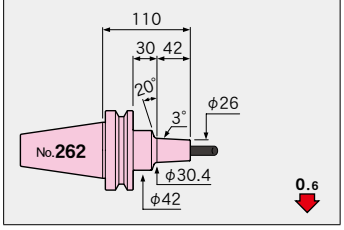
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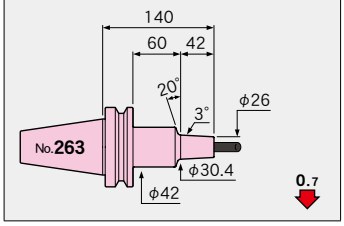
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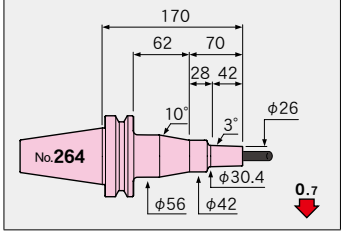
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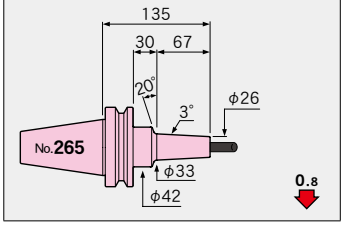
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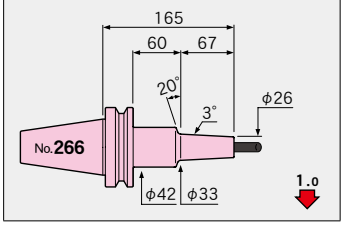
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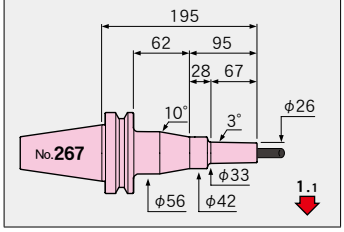
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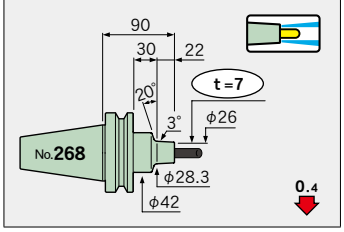
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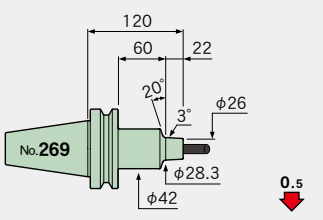
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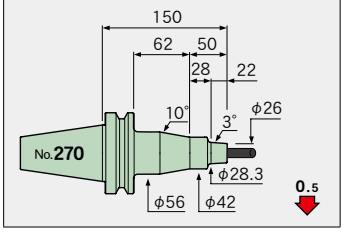
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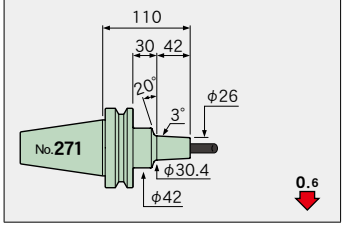
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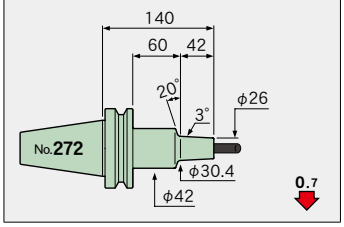
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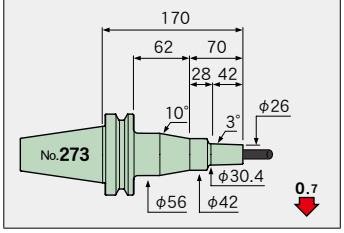
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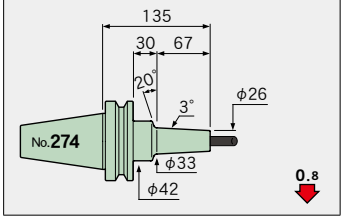
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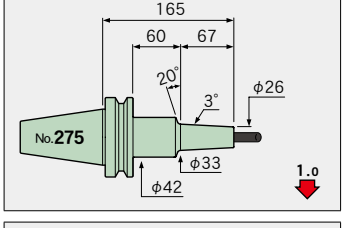
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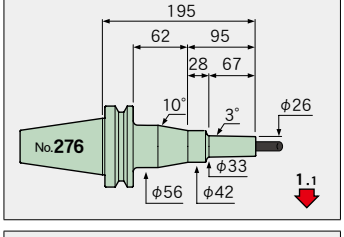
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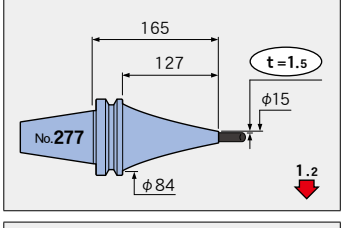
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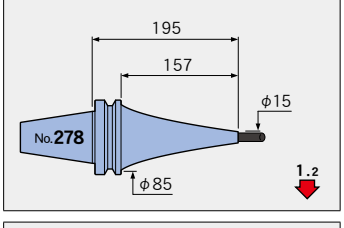
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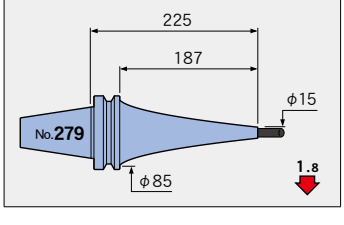
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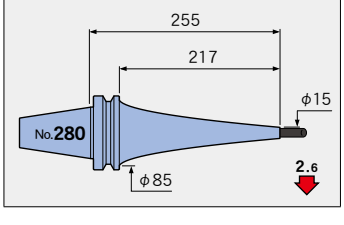
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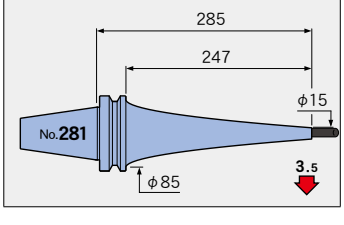
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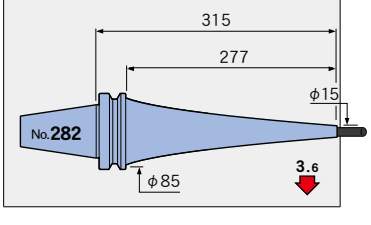
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BT50-SLSA12-285 CV

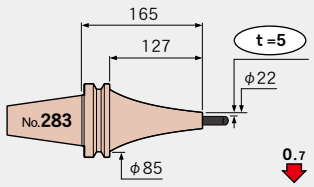


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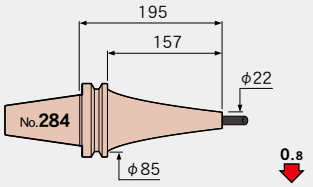


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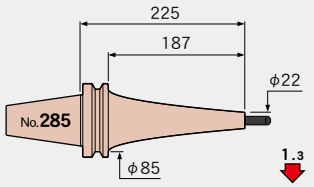
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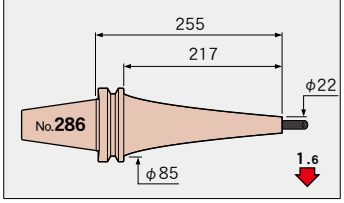
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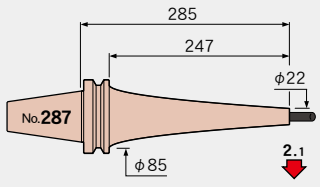
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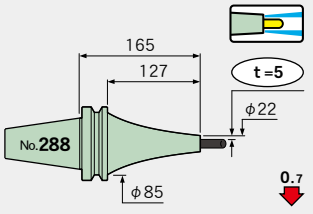
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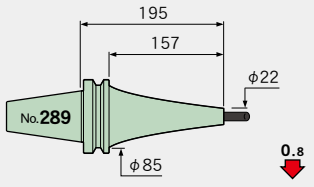
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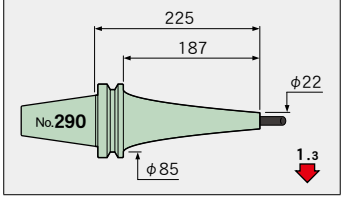
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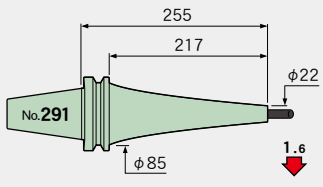
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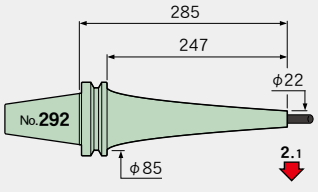
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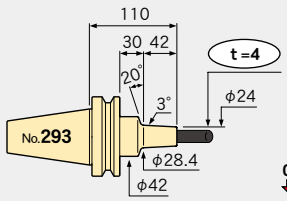
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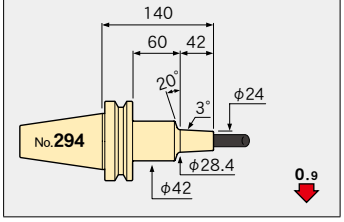


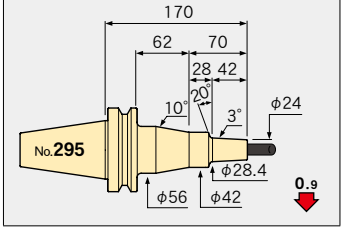
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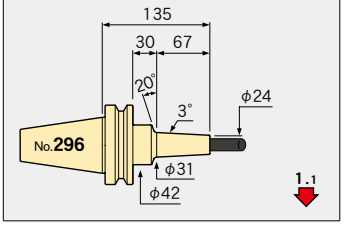


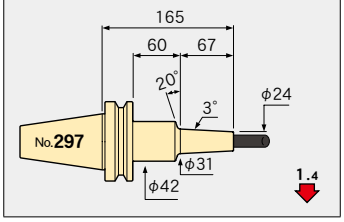
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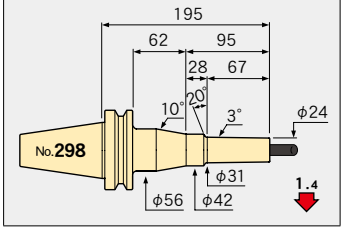
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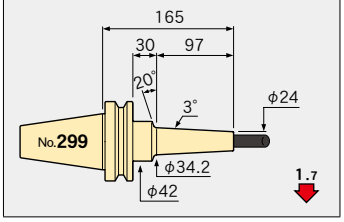
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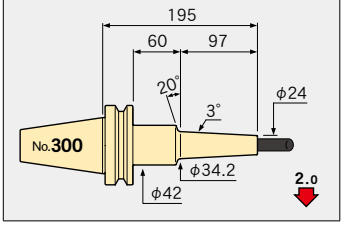
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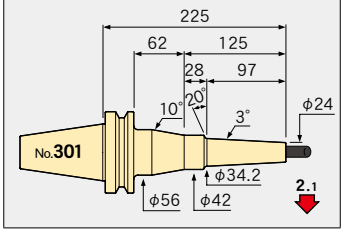
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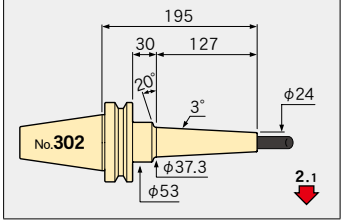
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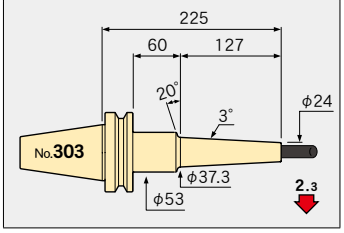
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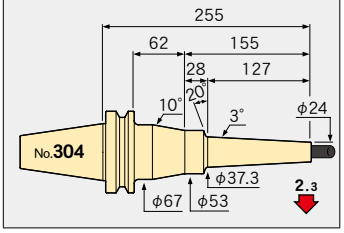
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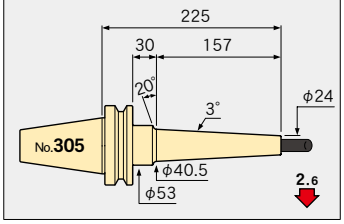
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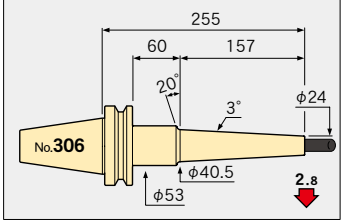
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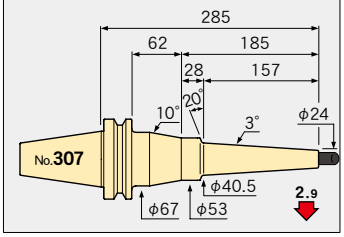
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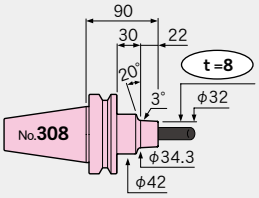
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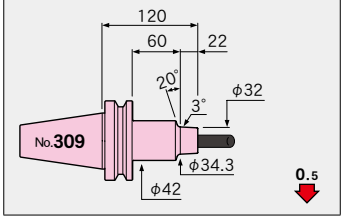
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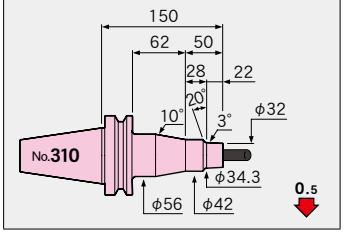
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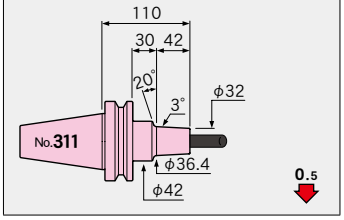
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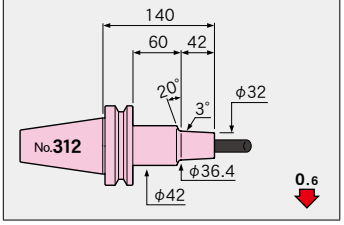
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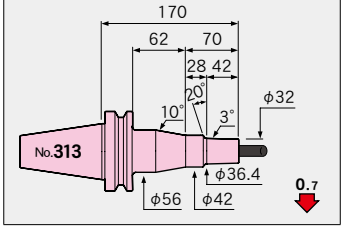
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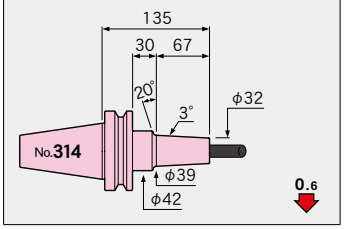
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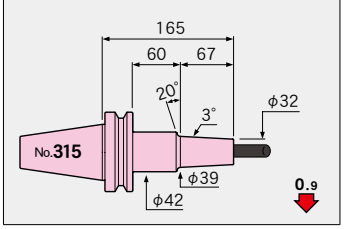
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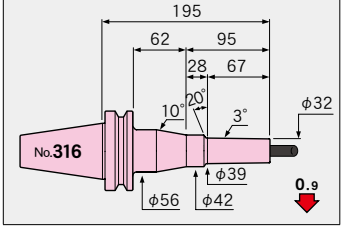
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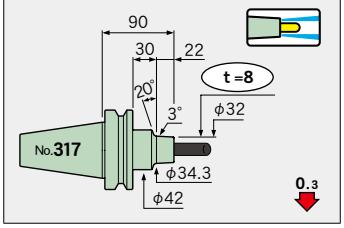
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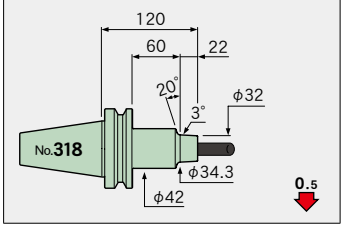
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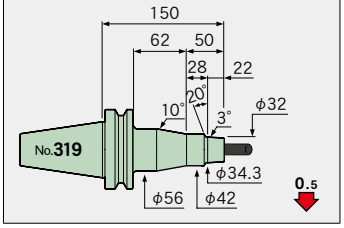
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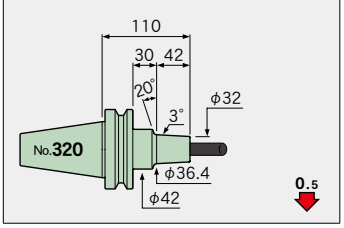
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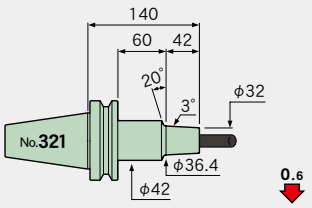
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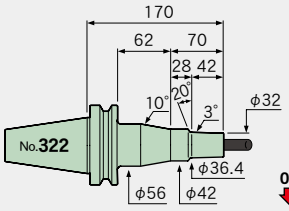
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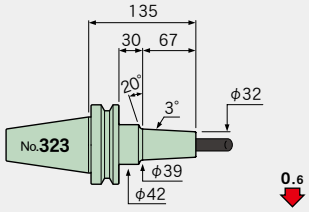
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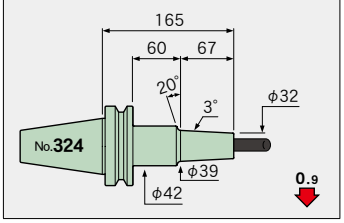
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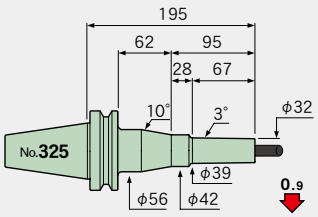
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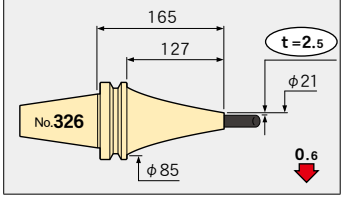
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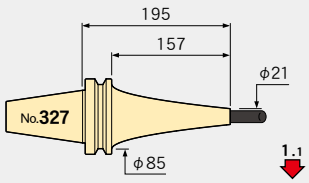
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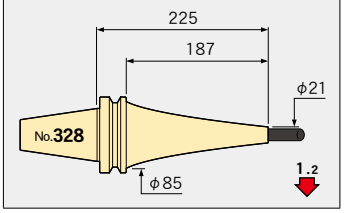
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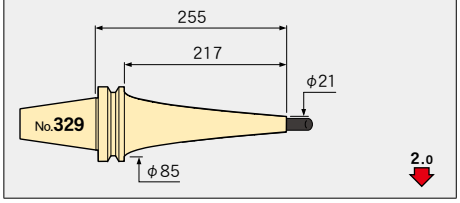
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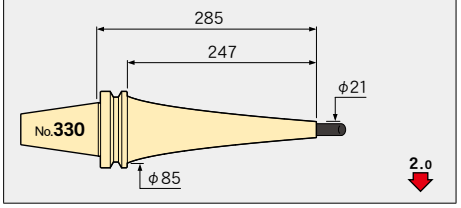
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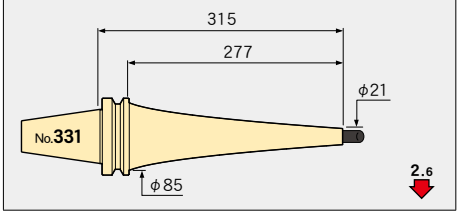
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BT50-SLSB16-285 CV

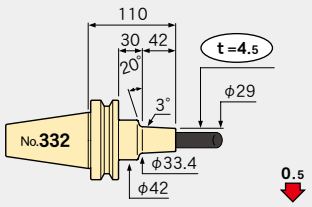


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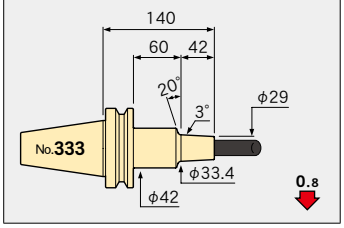


φ20

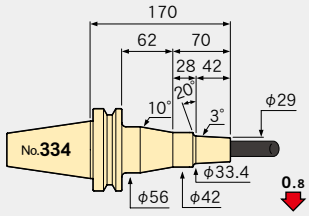
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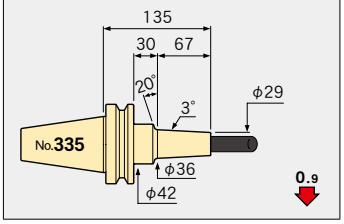
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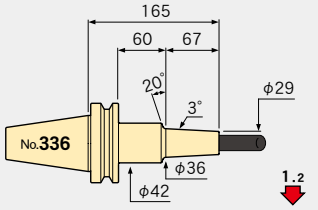
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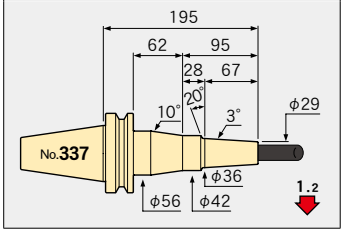
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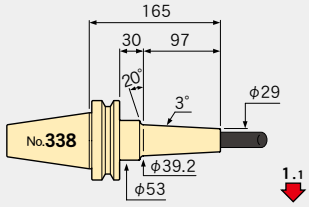
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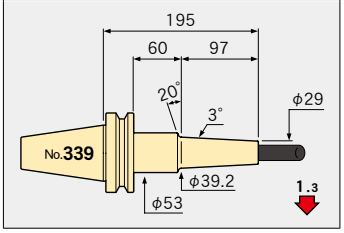
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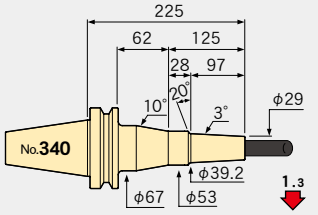
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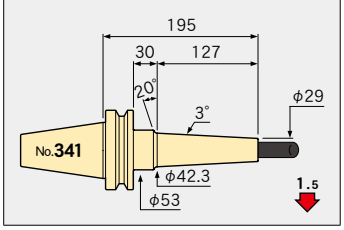
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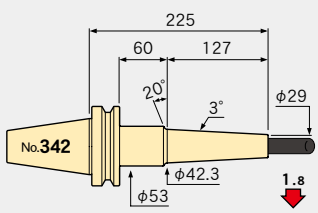
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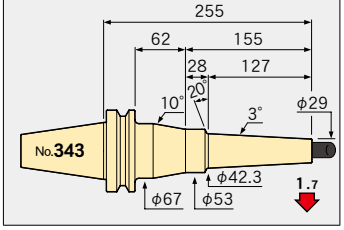
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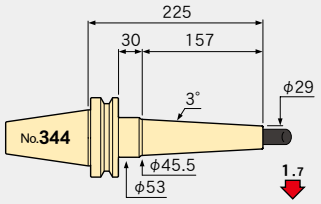
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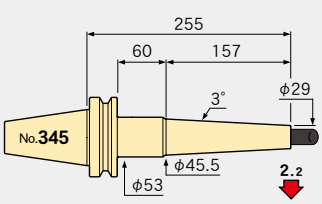
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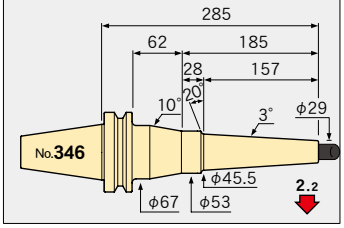
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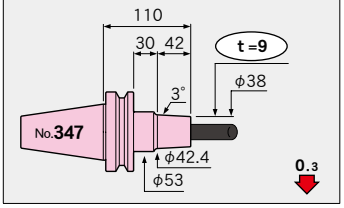
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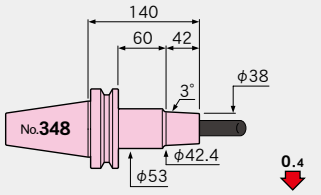
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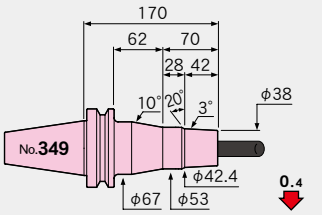
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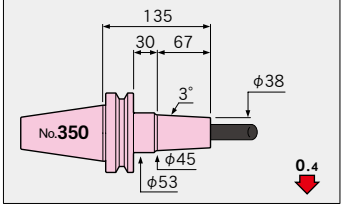
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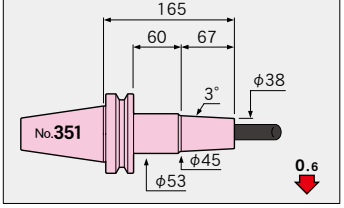
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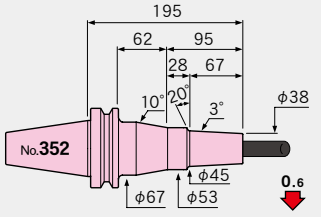
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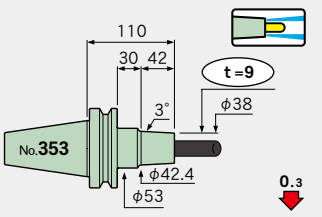
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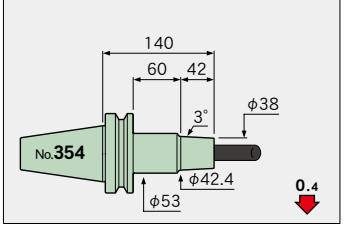
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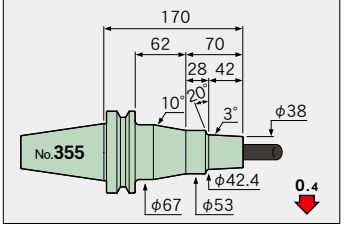
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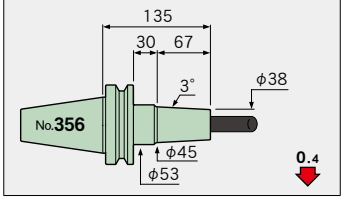
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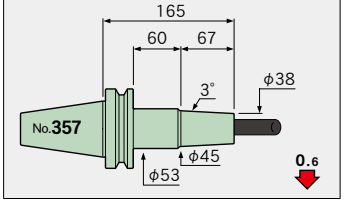
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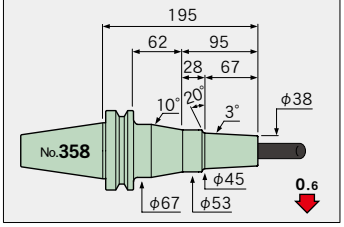
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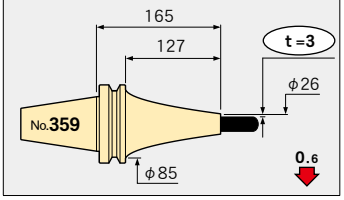
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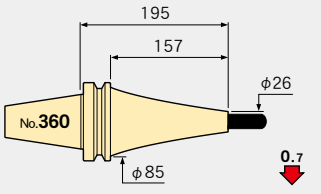
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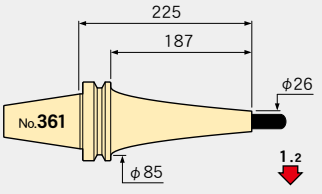
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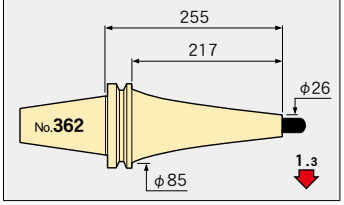
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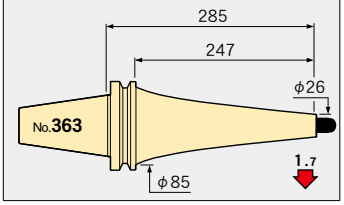
BT50-SLSB20-225 CV



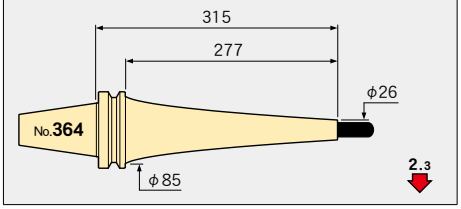
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BT50-SLSB20-285 CV



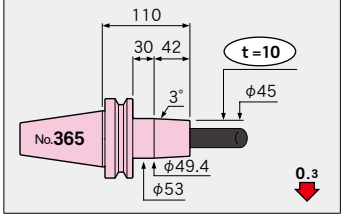
BT50-SLSB20-315 CV



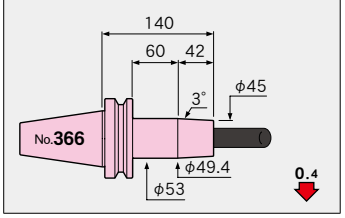
BT50 S=1:10

φ25

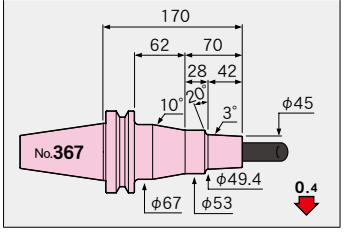
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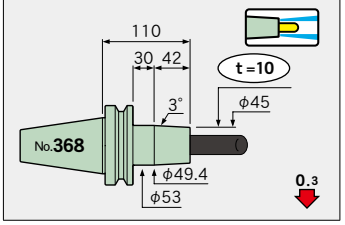
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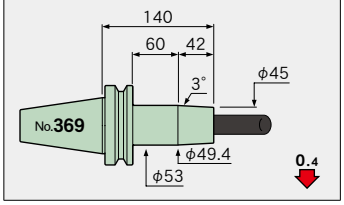
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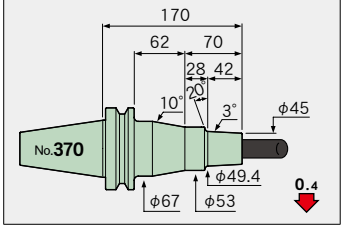
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BT50-SLFB25-140-M42

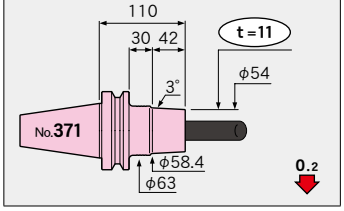


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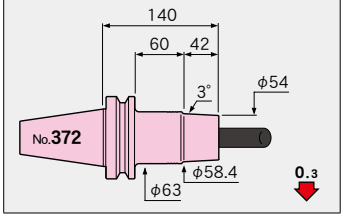


φ32

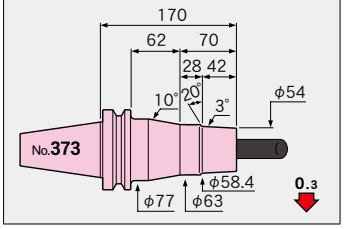
BT50-SLRB32-110-M42



BT50-SLRB32-140-M42



BT50-SLRB32-170-M42



▮ φ70 加热喷头 (HRB-03S-230AS)

SLRB32刀柄加热时必需品

型号
HRB-NZL70



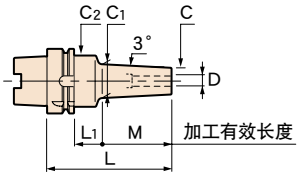


HEAT ROBO Baby3000S

A40

一体型 3°

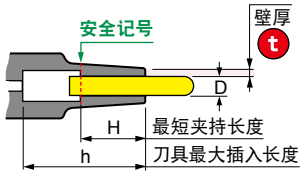




■标准附属品
- 冷却液导管(固定式)→P.186

■备考
- 可对应可动式冷却液导管→P.186

■注意事项
- 刀具安装…插入刀具时,请务必将刀具插入比安全记号更深的位置。





HEATROBO电磁 1200S (HRD-01S-230AS)
电磁式加热器对应表

[○] 可加热 [×] 不可加热

壁厚 t

型号	φD	φC	t	L	M	L1	φC1	φC2	H	h	Kg	N	S		缩略图
A40-SLSA3- 60	3	6	1.5	60	22	18	8.3	20	9	44	0.2	1.3	4.8	○	1
- 65-M22				65		23		25			0.3	3	4.5		2
- 85-M42				85	42		10.4			64		3.2	9.1		3
-100-M42				100		38				78		3.3	9.3		4
-SLRA3- 65-M22	3	7.5	2.25	65	22	23	9.8	25	9	44	0.3	3	2.7	○	5
- 85-M42				85	42		11.9			64		3.2	5.3		6
-SLFB3- 65-M22	3	9.5	3.25	65	22	23	11.8	25	9	44	0.3	3	1.2	○	7
- 85-M42				85	42		13.9			64		3.3	3.2		8
A40-SLSA4- 60	4	7	1.5	60	22	18	9.3	20	12	44	0.2	1.4	3.8	○	9
- 65-M22				65		23		25			0.3	3.1	3.5		10
- 80				80	42	18	11.4	20		64	0.2	1.4	7.5		11
- 85-M42				85		23		25			0.3	3.4	7.1		12
-100-M42				100		38				78		3.5	7.4		13
-SLRA4- 65-M22	4	10	3	65	22	23	12.3	25	12	44	0.3	3.1	1.7	○	14
- 85-M42				85	42		14.4			64		3.5	3.1		15
-SLFB4- 65-M22	4	12	4	65	22	23	14.3	25	12	44	0.3	3.2	1.3	○	16
- 85-M42				85	42		16.4			64		3.5	2.2		17
A40-SLSA6- 65-M22	6	9	1.5	65	22	23	11.3	25	18	44	0.3	3.2	2.3	○	18
- 80				80	42	18	13.4	20		54	0.2	1.5	5.1		19
- 85-M42				85		23		25		64	0.3	3.9	4.8		20
-100-M42				100		38				78		4	5.1		21
-SLRA6- 60	6	12	3	60	22	18	14.3	26	18	39	0.3	1.4	1.3	○	22
- 65-M22				65		23		25		44		3.2			23
- 85-M42				85	42		16.4			64		3.9	2.4		24
-SLFB6- 70-M22	6	14	4	70	22	28	16.3	32	18	48	0.4	4.1	1	○	25
- 90-M42				90	42		18.4			68		4.7	1.6		26
A40-SLSA8- 65-M22	8	11	1.5	65	22	23	13.3	25	24	44	0.3	3.2	1.6	○	27
- 85-M42				85	42	23	15.4			64		4.3	3.4		28
-100-M42				100		38				78		4.4	3.8		29
-SLRA8- 65-M22	8	14	3	65	22	23	16.3	25	24	44	0.3	3.2	1.1	○	30
- 85-M42				85	42		18.4			64		4.3	2		31
-SLFB8- 70-M22	8	18	5	70	22	28	20.3	32	24	48	0.4	4.1	0.7	×	32
- 90-M42				90	42		22.4			68		5.2	1.1	○	33
A40-SLSA10- 65-M22	10	13	1.5	65	22	23	15.3	25	30	44	0.3	3	1.2	○	34
- 85-M42				85	42		17.4			64		4.6	2.6		35
- 90				90		28		26				1.9			36
-100-M42				100		38		25		78		4.7	3		37



HRD-01S

型号	φD	φC	t	L	M	L1	φC1	φC2	H	h	Kg	N	S	○	缩略图
A40-SLRA10- 65	10	16	3	65	22	23	18.3	26	25	44	0.3	1.6	0.9	○	38
- 65-M22								25	30			3	1		39
- 90-M42				90	42	28	20.4	32		69	0.4	5.4	1.5		40
-SLFB10- 70-M22	10	22	6	70	22	28	24.3	32	30	48	0.4	3.9	0.6	×	41
- 90-M42				90	42		26.4			68	0.5	5.6	0.9	○	42
A40-SLSA12- 65-M22	12	15	1.5	65	22	23	17.3	25	30	44	0.3	3.3	1.1	○	43
- 90-M42				90	42	28	19.4	32		68	0.4	6.1	1.9		44
-SLRA12- 65-M22	12	20	4	65	22	23	22.3	25	30	44	0.3	3.3	0.8	○	45
-SLFB12- 70-M22	12	26	7	70	22	28	28.3	32	30	48	0.4	4.2	0.6	×	46
A40-SLRA16- 65-M22	16	26	5	65	22	23	28.3	33.5	32	43	0.4	2	0.5		47
A40-SLRA20- 70-M50	20	32	6	70	50	–	33.5	–	38	48	0.4	2.4	0.6		48

SLFB 

■ 主轴锥孔用 清洁工具
STAR DUST

型号
CLT-A40-G2

P.194



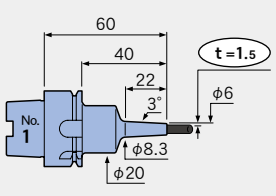
MAKINO
N2-5XA



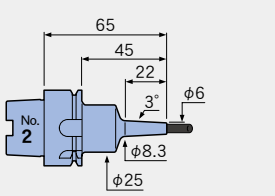
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φ3

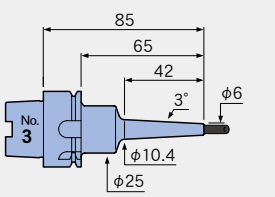
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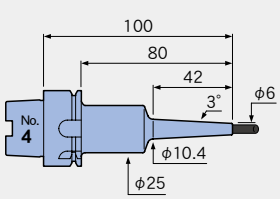
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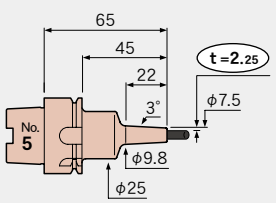
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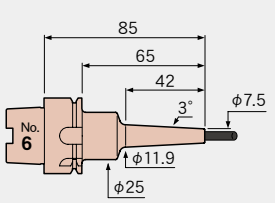
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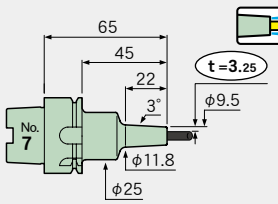
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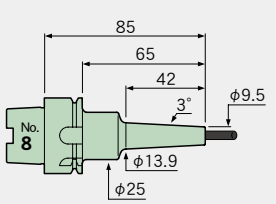
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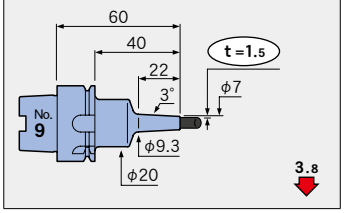


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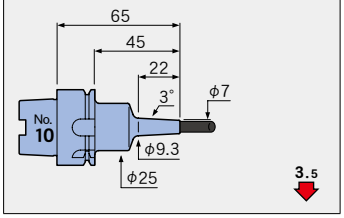


φ4

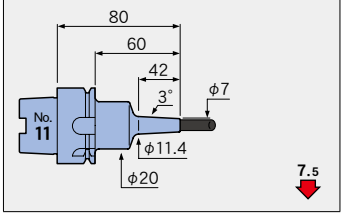
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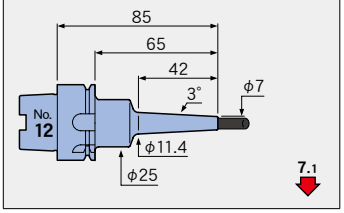
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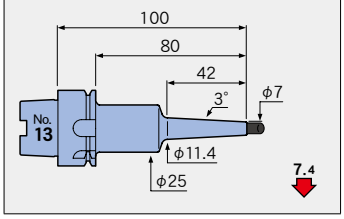
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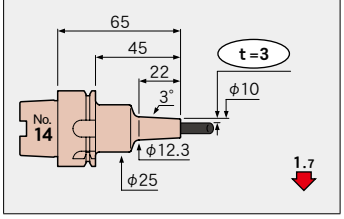
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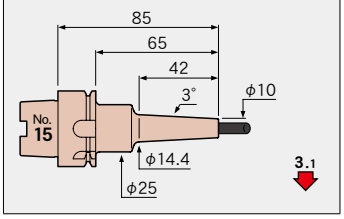
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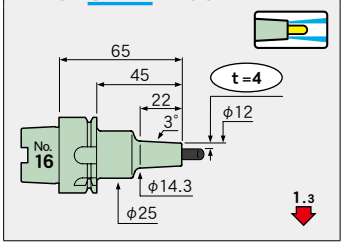
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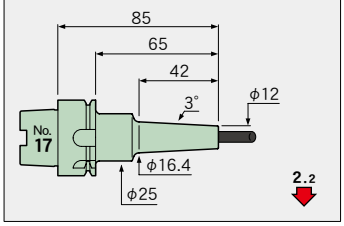
A40-SLRA4-85-M42



A40-SLFB4-65-M22

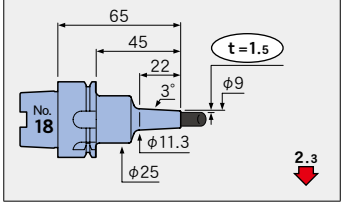


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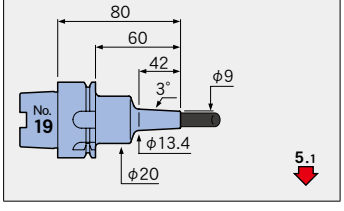


φ6

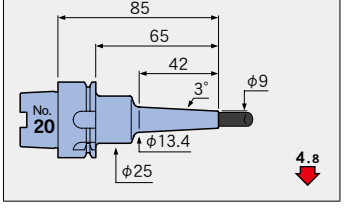
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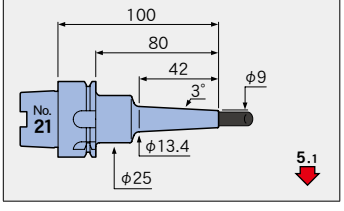
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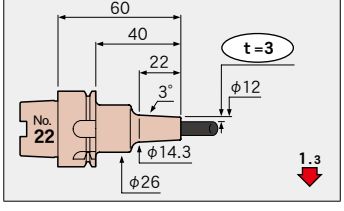
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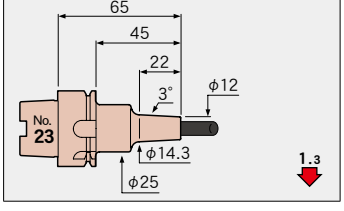
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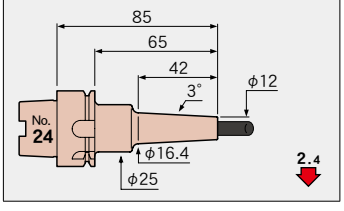
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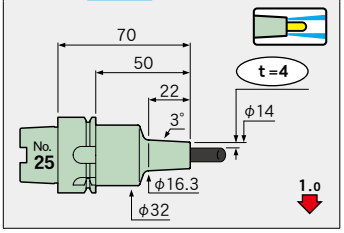
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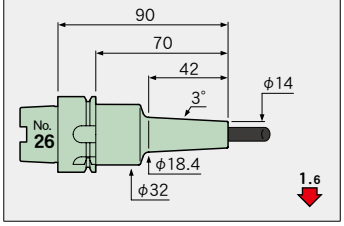
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A40-SLFB6-70-M22



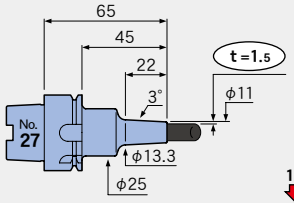
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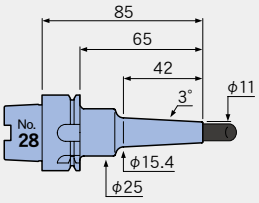
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ϕ8

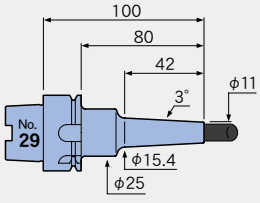
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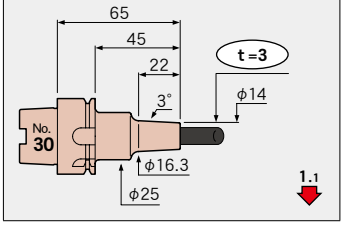
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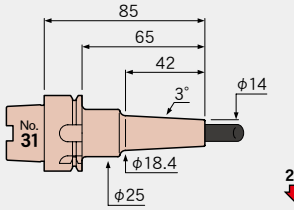
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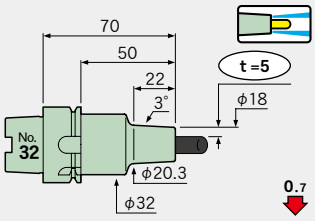
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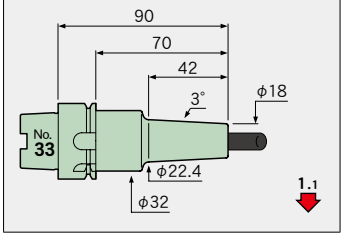
A40-SLRA8-85-M42



A40-SLFB8-70-M22

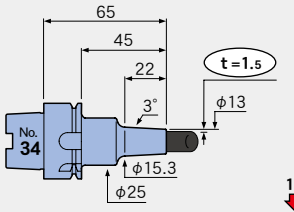


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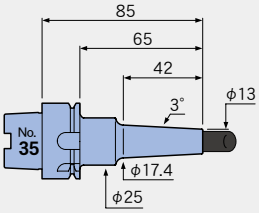


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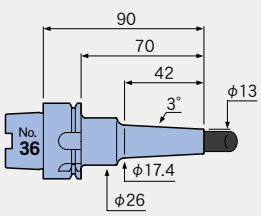
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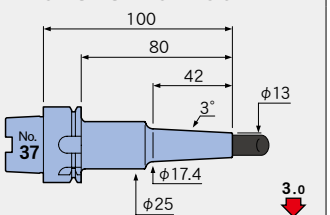
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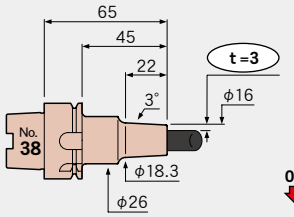
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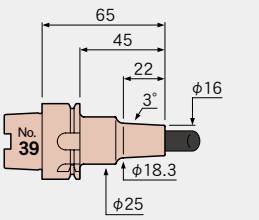
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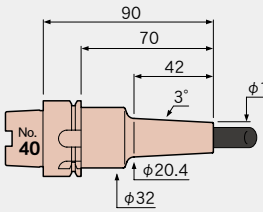
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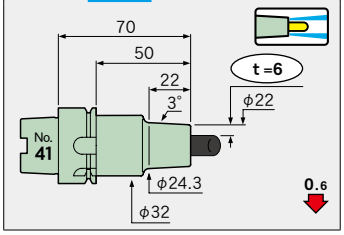
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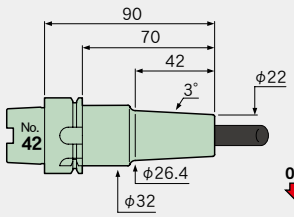
A40-SLRA10-90-M42



A40-SLFB10-70-M22

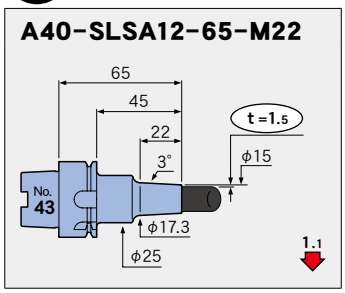


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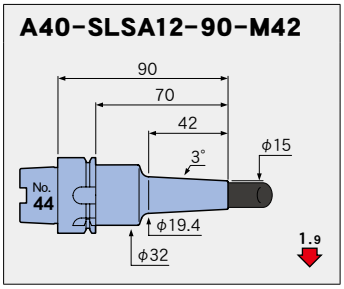


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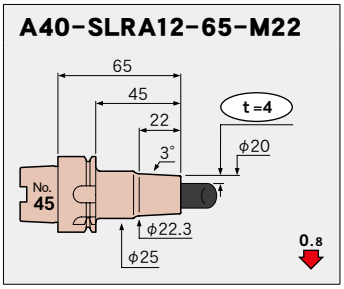
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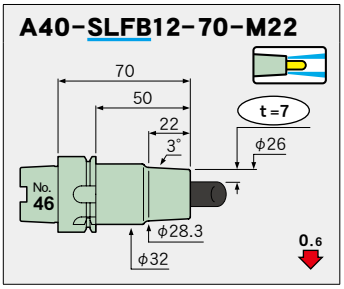
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A40-SLRA12-65-M22

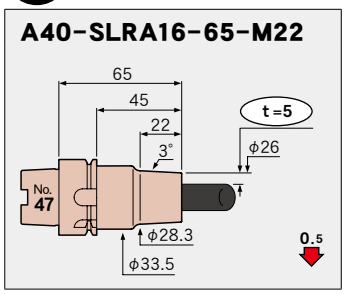


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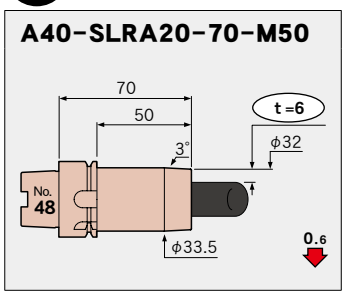
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A40-SLRA16-65-M22



ϕ20

A40-SLRA20-70-M50

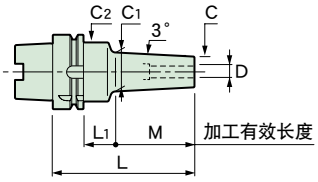


A50

一体型 3°



A50-SLSA4-95-M42





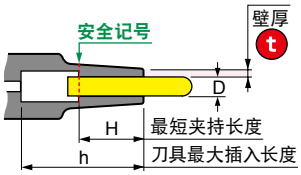
HEATROBO电磁 1200S
(HRD-01S-230AS)
电磁式加热器对应表

[○] 可加热 [×] 不可加热

■标准附属品
- ●冷却液导管(固定式)→P.186

■备考
- ●可对应可动式冷却液导管→P.186

■注意事项
- ●刀具安装···插入刀具时,请务必将刀具插入比安全记号更深的位置。
- ●A50M 倒扣部分尺寸同规格不同。请注意是否同 ATC 臂发生干涉。



壁厚 t

型号	φD	φC	t	L	M	L1	φC1	φC2	H	h	Kg	N	S		缩略图
A50-SLSA 3- 95-M42	3	6	1.5	95	42	27	10.4	25	9	71	0.5	5.8	9.1	○	1
-125-M42				125		57				101	0.6	6.5	9.8		2
-SLRA 3- 75-M22	3	7.5	2.25	75	22	27	9.8	25	9	51	0.5	6.2	2.8	○	3
- 95-M42				95	42		11.9			71		6.6	5.3		4
-125-M42				125		57				101	0.6	7.3	6		5
A50-SLSA 4- 95-M42	4	7	1.5	95	42	27	11.4	25	12	71	0.5	7	7.2	○	6
-125-M42				125		57				101	0.6	7.7	7.9		7
-SLRA 4- 75-M22	4	10	3	75	22	27	12.3	25	12	51	0.5	6.3	1.7	○	8
- 95-M42				95	42		14.4			71		7	3.1		9
-125-M42				125		57				101	0.6	7.7	3.8		10
A50-SLSA 6- 95-M42	6	9	1.5	95	42	27	13.4	25	18	71	0.5	7.3	4.8	○	11
-125-M42				125		57				101	0.6	8	5.6		12
-SLRB 6- 75-M22	6	14	4	75	22	27	16.3	32	18	50	0.5	7.2	1	○	13
- 95-M42				95	42		18.4			70	0.6	8.9	1.6		14
-125-M42				125		57				100	0.7	10.2	1.9		15
A50-SLSA 8- 95-M42	8	11	1.5	95	42	27	15.4	25	24	71	0.5	9.3	3.4	○	16
-125-M42				125		57				101	0.6	11.8	4.4		17
-SLRB 8- 75-M22	8	18	5	75	22	27	20.3	32	24	50	0.6	7.9	0.7	×	18
- 95-M42				95	42		22.4			70		10.5	1.1	○	19
-125-M42				125		57				100	0.8	11.8	1.5		20
A50-SLSA10- 95-M42	10	13	1.5	95	42	27	17.4	25	30	71	0.5	10.7	2.6	○	21
-125-M42				125		57				101	0.6	12.1	3.7		22
-SLRB10- 75-M22	10	22	6	75	22	27	24.3	32	30	50	0.6	8.3	0.6	×	23
- 95-M42				95	42		26.4			70		11.9	0.9	○	24
-125-M42				125		57				100	0.8	13.3	1.3		25
A50-SLRB12- 75-M22	12	26	7	75	22	27	28.3	42	30	52	0.7	6.2	0.4	×	26
- 95-M42				95	42		30.4			72	0.8	6.3	0.6		27
-125-M42				125		57				98	1	22.9	0.8		28
A50-SLRB16- 75-M22	16	32	8	75	22	27	34.3	42	32	52	0.7	6.3	0.4		29
-105-M22				105		57				78	1	19	0.5		30
A50M-SLRB20- 75-M22※	20	38	9	75	22	27	40.3	49	40	51	0.8	6.4	0.3		31
-105-M22※				105		57				76	1.2	15.1	0.4		32

※ 使用电磁5000S加热器对SLRB20加热时,所使用加热线圈号码不同。
请使用加热线圈No.4进行加热。

■主轴锥孔用 清洁工具
STAR DUST

型号
CLT-A50-G2

P.194

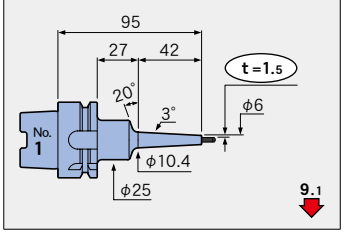


SUGINO	SC Dual
HORKOS	NJ 50
MAKINO J	J3 / L2



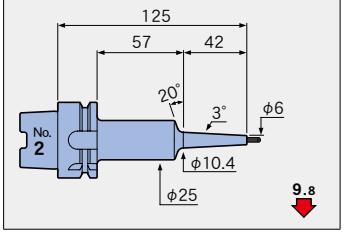
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A50-SLSA3-95-M42



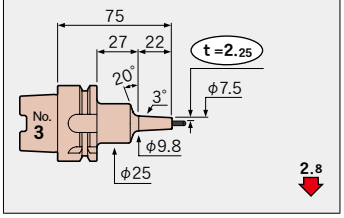
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A50-SLSA3-125-M42



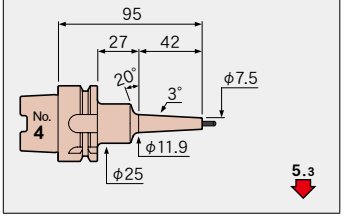
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A50-SLRA3-75-M22



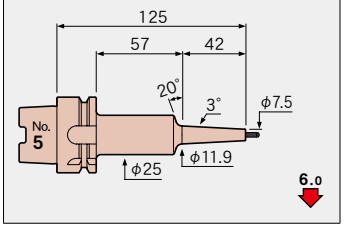
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A50-SLRA3-95-M42



5.3

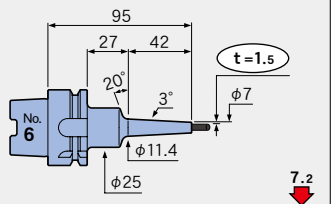
A50-SLRA3-125-M42



6.0

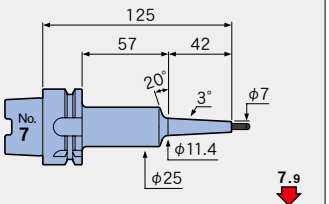
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A50-SLSA4-95-M42



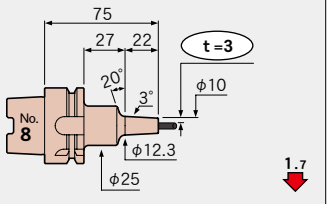
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A50-SLSA4-125-M42



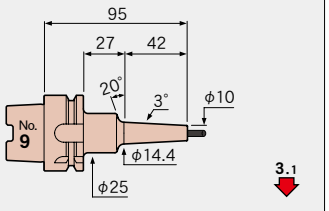
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A50-SLRA4-75-M22



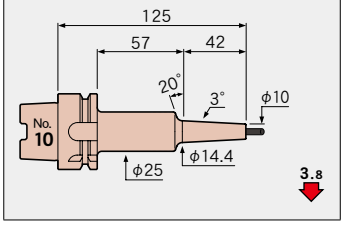
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A50-SLRA4-95-M42



3.1

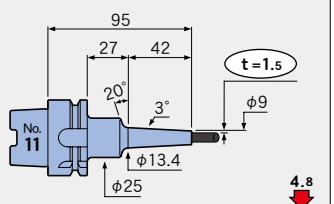
A50-SLRA4-125-M42



3.8

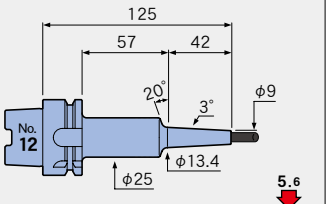
φ6

A50-SLSA6-95-M42



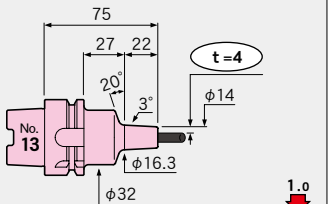
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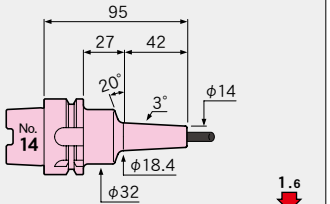
5.6

A50-SLRB6-75-M22



1.0

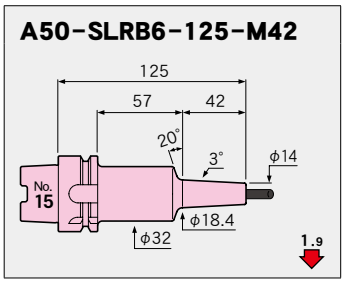
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1.6

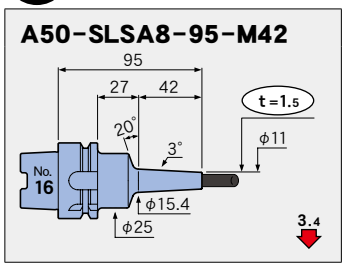
A50 S=1:5

A50-SLRB6-125-M42

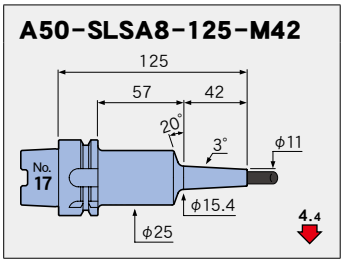


φ8

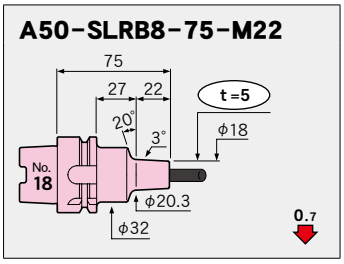
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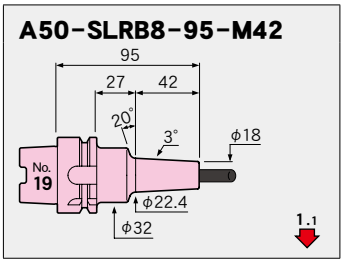
A50-SLSA8-125-M42



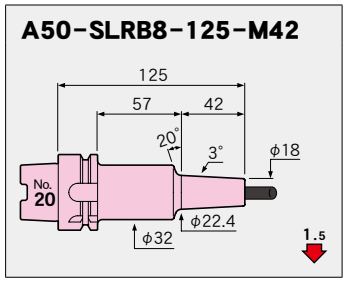
A50-SLRB8-75-M22



A50-SLRB8-95-M42

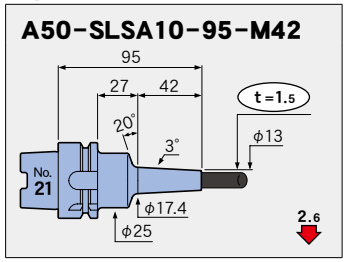


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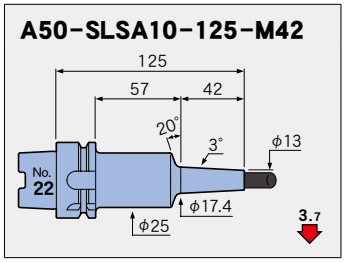


φ10

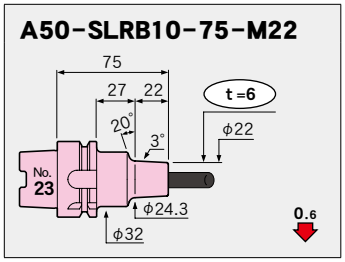
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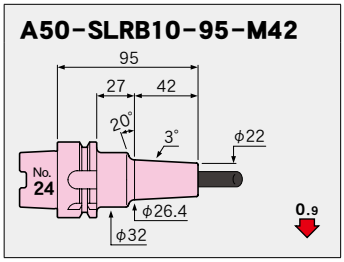
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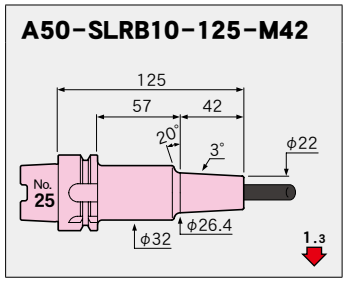
A50-SLRB10-75-M22



A50-SLRB10-95-M42

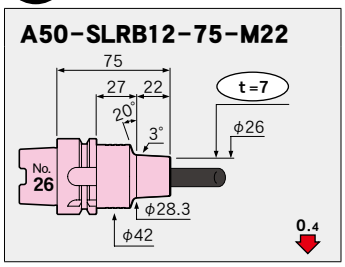


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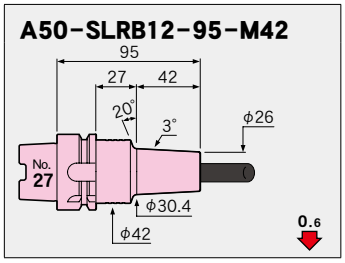


φ12

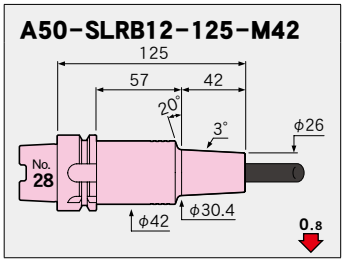
A50-SLRB12-75-M22



A50-SLRB12-95-M42

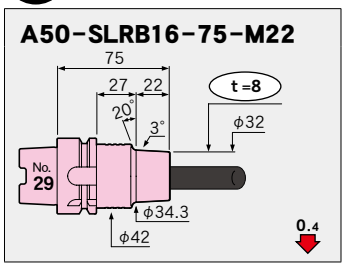


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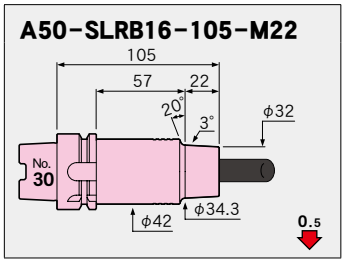


φ16

A50-SLRB16-75-M22

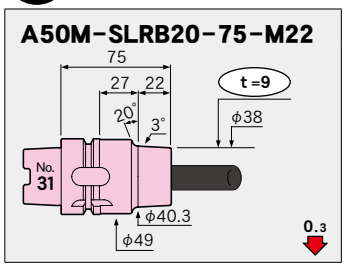


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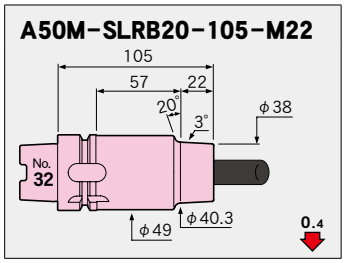


φ20

A50M-SLRB20-75-M22



A50M-SLRB20-105-M22



A63

一体型 3°



A63-SLSA6-150-M97

Fig. 1

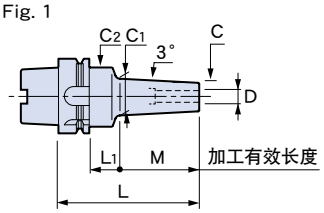
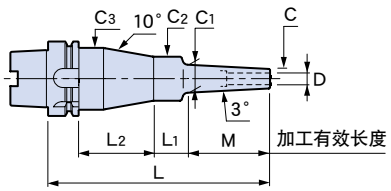


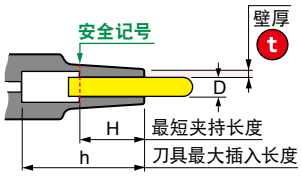
Fig. 2



■标准附属品
- 冷却液导管(固定式)→P.186

■备考
- 可对应可动式冷却液导管→P.186

■注意事项
- 刀具安装…插入刀具时,请务必将刀具插入比安全记号更深的位置。

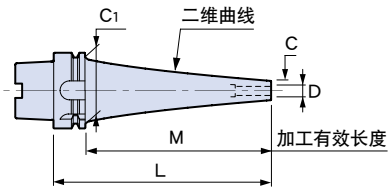


一体型CURVE CV



A63-SLSA8-150 cv

Fig. 3





HEATROBO电磁 1200S
(HRD-01S-230AS)
电磁式加热器对应表

[○] 可加热　[×] 不可加热
[▲] 垫高加热器后可进行加热→P.201
[★] 使用线圈和标准时不同。
请使用2号加热线圈。

CV：曲线　　壁厚

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S		缩略图
A63-SLSA3- 95-M 42	1	3	6	1.5	95	42	27	—	10.4	25	—	9	70	0.7	8.1	9.1	○	1
-120-M 67					120	67			13				95	0.8	9.2	14.7		4
-125-M 42					125	42	57		10.4				100		8.2	9.8		2
-150-M 67					150	67			13				125		9.3	15.8		5
-M 97						97	27		16.2						10.5	20.5		7
-155-M 42	2				155	42	33	54	10.4	26	40		130	1.2	8.4	9.9		3
-180-M 67					180	67			13	25	39		155	1.1	9.6	15.7		6
-M 97	1					97	57	—	16.2		—			0.9	10.6	22.2		8
-210-M 97	2				210		33	54			39		185	1.2	10.8	22.1		9
-SLRA3- 75-M 22	1	3	7.5	2.25	75	22	27	—	9.8	25	—	9	50	0.7	8.4	2.8	○	10
- 95-M 42					95	42			11.9				70		8.9	5.3		13
-105-M 22					105	22	57		9.8				80	0.8	8.6	3.2		11
-120-M 67					120	67	27		14.5				95		9.6	8.8		16
-125-M 42					125	42	57		11.9				100		9	6		14
-135-M 22	2				135	22	33	54	9.8		39		110	1.1	8.8	3.2		12
-150-M 67	1				150	67	57	—	14.5		—		125	0.9	9.8	9.9		17
-M 97						97	27		17.7					0.8	10.6	12.9		19
-155-M 42	2				155	42	33	54	11.9	25	39		130	1.1	9.2	6		15
-180-M 67					180	67			14.5	26	40		155	1.2	10	9.8		18
-M 97	1					97	57	—	17.7	25	—			0.9	10.8	14.6		20
-M127						127	27		20.8	36					12.6	15.7		22
-210-M 97	2				210	97	33	54	17.7	25	39		185	1.2	11	14.4		21
-M127	1					127	57	—	20.8	32	—		184	1.1	12.8	16.6		23
-240-M127	2				240		30	57			46		214	1.5	13.2	16.5		24

HRD-01S

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S		缩略图
A63-SLFB3- 75-M 22	1	3	9.5	3.25	75	22	27	—	11.8	25	—	9	50	0.7	8.1	1.9	○	25
- 95-M 42					95	42			13.9				70	0.8	8.5	3.2		28
-105-M 22					105	22	57		11.8	26			80	0.9	8.2	2.3		26
-120-M 67					120	67	27		16.5	25			95	0.8	9.7	5.3		31
-125-M 42					125	42	57		13.9	26			100	0.9	8.7	3.8		29
-135-M 22	2				135	22	33	54	11.8	25	39		110	1.1	8.5	2.3		27
-150-M 67	1				150	67	57	—	16.5		—		125	0.9	9.8	6.4		32
-155-M 42	2				155	42	33	54	13.9		39		130	1.1	8.9	3.9		30
-180-M 67					180	67			16.5				155	1.2	10	6.4		33
A63-SLSA4- 95-M 42	1	4	7	1.5	95	42	27	—	11.4	25	—	12	70	0.7	9.2	7.2	○	34
-120-M 67					120	67			14				95	0.8		11.7		37
-125-M 42					125	42	57		11.4				100		9.4	7.9		35
-150-M 67					150	67			14				125	0.9		12.8		38
-M 97						97	27		17.2					0.8	10.6	16.6		40
-155-M 42	2				155	42	33	54	11.4		39		130	1.1	9.6	7.9		36
-180-M 67					180	67			14				155			12.8		39
-M 97	1					97	57	—	17.2		—			0.9	10.8	18.4		41
-210-M 97	2				210		33	54			39		185	1.2	11	18.2		42
-SLRA4- 75-M 22	1	4	10	3	75	22	27	—	12.3	25	—	12	50	0.7	8.6	1.7	○	43
- 95-M 42					95	42			14.4				70	0.8	9.2	3.1		46
-105-M 22					105	22	57		12.3				80		8.7	2.2		44
-120-M 67					120	67	27		17				95		10.3	5.1		49
-125-M 42					125	42	57		14.4				100		9.3	3.8		47
-135-M 22	2				135	22	33	54	12.3		39		110	1.1	8.9	2.2		45
-150-M 67	1				150	67	57	—	17		—		125	0.9	10.4	6.3		50
-M 97						97	27		20.2				124	0.8	11.7	7.7		52
-155-M 42	2				155	42	33	54	14.4		39		130	1.1	9.6	3.8		48
-180-M 67					180	67			17				155	1.2	10.7	6.2		51
-M 97	1					97	57	—	20.2		—		154	0.9	11.8	9.5		53
-M127						127	27		23.3	32				1	14.8	9.4		55
-210-M 97	2				210	97	33	54	20.2	25	39		184	1.2	12.1			54
-M127	1					127	57	—	23.3	32	—			1.1	15.1	10.4		56
-240-M127	2				240		30	57			46		214	1.5	15.4	10.3		57
-SLFB4- 75-M 22	1	4	12	4	75	22	27	—	14.3	25	—	12	50	0.7	8.4	1.3	○	58
- 95-M 42					95	42			16.4				70	0.8	9	2.2		61
-105-M 22					105	22	57		14.3				80		8.5	1.8		59
-120-M 67					120	67	27		19				95		10.3	3.6		64
-125-M 42					125	42	57		16.4				100	0.9	9.1	2.9		62
-135-M 22	2				135	22	33	54	14.3		39		110	1.1	8.7	1.8		60
-150-M 67	1				150	67	57	—	19		—		125	0.9	10.4	4.7		65
-155-M 42	2				155	42	33	54	16.4		39		130	1.1	9.4	2.9		63
-180-M 67					180	67			19				155	1.2	10.6	4.6		66
-SLSA4- 90 CV	3	4	7	1.5	90	64	—	—	53	—	—	12	65	1	9.3	1.8	○	67
-120 CV					120	94							95	1.1	10.1	2.7		68
-150 CV					150	124							125	1.3	11	4		69
-180 CV					180	154							154	1.4	11.6	6.6		70
-210 CV					210	184							185		11.8	11.6		71
-240 CV					240	214							214	1.6	13.1	14		72
-270 CV					270	244							245	2	15.4	11.9		73
-300 CV					300	274							275	2.1	16.3	15.9		74
-SLRA4-120 CV	3	4	10	3	120	94	—	—	53	—	—	12	95	1	8.6	1.9	○	75
-150 CV					150	124							125	1.1	9.3	2.9		76
-180 CV					180	154							155	1.4	10.9	3.3		77
-210 CV					210	184							185		11.3	5.6		78

HRD-01S

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S		缩略图
A63-SLSA6- 95-M 42	1	6	9	1.5	95	42	27	—	13.4	25	—	18	70	0.7	9.5	4.8	○	79
-120-M 67					120	67			16				95	0.8	11.1	8		82
-125-M 42					125	42	57		13.4				100		9.7	5.6		80
-150-M 67					150	67			16				125	0.9	11.2	9.3		83
-M 97						97	27		19.2	32			124		13.4	11		85
-155-M 42	2				155	42	33	54	13.4	25	39		130	1.1	9.9	5.6		81
-180-M 67					180	67			16				155		11.5	9.2		84
-M 97	1					97	57	—	19.2	32	—		154	1	13.6	11.7		86
-210-M 97	2				210		30	57			46		184	1.4	14			87
-SLSB6- 95-M 42	1	6	10	2	95	42	27	—	14.4	25	—	18	70	0.7	10.5	3.7	○	88
-120-M 67					120	67			17				95	0.8	12.6	6.2		91
-125-M 42					125	42	57		14.4				100		10.6	4.5		89
-150-M 67					150	67			17				125	0.9	12.7	7.4		92
-M 97						97	27		20.2	32			124		15.4	8.5		94
-155-M 42	2				155	42	33	54	14.4	25	39		130	1.1	10.9	4.4		90
-180-M 67					180	67			17				155		12.9	7.3		93
-M 97	1					97	57	—	20.2	32	—		154	1	15.7	9.2		95
-M127						127	27		23.3					0.9	17.9	11		97
-210-M 97	2				210	97	30	57	20.2		46		184	1.4	16	9.2		96
-M127	1					127	57	—	23.3		—			1.1	18.2	12		98
-M157						157	27		26.5						20.4	13.2		100
-240-M127	2				240	127	30	57	23.3		46		214	1.5	18.5	12		99
-M157	1					157	57	—	26.5		—			1.2	20.7	14.6		101
-270-M157	2				270		30	57			46		244	1.6	21		▲	102
-SLRB6- 75-M 22	1	6	14	4	75	22	27	—	16.3	32	—	18	49	0.8	9.3	1	○	103
- 95-M 42					95	42			18.4				69		10.9	1.6		106
-105-M 22					105	22	57		16.3				79	0.9	9.5	1.2		104
-120-M 67					120	67	27		21				94		13	2.6		109
-125-M 42					125	42	57		18.4				99	1	11.2	1.9		107
-135-M 22	2				135	22	30	57	16.3		46		109	1.3	9.9	1.2		105
-150-M 67	1				150	67	57	—	21		—		124	1	13.2	3		110
-155-M 42	2				155	42	30	57	18.4		46		129	1.4	11.5	1.9		108
-180-M 67					180	67			21				154		13.6	3.1		111
-SLFB6- 75-M 22	1	6	14	4	75	22	27	—	16.3	32	—	18	49	0.8	9.3	1	○	112
- 95-M 42					95	42			18.4				69		10.9	1.6		115
-105-M 22					105	22	57		16.3				79	0.9	9.5	1.2		113
-120-M 67					120	67	27		21				94		13	2.6		118
-125-M 42					125	42	57		18.4				99	1	11.2	1.9		116
-135-M 22	2				135	22	30	57	16.3		46		109	1.3	9.9	1.2		114
-150-M 67	1				150	67	57	—	21		—		124	1	13.2	3		119
-155-M 42	2				155	42	30	57	18.4		46		129	1.4	11.5	1.9		117
-180-M 67					180	67			21				154		13.6	3.1		120
A63-SLSA6- 90 CV	3	6	9	1.5	90	64	—	—	53	—	—	18	65	1	9.4	1.6	○	121
-120 CV					120	94							95	1.1	10.1	2.3		122
-150 CV					150	124							125	1.3	11	3.6		123
-180 CV					180	154							154	1.4	11.7	5.7		124
-210 CV					210	184							184	1.6	13	7.3		125
-240 CV					240	214							214		13.3	12		126
-270 CV					270	244							245	2.1	16.3	8.5	▲	127
-300 CV					300	274							275	2.3	17.2	11.7		128
-SLRA6- 90 CV	3	6	13	3.5	90	64	—	—	53	—	—	18	65	1	8.3	0.8	★	129
-120 CV					120	94							95	1.1	9.3	1.2		130
-150 CV					150	124							125	1.3	10.1	1.9	○	131
-180 CV					180	154							155	1.4	11.1	2.8		132
-210 CV					210	184							185		11.5	4.8		133
-SLFA6- 90 CV	3	6	13	3.5	90	64	—	—	53	—	—	18	65	1	8.3	0.8	★	134
-120 CV					120	94							95	1.1	9.3	1.2		135
-150 CV					150	124							125	1.3	10.1	1.9	○	136
-180 CV					180	154							155	1.4	11.1	2.8		137
-210 CV					210	184							185		11.5	4.8		138

HRD-01S

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S		缩略图
A63-SLSA8- 95-M 42	1	8	11	1.5	95	42	27	—	15.4	25	—	24	70	0.7	11.4	3.4	○	139
-120-M 67					120	67			18	32			94	0.8	14	5.4		142
-125-M 42					125	42	57		15.4	25			100		11.6	4.3		140
-150-M 67					150	67			18	32			124	1	14.2	5.9		143
-M 97						97	27		21.2					0.9	17.1	7.9		145
-155-M 42	2				155	42	33	54	15.4	25	39		130	1.1	12	4.3		141
-180-M 67					180	67	30	57	18	32	46		154	1.4	14.6	5.9		144
-M 97	1					97	57	—	21.2		—			1	17.4	8.7		146
-210-M 97	2				210		30	57			46		184	1.4	17.7			147
-SLSB8- 95-M 42	1	8	13	2.5	95	42	27	—	17.4	32	—	24	69	0.8	12.5	2.1	○	148
-120-M 67					120	67			20				94	0.9	15.7	3.5		151
-125-M 42					125	42	57		17.4				99	1	12.7	2.4		149
-150-M 67					150	67			20				124		15.9	4		152
-M 97						97	27		23.2					0.9	19.5	5.2		154
-155-M 42	2				155	42	30	57	17.4		46		129	1.4	13.1	2.4		150
-180-M 67					180	67			20				154		16.3	4		153
A63 -M 97	1					97	57	—	23.2		—			1.1	19.8	6		155
-M127						127	27		26.3					1	23.4	7		157
-210-M 97	2				210	97	30	57	23.2		46		184	1.5	20.2	6		156
-M127	1					127	57	—	26.3		—			1.2	23.7	8.1		158
-M157						157	27		29.5	42			185		27.3	8		160
-240-M127	2				240	127	30	57	26.3	32	46		214	1.6	24	8.1	▲	159
-M157	1					157	57	—	29.5	42	—			1.5	27.5	8.6		161
-270-M157	2				270		28	59			53		242	2	27.9	8.7		162
A63-SLRB8- 75-M 22	1	8	18	5	75	22	27	—	20.3	32	—	24	49	0.8	10	0.7	×	163
- 95-M 42					95	42			22.4				69	0.9	12.5	1.1	○	166
-105-M 22					105	22	57		20.3				79	1	10.2	0.9	×	164
-120-M 67					120	67	27		25				94	0.9	15.7	1.7	○	169
-125-M 42					125	42	57		22.4				99	1	12.8	1.4		167
-135-M 22	2				135	22	30	57	20.3		46		109	1.4	10.6	1	×	165
-150-M 67	1				150	67	57	—	25		—		124	1.1	16	2.2	○	170
-155-M 42	2				155	42	30	57	22.4		46		129	1.4	13.2	1.4		168
-180-M 67					180	67			25				155	1.5	16.4	2.2		171
-SLFB8- 75-M 22	1	8	18	5	75	22	27	—	20.3	32	—	24	49	0.8	10	0.7	×	172
- 95-M 42					95	42			22.4				69	0.9	12.5	1.1	○	175
-105-M 22					105	22	57		20.3				79	1	10.2	0.9	×	173
-120-M 67					120	67	27		25				94	0.9	15.7	1.7	○	178
-125-M 42					125	42	57		22.4				99	1	12.8	1.4		176
-135-M 22	2				135	22	30	57	20.3		46		109	1.4	10.6	1	×	174
-150-M 67	1				150	67	57	—	25		—		124	1.1	16	2.2	○	179
-155-M 42	2				155	42	30	57	22.4		46		129	1.4	13.2	1.4		177
-180-M 67					180	67			25				154	1.5	16.4	2.2		180
-SLSA8- 90 CV	3	8	11	1.5	90	64	—	—	53	—	—	24	65	1	9.4	1.4	○	181
-120 CV					120	94							94	1.1	10.3	2		182
-150 CV					150	124							124	1.3	11.5	2.7		183
-180 CV					180	154							155	1.4	11.8	5		184
-210 CV					210	184							184	1.6	13.2	6.6	▲	185
-240 CV					240	214							214	1.8	14.4	8.3		186
-270 CV					270	244							244	2.2	17.2	6.9		187
-300 CV					300	274							274	2.4	18.5	8.9		188
-SLRA8- 90 CV	3	8	16	4	90	64	—	—	53	—	—	24	65	1	8.4	0.7	○	189
-120 CV					120	94							95	1.2	9.6	1		190
-150 CV					150	124							125	1.4	10.8	1.4		191
-180 CV					180	154							155	1.5	12	2		192
-210 CV					210	184							185	1.6	12.5	3.5		193
-SLFA8- 90 CV	3	8	16	4	90	64	—	—	53	—	—	24	65	1	8.4	0.7	○	194
-120 CV					120	94							95	1.2	9.6	1		195
-150 CV					150	124							125	1.4	10.8	1.4		196
-180 CV					180	154							155	1.5	12	2		197
-210 CV					210	184							185	1.6	12.5	3.5		198

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S	HRD-01S	缩略图
A63-SLSA10- 95-M 42	1	10	13	1.5	95	42	27	—	17.4	25	—	30	70	0.8	12.8	2.6	○	199
-120-M 67					120	67			20	32			94		16.6	4		202
-125-M 42					125	42	57		17.4	25			100		13	3.6		200
-150-M 67					150	67			20	32			124	1	16.9	4.6		203
-M 97						97	27		23.2					0.9	21.3	6		205
-155-M 42	2				155	42	33	54	17.4	25	39		130	1.1	13.4	3.5		201
-180-M 67					180	67	30	57	20	32	46		154	1.4	17.3	4.6		204
-M 97	1					97	57	—	23.2		—			1.1	21.6	6.9		206
-210-M 97	2				210		30	57			46		184	1.5	21.9			207
-SLSB10- 95-M 42	1	10	16	3	95	42	27	—	20.4	32	—	30	69	0.8	13.9	1.4	○	208
-120-M 67					120	67			23				94	0.9	18.5	2.4		211
-125-M 42					125	42	57		20.4				99	1	14.2	1.8		209
-150-M 67					150	67			23				124		18.8	3		212
-M 97						97	27		26.2						24	3.6		214
-155-M 42	2				155	42	30	57	20.4	32	46		129	1.4	14.6	1.8		210
-180-M 67					180	67			23				154		19.2	3		213
-M 97	1					97	57	—	26.2		—			1.1	24.3	4.5		215
-M127						127	27		29.3	42			155	1.2	30.2			217
-210-M 97	2				210	97	30	57	26.2	32	46		184	1.5	24.7			216
-M127	1					127	57	—	29.3	42	—		182	1.4	31	4.9		218
-M157						157	27		32.5				185	1.3	35.7	5.6		220
-240-M127	2				240	127	28	59	29.3		53		212	1.9	31.8	5.0	▲	219
-M157	1					157	57	—	32.5		—		215	1.8	36.5	5.8		221
-270-M157	2				270		28	59			53		242	2.1	37.4	6.2		222
-SLRB10- 75-M 22	1	10	22	6	75	22	27	—	24.3	32	—	30	49	0.8	10.3	0.6	×	223
- 95-M 42					95	42			26.4				68	0.9	14	0.8	○	226
-105-M 22					105	22	57		24.3				79	1	10.6		×	224
-120-M 67					120	67	27		29	42			94	1.1	18.6	1.1	○	229
-125-M 42					125	42	57		26.4	32			99		14.2	1.2		227
-135-M 22	2				135	22	30	57	24.3		46		109	1.4	10.9	0.9	×	225
-150-M 67	1				150	67	57	—	29	42	—		124	1.3	18.9	1.3	○	230
-155-M 42	2				155	42	30	57	26.4	32	46		129	1.5	14.6	1.2		228
-180-M 67					180	67	28	59	29	42	53		154	1.8	19.2	1.3		231
-SLFB10- 75-M 22	1	10	22	6	75	22	27	—	24.3	32	—	30	49	0.8	10.3	0.6	×	232
- 95-M 42					95	42			26.4				69	0.9	14	0.8	○	235
-105-M 22					105	22	57		24.3				79	1	10.6		×	233
-120-M 67					120	67	27		29	42			94	1.1	18.6	1.1	○	238
-125-M 42					125	42	57		26.4	32			99		14.2	1.2		236
-135-M 22	2				135	22	30	57	24.3		46		109	1.4	10.9	0.9	×	234
-150-M 67	1				150	67	57	—	29	42	—		124	1.3	18.9	1.3	○	239
-155-M 42	2				155	42	30	57	26.4	32	46		129	1.5	14.6	1.2		237
-180-M 67					180	67	28	59	29	42	53		154	1.8	19.2	1.3		240
-SLSA10- 90 CV	3	10	13	1.5	90	64	—	—	53	—	—	30	65	1	9.4	1.3	○	241
-120 CV					120	94							95	1.3	10.9			242
-150 CV					150	124							125	1.4	11.8	2.2		243
-180 CV					180	154							154	1.6	12.9	3.4		244
-210 CV					210	184							184		13.3	6		245
-240 CV					240	214							212	2.1	16	5.8	▲	246
-270 CV					270	244							244		17.5	6.6		247
-300 CV					300	274							274	2.3	18.7	8.6		248

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S	HRD-01S	缩略图
A63-SLRA10- 90 CV	3	10	19	4.5	90	64	—	—	53	—	—	30	65	1	8.5	0.6	×	249
-120 CV					120	94							95	1.2	9.6	0.9	○	250
-150 CV					150	124							125	1.3	10.9	1.4		251
-180 CV					180	154							155	1.5	12.1	2		252
-210 CV					210	184							185	1.6	13.3	3.1		253
-SLFA10- 90 CV	3	10	19	4.5	90	64	—	—	53	—	—	30	65	1	8.5	0.6	×	254
-120 CV					120	94							95	1.2	9.6	0.9	○	255
-150 CV					150	124							125	1.3	10.9	1.4		256
-180 CV					180	154							155	1.5	12.1	2		257
-210 CV					210	184							185	1.6	13.3	3.1		258
A63-SLSA12- 95-M 42	1	12	15	1.5	95	42	27	—	19.4	32	—	30	69	0.8	15.2	1.8	○	259
-120-M 67					120	67			22				94		20.6	3.3		262
-125-M 42					125	42	57		19.4				99	1	15.4	2.3		260
-150-M 67					150	67			22				124		20.8	3.9		263
-M 97						97	27		25.2					0.9	27.5	4.9		265
-155-M 42	2				155	42	30	57	19.4		46		129	1.4	15.8	2.3		261
-180-M 67					180	67			22				154		21.2	3.9		264
-M 97	1					97	57	—	25.2		—			1.1	27.8	5.8		266
-210-M 97	2				210		30	57			46		184	1.5	28.2		▲	267
-SLSB12- 95-M 42	1	12	19	3.5	95	42	27	—	23.4	32	—	30	69	0.8	16.5	1.1	○	268
-120-M 67					120	67			26				94	0.9	22.8	1.8		271
-125-M 42					125	42	57		23.4				99	1	16.8	1.5		269
-150-M 67					150	67			26				124	1.1	23.1	2.5		272
-M 97						97	27		29.2	42			125		30.9	2.4		274
-155-M 42	2				155	42	30	57	23.4	32	46		129	1.4	17.2	1.6		270
-180-M 67					180	67			26				154	1.5	23.4	2.5		273
-M 97	1					97	57	—	29.2	42	—		152	1.4	31.7	2.8		275
-M127						127	27		32.3				155	1.3	38.5	3.3		277
-210-M 97					210	97	87		29.2	50			180	1.9	32.6	2.8	▲	276
-M127						127	57		32.3					1.7	39.3	3.5		278
-M157						157	27		35.5	42			185	1.4	46	4.1		280
-240-M127					240	127	87		32.3	50			215	2.1	40.1	3.8		279
-M157						157	57		35.5	42			212	1.7	46.8	4.7		281
-270-M157	2				270		28	59			53		242	2.2	47.7	4.8		282
-SLRB12- 75-M 22	1	12	26	7	75	22	27	—	28.3	42	—	30	50	0.9	14.5	0.4	×	283
- 95-M 42					95	42			30.4				70	1	17.2	0.6		286
-105-M 22					105	22	57		28.3				77	1.2	15.3	0.5		284
-120-M 67					120	67	27		33				95		23.5	0.8		289
-125-M 42					125	42	57		30.4				97	1.3	18	0.7		287
-135-M 22	2				135	22	28	59	28.3		53		107	1.7	16.2	0.6		285
A63 -150-M 67	1				150	67	57	—	33		—		122	1.4	24.3	1.1		290
-155-M 42	2				155	42	28	59	30.4		53		127	1.8	18.9	0.8		288
-180-M 67					180	67			33				152	1.9	25.2	1.1		291
-SLFB12- 75-M 22	1	12	26	7	75	22	27	—	28.3	42	—	30	50	0.9	14.5	0.4	×	292
- 95-M 42					95	42			30.4				70	1	17.2	0.6		295
-105-M 22					105	22	57		28.3				77	1.2	15.3	0.5		293
-120-M 67					120	67	27		33				95		23.5	0.8		298
-125-M 42					125	42	57		30.4				97	1.3	18	0.7		296
-135-M 22	2				135	22	28	59	28.3		53		107	1.7	16.2	0.6		294
-150-M 67	1				150	67	57	—	33		—		122	1.4	24.3	1.1		299
-155-M 42	2				155	42	28	59	30.4	42	53		127	1.8	18.9	0.8		297
-180-M 67					180	67			33				152	1.9	25.2	1.1		300

HRD-01S

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S		缩略图
A63-SLSA12- 90 CV	3	12	15	1.5	90	64	—	—	53	—	—	30	64	1.1	9.9	0.9	○	301
-120 CV					120	94							94	1.3	11.3	1.2		302
-150 CV					150	124							124	1.4	11.8	2.4		303
-180 CV					180	154							154	1.6	13	3.3		304
-210 CV					210	184							184	1.8	14.3	4.6		305
-240 CV					240	214							212	2.1	16.2	5.5	▲	306
-270 CV					270	244							244	2.3	18.4	5.4		307
-SLRA12- 90 CV	3	12	22	5	90	64	—	—	53	—	—	30	64	1	8.5	0.6	×	308
-120 CV					120	94							94	1.3	10.4	0.7		309
-150 CV					150	124							124	1.5	11.7	1.1	○	310
-180 CV					180	154							154		12.8	1.8		311
-210 CV					210	184							184	1.6	14	2.8		312
-SLFA12- 90 CV	3	12	22	5	90	64	—	—	53	—	—	30	64	1	8.5	0.6	×	313
-120 CV					120	94							94	1.3	10.4	0.7		314
-150 CV					150	124							124	1.5	11.7	1.1	○	315
-180 CV					180	154							154		12.8	1.8		316
-210 CV					210	184							184	1.6	14	2.8		317
A63-SLSB16- 95-M 42	1	16	24	4	95	42	27	—	28.4	42	—	32	70	1	22.7	0.7		318
-120-M 67					120	67			31				95	1.1	33	1.1		321
-125-M 42					125	42	57		28.4				97	1.2	23.5	0.9		319
-150-M 67					150	67			31				122	1.3	33.8	1.4		322
-M 97						97	27		34.2				125	1.2	45.5	1.7		324
-155-M 42					155	42	87		28.4	50			130	1.7	24.4	0.9		320
-180-M 67	2				180	67	28	59	31	42	53		152	1.8	34.7	1.5		323
-M 97	1					97	57	—	34.2		—			1.4	46.3	2.1		325
-M127						127	27		37.3	53			155	1.5	57.9			327
-210-M 97	2				210	97	28	59	34.2	42	53		182	2	47.1			326
-M127	1					127	57	—	37.3	53	—		181	1.9	58.7	2.3		328
-M157						157	27		40.5				185	1.7	70.3	2.7		330
-240-M127					240	127	87		37.3				211	2.3	59.5	2.6		329
-M157						157	57		40.5				215	2.1	71.1	2.9		331
-270-M157					270		87						241	2.5	72	3.2		332
-SLRB16- 75-M 22	1	16	32	8	75	22	27	—	34.3	42	—	32	50	1	14.5	0.3		333
- 95-M 42					95	42			36.4				70	1.1	22.8	0.5		336
-105-M 22					105	22	57		34.3				77	1.2	15.3			334
-120-M 67					120	67	27		39				95	1.3	33.2	0.7		339
-125-M 42					125	42	57		36.4				97		23.6			337
-135-M 22	2				135	22	28	59	34.3		53		107	1.7	16.2	0.5		335
-150-M 67	1				150	67	57	—	39		—		122	1.5	34	0.9		340
-155-M 42	2				155	42	28	59	36.4		53		127	1.9	24.5	0.7		338
-180-M 67					180	67			39				152	2	34.9	1		341
-SLFB16- 75-M 22	1	16	32	8	75	22	27	—	34.3	42	—	32	50	1	14.5	0.3		342
- 95-M 42					95	42			36.4				70	1.1	22.8	0.5		345
-105-M 22					105	22	57		34.3				77	1.2	15.3			343
-120-M 67					120	67	27		39				95	1.3	33.2	0.7		348
-125-M 42					125	42	57		36.4				97		23.6			346
-135-M 22	2				135	22	28	59	34.3		53		107	1.7	16.2	0.5		344
-150-M 67	1				150	67	57	—	39	50	—		120		34	0.7		349
-155-M 42	2				155	42	28	59	36.4	42	53		127	1.9	24.5			347
-180-M 67					180	67			39				152	2	34.9	1		350
-SLSB16- 90 CV	3	16	21	2.5	90	64	—	—	53	—	—	32	62	1.1	10.5	0.6		351
-120 CV					120	94							92	1.5	12.4	0.8		352
-150 CV					150	124							122	1.6	13.5	1.5		353
-180 CV					180	154							152	1.9	15.4	1.9		354
-210 CV					210	184							182	2.1	16.5	3		355
-240 CV					240	214							212	2.4	18.4	3.7		356
-270 CV					270	244							242	2.7	20.3	4.6		357

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S	缩略图
A63-SLSB20- 95-M 42	1	20	29	4.5	95	42	27	—	33.4	42	—	40	70	1	25.4	0.5	358
-120-M 67					120	67			36				95	1.1	40.8	0.9	361
-125-M 42					125	42	57		33.4				97	1.2	26.2	0.8	359
-150-M 67					150	67			36				122	1.4	41.6	1.2	362
-M 97						97	27		39.2	53			125		59.3	1.1	364
-155-M 42					155	42	87		33.4	50			130	1.8	27.1	0.8	360
-180-M 67	2				180	67	28	59	36	42	53		152	1.9	42.5	1.2	363
-M 97	1					97	57	—	39.2	53	—		151	1.8	60.1	1.3	365
-M127						127	27		42.3				155	1.6	79.1	1.5	367
-210-M 97					210	97	87		39.2				181	2.2	61	1.6	366
-M127						127	57		42.3					2	79.9	1.8	368
-M157						157	27		45.5				185	1.9	97.6	1.9	370
-240-M127					240	127	87		42.3				211	2.3	80.7	2.1	369
-M157						157	57		45.5					2.4	98.4	2.2	371
-270-M157					270		87						241	2.7	99.3	2.6	372
-SLRB20- 95-M 42	1	20	38	9	95	42	27	—	42.4	53	—	40	70	1.3	25.6	0.3	373
-120-M 67					120	67			45				95	1.5	41	0.5	376
A63 -125-M 42					125	42	57		42.4				96	1.7	26.4	0.4	374
-150-M 67					150	67			45				121	1.9	41.8	0.6	377
-155-M 42					155	42	87		42.4				126	2.1	27.2		375
-180-M 67					180	67			45				151	2.3	42.7	0.8	378
-SLFB20- 95-M 42	1	20	38	9	95	42	27	—	42.4	53	—	40	70	1.3	25.6	0.3	379
-120-M 67					120	67			45				95	1.5	41	0.5	382
-125-M 42					125	42	57		42.4				96	1.7	26.4	0.4	380
-150-M 67					150	67			45	50			120	1.9	41.8	0.7	383
-155-M 42					155	42	87		42.4				125	2	27.2	0.6	381
-180-M 67					180	67			45	53			151	2.3	42.7	0.8	384
-SLSB20- 90 CV	3	20	26	3	90	64	—	—	51	—	—	40	62	1.2	10.7	0.5	385
-120 CV					120	94			53				92	1.5	12.8	0.8	386
-150 CV					150	124							122	1.7	14.1	1.3	387
-180 CV					180	154							152	2	16.2	1.8	388
-210 CV					210	184							182	2.4	18.2	2.3	389
-240 CV					240	214							212	2.7	20.2	3	390
-270 CV					270	244							242	3.1	22.8	3.4	391
A63-SLRB25- 95-M 42	1	25	45	10	95	42	27	—	49.4	53	—	45	70	1.4	28.7	0.3	392
-125-M 42					125		57						96	1.8	29.5	0.4	393
-155-M 42					155		87						126	2.2	30.4	0.6	394
-SLFB25- 95-M 42	1	25	45	10	95	42	27	—	49.4	53	—	45	70	1.4	28.7	0.3	395
-125-M 42					125		57						96	1.8	29.5	0.4	396
-155-M 42					155		87						126	2.2	30.4	0.6	397
A63-SLRB32-110-M 42	1	32	54	11	110	42	42	—	58.4	63	—	50	84	1.8	13.3	0.3	398

▮主轴锥孔用 清洁工具
STAR DUST

型号
CLT-A63-G3

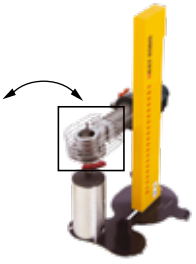
P.194



▮φ70 加热喷头 (HRB-03S-230AS)
SLRB32刀柄加热时必需品

型号
HRB-NZL70

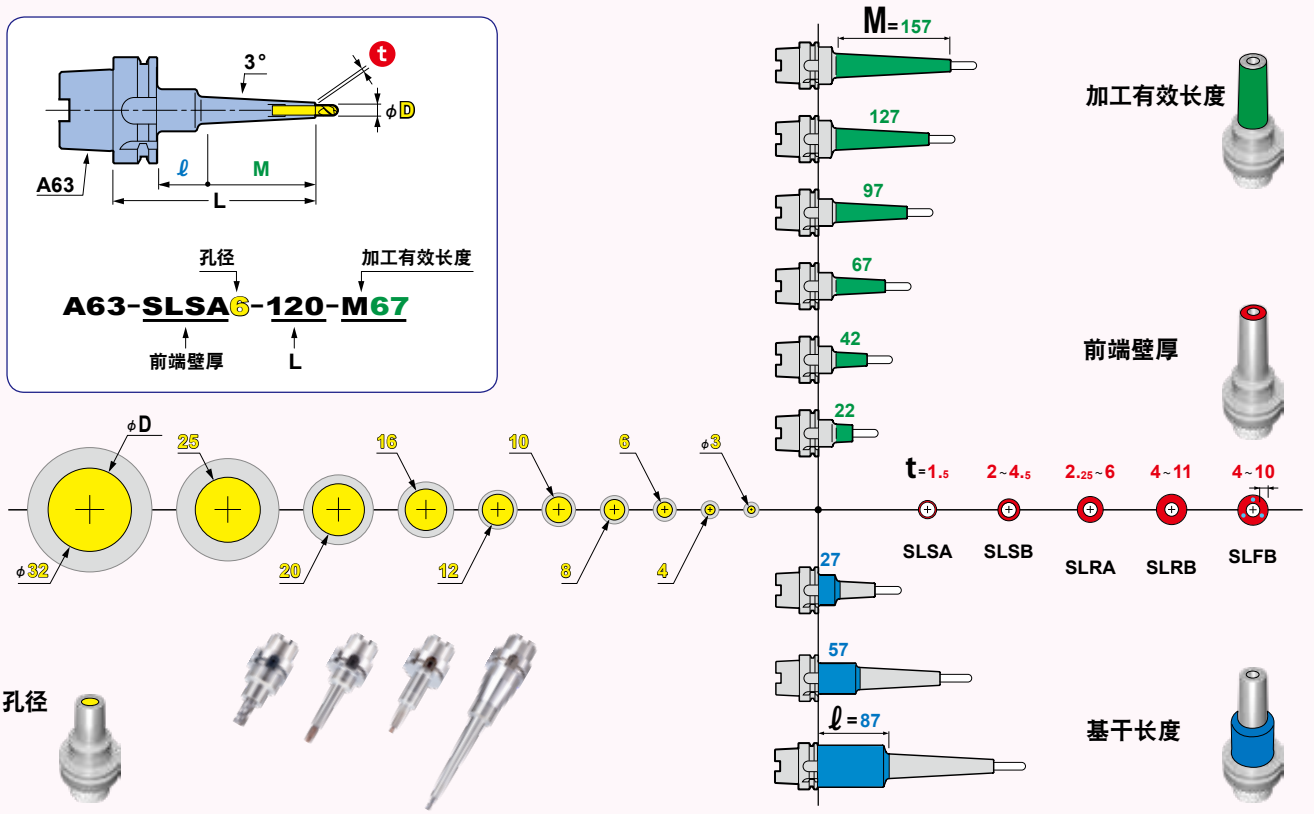




HEAT ROBO Baby 3000S

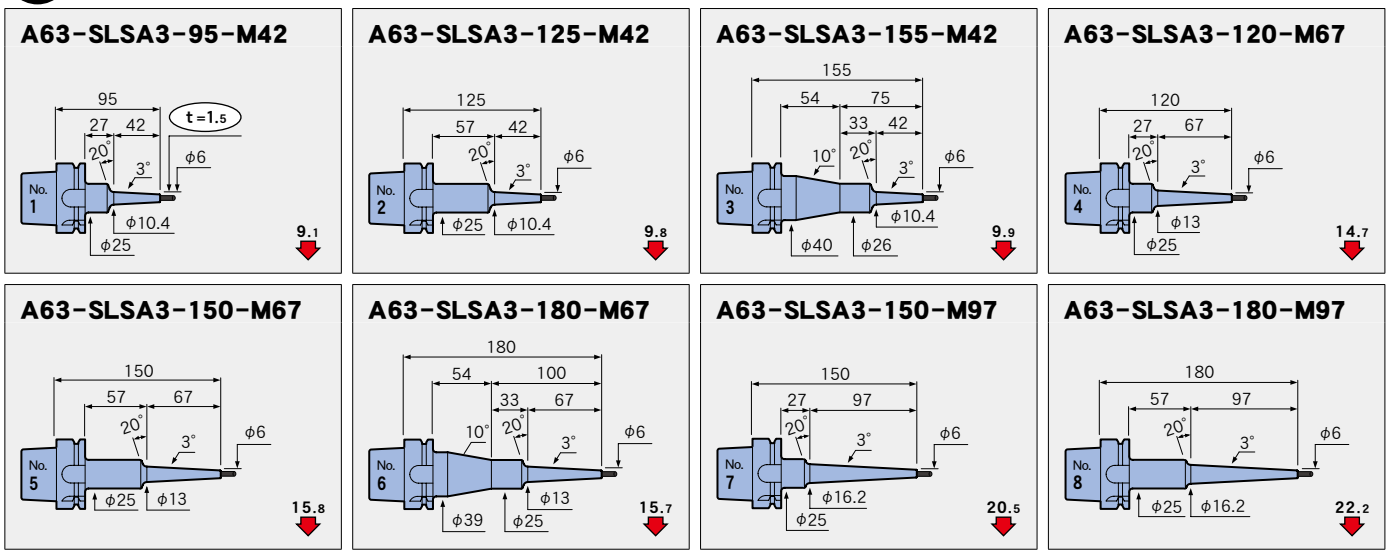
300 种丰富的产品型号 HSK-A63 系统

● 一体型3° 刀柄，根据 孔径 基干长度 加工有效长度 前端壁厚 的不同，组合成300种丰富的产品型号，可根据您的加工内容选择最佳刀柄。

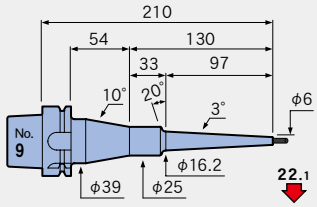


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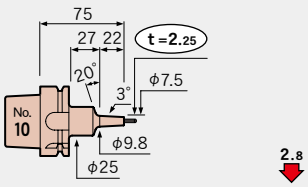
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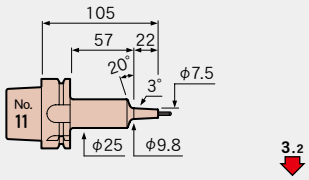
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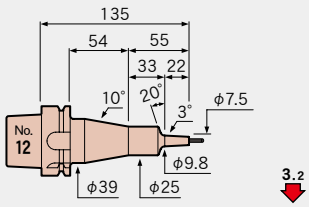
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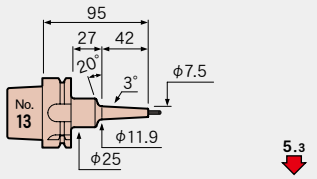
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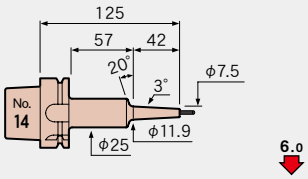
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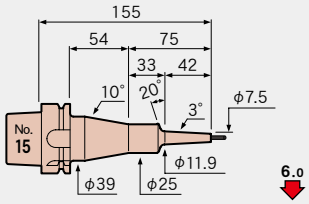
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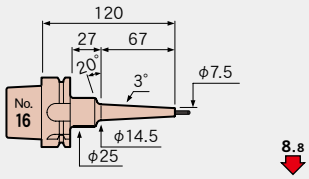
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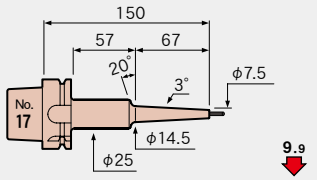
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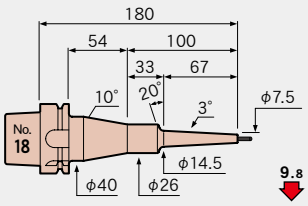
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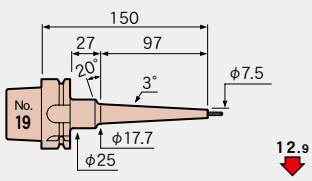
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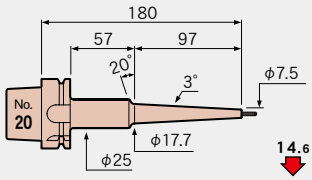
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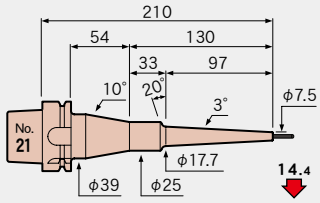
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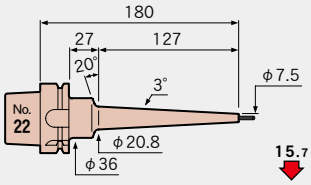
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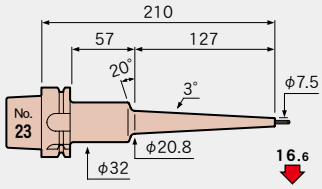
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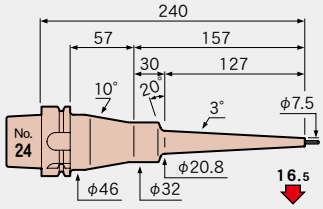
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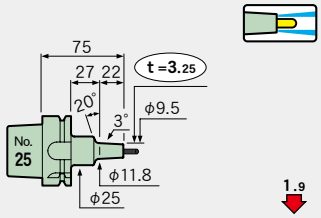
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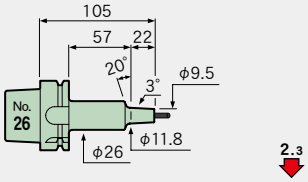
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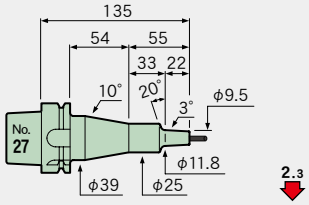
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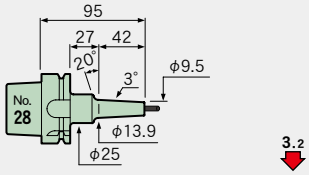
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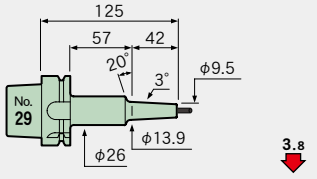
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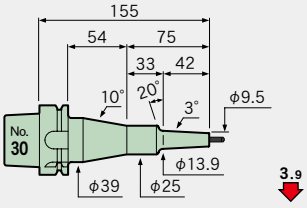
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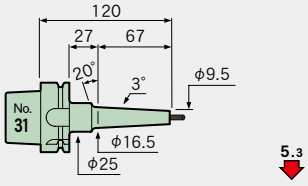
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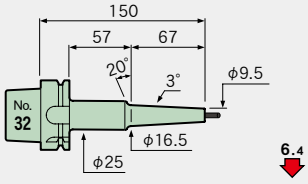
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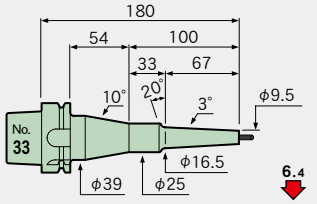
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A63-SLFB3-150-M67



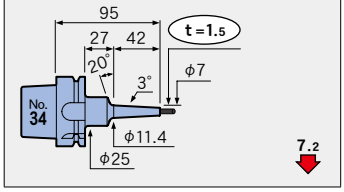
A63-SLFB3-180-M67



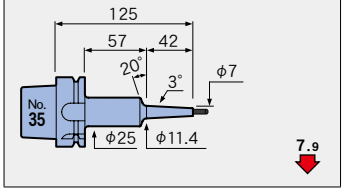
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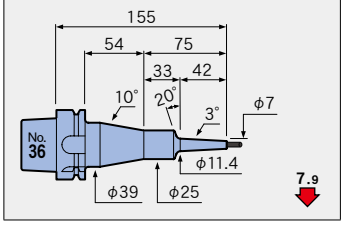
A63-SLSA4-95-M42



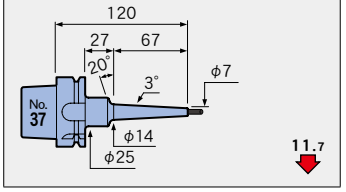
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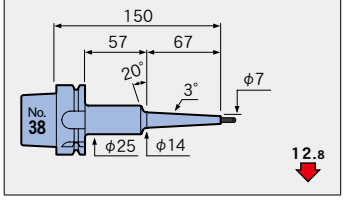
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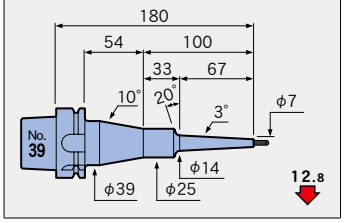
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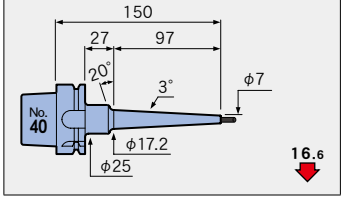
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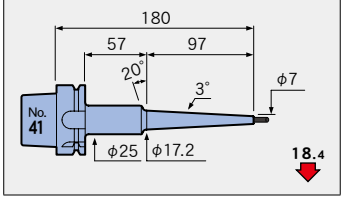
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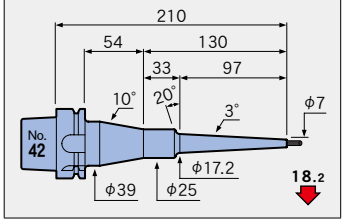
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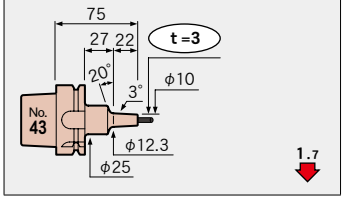
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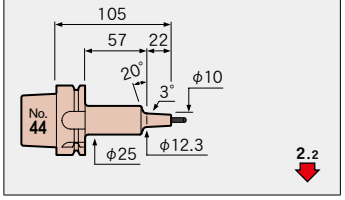
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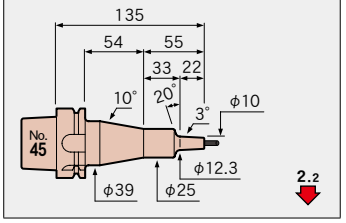
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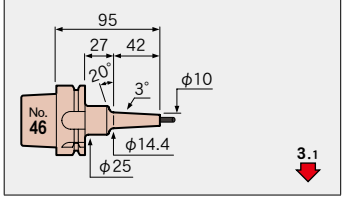
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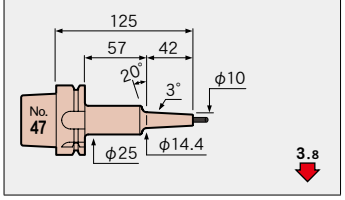
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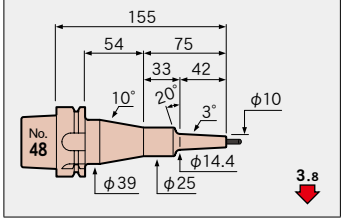
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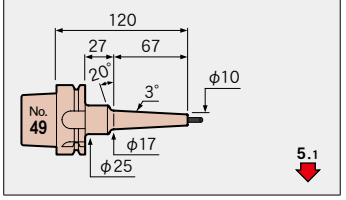
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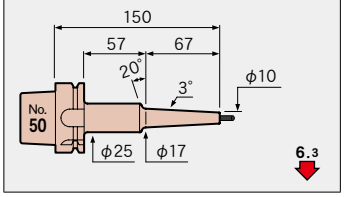
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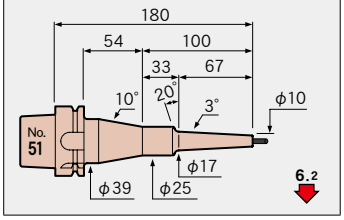
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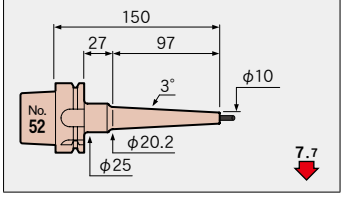
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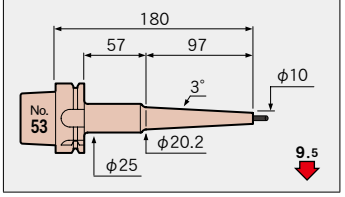
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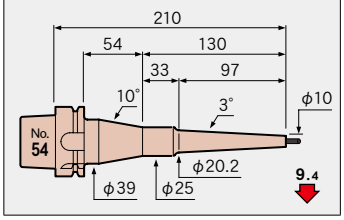
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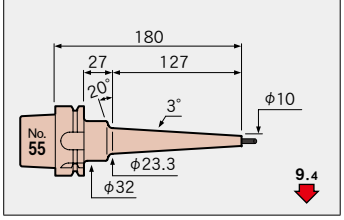
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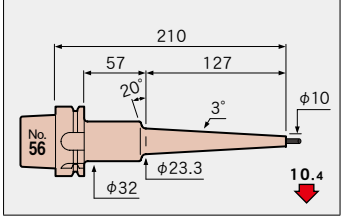
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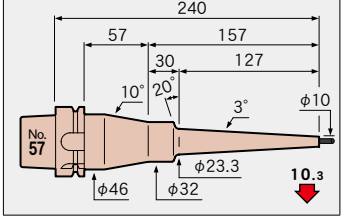
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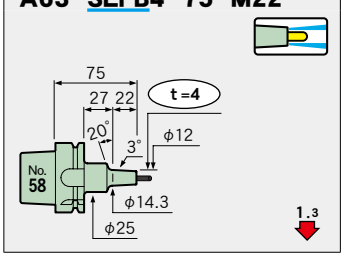
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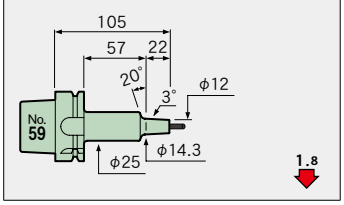
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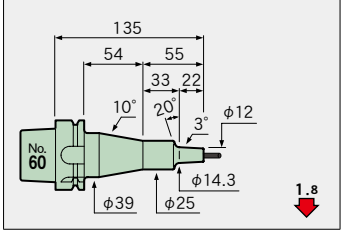
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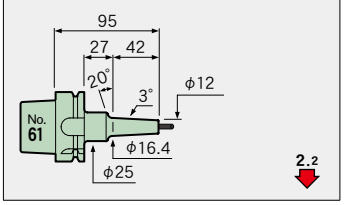
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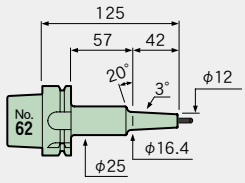
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A63-SLFB4-95-M42

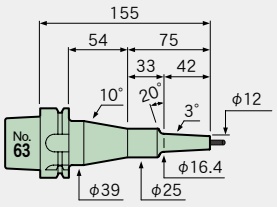


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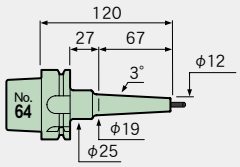
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A63-SLFB4-155-M42



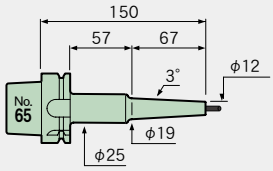
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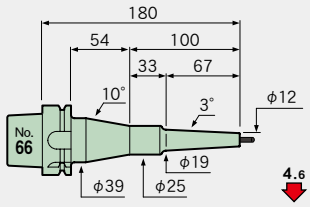
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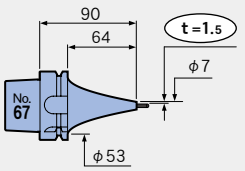
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A63-SLFB4-180-M67



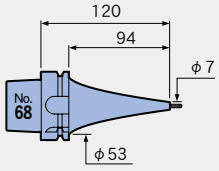
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A63-SLSA4-90 CV



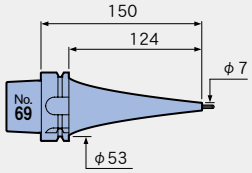
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A63-SLSA4-120 CV



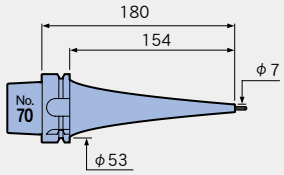
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A63-SLSA4-150 CV



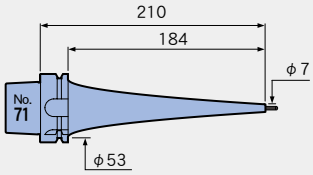
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A63-SLSA4-180 CV



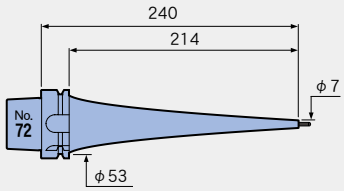
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A63-SLSA4-210 CV



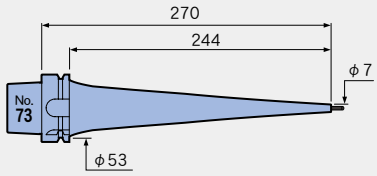
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A63-SLSA4-240 CV



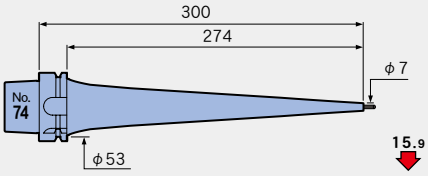
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A63-SLSA4-270 CV



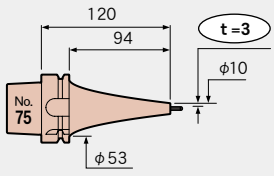
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A63-SLSA4-300 CV



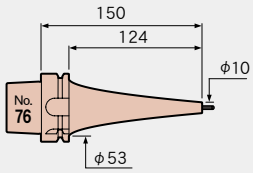
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A63-SLRA4-120 CV



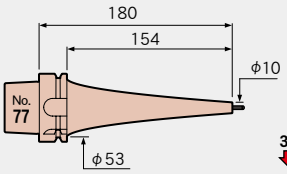
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A63-SLRA4-150 CV



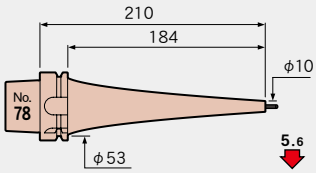
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A63-SLRA4-180 CV



3.3

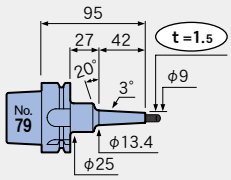
A63-SLRA4-210 CV



5.6

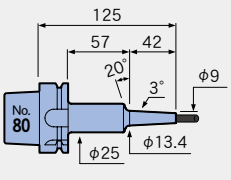
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A63-SLSA6-95-M42



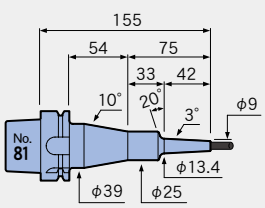
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A63-SLSA6-125-M42



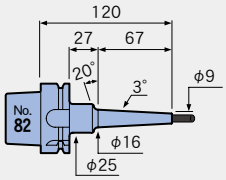
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A63-SLSA6-155-M42



5.6

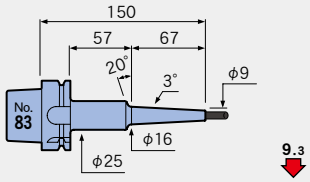
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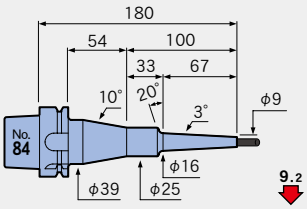
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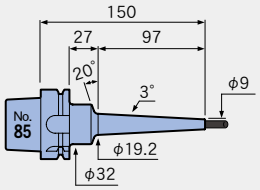
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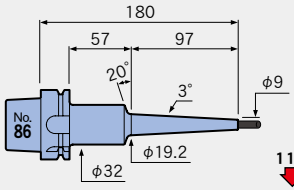
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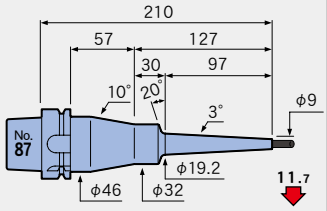
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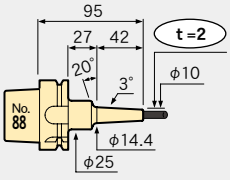
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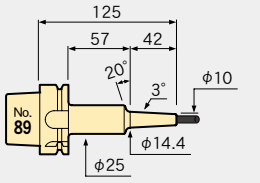
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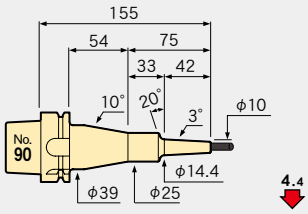
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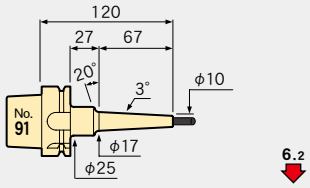
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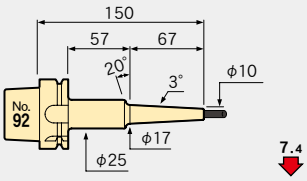
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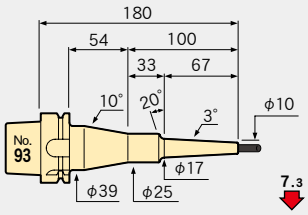
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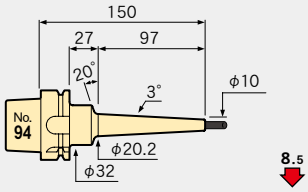
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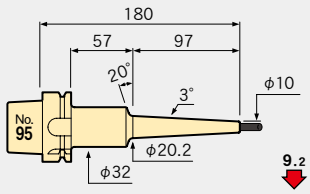
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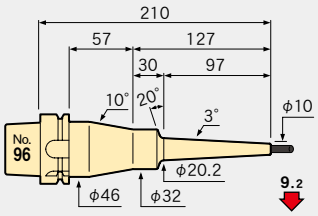
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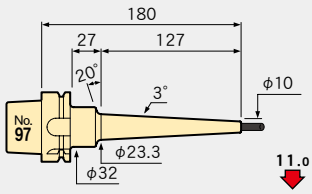
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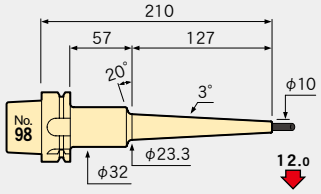
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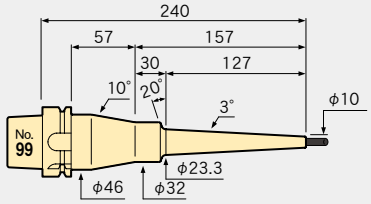
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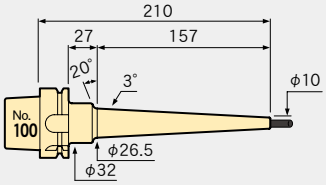
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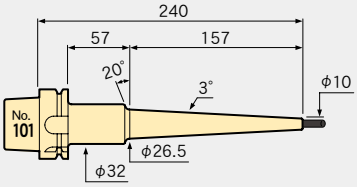
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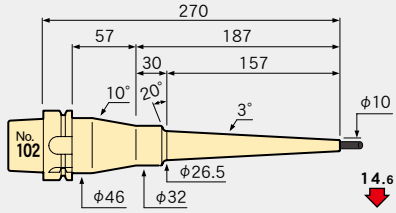
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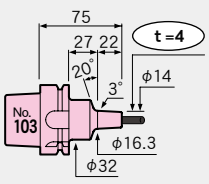
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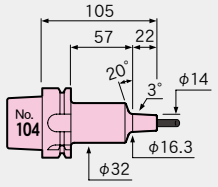
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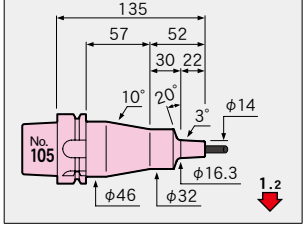
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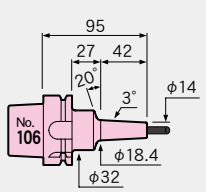
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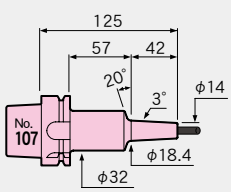
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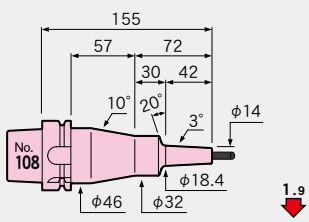
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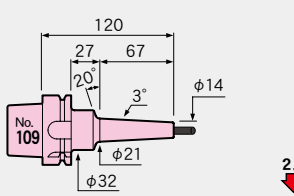
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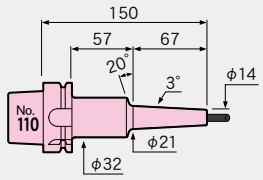
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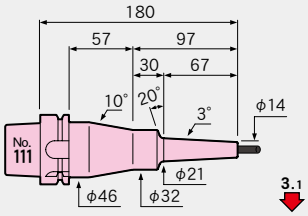
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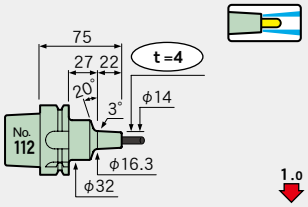
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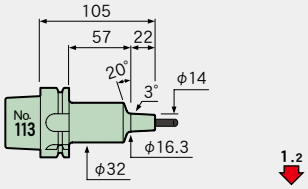
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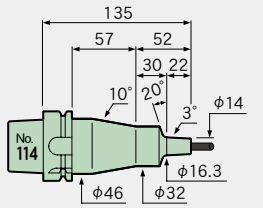
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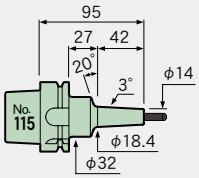
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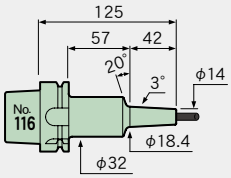
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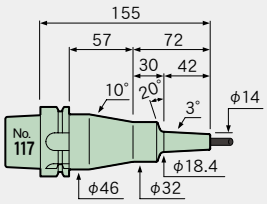
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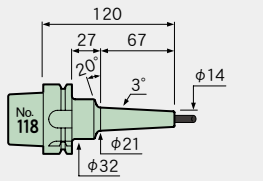
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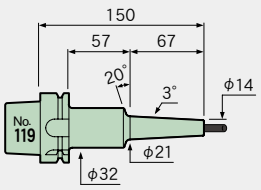
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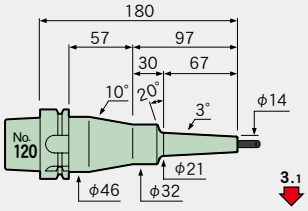
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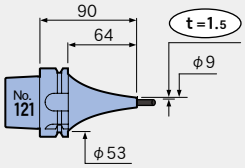
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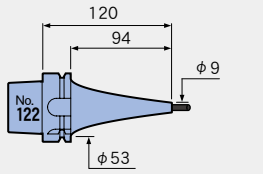
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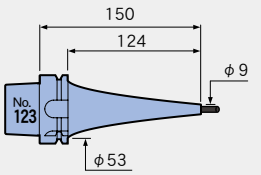
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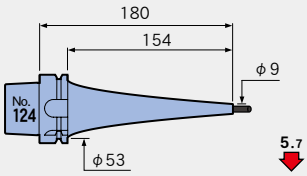
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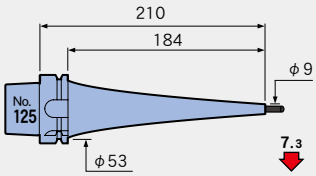
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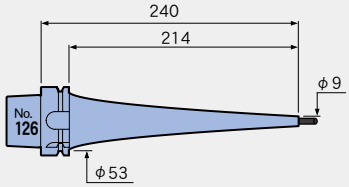
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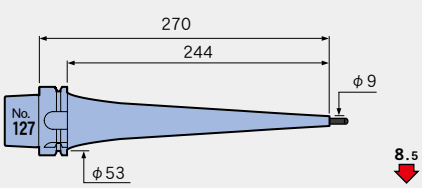
A63-SLSA6-210 CV



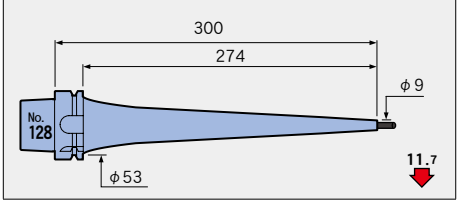
A63-SLSA6-240 CV



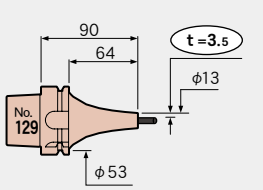
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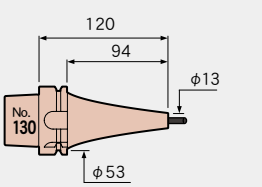
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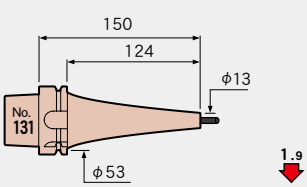
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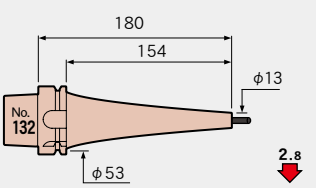
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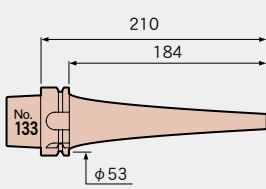
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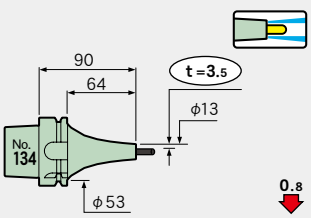
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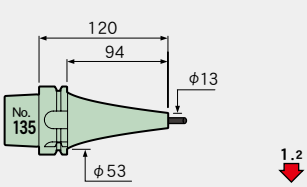
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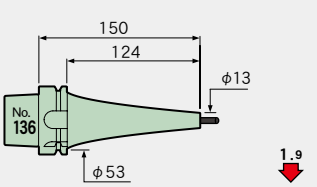
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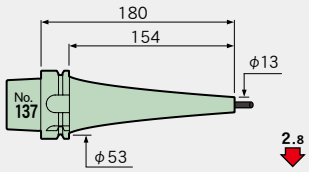


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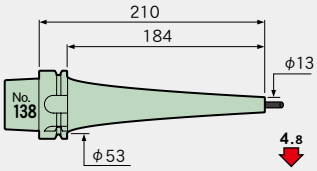


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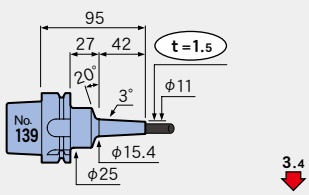


A63-SLFA6-210 CV

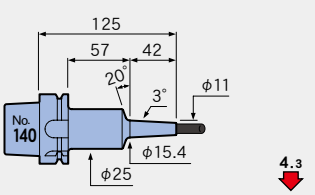


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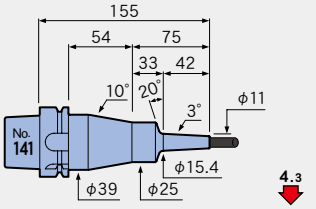
A63-SLSA8-95-M42



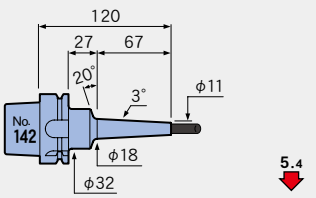
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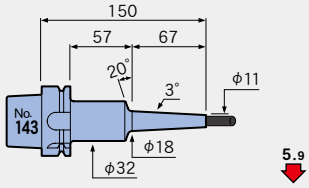
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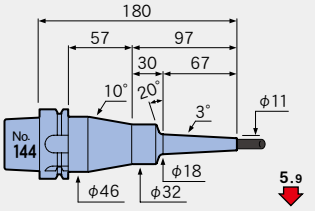
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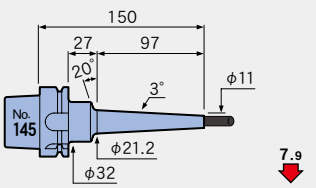
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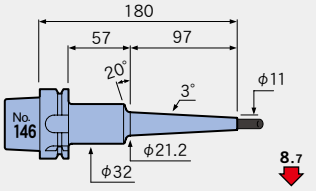
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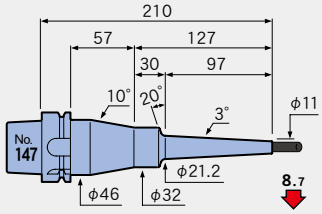
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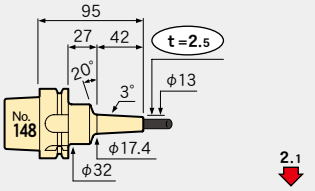
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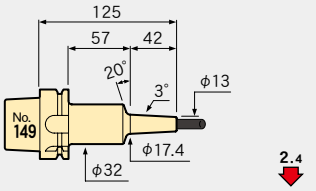
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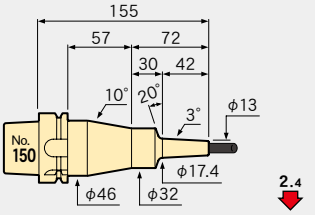
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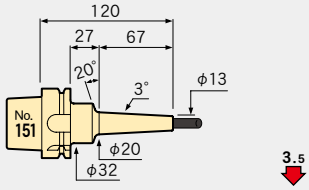
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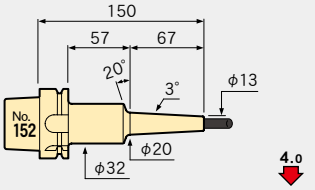
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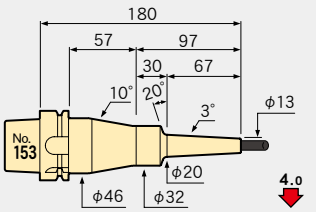
A63-SLSB8-120-M67



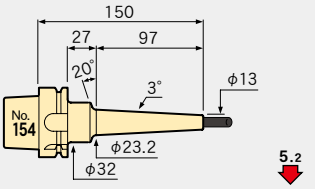
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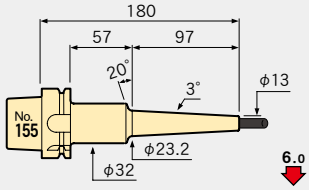
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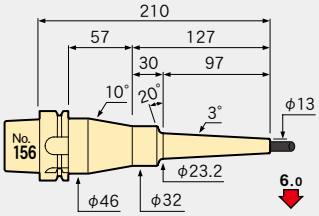
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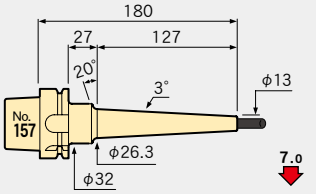
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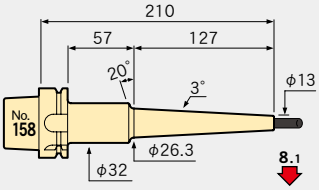
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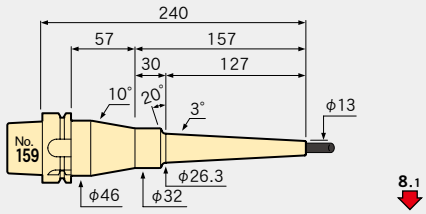
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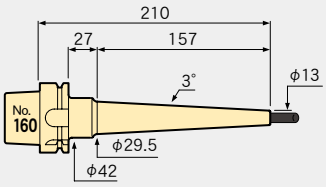
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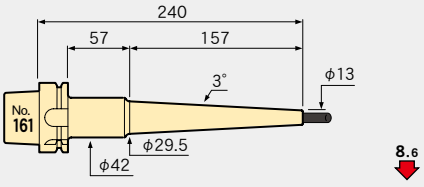
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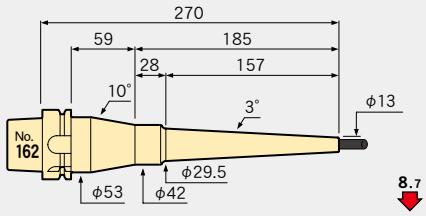
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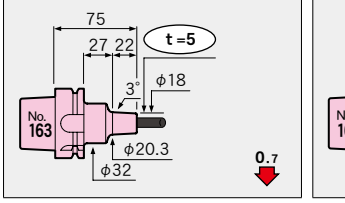
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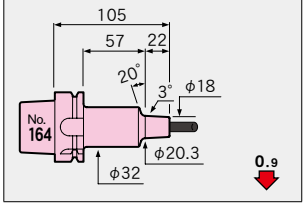
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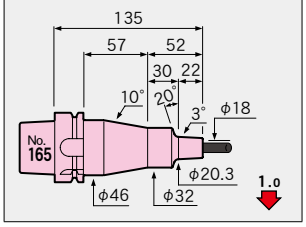
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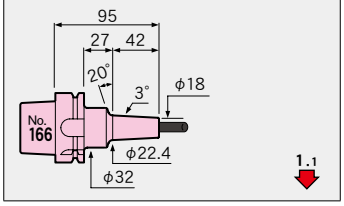
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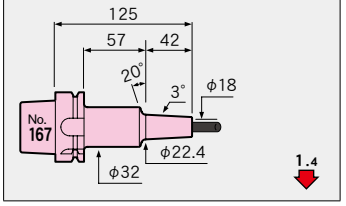
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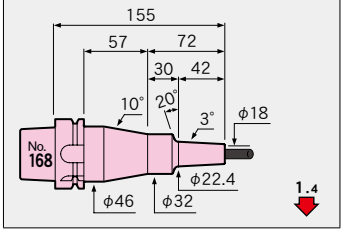
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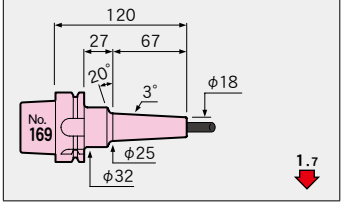
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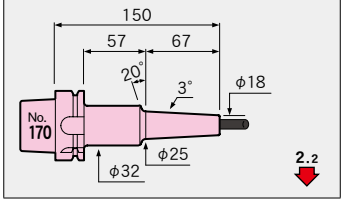
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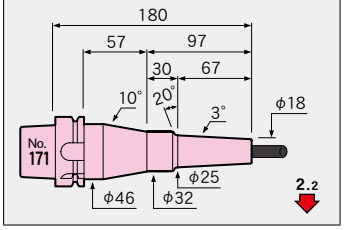
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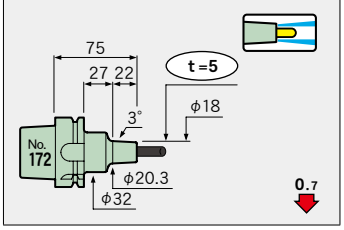
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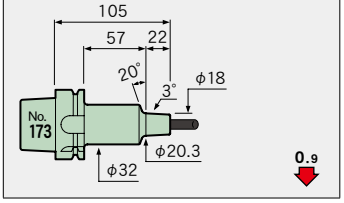
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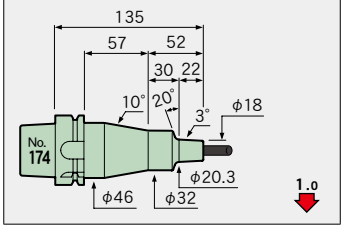
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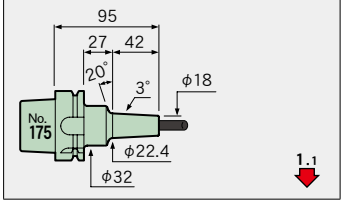
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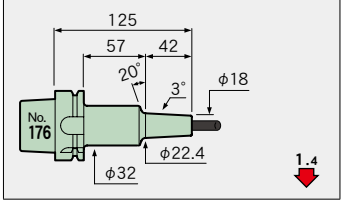
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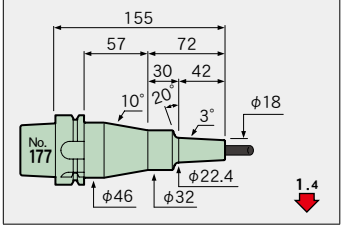
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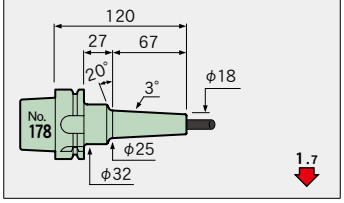
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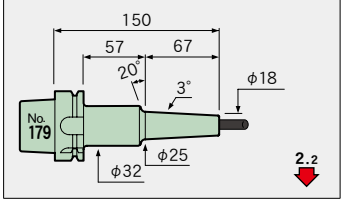
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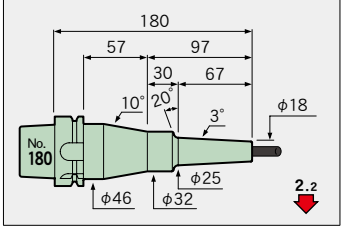
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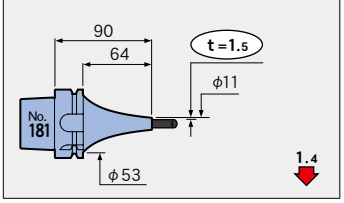
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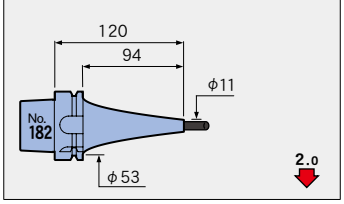
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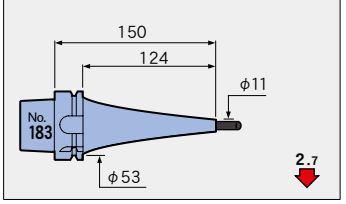
A63-SLSA8-90 CV



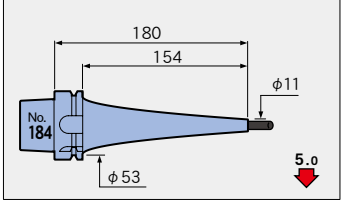
A63-SLSA8-120 CV



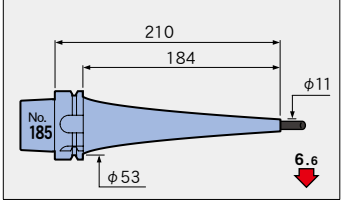
A63-SLSA8-150 CV



A63-SLSA8-180 CV

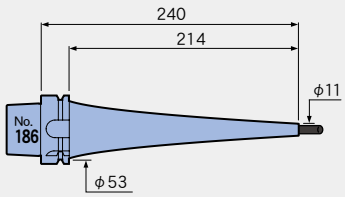


A63-SLSA8-210 CV

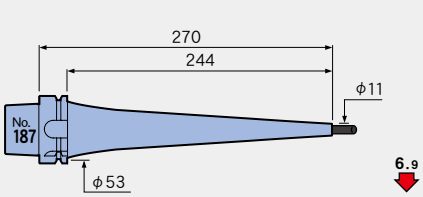


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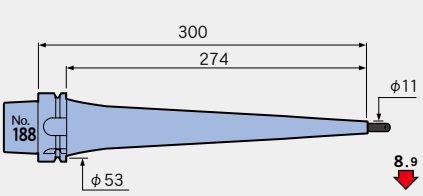
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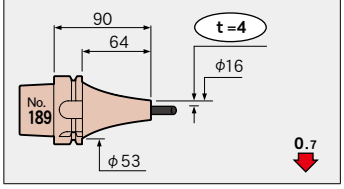
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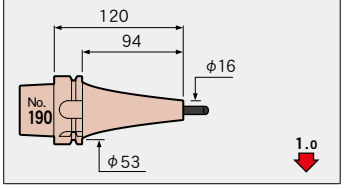
A63-SLSA8-300 CV



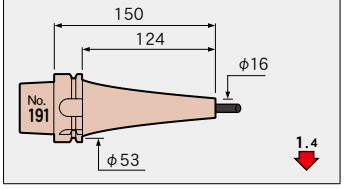
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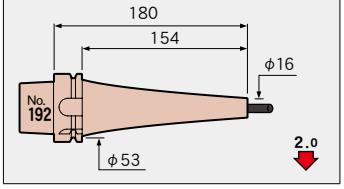
A63-SLRA8-120 CV



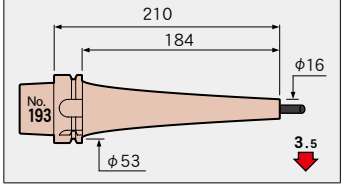
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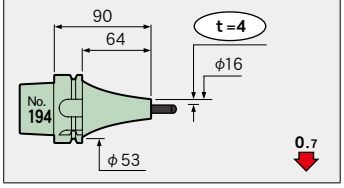
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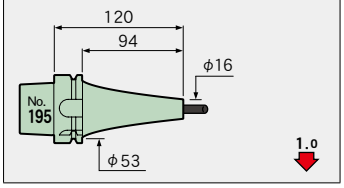
A63-SLRA8-210 CV



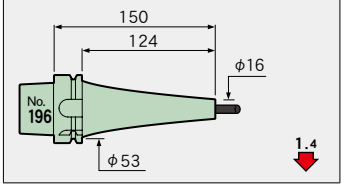
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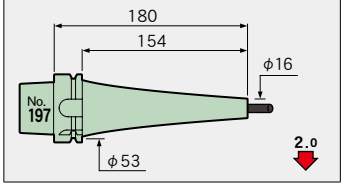
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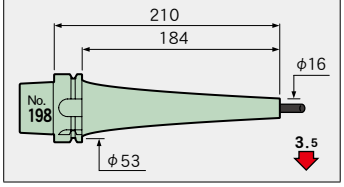
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A63-SLFA8-180 CV

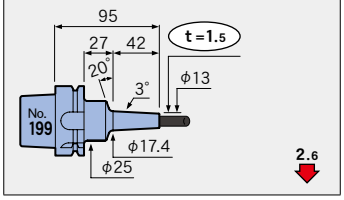


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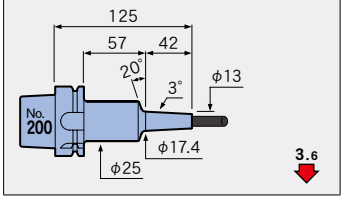


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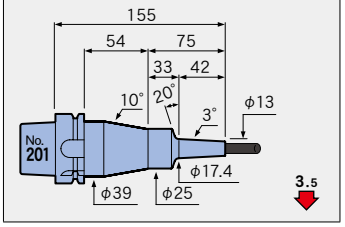
A63-SLSA10-95-M42



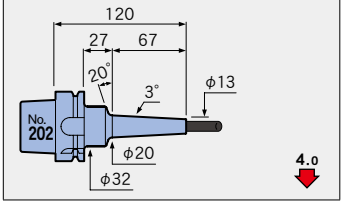
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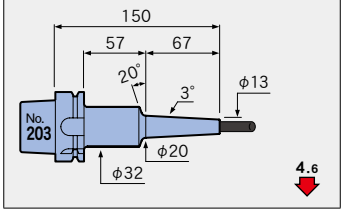
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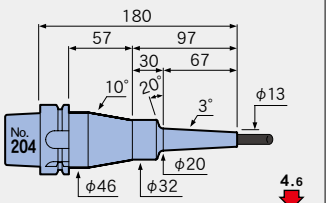
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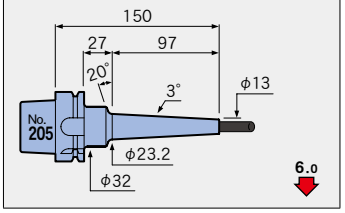
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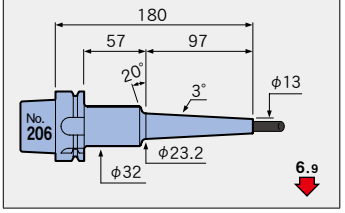
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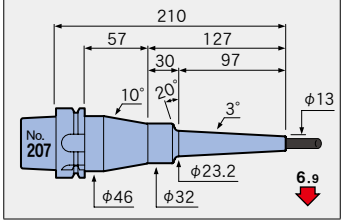
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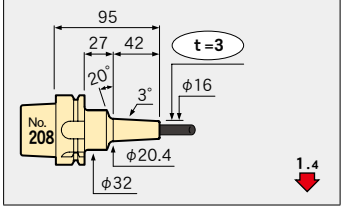
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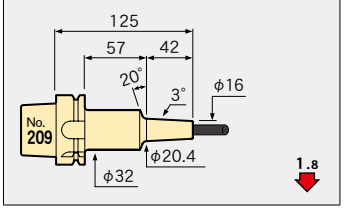
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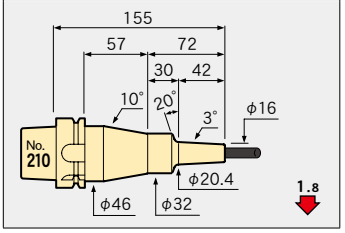
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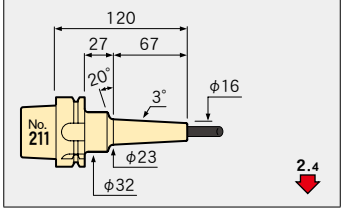
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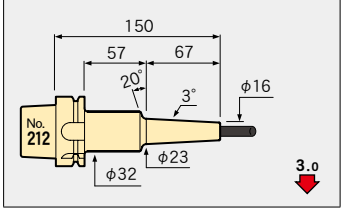
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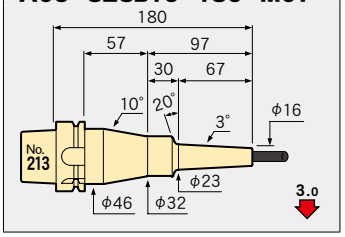
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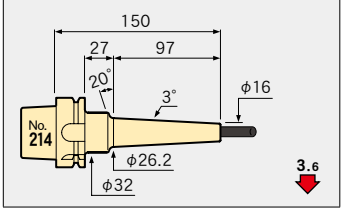
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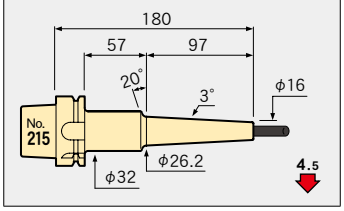
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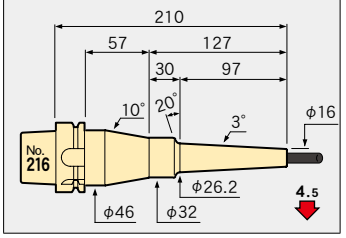
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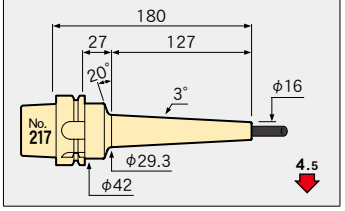
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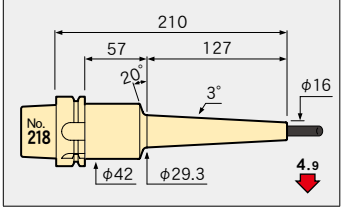
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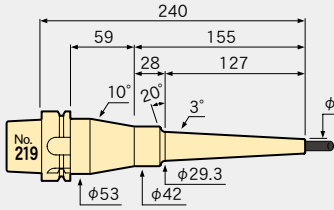
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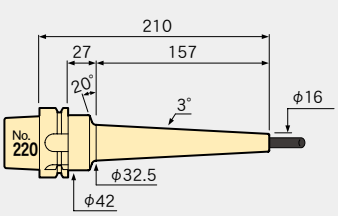
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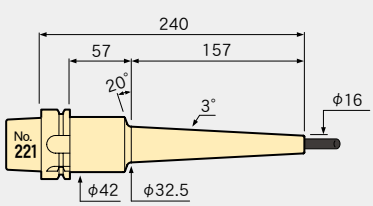
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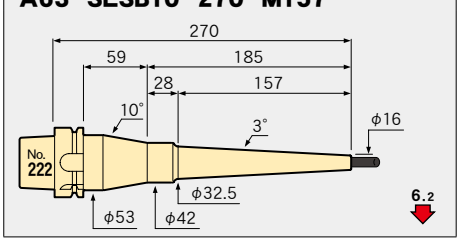
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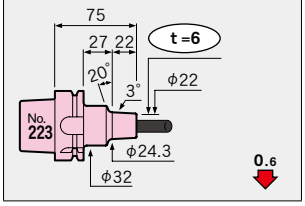
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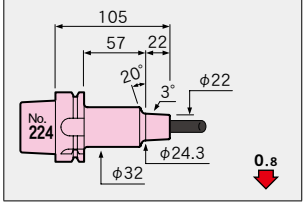
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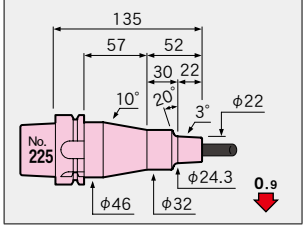
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A63-SLRB10-105-M22

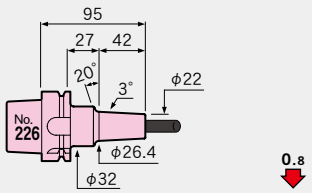


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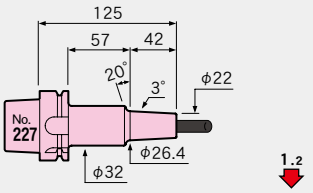


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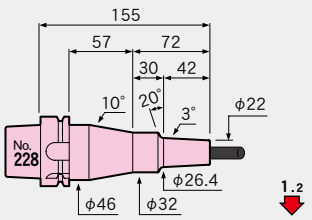
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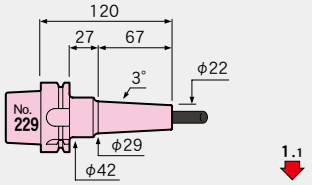
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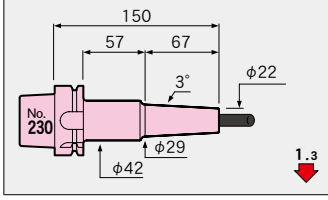
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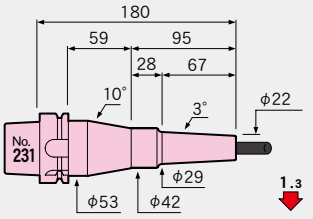
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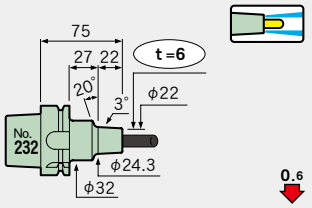
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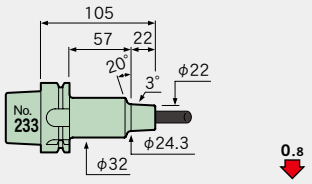
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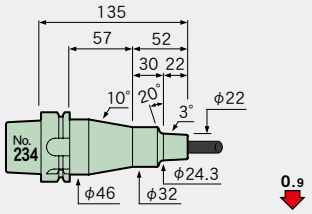
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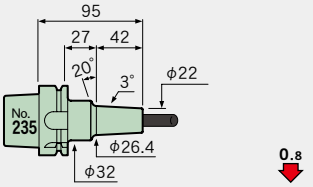
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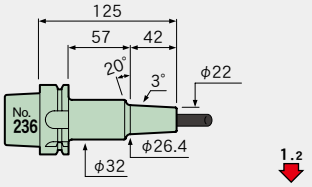
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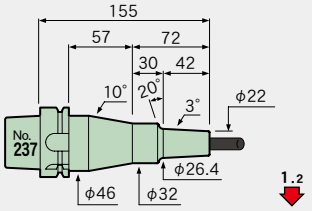
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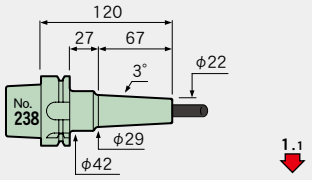
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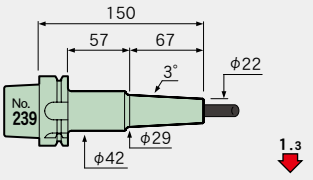
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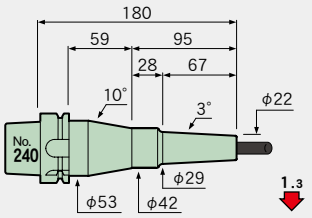
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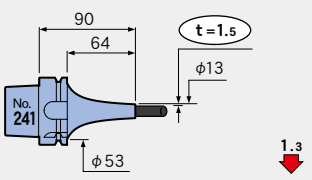
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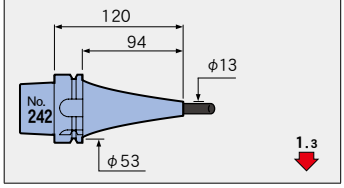
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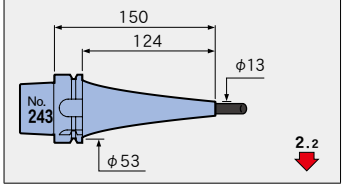
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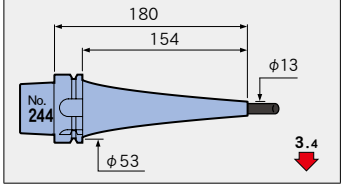
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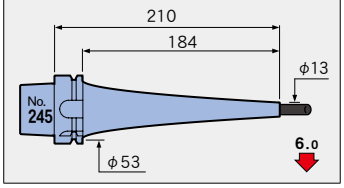
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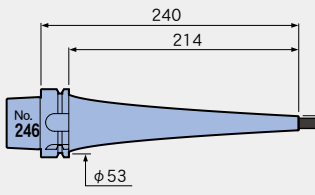
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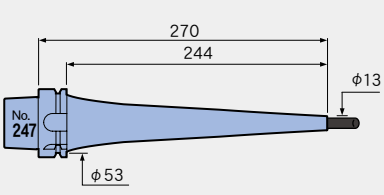
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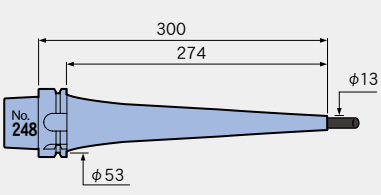
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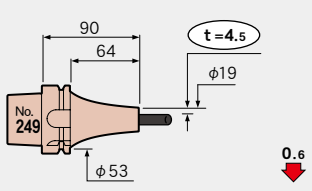
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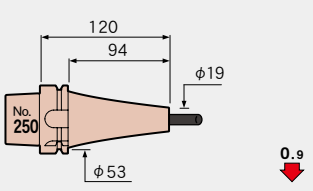
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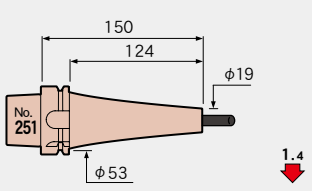
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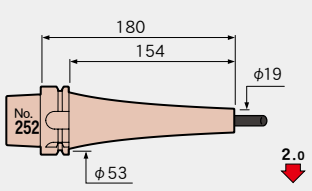
A63-SLRA10-120 CV



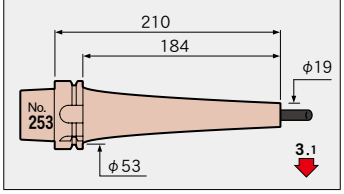
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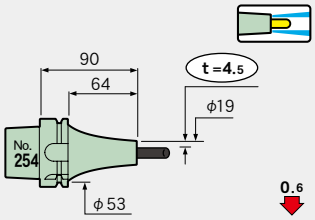
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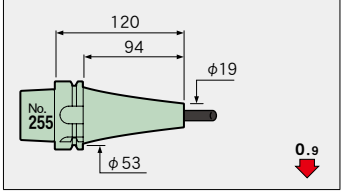
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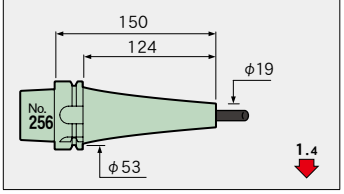
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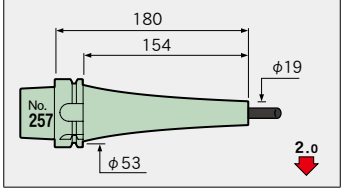
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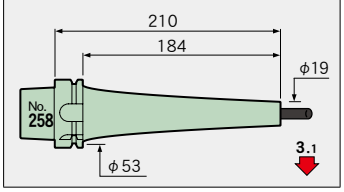
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A63-SLFA10-180 CV

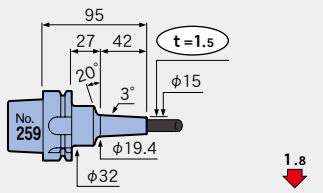


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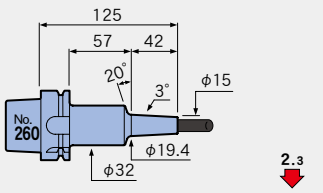


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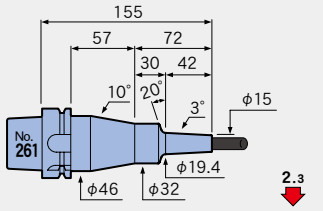
A63-SLSA12-95-M42



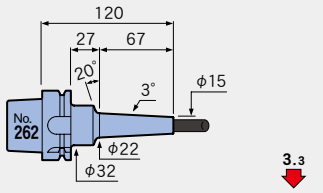
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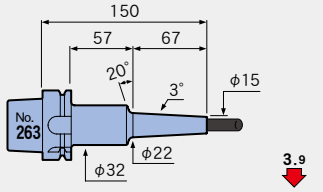
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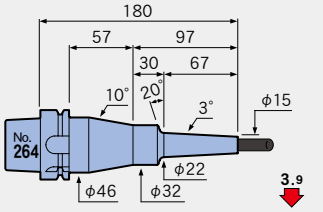
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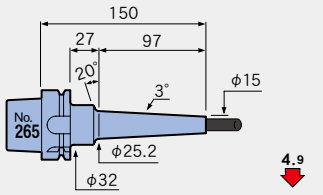
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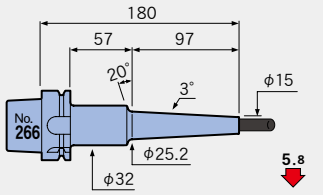
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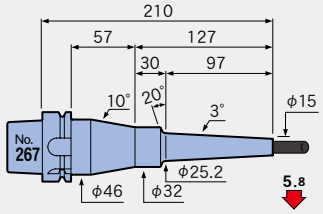
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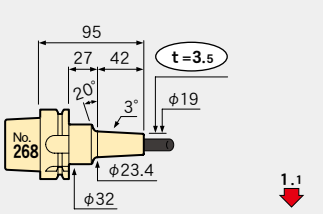
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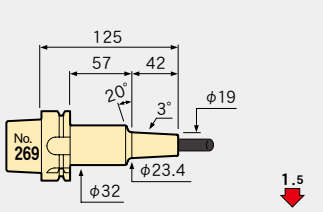
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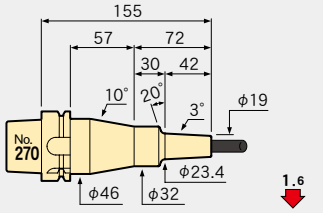
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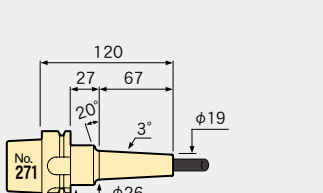
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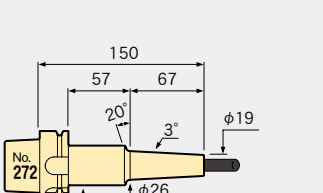
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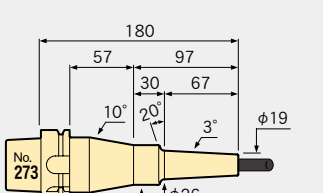
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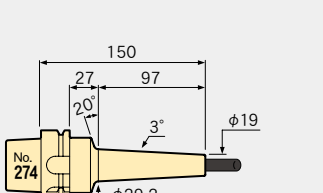
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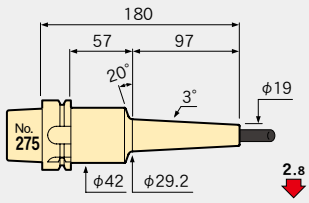


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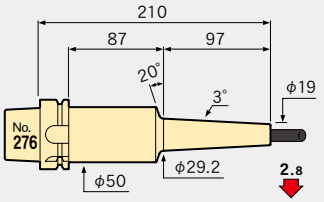


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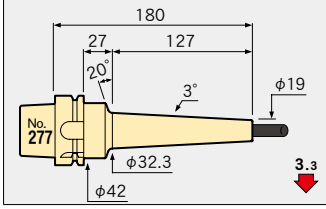
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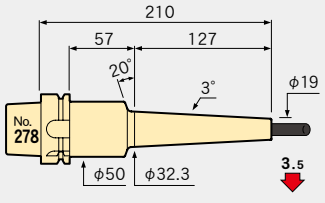
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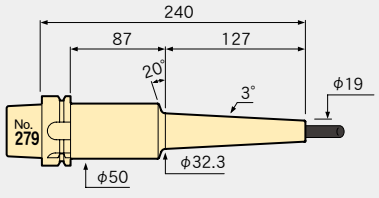
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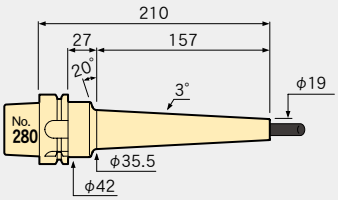
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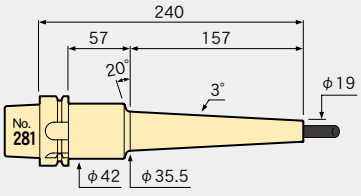
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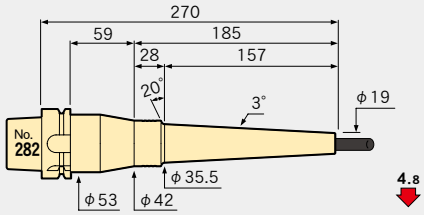
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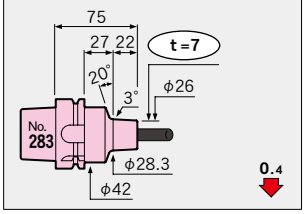
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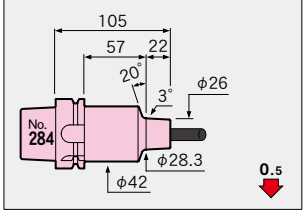
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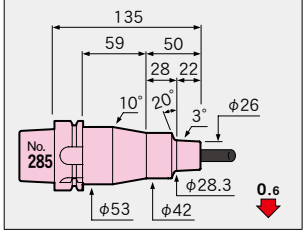
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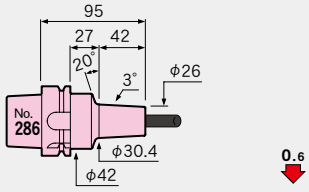
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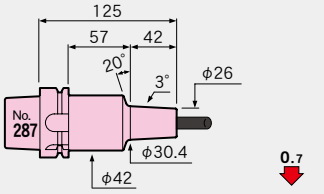
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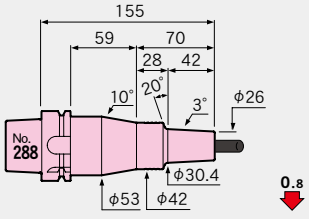
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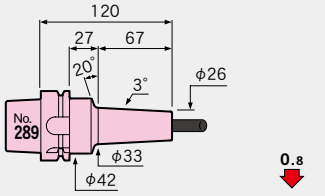
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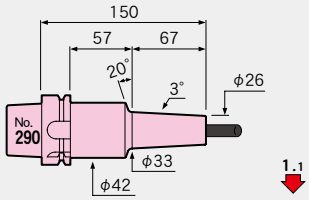
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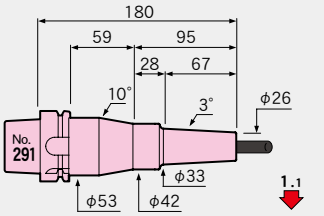
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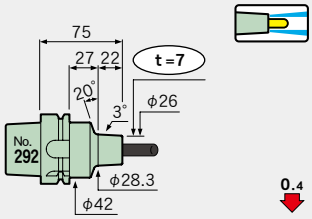
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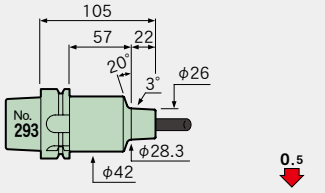
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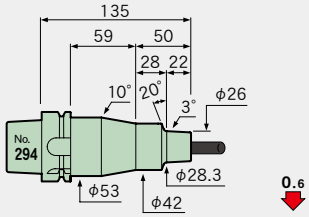
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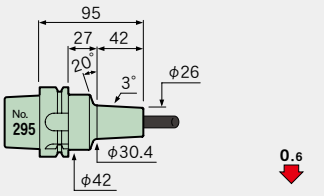
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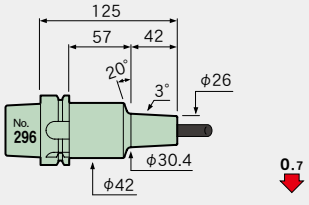
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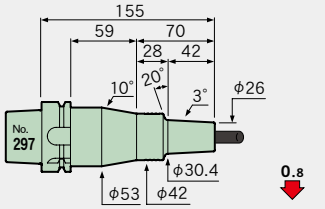
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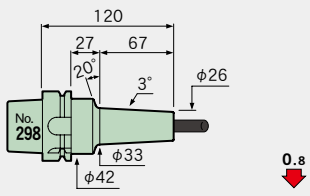
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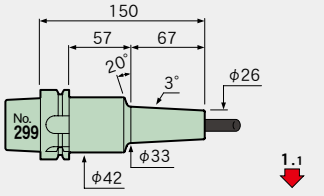
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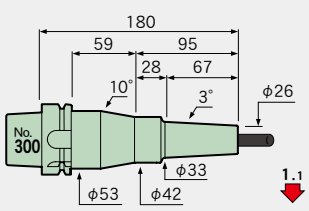
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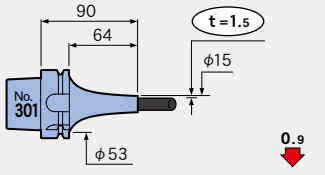
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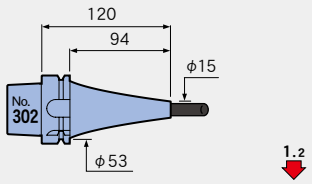
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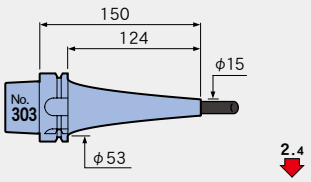
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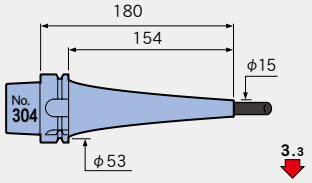
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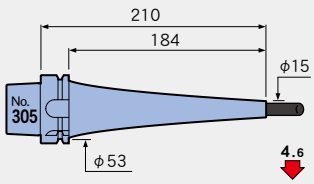
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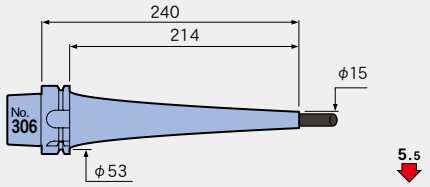
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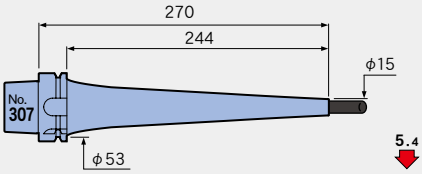
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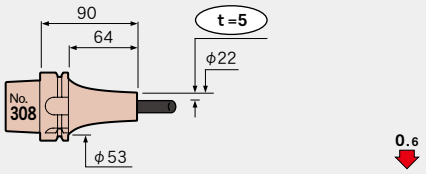
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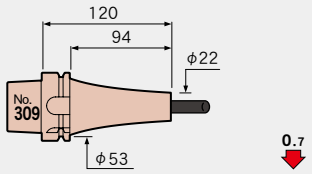
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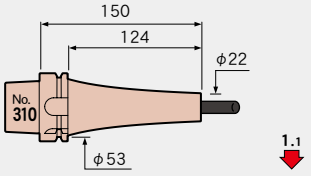
A63-SLRA12-90 CV



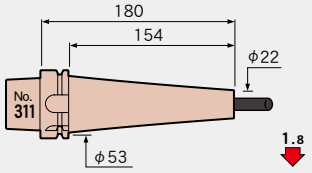
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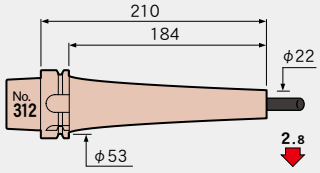
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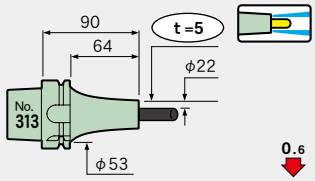
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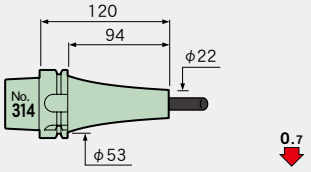
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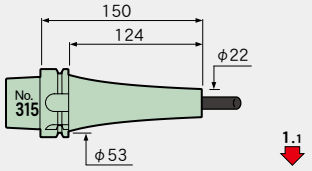
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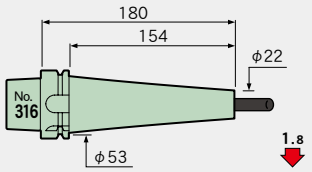
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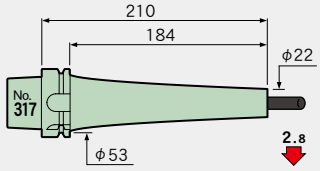
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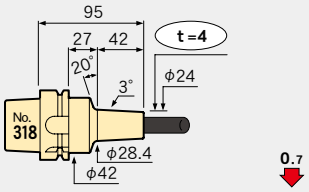
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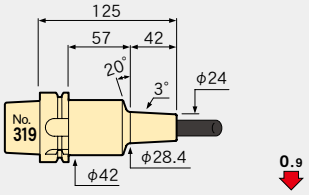
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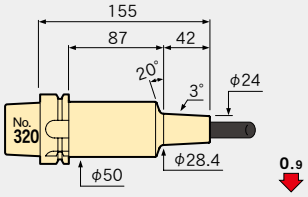
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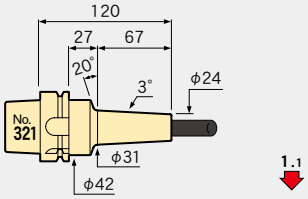
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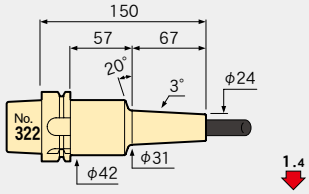
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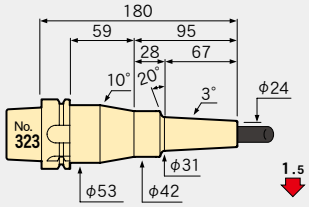
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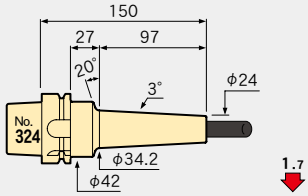
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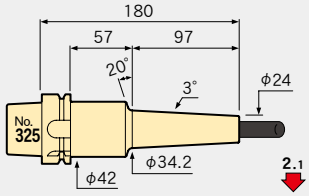
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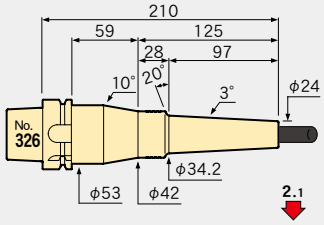
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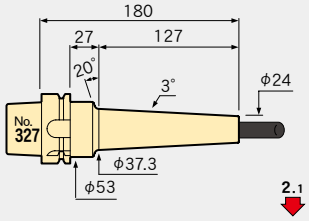
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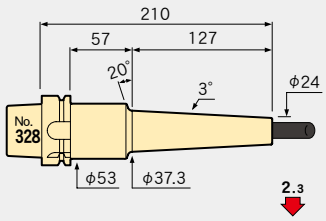
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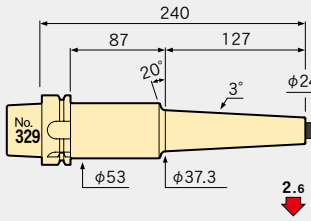
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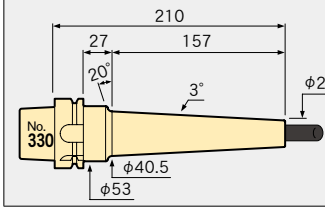
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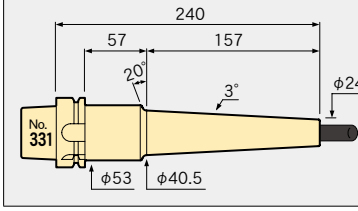
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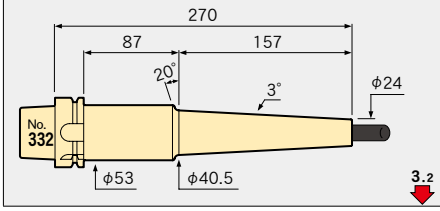
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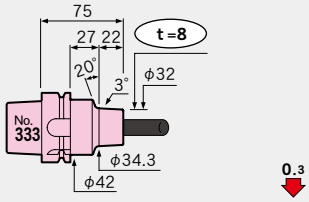
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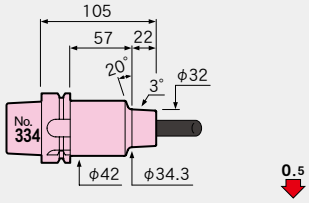
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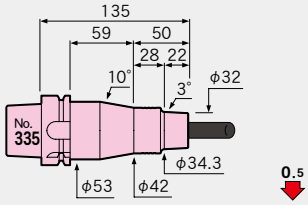
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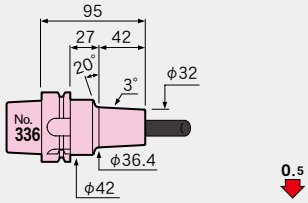
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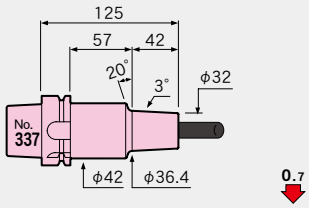
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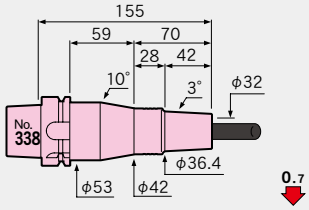
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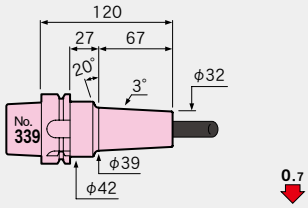
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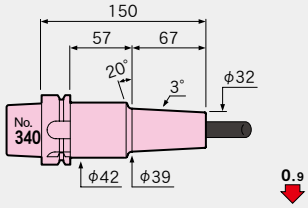
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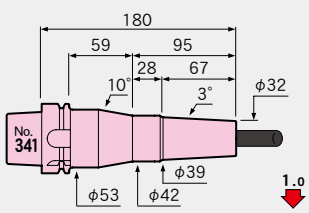
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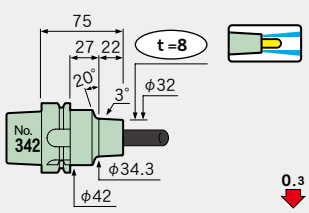
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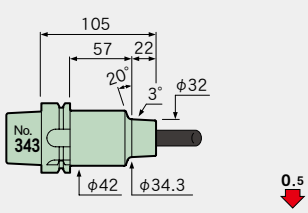
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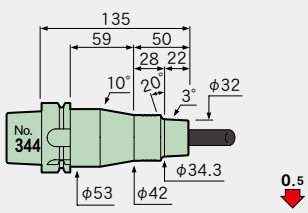
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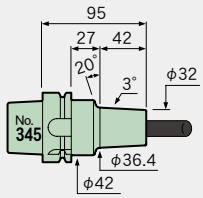
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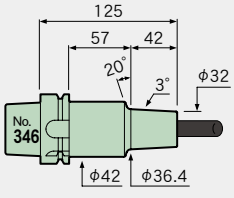


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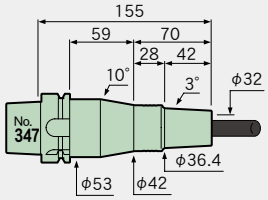
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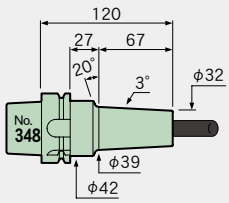
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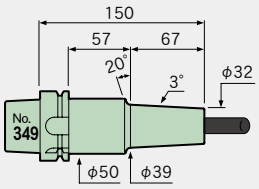
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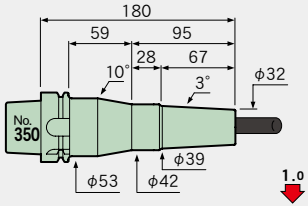
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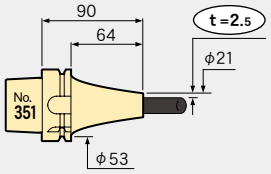
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A63-SLFB16-180-M67



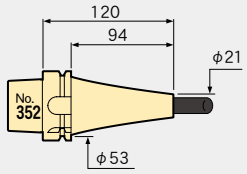
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A63-SLSB16-90 CV



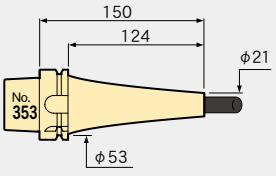
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A63-SLSB16-120 CV



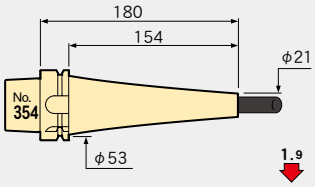
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A63-SLSB16-150 CV



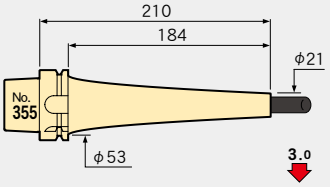
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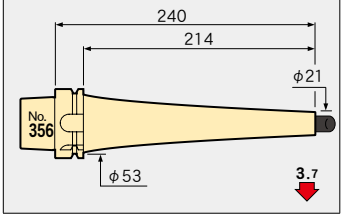
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A63-SLSB16-210 CV



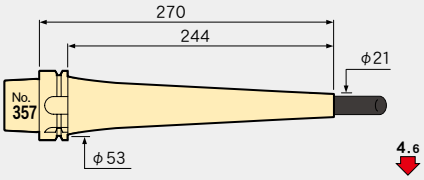
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A63-SLSB16-240 CV



3.7

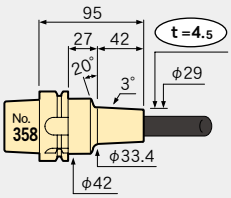
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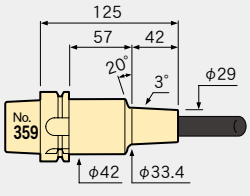
ϕ20

A63-SLSB20-95-M42



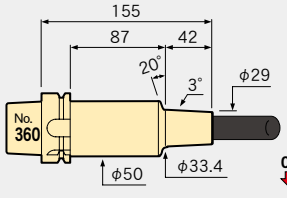
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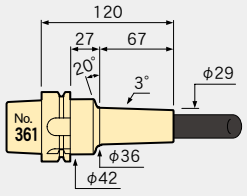
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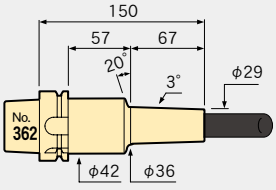
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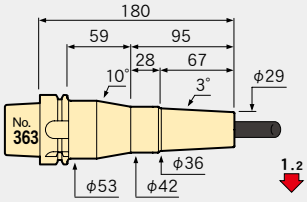
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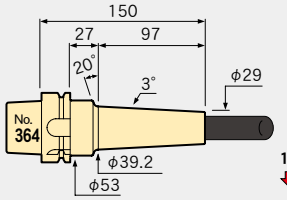
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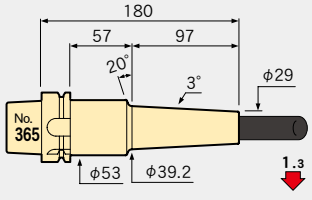
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A63-SLSB20-150-M97



1.1

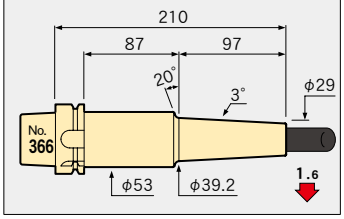
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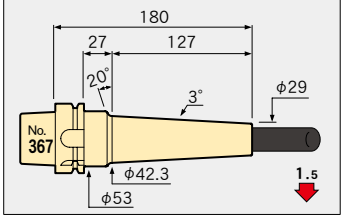
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A63 S=1:7

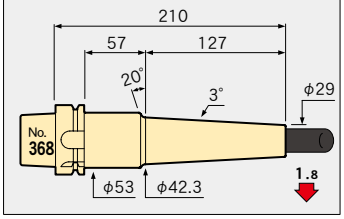
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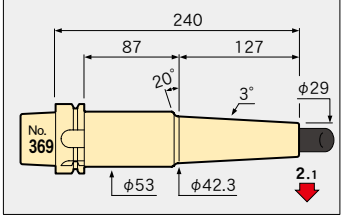
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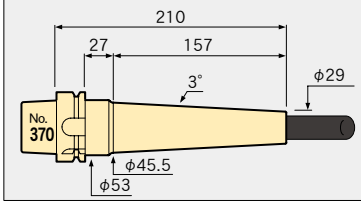
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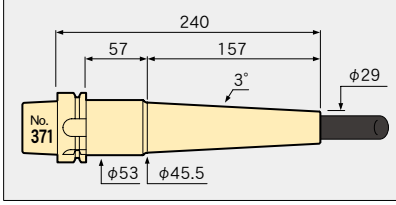
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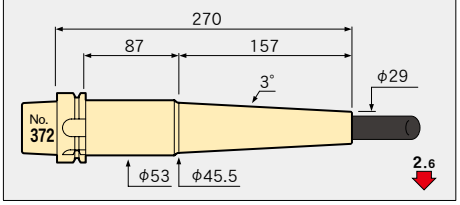
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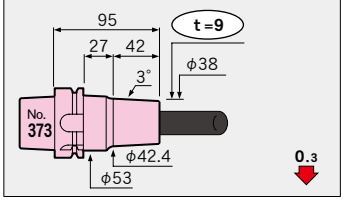
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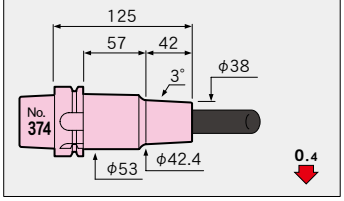
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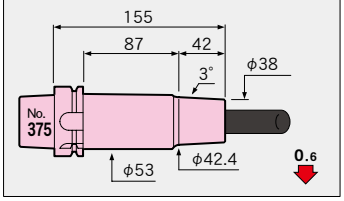
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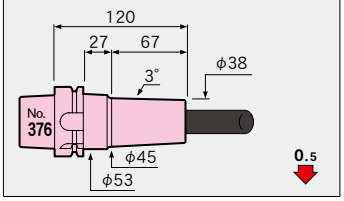
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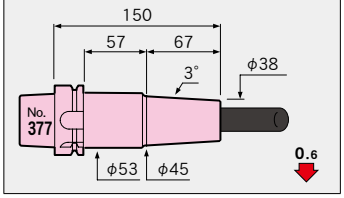
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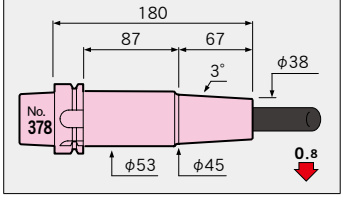
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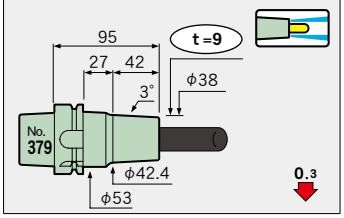
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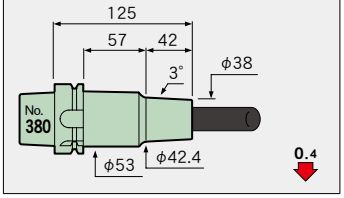
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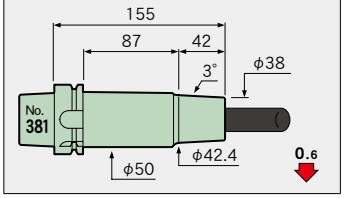
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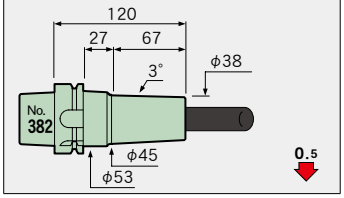
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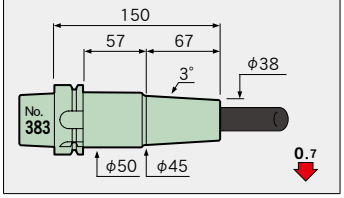
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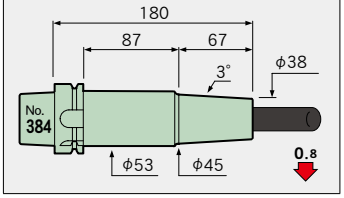
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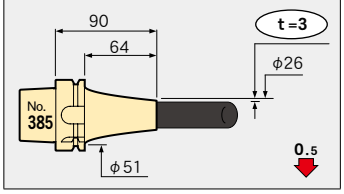
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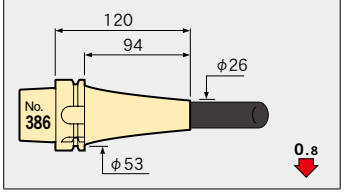
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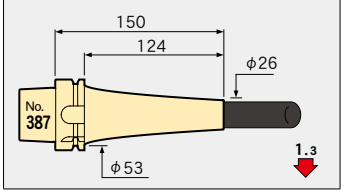
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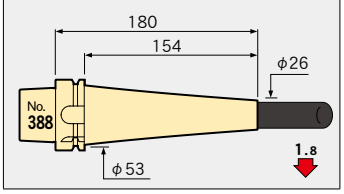
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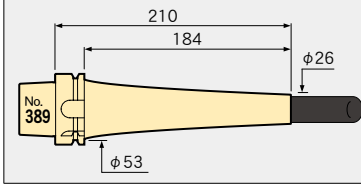
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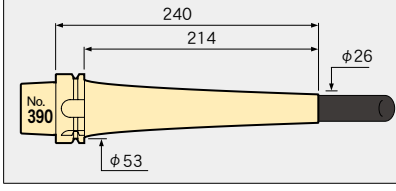
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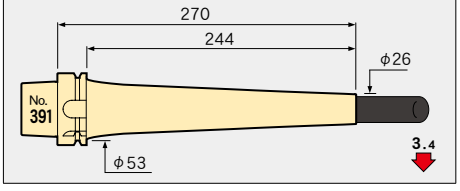
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A63-SLSB20-240 CV

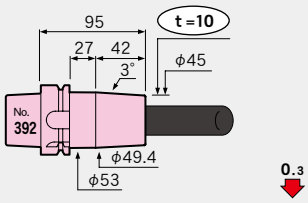


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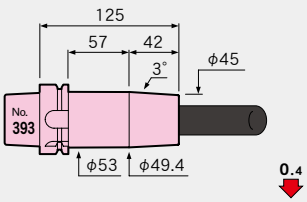


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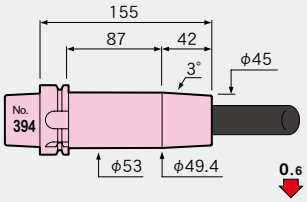
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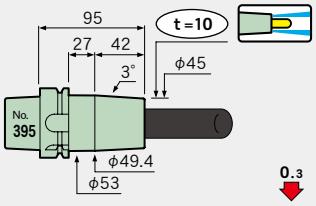
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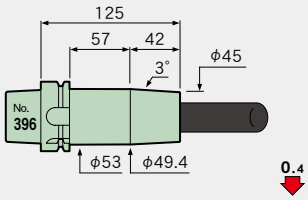
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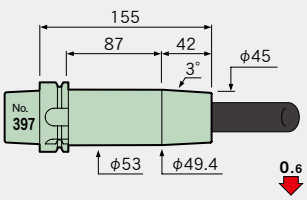
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A63-SLFB25-125-M42

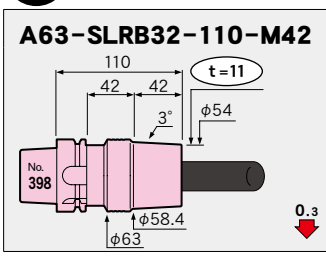


A63-SLFB25-155-M42



ϕ32

A63-SLRB32-110-M42



▮ϕ70 加热喷头 (HRB-03S-230AS)

SLRB32刀柄加热时必需品

型号
HRB-NZL70





HEAT ROBO Baby3000S

A100

一体型 3°



A100-SLRB16-285-M157

Fig. 1

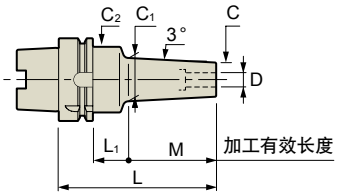
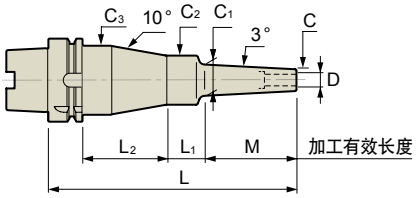


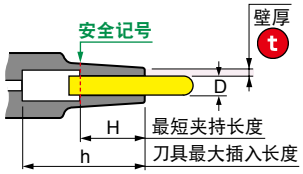
Fig. 2



■标准附属品
●冷却液导管(固定式) →P.186

■备考
●可对应可动式冷却液导管 →P.186

■注意事项
●刀具安装···插入刀具时,请务必将刀具插入比安全记号更深的位置。

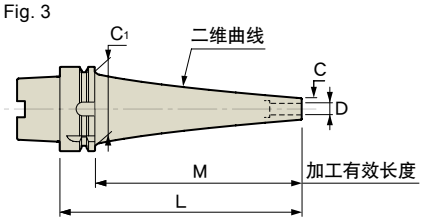


一体型CURVE CV



A100-SLRA12-225 cv

Fig. 3





HEATROBO电磁 1200S
(HRD-01S-230AS)
电磁式加热器对应表

[○] 可加热 [×] 不可加热
[▲] 垫高加热器后可进行加热→P.201

CV：曲线

壁厚

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S		缩略图
A100-SLSA3-110-M 42	1	3	6	1.5	110	42	39	—	10.4	26	—	9	80	2.2	19.8	9.4	○	1
-135-M 67					135	67			13				105	2.3	20.9	15.1		4
-140-M 42					140	42	69		10.4				110		19.9	10.1		2
-165-M 67					165	67			13	25			136	2.2	21	16		5
-M 97						97	39		16.2	26			135	2.3	22.2	21		7
-170-M 42	2				170	42	33	66	10.4		40		140	2.6	20.2	10		3
-195-M 67					195	67			13				165		21.3	15.9		6
-M 97	1					97	69	—	16.2	25	—		166	2.3	22.3	22.5		8
-225-M 97	2				225		33	66		26	40		195	2.7	22.6	22.2		9
-SLRA3- 90-M 22	1	3	7.5	2.25	90	22	39	—	9.8	26	—	9	60	2.2	20.2	2.9	○	10
-110-M 42					110	42			11.9				80		20.6	5.5		13
-120-M 22					120	22	69		9.8	25			91		20.3	3.3		11
-135-M 67					135	67	39		14.5	26			105	2.3	21.4	9		16
-140-M 42					140	42	69		11.9				110		20.7	6.1		14
-150-M 22	2				150	22	33	66	9.8		40		120	2.6	20.6	3.2		12
-165-M 67	1				165	67	69	—	14.5	25	—		136		21.5	10.1		17
-M 97						97	39		17.7					2.2	22.4	13.1		19
-170-M 42	2				170	42	33	66	11.9	26	40		140	2.6	21	6		15
-195-M 67					195	67			14.5				165		21.8	9.9		18
-M 97	1					97	69	—	17.7		—			2.4	22.5	14.7		20
-M127						127	39		20.8	36					24.5	15.8		22
-225-M 97	2				225	97	33	66	17.7	26	40		195	2.7	22.8	14.4		21
-M127	1					127	69	—	20.8	36	—			2.6	24.6	16.4		23
-255-M127	2				255		30	69		32	46		226	3	24.9	16.6		24

HRD-01S

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S		缩略图
A100-SLFB3- 90-M 22	1	3	9.5	3.25	90	22	39	—	11.8	26	—	9	60	2.2	19.8	1.9	○	25
-110-M 42					110	42			13.9				80	2.3	20.3	3.3		28
-120-M 22					120	22	69		11.8				90		19.9	2.3		26
-135-M 67					135	67	39		16.5				105		21.4	5.5		31
A100 -140-M 42					140	42	69		13.9	25			111	2.2	20.4	4.1		29
-150-M 22	2				150	22	33	66	11.8	26	40		120	2.6	20.2	2.3		27
-165-M 67	1				165	67	69	—	16.5	25	—		136	2.3	21.5	6.7		32
-170-M 42	2				170	42	33	66	13.9	26	40		140	2.6	20.7	3.9		30
-195-M 67					195	67			16.5				165		21.8	6.3		33
A100-SLSA4-110-M 42	1	4	7	1.5	110	42	39	—	11.4	25	—	12	81	2.1	21	7.2	○	34
-135-M 67					135	67			14				106	2.2		11.8		37
-140-M 42					140	42	69		11.4				111		21.1	8		35
-165-M 67					165	67			14				136	2.3		13.1		38
-M 97						97	39		17.2	26			135		22.4	16.9		40
-170-M 42	2				170	42	33	66	11.4		40		140	2.6	21.4	8		36
-195-M 67					195	67			14	25	39		166			12.9		39
-M 97	1					97	69	—	17.2		—			2.3	22.5	18.7		41
-225-M 97	2				225		33	66			39		196	2.6	22.8	18.3		42
-SLRA4- 90-M 22	1	4	10	3	90	22	39	—	12.3	25	—	12	61	2.1	20.3	1.8	○	43
-110-M 42					110	42			14.4				81	2.2	21	3.2		46
-120-M 22					120	22	69		12.3				91		20.4	2.3		44
-135-M 67					135	67	39		17				106		22	5.3		49
-140-M 42					140	42	69		14.4				111		21.1	4		47
-150-M 22	2				150	22	33	66	12.3	26	40		120	2.6	20.7	2.2		45
-165-M 67	1				165	67	69	—	17		—		135	2.4	22.1	6.3		50
-M 97						97	39		20.2	25			136	2.2	23.5	8		52
-170-M 42	2				170	42	33	66	14.4		39		141	2.6	21.4	3.8		48
-195-M 67					195	67			17				166		22.5	6.3		51
-M 97	1					97	69	—	20.2	26	—		165	2.4	23.5	9.5		53
-M127						127	39		23.3	32			166		26.7	9.6		55
-225-M 97	2				225	97	33	66	20.2	26	40		195	2.7	23.9	9.2		54
-M127	1					127	69	—	23.3	32	—		196	2.6	26.8	10.7		56
-255-M127	2				255		30	69			46		226	3	27.2	10.4		57
-SLFB4- 90-M 22	1	4	12	4	90	22	39	—	14.3	25	—	12	61	2.1	20.1	1.4	○	58
-110-M 42					110	42			16.4	26			80	2.3	20.8	2.3		61
-120-M 22					120	22	69		14.3	25			91	2.2	20.2	1.9		59
-135-M 67					135	67	39		19	26			105	2.3	22	3.7		64
-140-M 42					140	42	69		16.4	25			111		20.8	3.1		62
-150-M 22	2				150	22	33	66	14.3		39		121	2.6	20.5	1.8		60
-165-M 67	1				165	67	69	—	19	26	—		135	2.4	22.1	4.7		65
-170-M 42	2				170	42	33	66	16.4	25	39		141	2.6	21.2	2.9		63
-195-M 67					195	67			19				166		22.4	4.7		66
-SLSA4-165 CV	3	4	7	1.5	165	136	—	—	85	—	—	12	133	3.4	29	2.5	○	67
-195 CV					195	166							163	3.7	30.6	3.3		68
-225 CV					225	196							196	4.3	33	3.8		69
-255 CV					255	226							226	4.4	34.1	5.6		70
-285 CV					285	256							256	4.6	35.5	7.6		71
-315 CV					315	286							286	4.9	37.1	9.8		72
-345 CV					345	316							316	5.2	38.8	12.4		73

HRD-01S

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S		缩略图
A100-SLSA6-110-M 42	1	6	9	1.5	110	42	39	—	13.4	25	—	18	81	2.1	21.3	4.9	▲	74
-135-M 67					135	67			16				106	2.2	22.8	8.2		77
-140-M 42					140	42	69		13.4				111		21.4	5.8		75
-165-M 67					165	67			16				136	2.3	22.9	9.5		78
-M 97						97	39		19.2	32					25.3	11.1		80
-170-M 42	2				170	42	33	66	13.4	25	39		141	2.6	21.7	5.6		76
-195-M 67					195	67			16				166		23.2	9.3		79
-M 97	1					97	69	—	19.2	32	—			2.4	25.4	11.9		81
-225-M 97	2				225		30	69			46		196	2.9	25.7	11.7		82
-SLSB6-110-M 42	1	6	10	2	110	42	39	—	14.4	25	—	18	81	2.1	22.2	3.8	○	83
-135-M 67					135	67			17				106	2.2	24.3	6.3		86
-140-M 42					140	42	69		14.4				111	2.2	22.3	4.7		84
-165-M 67					165	67			17				136	2.3	24.4	7.7		87
-M 97						97	39		20.2	32					27.3	8.6		89
-170-M 42	2				170	42	33	66	14.4	26	40		140	2.6	22.6	4.6		85
-195-M 67					195	67			17	25	39		166		24.7	7.4		88
-M 97	1					97	69	—	20.2	36	—		165		27.4	9.5		90
-M127						127	39		23.3	32			166	2.4	29.8	11.3		92
-225-M 97	2				225	97	30	69	20.2		46		196	2.9	27.8	9.2		91
-M127	1					127	69	—	23.3		—			2.5	29.9	12.4		93
A100 -M157						157	39		26.5						32.3	13.6		95
-255-M127	2				255	127	30	69	23.3		46		226	3	30.3	12.1	▲	94
-M157	1					157	69	—	26.5		—			2.6	32.4	15.1		96
-285-M157	2				285		30	69			46		256	3.1	32.8	14.6		97
-SLRB6- 90-M 22	1	6	14	4	90	22	39	—	16.3	32	—	18	61	2.2	21.1	1	○	98
-110-M 42					110	42			18.4				81	2.3	22.8	1.6		101
-120-M 22					120	22	69		16.3				91	2.4	21.3	1.2		99
-135-M 67					135	67	39		21				106	2.3	24.9	2.7		104
-140-M 42					140	42	69		18.4				111	2.4	22.9	2		102
-150-M 22	2				150	22	30	69	16.3		46		121	2.8	21.6	1.2		100
-165-M 67	1				165	67	69	—	21		—		136	2.5	25	3.2		105
-170-M 42	2				170	42	30	69	18.4		46		141	2.9	23.3	1.9		103
-195-M 67					195	67			21				166		25.3	3.1		106
-SLFB6- 90-M 22	1	6	14	4	90	22	39	—	16.3	32	—	18	61	2.2	21.1	1	○	107
-110-M 42					110	42			18.4				81	2.3	22.8	1.6		110
-120-M 22					120	22	69		16.3				91	2.4	21.3	1.2		108
-135-M 67					135	67	39		21	36			105		24.9	2.6		113
-140-M 42					140	42	69		18.4	32			111		22.9	2		111
-150-M 22	2				150	22	30	69	16.3		46		121	2.8	21.6	1.2		109
-165-M 67	1				165	67	69	—	21		—		136	2.5	25	3.2		114
-170-M 42	2				170	42	30	69	18.4		46		141	2.9	23.3	1.9		112
-195-M 67					195	67			21				166		25.3	3.1		115
-SLSA6-165 CV	3	6	9	1.5	165	136	—	—	85	—	—	18	136	3.3	28.8	2.1	○	116
-195 CV					195	166							166	4	32	2.3		117
-225 CV					225	196							196	4.1	32.4	3.6		118
-255 CV					255	226							226	4.8	35.9	3.9		119
-285 CV					285	256							256	5	37.4	5.2	▲	120
-315 CV					315	286							286	5.3	38.9	6.8		121
-345 CV					345	316							316	5.6	40.3	8.7		122

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S	HRD-01S	缩略图
A100-SLSA8-110-M 42	1	8	11	1.5	110	42	39	—	15.4	36	—	24	80	2.3	23.2	3.2	○	123
-135-M 67					135	67			18	32			106		25.8	5.5		126
-140-M 42					140	42	69		15.4	36			110	2.5	23.4	3.5		124
-165-M 67					165	67			18				135		26	5.8		127
-M 97						97	39		21.2	32			136	2.3	29	8.1		129
-170-M 42	2				170	42	28	71	15.4	36	50		140	3.1	23.7	3.4		125
-195-M 67					195	67	30	69	18	32	46		166	2.9	26.3	5.9		128
-M 97	1					97	69	—	21.2		—			2.5	29.1	8.9		130
-225-M 97	2				225		28	71		36	50		195	3.2	29.5	8.3		131
-SLSB8-110-M 42	1	8	13	2.5	110	42	39	—	17.4	32	—	24	81	2.2	24.3	2.1	○	132
-135-M 67					135	67			20				106	2.3	27.5	3.6		135
-140-M 42					140	42	69		17.4				111	2.4	24.5	2.6		133
-165-M 67					165	67			20				136		27.7	4.2		136
-M 97						97	39		23.2						31.4	5.4		138
-170-M 42	2				170	42	28	71	17.4	36	50		140	3.1	24.8	2.4		134
-195-M 67					195	67	30	69	20	32	46		166	2.9	28	4		137
-M 97	1					97	69	—	23.2		—			2.5	31.5	6.3		139
-M127						127	39		26.3					2.4	35.3	7.3		141
-225-M 97	2				225	97	30	69	23.2		46		196	3	31.9	6		140
-M127	1					127	69	—	26.3		—			2.6	35.4	8.5		142
-M157						157	39		29.5	42				2.7	39.1	8.1		144
-255-M127	2				255	127	30	69	26.3	32	46		226	3.1	35.7	8.2	▲	143
-M157	1					157	69	—	29.5	42	—			2.9	39.3	8.7		145
-285-M157	2				285		28	71			56		256	3.6	39.6	8.6		146
-SLRB8- 90-M 22	1	8	18	5	90	22	39	—	20.3	32	—	24	61	2.2	21.8	0.7	×	147
-110-M 42					110	42			22.4				81	2.3	24.4	1.1	○	150
-120-M 22					120	22	69		20.3				91	2.4	22	1	×	148
-135-M 67					135	67	39		25				106		27.6	1.8	○	153
-140-M 42					140	42	69		22.4				111		24.5	1.6		151
-150-M 22	2				150	22	30	69	20.3		46		121	2.9	22.3	1	×	149
-165-M 67	1				165	67	69	—	25		—		136	2.5	27.8	2.4	○	154
-170-M 42	2				170	42	28	71	22.4	36	50		140	3.1	24.9	1.3		152
-195-M 67					195	67	30	69	25	32	46		166	3	28.1	2.2		155
-SLFB8- 90-M 22	1	8	18	5	90	22	39	—	20.3	36	—	24	60	2.3	21.8	0.7	×	156
-110-M 42					110	42			22.4	32			81		24.4	1.1	○	159
-120-M 22					120	22	69		20.3				91	2.4	22	1	×	157
-135-M 67					135	67	39		25	36			105		27.6	1.7	○	162
-140-M 42					140	42	69		22.4				110	2.6	24.5	1.3		160
-150-M 22	2				150	22	30	69	20.3	32	46		121	2.9	22.3	1	×	158
-165-M 67	1				165	67	69	—	25		—		136	2.5	27.8	2.4	○	163
-170-M 42	2				170	42	30	69	22.4		46		141	2.9	24.9	1.5		161
-195-M 67					195	67			25				166	3	28.1	2.2		164
-SLSA8-165 CV	3	8	11	1.5	165	136	—	—	85	—	—	24	136	3.7	30.7	1.4	○	165
-195 CV					195	166							166		31	2.3		166
-225 CV					225	196							196	4.6	35.3			167
-255 CV					255	226							226		35.9	3.6	▲	168
-285 CV					285	256							256	4.9	37.4	4.8		169
-315 CV					315	286							286	5.7	41.9	5		170
-345 CV					345	316							311	6.1	45.1	6		171
-SLRA8-195 CV	3	8	16	4	195	166	—	—	85	—	—	24	166	3.7	28.5	1.4	○	172
-225 CV					225	196							196	4.4	32.3	1.6		173
-255 CV					255	226							226	4.6	33.6	2.2	▲	174
-285 CV					285	256							256	4.8	34.8	3		175
-SLFA8-195 CV	3	8	16	4	195	166	—	—	85	—	—	24	166	3.7	28.5	1.4	○	176
-225 CV					225	196							196	4.4	32.3	1.6		177
-255 CV					255	226							226	4.6	33.6	2.2	▲	178
-285 CV					285	256							256	4.8	34.8	3		179

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S	HRD-01S	缩略图
A100-SLSA10-110-M 42	1	10	13	1.5	110	42	39	—	17.4	25	—	30	81	2.2	24.6	2.7	○	180
-135-M 67					135	67			20	32			106	2.3	28.5	4.1		183
-140-M 42					140	42	69		17.4	25			111	2.2	24.8	3.8		181
-165-M 67					165	67			20	36			135	2.5	28.6	4.4		184
-M 97						97	39		23.2	32			136	2.3	33.2	6.2		186
-170-M 42	2				170	42	28	71	17.4	36	50		140	3.1	25.1	2.5		182
-195-M 67					195	67	30	69	20	32	46		166	2.9	29	4.6		185
-M 97	1					97	69	—	23.2		—			2.5	33.3	7.1		187
-225-M 97	2				225		30	69			46		196	3	33.7	6.9	▲	188
-SLSB10-110-M 42	1	10	16	3	110	42	39	—	20.4	32	—	30	81	2.3	25.8	1.2	○	189
-135-M 67					135	67			23				106		30.4	2.5		192
-140-M 42					140	42	69		20.4				111	2.4	25.9	2		190
-165-M 67					165	67			23				136	2.5	30.5	3.2		193
-M 97						97	39		26.2					2.4	35.9	3.8		195
-170-M 42	2				170	42	30	69	20.4		46		141	2.9	26.3	1.9		191
-195-M 67					195	67			23				166		30.9	3		194
-M 97	1					97	69	—	26.2		—			2.6	36.1	4.8		196
-M127						127	39		29.3	42					42.1	4.6		198
-225-M 97	2				225	97	30	69	26.2	32	46		196	3	36.4	4.5	▲	197
-M127	1					127	69	—	29.3	42	—			2.9	42.5	5		199
-M157						157	39		32.5					2.8	47.7	5.7		201
-255-M127					255	127	99		29.3	50			225	3.5	42.8	5		200
-M157						157	69		32.5	42			226	3	48.1	6.2		202
-285-M157	2				285		28	71			56		256	3.7	48.4	6.1		203
-SLRB10- 90-M 22	1	10	22	6	90	22	39	—	24.3	32	—	30	61	2.3	22.2	0.6	×	204
-110-M 42					110	42			26.4				81		25.9	0.9	○	207
-120-M 22					120	22	69		24.3				91	2.4	22.3		×	205
-135-M 67					135	67	39		29	42			106	2.5	30.5	1.1	○	210
-140-M 42					140	42	69		26.4	32			111		26	1.4		208
-150-M 22	2				150	22	28	71	24.3	36	50		120	3.1	22.7	0.7	×	206
-165-M 67	1				165	67	69	—	29	42	—		136	2.8	30.6	1.3	○	211
-170-M 42	2				170	42	28	71	26.4	36	50		140	3.2	26.3	1		209
-195-M 67					195	67			29	42	56		166	3.5	31	1.3		212
-SLFB10- 90-M 22	1	10	22	6	90	22	39	—	24.3	32	—	30	61	2.3	22.2	0.6	×	213
-110-M 42					110	42			26.4				81		25.9	0.9	○	216
-120-M 22					120	22	69		24.3	32			91	2.4	22.3		×	214
-135-M 67					135	67	39		29	36			105	2.5	30.5	1.2	○	219
-140-M 42					140	42	69		26.4				110	2.6	26	1.1		217
-150-M 22	2				150	22	30	69	24.3	32	46		121	2.9	22.7	0.9	×	215
-165-M 67	1				165	67	69	—	29	36	—		135	2.7	30.6	1.6	○	220
-170-M 42	2				170	42	30	69	26.4	32	46		141	2.9	26.3	1.3		218
-195-M 67					195	67	28	71	29	42	56		166	3.5	31			221
A100-SLSA10-165 CV	3	10	13	1.5	165	136	—	—	85	—	—	30	136	3.5	29.4	1.4	○	222
-195 CV					195	166							166	4.3	33.6	1.5		223
-225 CV					225	196							196	4.2	33.4	2.4		224
-255 CV					255	226							226	4.5	34.3	3.5	▲	225
-285 CV					285	256							251	5.1	38.3	3.6		226
-315 CV					315	286							286		39.9	4.8		227
-345 CV					345	316							311	5.9	42.7	5.5		228
-SLRA10-165 CV	3	10	19	4.5	165	136	—	—	85	—	—	30	136	3.5	27.6	1	○	229
-195 CV					195	166							166	4	30.1	1.1		230
-225 CV					225	196							196	4.1	31.1	1.6		231
-255 CV					255	226							226	4.9	35.3	1.7	▲	232
-285 CV					285	256							256	5	36.2	2.4		233
-SLFA10-165 CV	3	10	19	4.5	165	136	—	—	85	—	—	30	136	3.5	27.6	1	○	234
-195 CV					195	166							166	4	30.1	1.1		235
-225 CV					225	196							196	4.1	31.1	1.6		236
-255 CV					255	226							226	4.9	35.3	1.7	▲	237
-285 CV					285	256							256	5	36.2	2.4		238

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S	HRD-01S	缩略图
A100-SLSA12-110-M 42	1	12	15	1.5	110	42	39	—	19.4	32	—	30	79	2.2	27	1.9	○	239
-135-M 67					135	67			22				104	2.3	32.5	3.4		242
-140-M 42					140	42	69		19.4				109	2.4	27.2	2.4		240
-165-M 67					165	67			22				134		32.6	4.1		243
-M 97						97	39		25.2					2.3	39.4	5.1		245
-170-M 42	2				170	42	28	71	19.4	36	50		135	3.1	27.5	2.1		241
-195-M 67					195	67	30	69	22	32	46		164	2.9	32.9	3.9		244
-M 97	1					97	69	—	25.2	36	—		160	2.7	39.6	5.5		246
-225-M 97	2				225		30	69		32	46		194	3	39.9	5.8	▲	247
-SLSB12-110-M 42	1	12	19	3.5	110	42	39	—	23.4	32	—	30	79	2.3	28.4	1.2	○	248
-135-M 67					135	67			26				104		34.7	2		251
-140-M 42					140	42	69		23.4				109	2.4	28.5	1.7		249
-165-M 67					165	67			26				134	2.5	34.8	2.7		252
-M 97						97	39		29.2	42			133	2.6	42.9	2.5		254
-170-M 42	2				170	42	28	71	23.4	36	50		135	3.1	28.9	1.4		250
-195-M 67					195	67	30	69	26	32	46		164	3	35.2	2.5		253
-M 97	1					97	69	—	29.2	50	—		160	3.1	43.2	2.6		255
A100 -M127						127	39		32.3	42			163	2.7	50.4	3.3		257
-225-M 97					225	97	99		29.2	50			190	3.4	43.6	2.8	▲	256
-M127						127	69		32.3	42			192	3	50.8	3.8		258
-M157						157	39		35.5				193	2.9	58	4.2		260
-255-M127	2				255	127	28	71	32.3		56		222	3.6	51.1	3.7		259
-M157	1					157	69	—	35.5		—			3.1	58.3	4.8		261
-285-M157	2				285		28	71			56		252	3.8	58.7	4.7		262
A100-SLRB12- 90-M 22	1	12	26	7	90	22	39	—	28.3	42	—	30	58	2.4	26.5	0.4	×	263
-110-M 42					110	42			30.4				78	2.5	29.2	0.6		266
-120-M 22					120	22	69		28.3				87	2.6	26.8	0.5		264
-135-M 67					135	67	39		33				103		35.5	0.9		269
-140-M 42					140	42	69		30.4				107	2.7	29.6	0.8		267
-150-M 22					150	22	99		28.3	50			117	3.3	27.2	0.5		265
-165-M 67					165	67	69		33	42			132	2.9	35.8	1.1		270
-170-M 42					170	42	99		30.4	50			135	3.3	29.9	0.8		268
-195-M 67	2				195	67	28	71	33	42	56		162	3.5	36.2	1.1		271
-SLFB12- 90-M 22	1	12	26	7	90	22	39	—	28.3	42	—	30	58	2.4	26.5	0.4	×	272
-110-M 42					110	42			30.4				78	2.5	29.2	0.6		275
-120-M 22					120	22	69		28.3				87	2.6	26.8	0.5		273
-135-M 67					135	67	39		33				103		35.5	0.9		278
-140-M 42					140	42	69		30.4	50			105	3	29.6	0.6		276
-150-M 22	2				150	22	28	71	28.3	42	56		117	3.3	27.2	0.5		274
-165-M 67	1				165	67	69	—	33		—		132	2.9	35.8	1.1		279
-170-M 42					170	42	99		30.4	50			135	3.3	29.9	0.8		277
-195-M 67	2				195	67	28	71	33	42	56		162	3.5	36.2	1.1		280
-SLSA12-165 CV	3	12	15	1.5	165	136	—	—	85	—	—	30	133	4.2	34.1	1.2	○	281
-195 CV					195	166							163	4.1	33.6			282
-225 CV					225	196							175	4.8	38.3	1.8		283
-255 CV					255	226							190		37.8	2.6	▲	284
-285 CV					285	256							251	5.5	42.5	3.5		285
-315 CV					315	286							281	5.9	44.6	4.3		286
-345 CV					345	316							311	6.2	46.7	5.3		287
-SLRA12-165 CV	3	12	22	5	165	136	—	—	85	—	—	30	133	3.6	27.9	0.8	×	288
-195 CV					195	166							163	4.4	32.2			289
-225 CV					225	196							159		32.7	1.3	○	290
-255 CV					255	226							221	4.6	36.1	1.6	▲	291
-285 CV					285	256							251	5	38.5	2.1		292
-SLFA12-165 CV	3	12	22	5	165	136	—	—	85	—	—	30	133	3.6	27.9	0.8	×	293
-195 CV					195	166							163	4.4	32.2			294
-225 CV					225	196							159		32.7	1.3	○	295
-255 CV					255	226							221	4.6	36.1	1.6	▲	296
-285 CV					285	256							251	5	38.5	2.1		297

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S	缩略图
A100-SLSB16-110-M 42	1	16	24	4	110	42	39	—	28.4	42	—	32	78	2.4	34.7	0.7	298
-135-M 67					135	67			31				103	2.5	45	1.2	301
-140-M 42					140	42	69		28.4				107	2.7	35	0.9	299
-165-M 67					165	67			31				132	2.8	45.4	1.4	302
-M 97						97	39		34.2				133	2.7	57.4	1.7	304
-170-M 42					170	42	99		28.4	50			135	3.2	35.4	0.9	300
-195-M 67					195	67			31				160	3.3	45.7	1.4	303
-M 97						97	69		34.2	42			162	2.9	57.8	2.1	305
-M127						127	39		37.3	50			160	3	69.8	2.2	307
-225-M 97					225	97	99		34.2				190	3.5	58.1	2.1	306
-M127						127	69		37.3	53				3.4	70.2	2.3	308
-M157						157	39		40.5				193	3.3	82.3	2.6	310
-255-M127	2				255	127	28	71	37.3		67		220	4.3	70.6	2.3	309
-M157	1					157	69	—	40.5		—			3.7	82.6	2.9	311
-285-M157	2				285		28	71			67		250	4.6	83		312
-SLRB16- 90-M 22	1	16	32	8	90	22	39	—	34.3	42	—	32	58	2.4	26.5	0.4	313
-110-M 42					110	42			36.4				78	2.5	34.8	0.5	316
-120-M 22					120	22	69		34.3				87	2.7	26.9		314
-135-M 67					135	67	39		39				103		45.2	0.7	319
-140-M 42					140	42	69		36.4				107	2.8	35.2		317
-150-M 22	2				150	22	28	71	34.3		56		117	3.4	27.2	0.5	315
-165-M 67	1				165	67	69	—	39		—		132	3	45.5	1	320
-170-M 42	2				170	42	28	71	36.4		56		137	3.5	35.5	0.7	318
-195-M 67					195	67			39				162	3.6	45.9	0.9	321
-SLFB16- 90-M 22	1	16	32	8	90	22	39	—	34.3	42	—	32	58	2.4	26.5	0.4	322
-110-M 42					110	42			36.4				78	2.5	34.8	0.5	325
-120-M 22					120	22	69		34.3				87	2.7	26.9		323
-135-M 67					135	67	39		39				103		45.2	0.7	328
-140-M 42					140	42	69		36.4				107	2.8	35.2		326
-150-M 22	2				150	22	28	71	34.3		56		117	3.4	27.2	0.5	324
-165-M 67	1				165	67	69	—	39		—		132	3	45.5	1	329
-170-M 42	2				170	42	28	71	36.4		56		137	3.5	35.5	0.7	327
-195-M 67					195	67			39				162	3.6	45.9	0.9	330
-SLSB16-165 CV	3	16	21	2.5	165	136	—	—	85	—	—	32	131	4.2	34.2	0.6	331
-195 CV					195	166							161	4	33.7	1.1	332
-225 CV					225	196							191	4.8	38.4	1.2	333
-255 CV					255	226							221	4.7	38	2	334
-285 CV					285	256							251	5.5	42.6		335
-315 CV					315	286							281	5.9	44.8	2.6	336
-345 CV					345	316							311	6.2	46.9	3.3	337
A100-SLSB20-110-M 42	1	20	29	4.5	110	42	39	—	33.4	42	—	40	78	2.5	37.4	0.6	338
-135-M 67					135	67			36				103	2.6	52.8	0.9	341
-140-M 42					140	42	69		33.4				107	2.7	37.8	0.8	339
-165-M 67					165	67			36				132	2.8	53.2	1.2	342
-M 97						97	39		39.2	53			133	2.9	71.3	1.1	344
-170-M 42	2				170	42	28	71	33.4	42	56		137	3.4	38.1	0.8	340
-195-M 67					195	67			36				162	3.5	53.5	1.2	343
-M 97	1					97	69	—	39.2	53	—			3.3	71.7	1.3	345
-M127						127	39		42.3				163	3.2	91	1.5	347
-225-M 97	2				225	97	28	71	39.2		67		190	4.3	72	1.3	346
-M127	1					127	69	—	42.3	50	—			3.5	91.4	1.9	348
-M157						157	39		45.5	53			193		109.6		350
-255-M127	2				255	127	28	71	42.3		67		220	4.5	91.8	1.8	349
-M157	1					157	69	—	45.5		—			3.9	109.9	2.2	351
-285-M157	2				285		28	71			67		250	4.8	110.3		352

型号	Fig.	φD	φC	t	L	M	L1	L2	φC1	φC2	φC3	H	h	Kg	N	S	缩略图
A100-SLRB20-110-M42	1	20	38	9	110	42	39	—	42.4	53	—	40	78	2.8	37.5	0.3	353
-135-M67					135	67			45				103	3.1	53	0.5	356
-140-M42					140	42	69		42.4				105	3.2	37.9	0.4	354
-165-M67					165	67			45				130	3.5	53.3	0.6	357
-170-M42	2				170	42	28	71	42.4	53	67		135	4.1	38.2	0.4	355
-195-M67					195	67			45				160	4.4	53.7	0.6	358
-SLFB20-110-M42	1	20	38	9	110	42	39	—	42.4	53	—	40	78	2.8	37.5	0.3	359
-135-M67					135	67			45				103	3.1	53	0.5	362
-140-M42					140	42	69		42.4				105	3.2	37.9	0.4	360
-165-M67					165	67			45				130	3.5	53.3	0.6	363
-170-M42	2				170	42	28	71	42.4		67		135	4.1	38.2	0.4	361
-195-M67					195	67			45				160	4.4	53.7	0.6	364
-SLSB20-165 CV	3	20	26	3	165	136	—	—	85	—	—	40	132	4	33.6	0.6	365
-195 CV					195	166							161	4.9	38.1	0.7	366
-225 CV					225	196							191	4.6	37.4	1.2	367
-255 CV					255	226							221	5.5	42.1	1.3	368
-285 CV					285	256							251	5.2	41.2	2.1	369
-315 CV					315	286							281	6.1	46	2.3	370
-345 CV					345	316							311	6.4	47.9	2.9	371
A100-SLRB25-110-M42	1	25	45	10	110	42	39	—	49.4	53	—	45	78	2.9	40.7	0.3	372
-140-M42					140		69						105	3.3	41	0.4	373
-170-M42	2				170		28	71			67		135	4.2	41.4		374
-SLFB25-110-M42	1	25	45	10	110	42	39	—	49.4	53	—	45	78	2.9	40.7	0.3	375
-140-M42					140		69			50			105	3.2	41	0.5	376
-170-M42	2				170		28	71		53	67		135	4.2	41.4	0.4	377
A100-SLRB32-110-M42	1	32	54	11	110	42	39	—	58.4	63	—	50	77	3.2	26.9	0.2	378
-140-M42					140		69						107	3.7	33.4	0.3	379
-170-M42	2				170		28	71			77		132	4.9	42.8		380

主轴锥孔用 清洁工具 STAR DUST

型号
CLT-A100-G3

P.194



φ70 加热喷头 (HRB-03S-230AS)

SLRB32刀柄加热时必需品

型号
HRB-NZL70



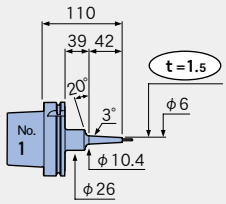


HEAT ROBO Baby 3000S

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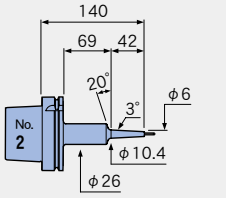
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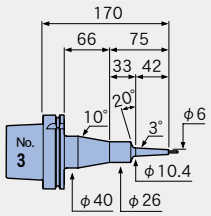
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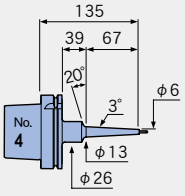
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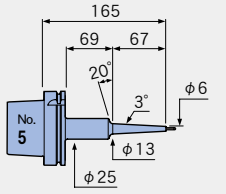
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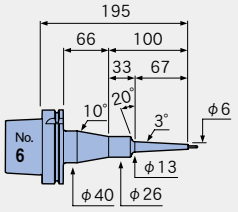
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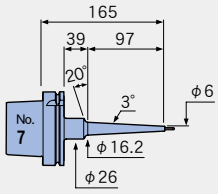
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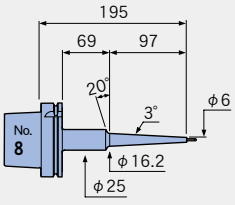
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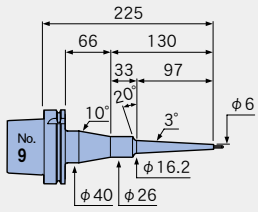
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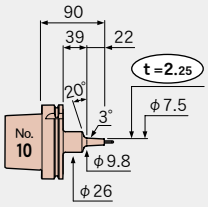
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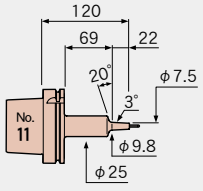
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A100-SLRA3-90-M22



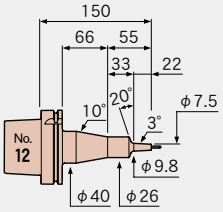
2.9

A100-SLRA3-120-M22



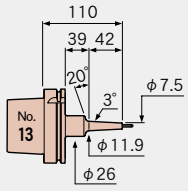
3.3

A100-SLRA3-150-M22



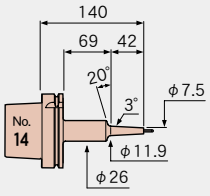
3.2

A100-SLRA3-110-M42



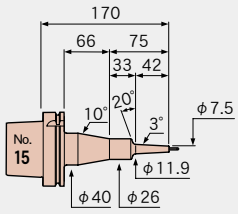
5.5

A100-SLRA3-140-M42



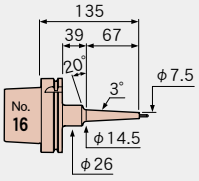
6.1

A100-SLRA3-170-M42



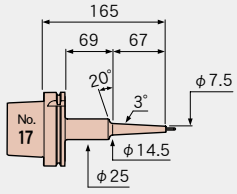
6.0

A100-SLRA3-135-M67



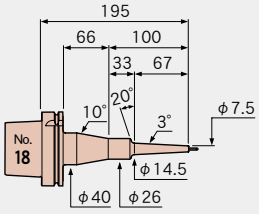
9.0

A100-SLRA3-165-M67



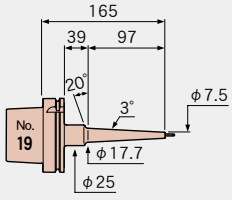
10.1

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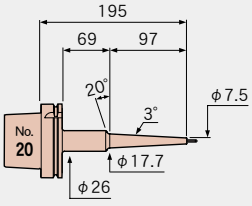
9.9

A100-SLRA3-165-M97



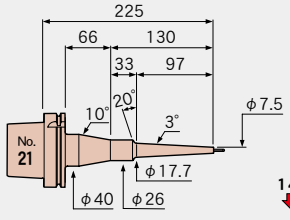
13.1

A100-SLRA3-195-M97



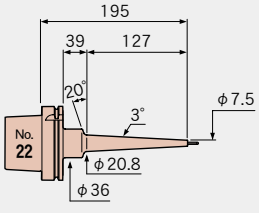
14.7

A100-SLRA3-225-M97



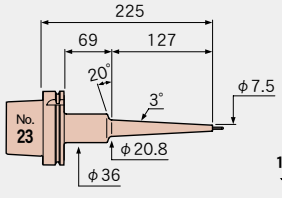
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A100-SLRA3-195-M127



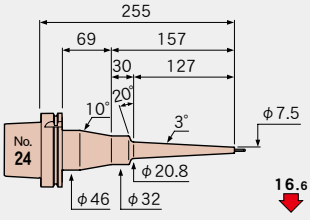
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A100-SLRA3-225-M127



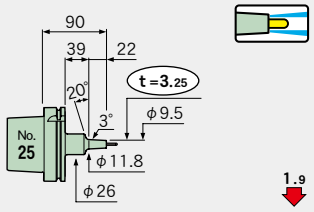
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A100-SLRA3-255-M127



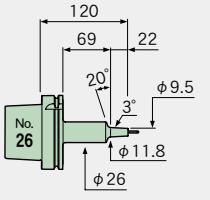
16.6

A100-SLFB3-90-M22



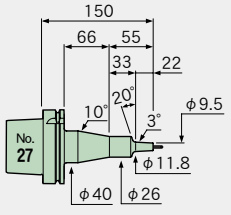
1.9

A100-SLFB3-120-M22



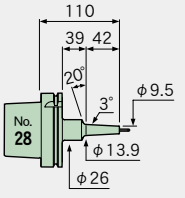
2.3

A100-SLFB3-150-M22



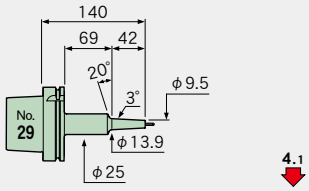
2.3

A100-SLFB3-110-M42



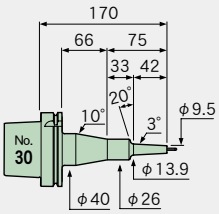
3.3

A100-SLFB3-140-M42



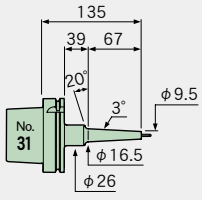
4.1

A100-SLFB3-170-M42



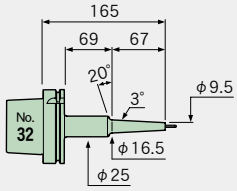
3.9

A100-SLFB3-135-M67



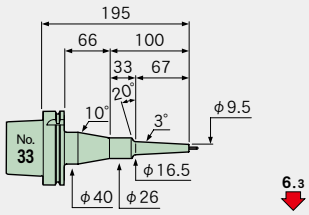
5.5

A100-SLFB3-165-M67



6.7

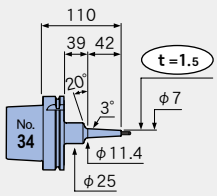
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6.3

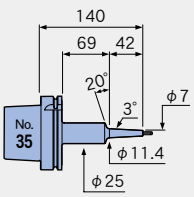
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A100-SLSA4-110-M42



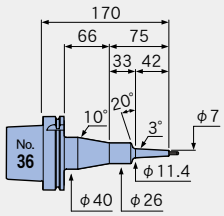
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A100-SLSA4-140-M42



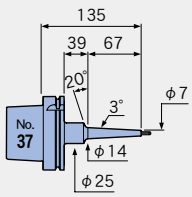
8.0

A100-SLSA4-170-M42



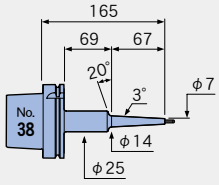
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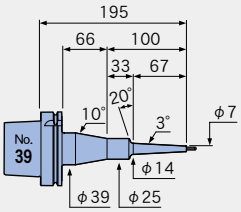
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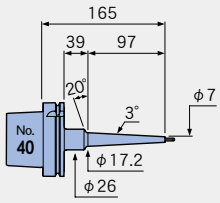
13.1

A100-SLSA4-195-M67



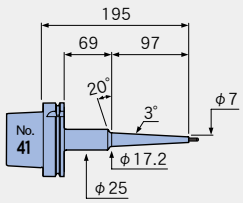
12.9

A100-SLSA4-165-M97



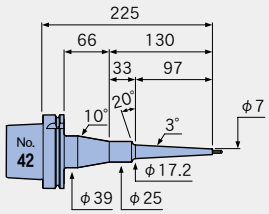
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A100-SLSA4-195-M97



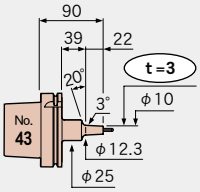
18.7

A100-SLSA4-225-M97



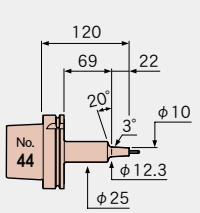
18.3

A100-SLRA4-90-M22



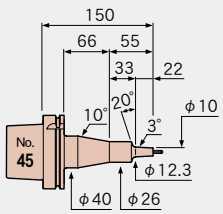
1.8

A100-SLRA4-120-M22



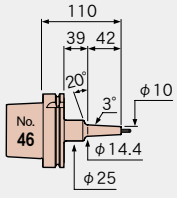
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A100-SLRA4-150-M22



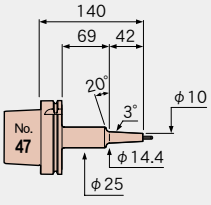
2.2

A100-SLRA4-110-M42



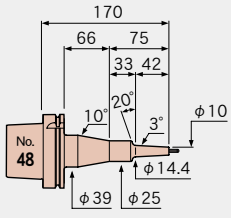
3.2

A100-SLRA4-140-M42



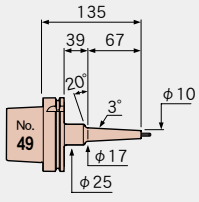
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A100-SLRA4-170-M42



3.8

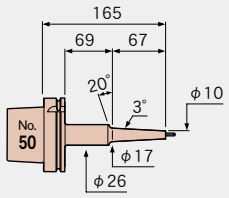
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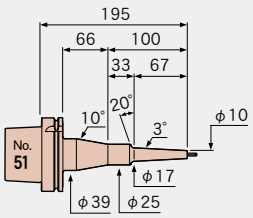
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A100 S=1:10

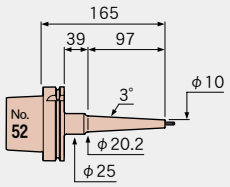
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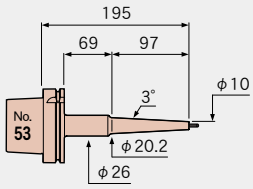
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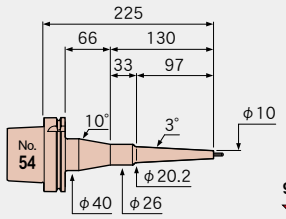
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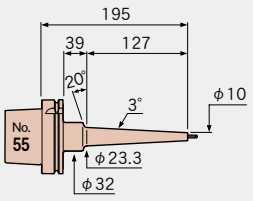
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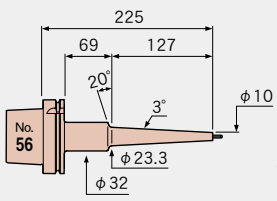
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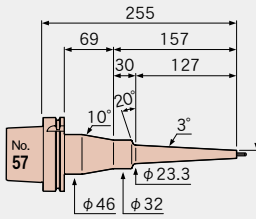
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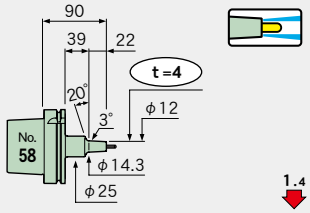
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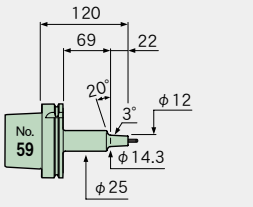
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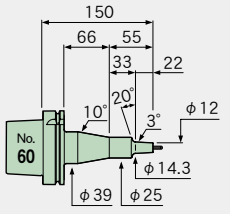
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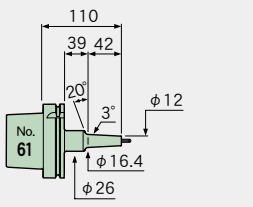
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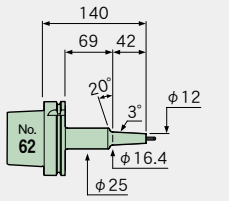
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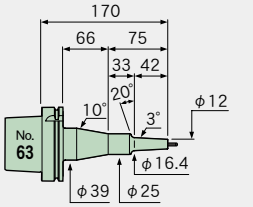
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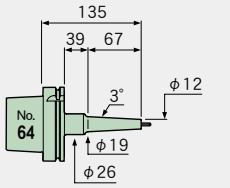
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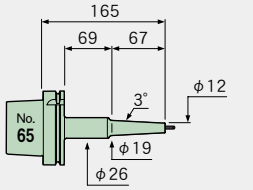
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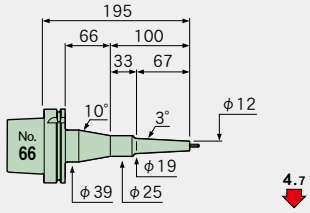
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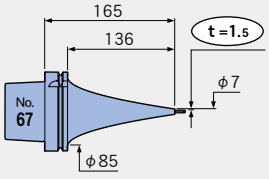
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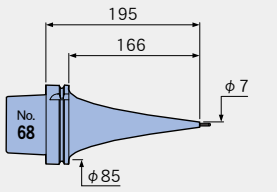
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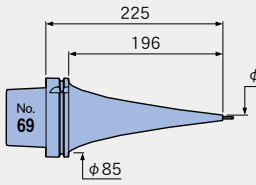
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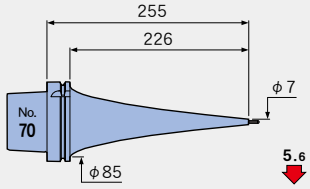
A100-SLSA4-195 CV



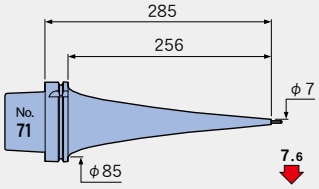
A100-SLSA4-225 CV



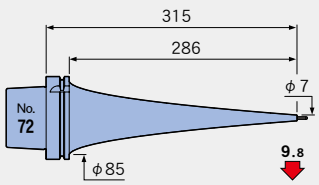
A100-SLSA4-255 CV



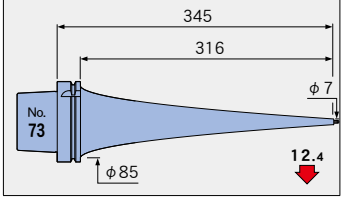
A100-SLSA4-285 CV



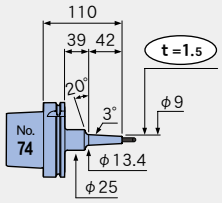
A100-SLSA4-315 CV



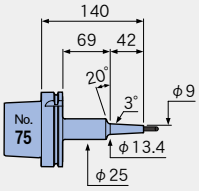
A100-SLSA4-345 CV



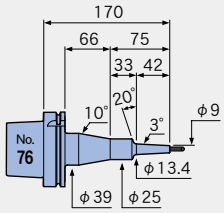
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A100-SLSA6-110-M42


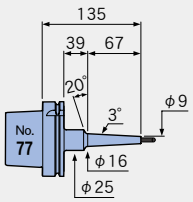
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A100-SLSA6-140-M42


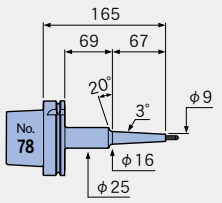
5.8

A100-SLSA6-170-M42


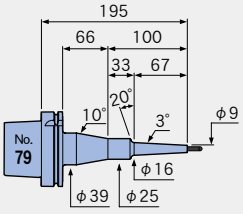
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A100-SLSA6-135-M67


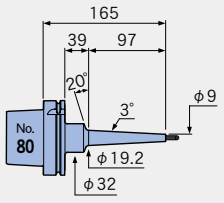
8.2

A100-SLSA6-165-M67


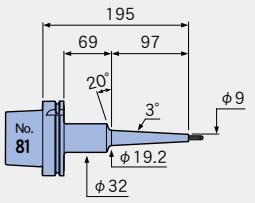
9.5

A100-SLSA6-195-M67


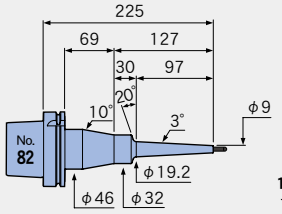
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A100-SLSA6-165-M97


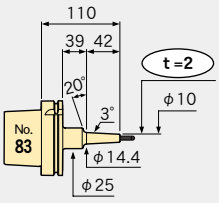
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A100-SLSA6-195-M97


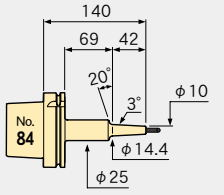
11.9

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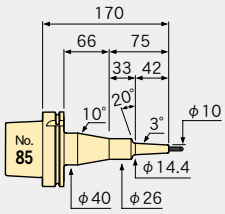
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A100-SLSB6-110-M42


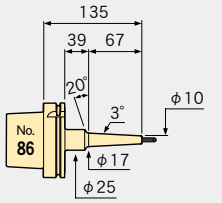
3.8

A100-SLSB6-140-M42


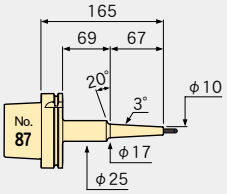
4.7

A100-SLSB6-170-M42


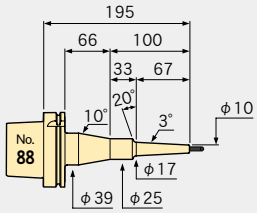
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A100-SLSB6-135-M67


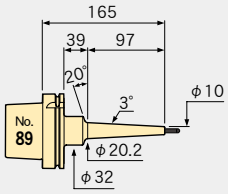
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A100-SLSB6-165-M67


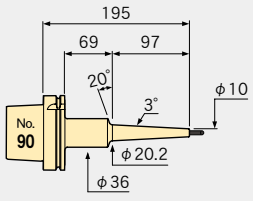
7.7

A100-SLSB6-195-M67


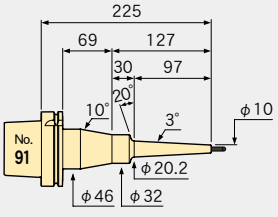
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A100-SLSB6-165-M97


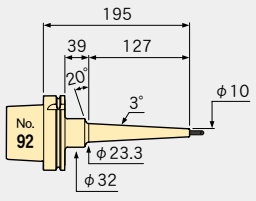
8.6

A100-SLSB6-195-M97


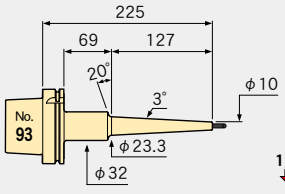
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A100-SLSB6-225-M97


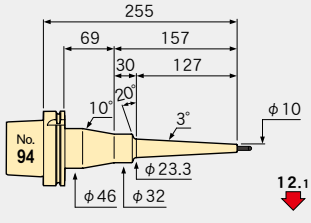
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A100-SLSB6-195-M127


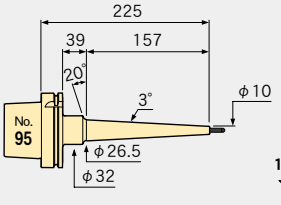
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A100-SLSB6-225-M127


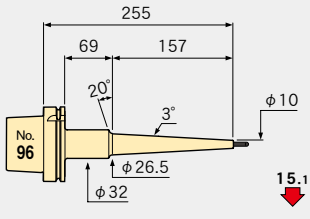
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A100-SLSB6-255-M127


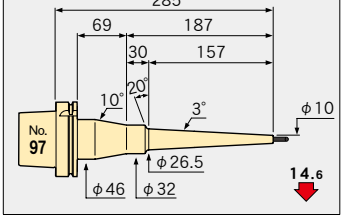
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A100-SLSB6-225-M157


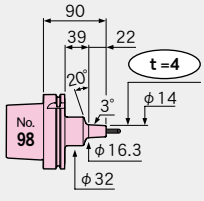
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A100-SLSB6-255-M157


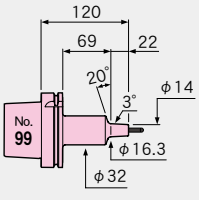
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A100-SLSB6-285-M157


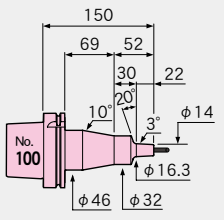
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A100-SLRB6-90-M22


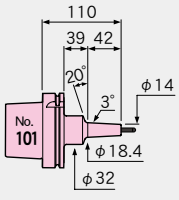
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A100-SLRB6-120-M22


1.2

A100-SLRB6-150-M22


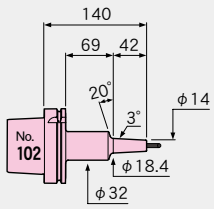
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A100-SLRB6-110-M42


1.6

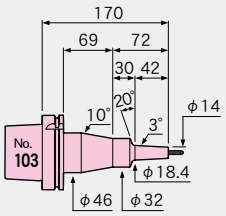
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A100-SLRB6-140-M42



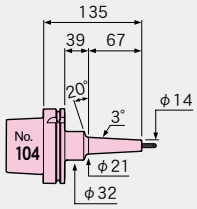
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A100-SLRB6-170-M42



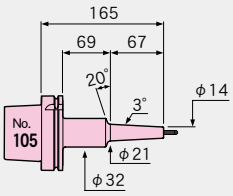
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A100-SLRB6-135-M67



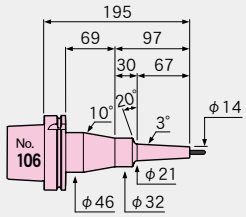
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A100-SLRB6-165-M67



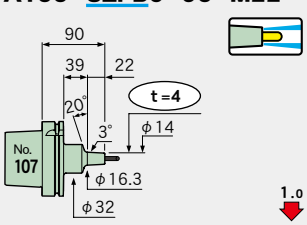
3.2

A100-SLRB6-195-M67



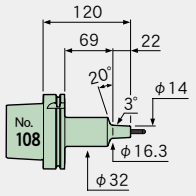
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A100-SLFB6-90-M22



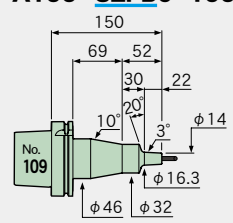
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A100-SLFB6-120-M22



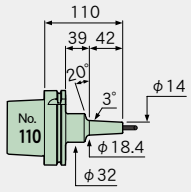
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A100-SLFB6-150-M22



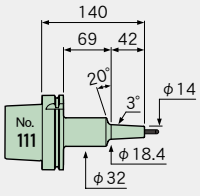
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A100-SLFB6-110-M42



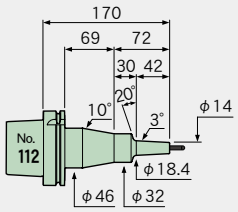
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A100-SLFB6-140-M42



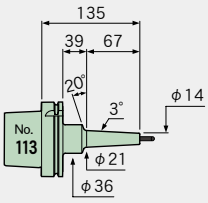
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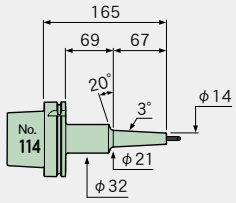
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A100-SLFB6-135-M67



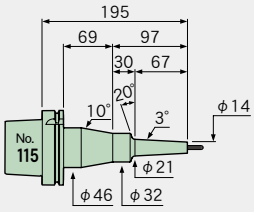
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A100-SLFB6-165-M67



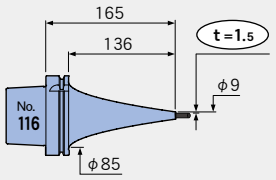
3.2

A100-SLFB6-195-M67



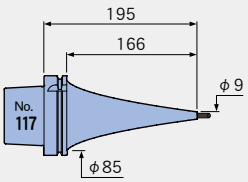
3.1

A100-SLSA6-165 CV



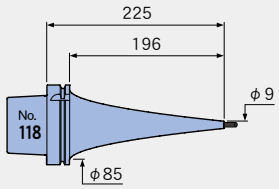
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A100-SLSA6-195 CV



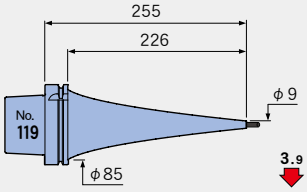
2.3

A100-SLSA6-225 CV



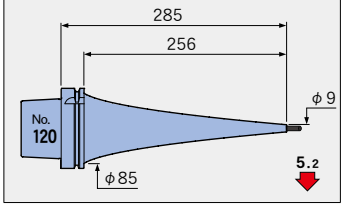
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A100-SLSA6-255 CV



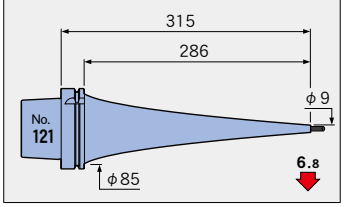
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A100-SLSA6-285 CV



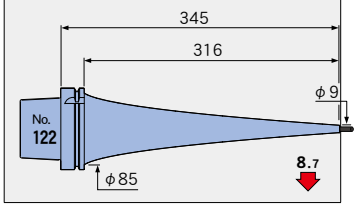
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A100-SLSA6-315 CV



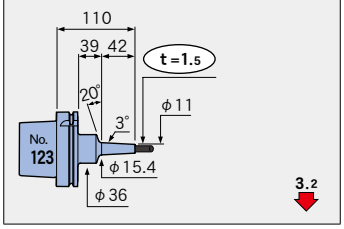
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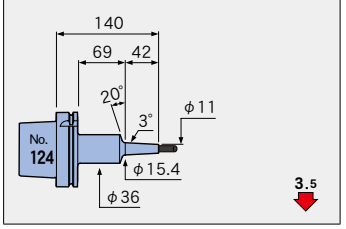
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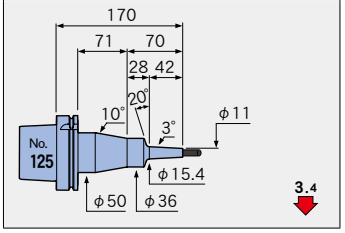


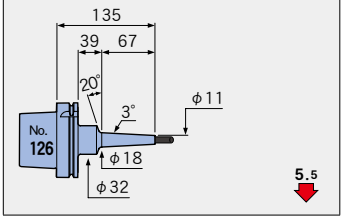
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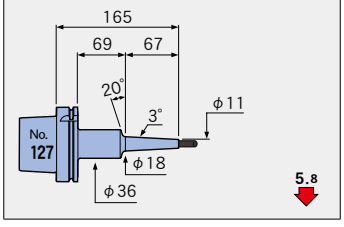
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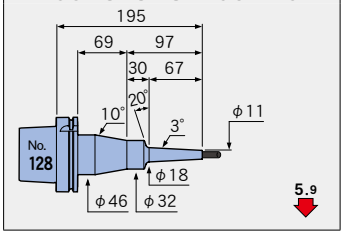
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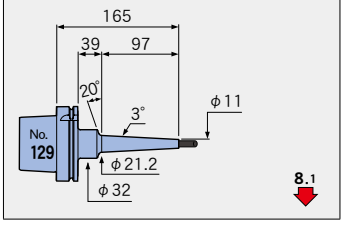
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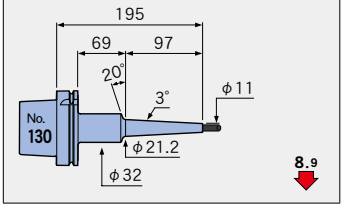
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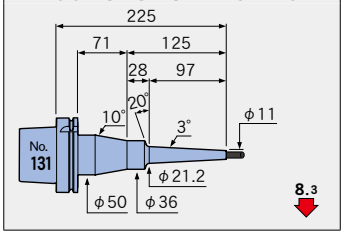
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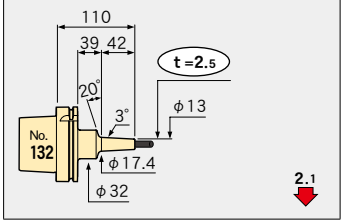
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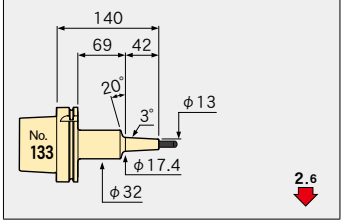
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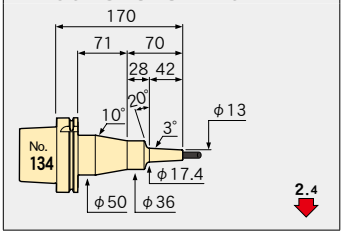
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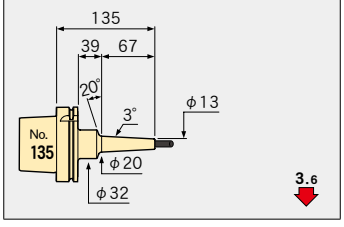
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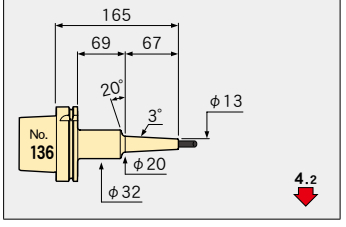
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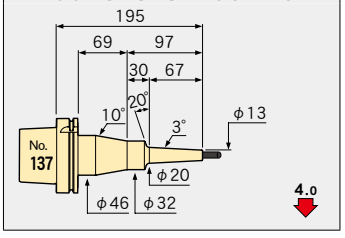
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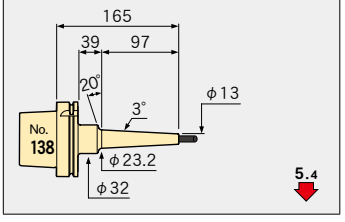
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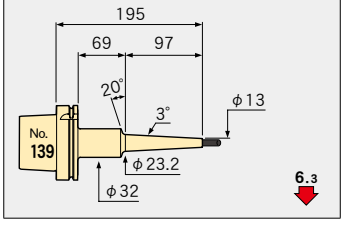
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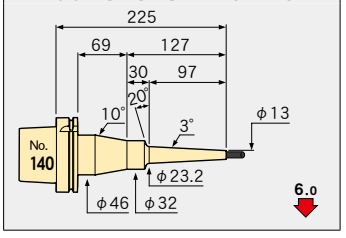
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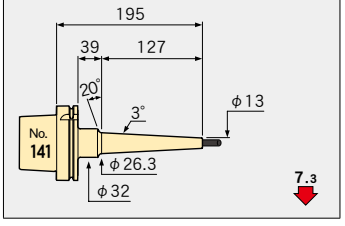
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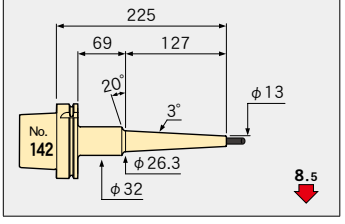
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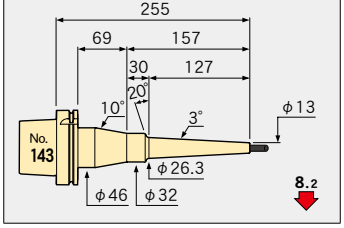
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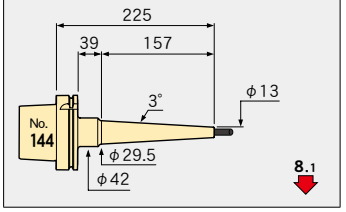
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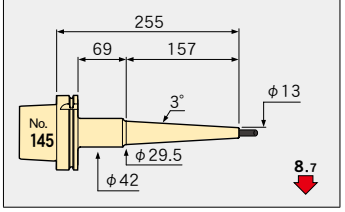
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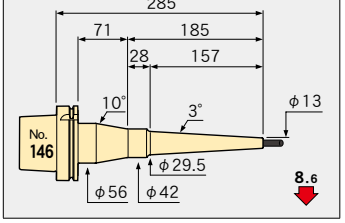
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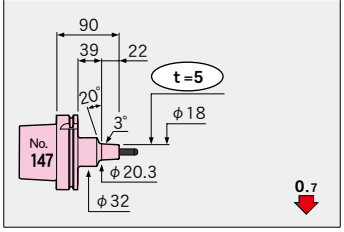
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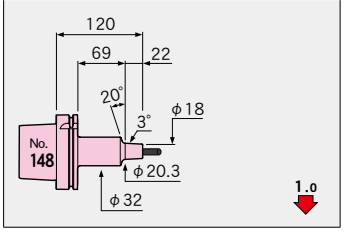
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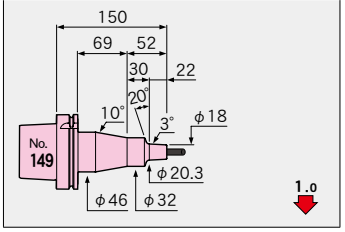
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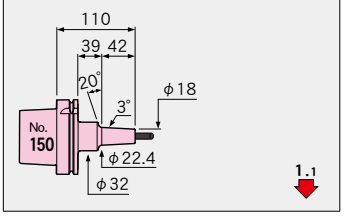
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A100-SLSB8-285-M157


A100-SLRB8-90-M22


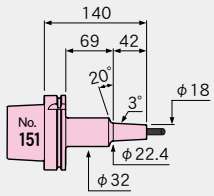
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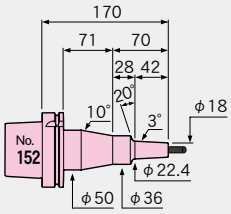
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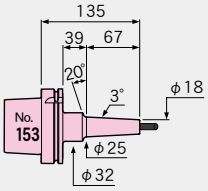
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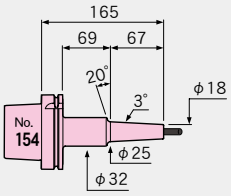
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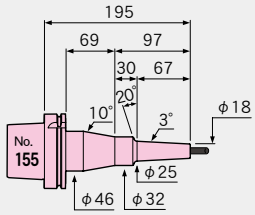
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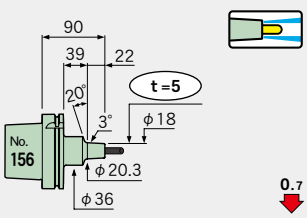
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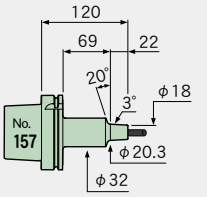
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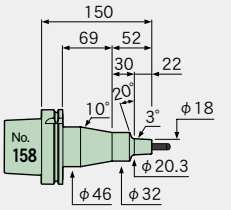
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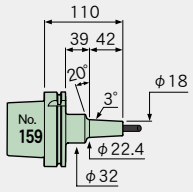
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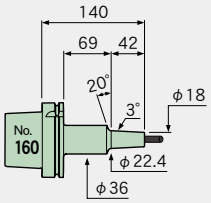
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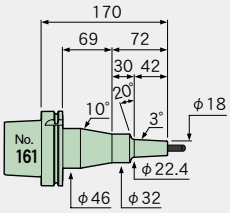
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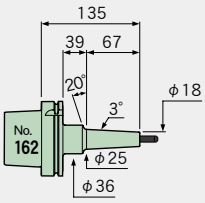
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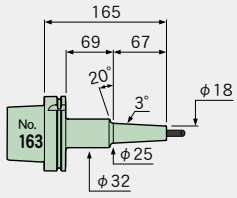
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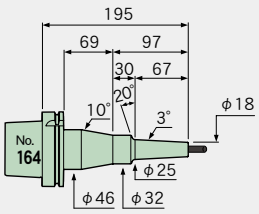
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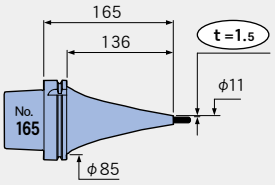
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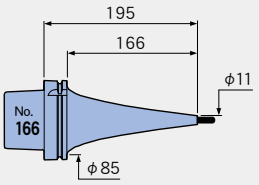
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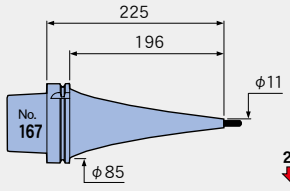
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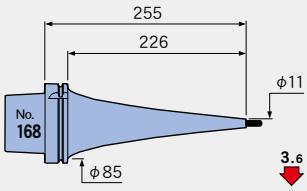
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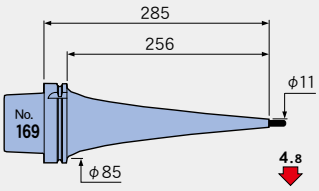
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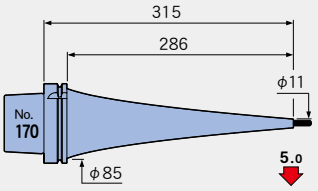
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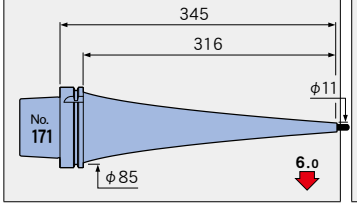
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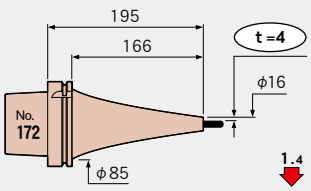
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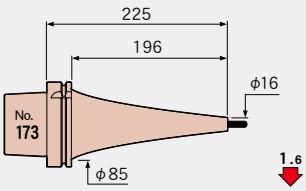
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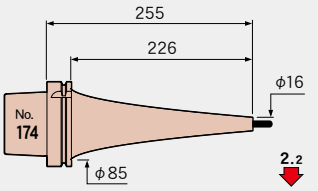
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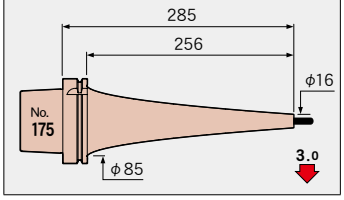
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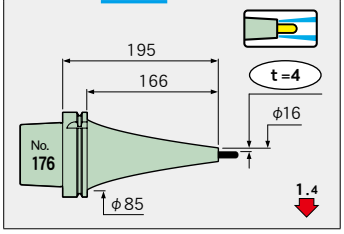
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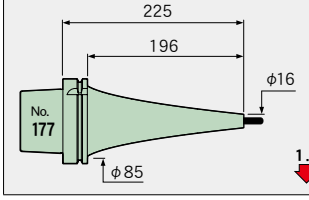
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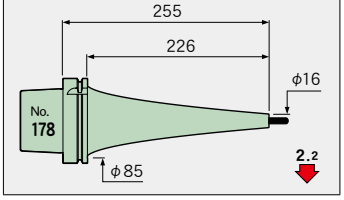
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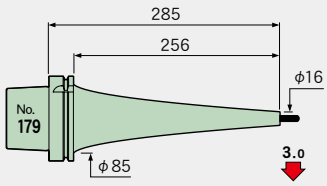
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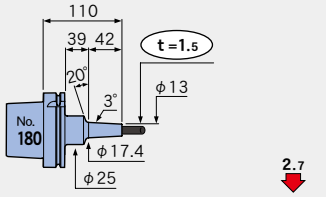


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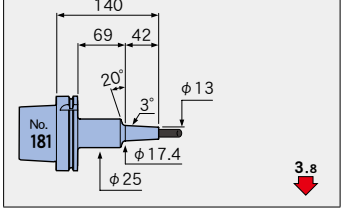


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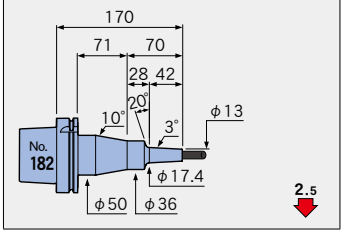
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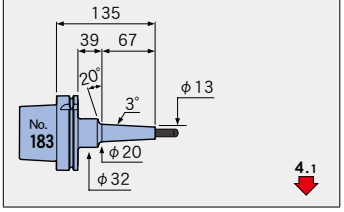
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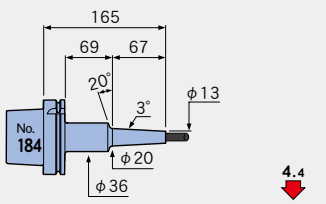
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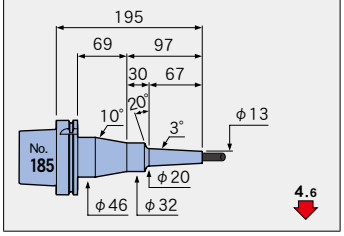
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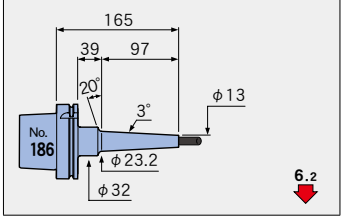
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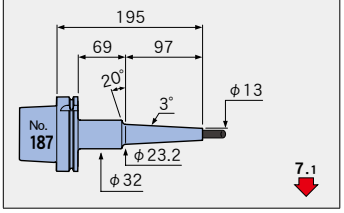
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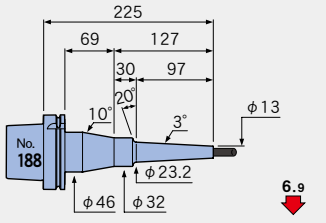
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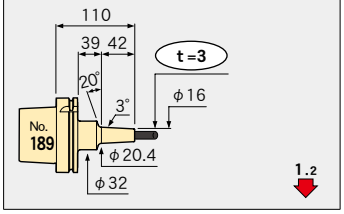
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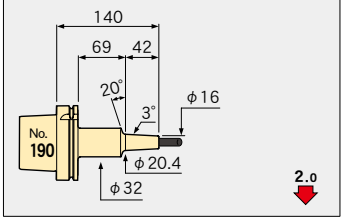
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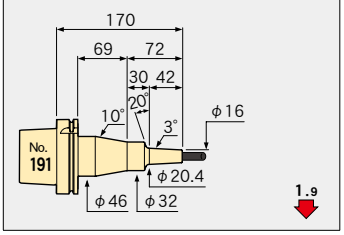
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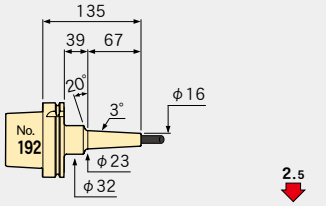
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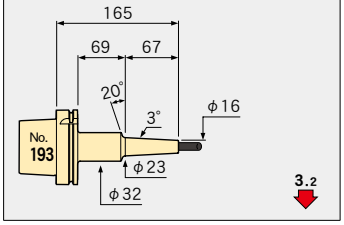
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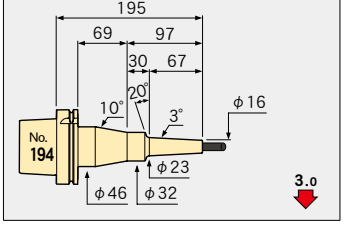
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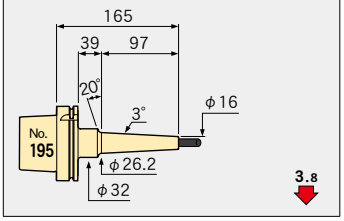
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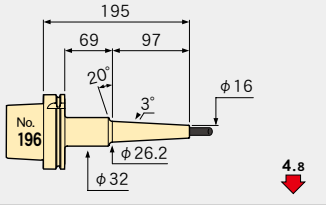
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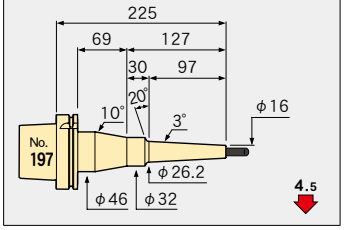
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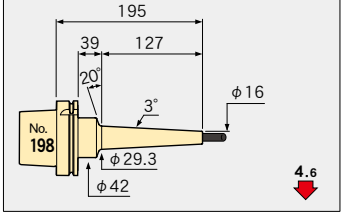
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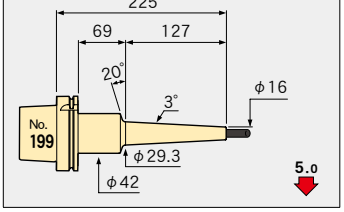
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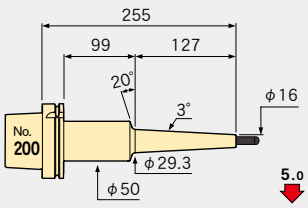


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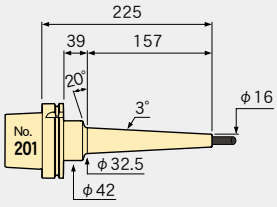


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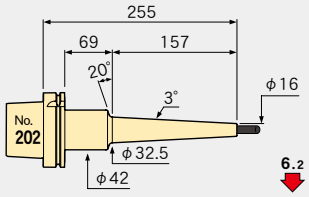
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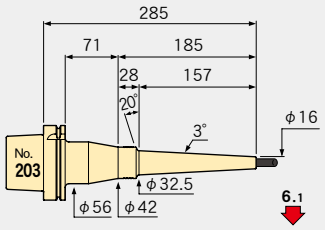
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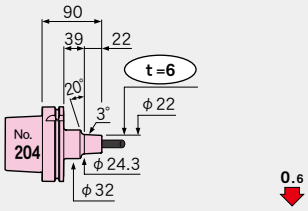
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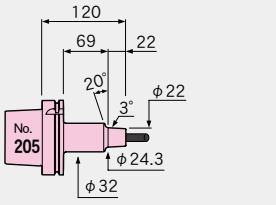
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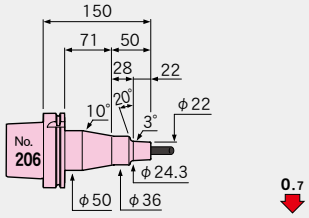
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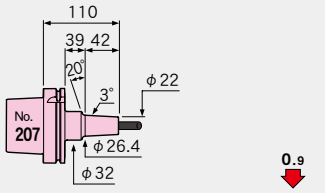
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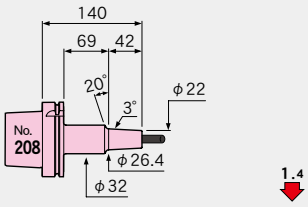
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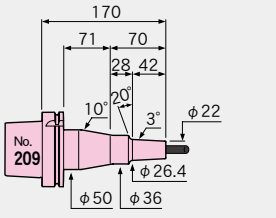
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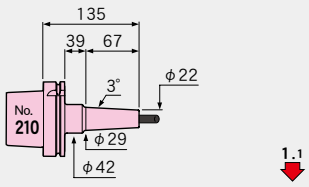
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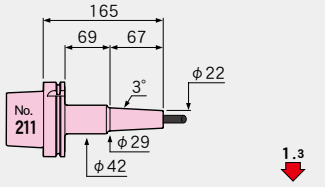
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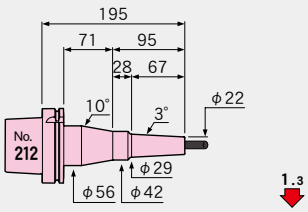
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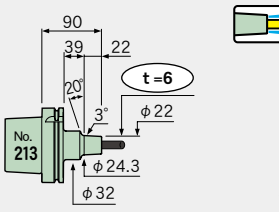
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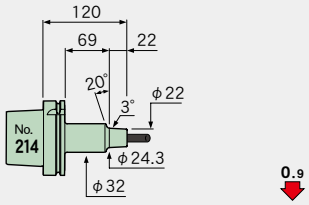
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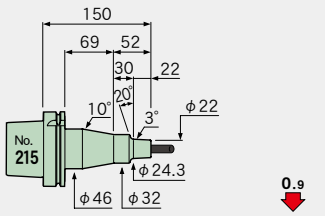
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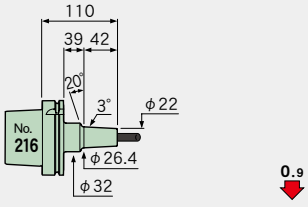
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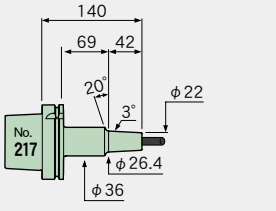
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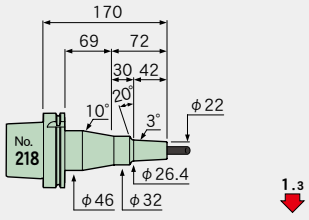
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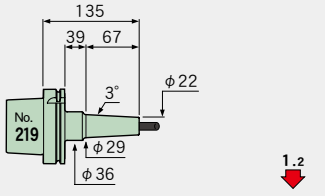
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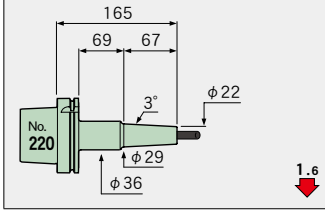
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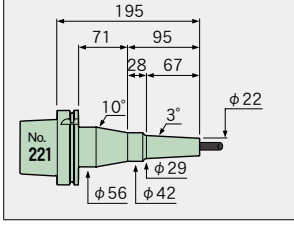
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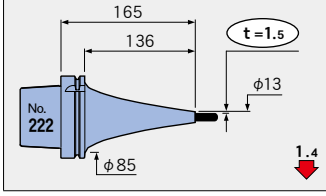
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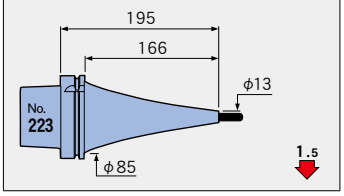
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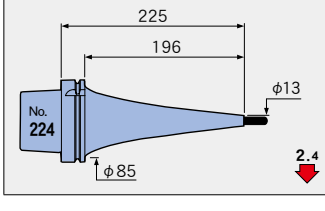
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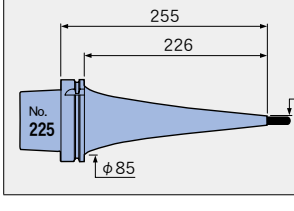
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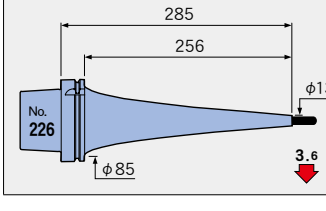
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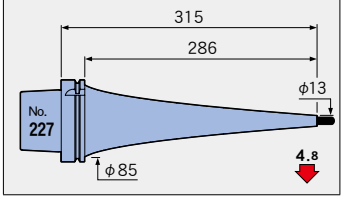
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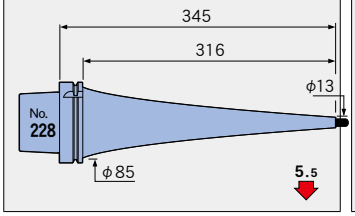
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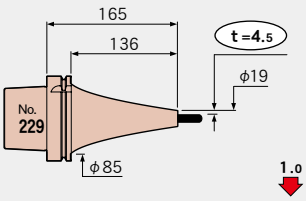
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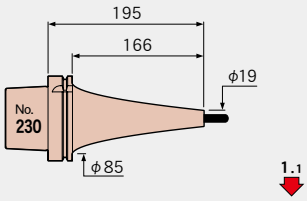
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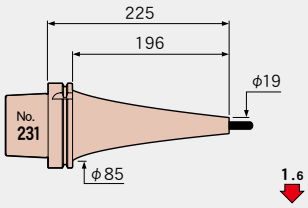
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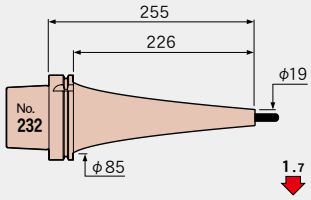
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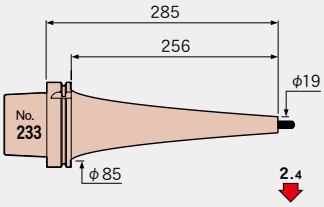
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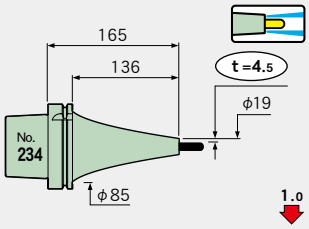
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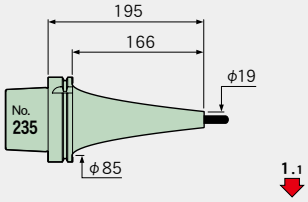
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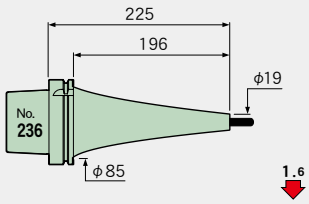
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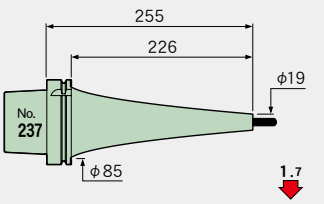
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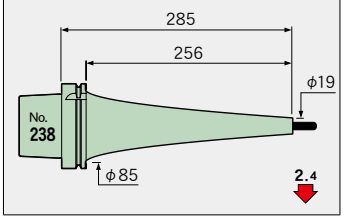
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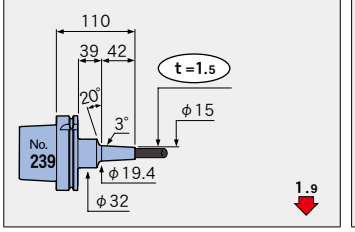


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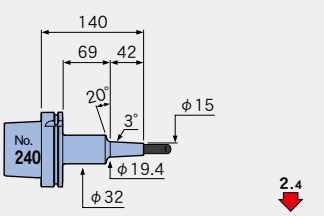


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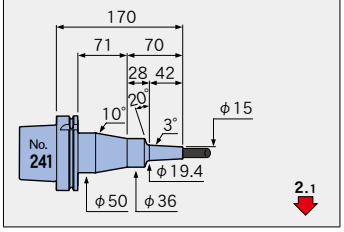
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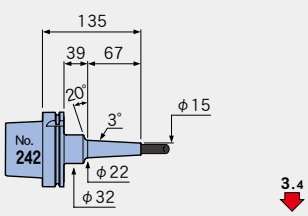
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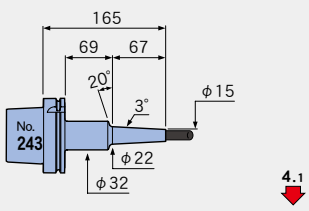
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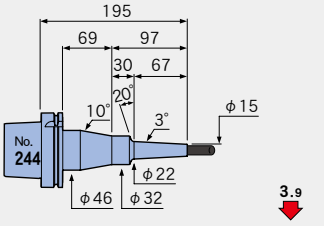
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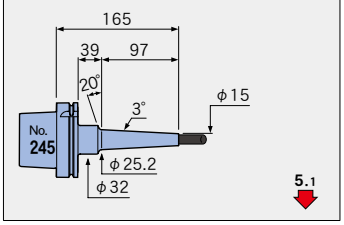
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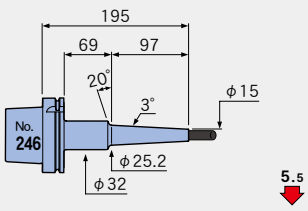
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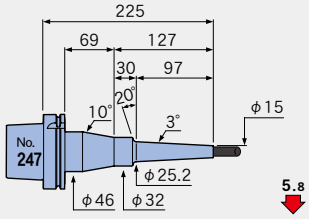
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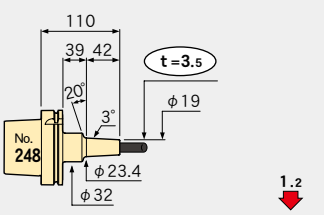
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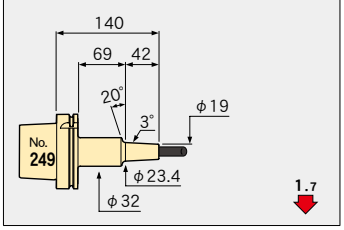
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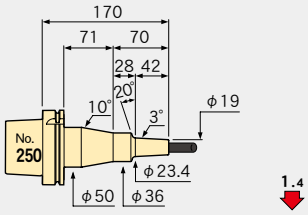
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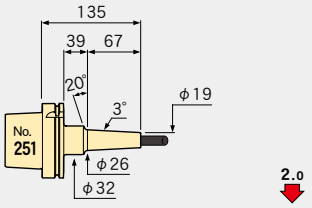


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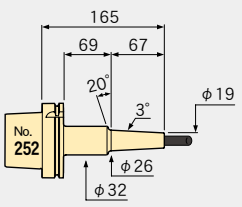


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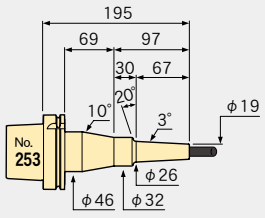
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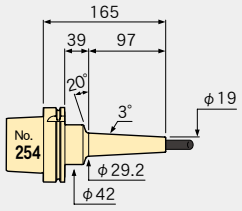
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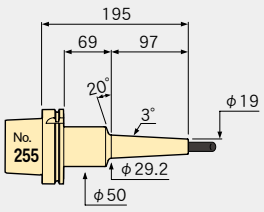
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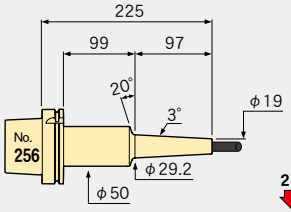
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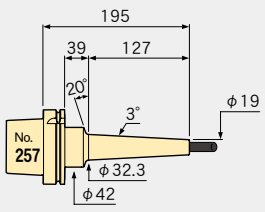
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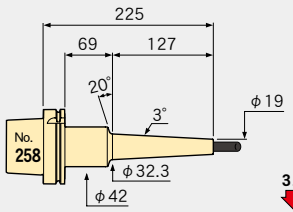
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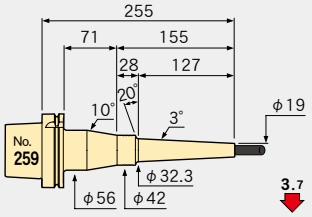
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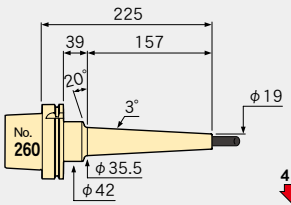
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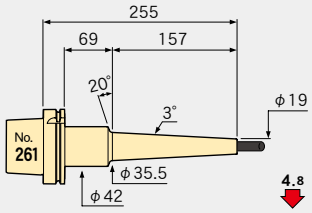
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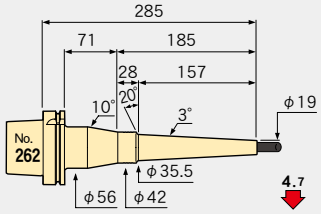
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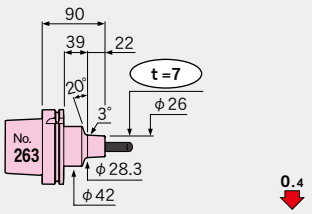
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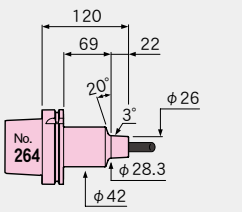
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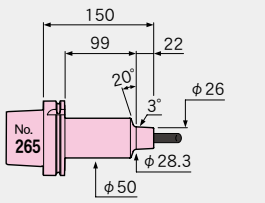
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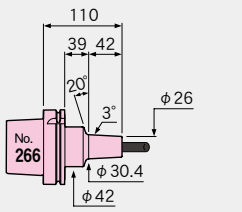
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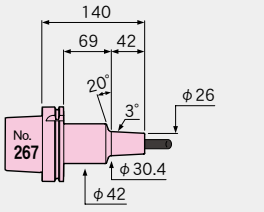
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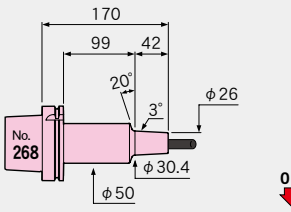
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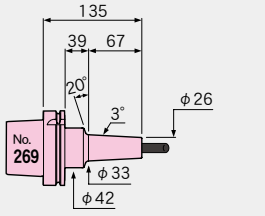
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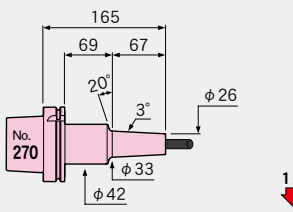
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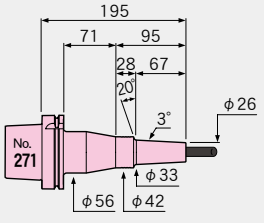
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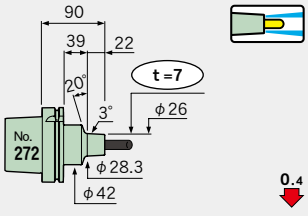
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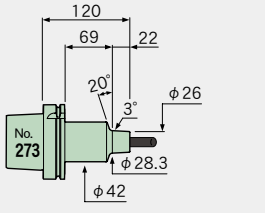
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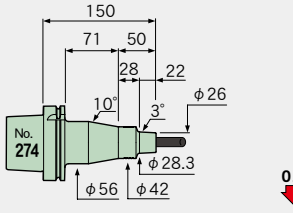
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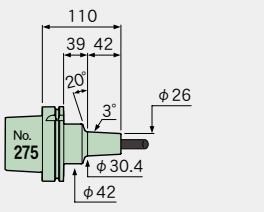
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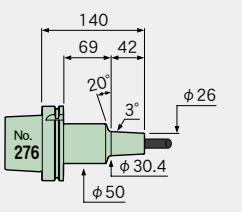
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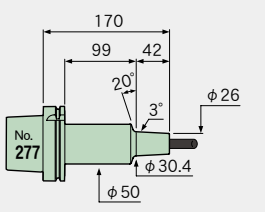
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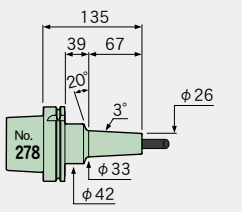
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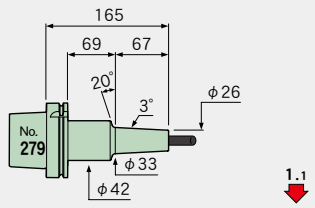
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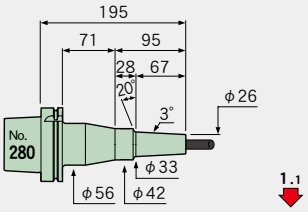
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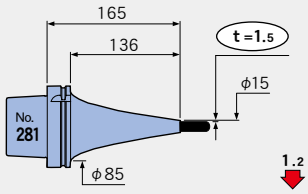
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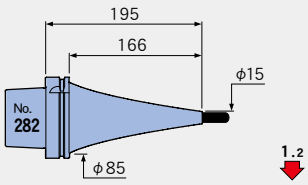
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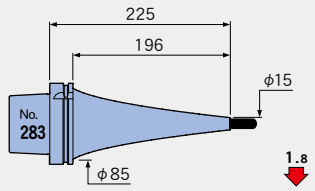
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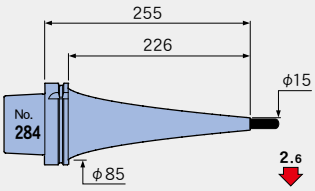
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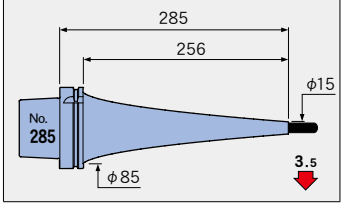
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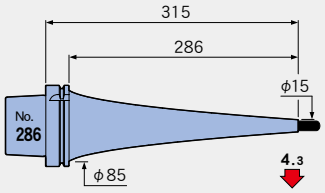
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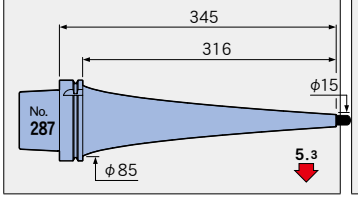
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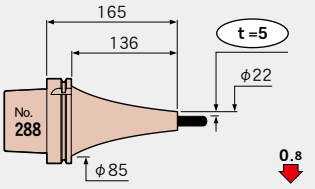
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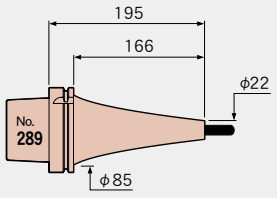
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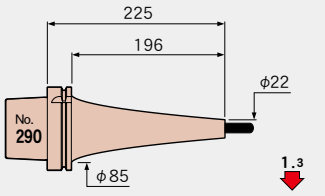
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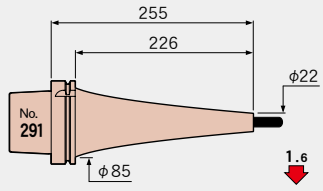
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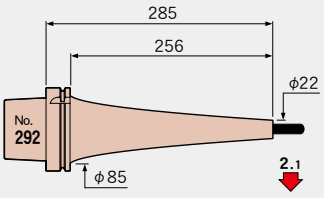
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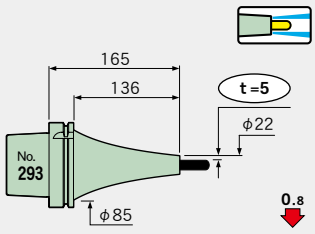
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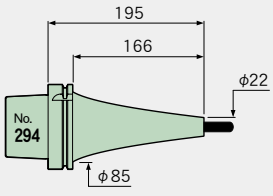
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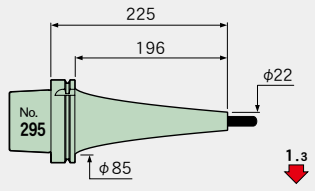
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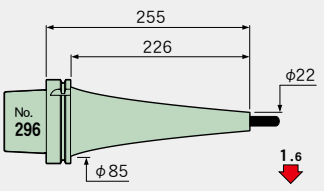
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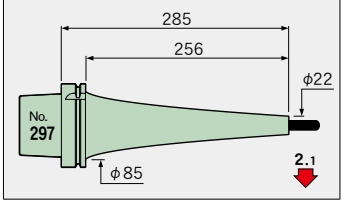
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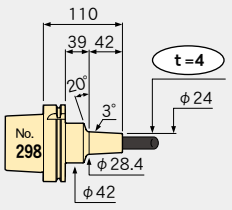
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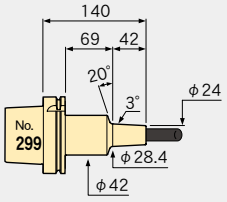
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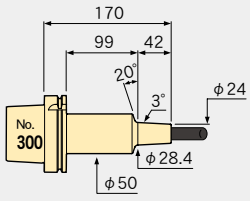
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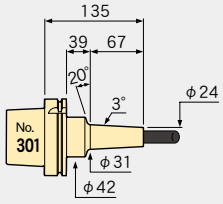
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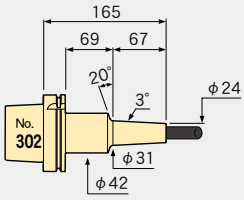
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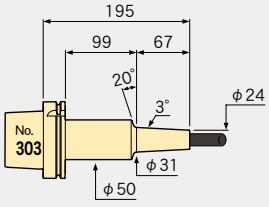
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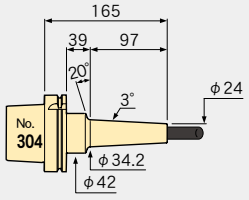
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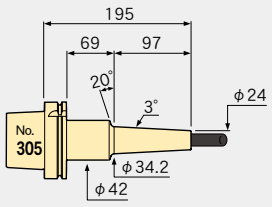
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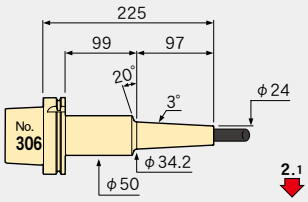
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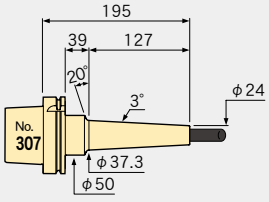
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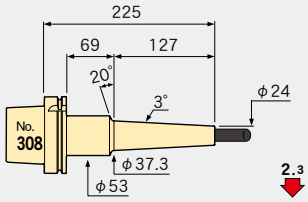
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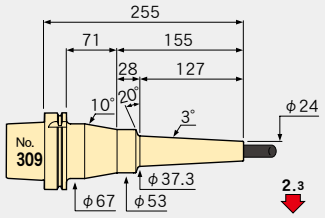
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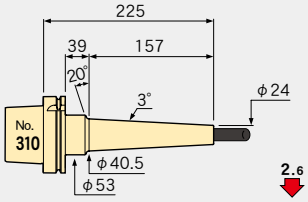
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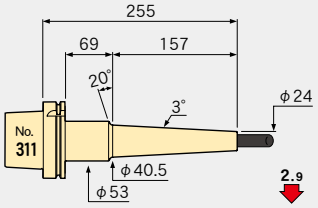
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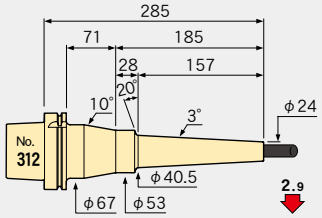
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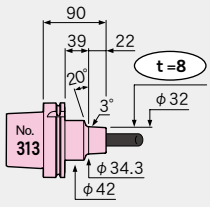
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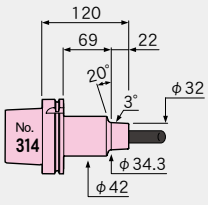
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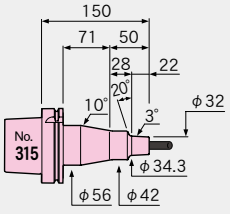
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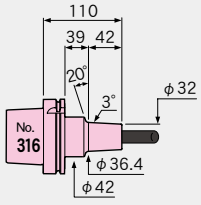
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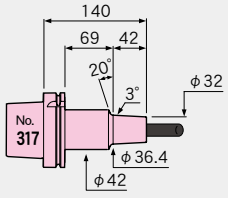
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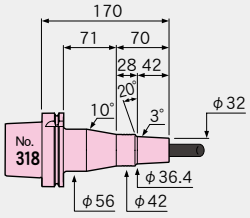
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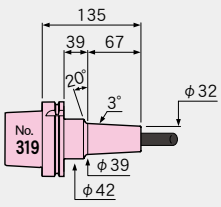
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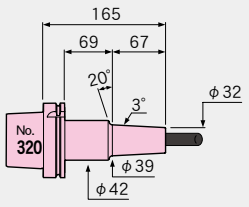
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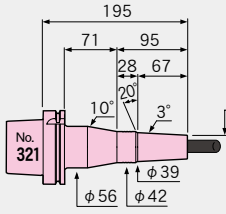
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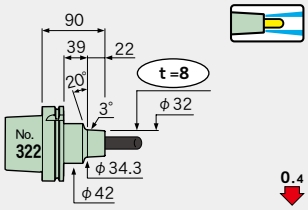
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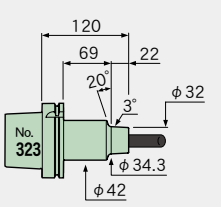
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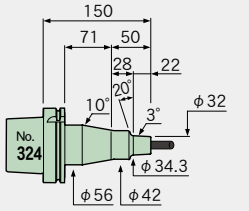
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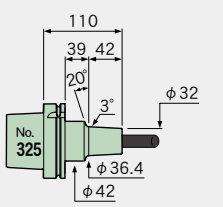
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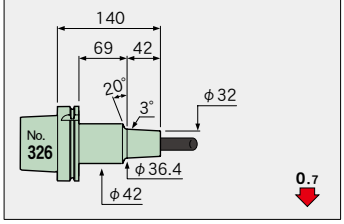
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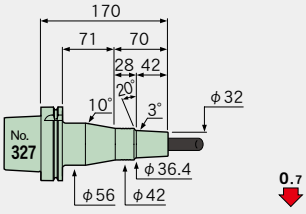
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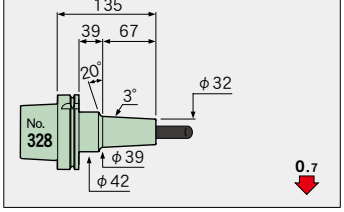
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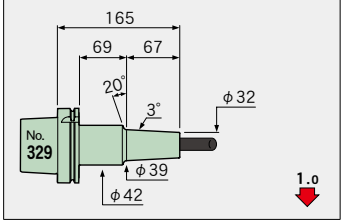
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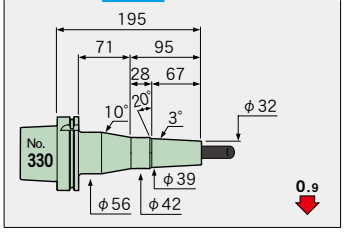
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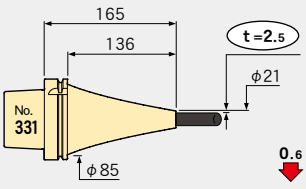
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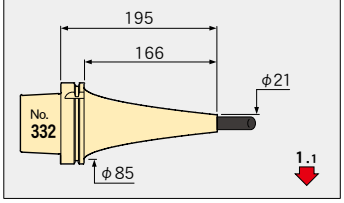
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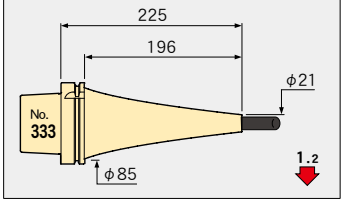
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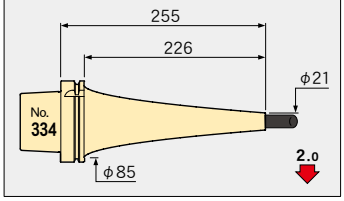
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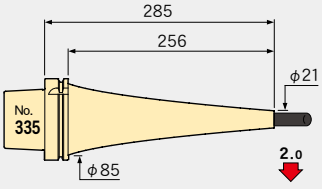
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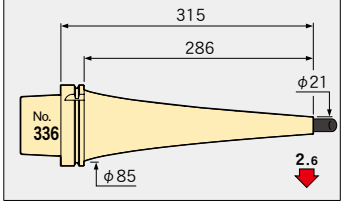
A100-SLSB16-255 CV



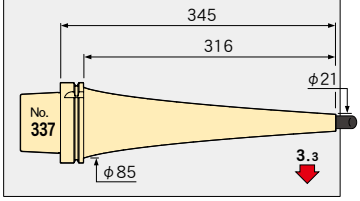
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A100-SLSB16-315 CV

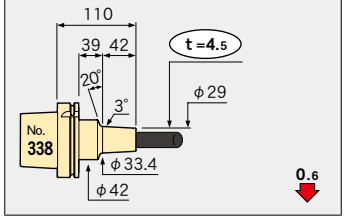


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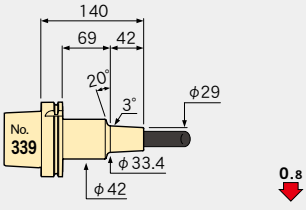


φ20

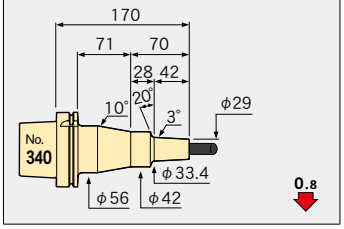
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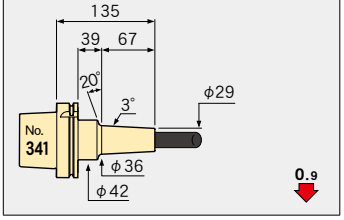
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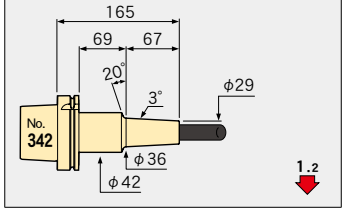
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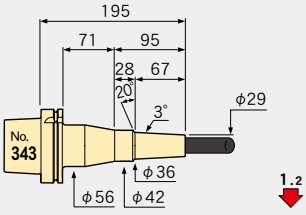
A100-SLSB20-135-M67



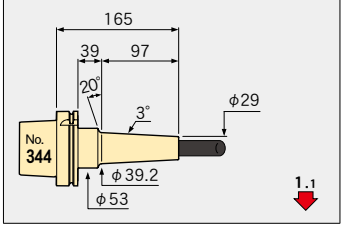
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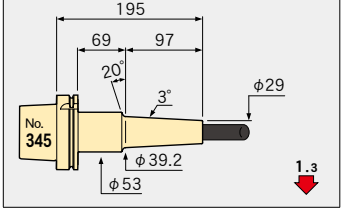
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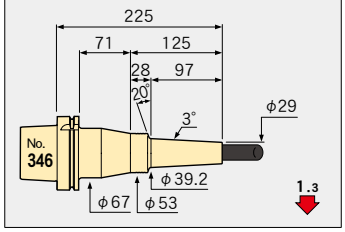
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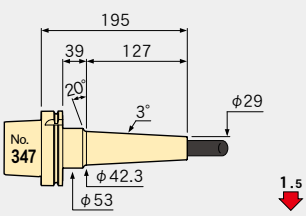
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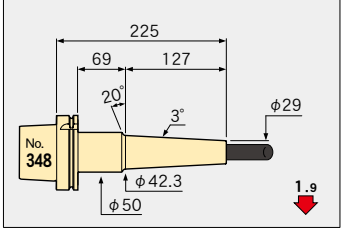
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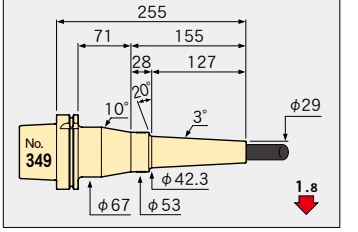
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A100-SLSB20-225-M127

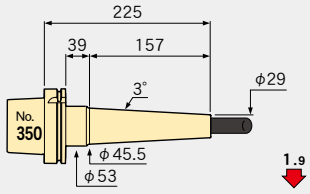


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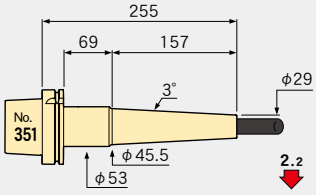


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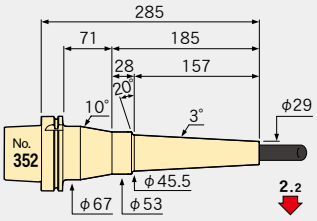
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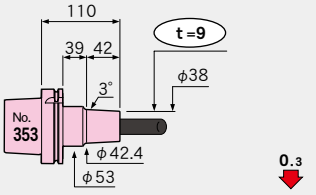
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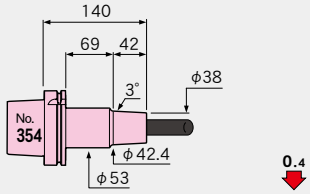
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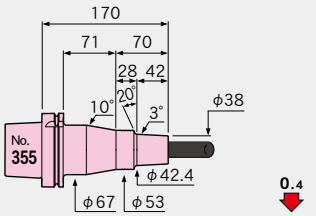
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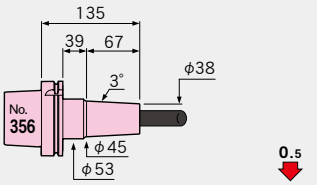
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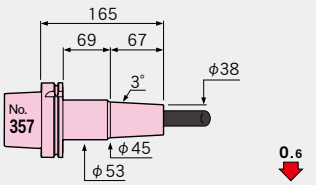
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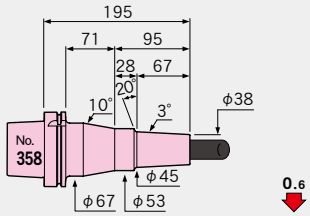
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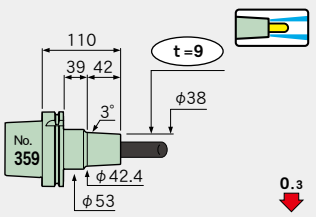
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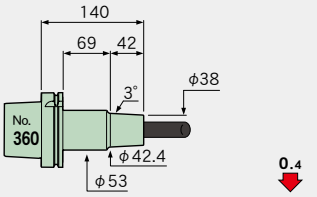
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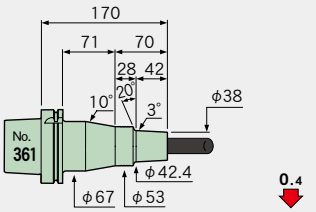
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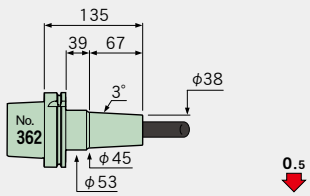
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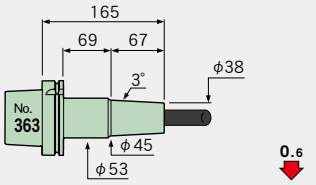
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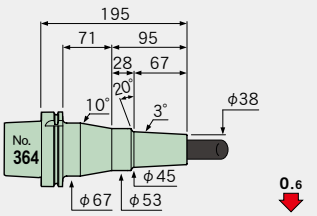
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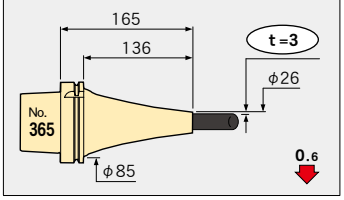
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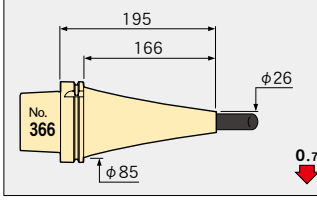
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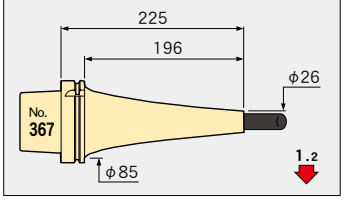
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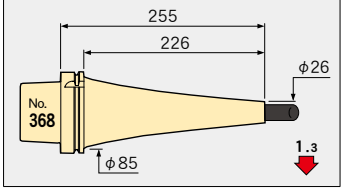
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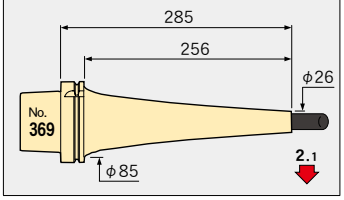
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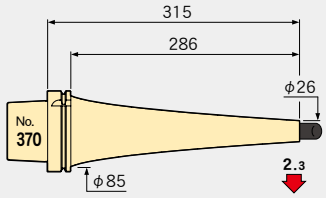
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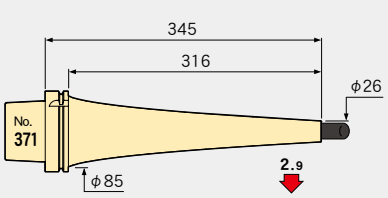
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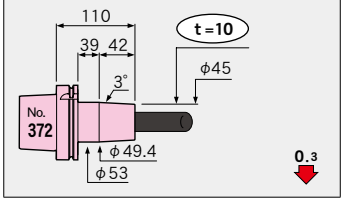


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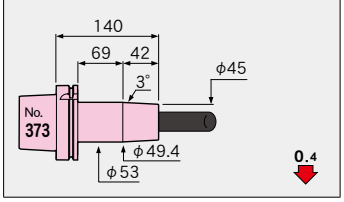


φ25

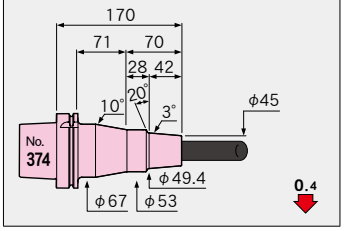
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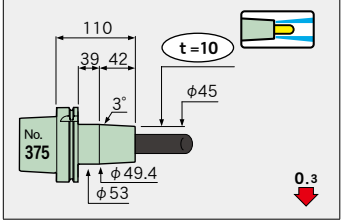
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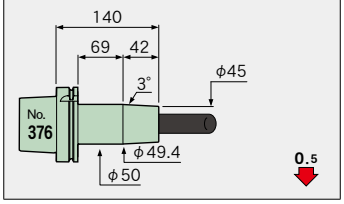
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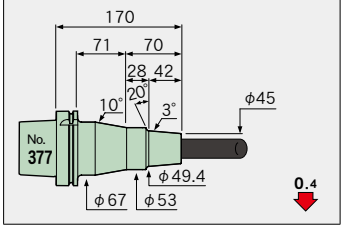
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A100-SLFB25-140-M42

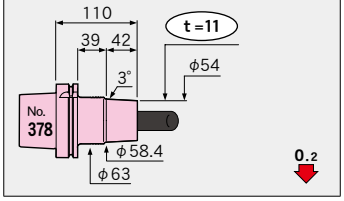


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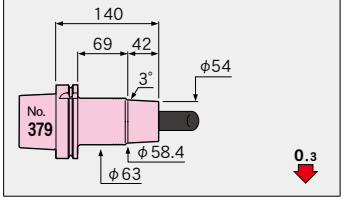


φ32

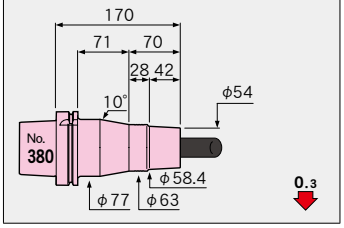
A100-SLRB32-110-M42



A100-SLRB32-140-M42



A100-SLRB32-170-M42



▮φ70 加热喷头 (HRB-03S-230AS)

SLRB32刀柄加热时必需品

型号
HRB-NZL70



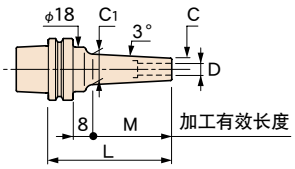


HEAT ROBO Baby 3000S

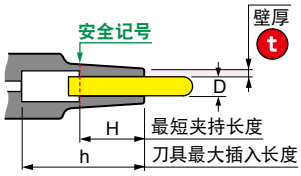
E25

一体型 3°





■注意事项
- HSK-E锥柄的刀柄没有附带冷却液导管。如需使用，请向敝司垂询。
- 刀具安装…插入刀具时，请务必将刀具插入比安全记号更深的位置。



壁厚

型号	φD	φC	t	L	M	φC1	H	h	Kg	N	S	缩略图
E25-SLSA3-35	3	6	1.5	35	17	7.8	9	29	0.06	0.37	3.6	1
-50				50	32	9.4		44		0.39	7	2
-SLRA3-35		7.5	2.25	35	17	9.3		29		0.37	2.3	3
E25-SLSA3.175-35	3.175	6.175	1.5	35	17	8	9	29	0.06	0.37	3.5	4
-50				50	32	9.6		44		0.39	6.6	5
E25-SLSA4-35	4	7	1.5	35	17	8.8	12	29	0.06	0.38	2.8	6
-50				50	32	10.4		44		0.4	5.3	7
-SLRA4-35		10	3	35	17	11.8		29		0.38	1.4	8
E25-SLSA5-35	5	8	1.5	35	17	9.8	15	26	0.06	0.38	2.2	9
E25-SLSA6-35	6	9	1.5	35	17	10.8	18	26	0.05	0.38	1.8	10
-50				50	32	12.4		39	0.07	0.43	3.6	11
-SLRA6-35		12	3	35	17	13.8		26		0.39	1.1	12

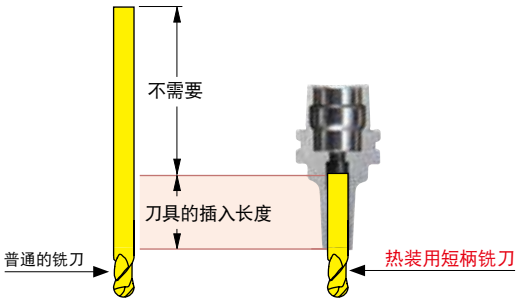
热装式刀柄用短柄硬质合金铣刀

超高速·小型加工中心用刀柄，由于刀具的插入量短，无需普通的长柄刀具。

热装用短柄铣刀 P. 206

柄部短 → 突出最短

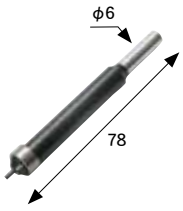
刃部短 → 刚性提高



▮中心测试棒

用于检测出加工物基准位置的测量棒。

型号
ST6-CEB102



▮测量用刀柄

请在工件中心调整时使用。
另外需要弹簧筒夹(C10-6-P)和中心测试棒(ST6-CEB102)。
手拧紧螺母规格。

型号
E25-CEH10-37

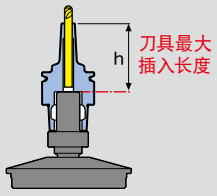


■注意事项
- 不能用于切削加工。

⚠留意最大插入长！

装夹刀具时如超过刀具最大插入长(h)，刀柄将无法准确被加工中心主轴夹持，产生故障。热装时，请使用专用的适配器（ADH-HSK25）。





ADH-HSK25 使用例

▮主轴锥孔用 清洁工具 STAR DUST

型号
CLT-E25-G1

P. 194



▮刀柄台

P. 14

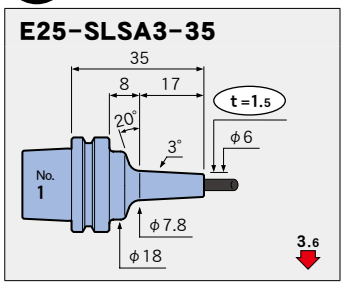


SODICK	UH430L / UH650L TT1-400A / OPM series
MITSUI SEIKI	VL30 / VL50
ROKU-ROKU	P12-C genesis / Android II MEGA series / HC-435
YASDA	YMC series

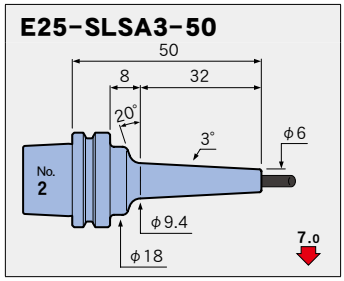


φ3

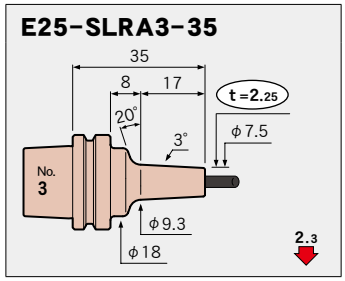
E25-SLSA3-35



E25-SLSA3-50

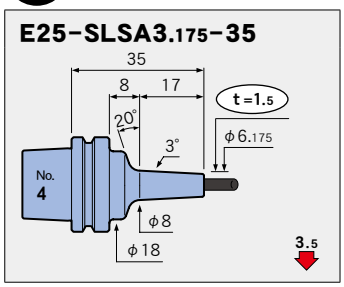


E25-SLRA3-35

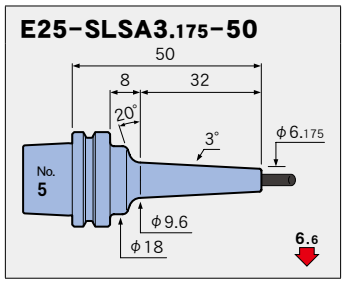


φ3.175

E25-SLSA3.175-35

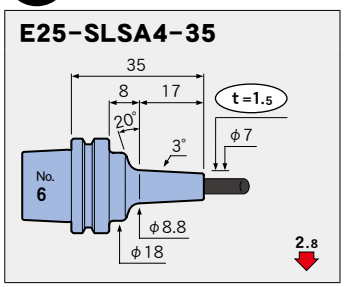


E25-SLSA3.175-50

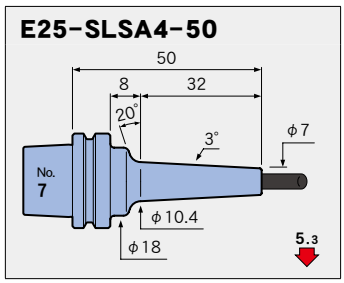


φ4

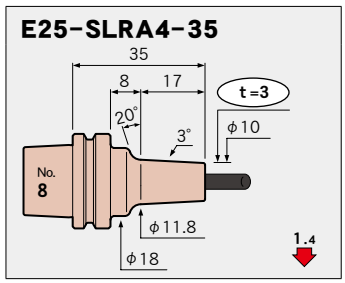
E25-SLSA4-35



E25-SLSA4-50

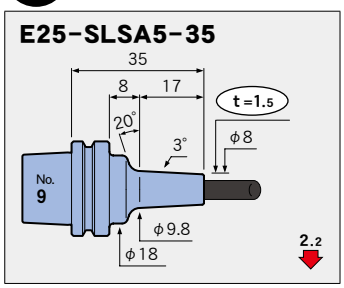


E25-SLRA4-35



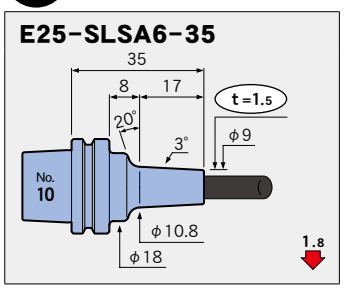
φ5

E25-SLSA5-35

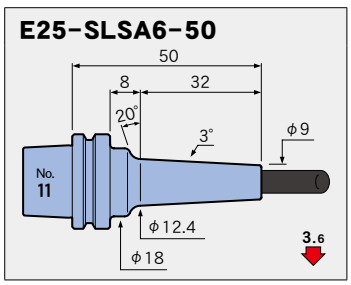


φ6

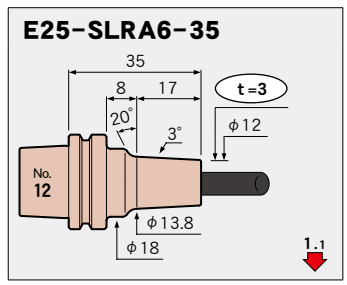
E25-SLSA6-35



E25-SLSA6-50



E25-SLRA6-35



E32

一体型 3°



E32-SLRA4-50-M22

Fig. 1

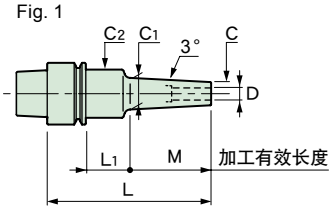
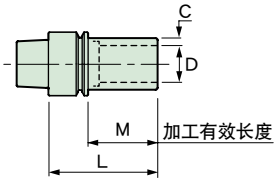
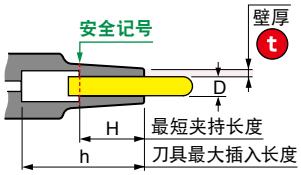


Fig. 2



■注意事项
- HSK-E锥柄的刀柄没有附带冷却液导管。如需使用,请向敝司垂询。
- 刀具安装…插入刀具时,请务必将刀具插入比安全记号更深的位置。

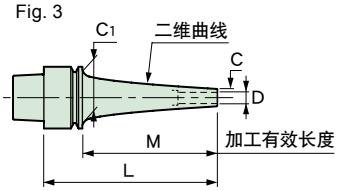


一体型 CURVE CV



E32-SLSA6-90 cv

Fig. 3



CV：曲线　　壁厚

型号	Fig.	φD	φC	t	L	M	L1	φC1	φC2	H	h	Kg	N	S	缩略图
E32-SLSA3-50-M22	1	3	6	1.5	50	22	8	8.3	20	9	42	0.1	0.4	4.7	1
-70-M42					70	42		10.4			62	0.2		9.5	2
-85-M42					85		23		25		77		0.8	9.4	3
-SLRA3-50-M22	1	3	7.5	2.25	50	22	8	9.8	20	9	42	0.1	0.4	2.8	4
-70-M42					70	42		11.9			62	0.2		5.3	5
-85-M42					85		23		25		77		0.8	5.5	6
E32-SLSA3.175-50-M22	1	3.175	6.175	1.5	50	22	8	8.5	20	9	42	0.1	0.4	4.4	7
E32-SLSA4-50-M22	1	4	7	1.5	50	22	8	9.3	20	12	42	0.1	0.4	3.6	8
-70-M42					70	42		11.4			62	0.2		7.3	9
-85-M42					85		23		25		77		0.8	7.4	10
-SLRA4-50-M22	1	4	10	3	50	22	8	12.3	20	12	42	0.2	0.4	1.7	11
-70-M42					70	42		14.4			62		0.5	3.1	12
-85-M42					85		23		25		77		0.9	3.2	13
-SLSA4-60 CV	3	4	7	1.5	60	40	—	26	—	12	43	0.2	0.6	2.4	14
-90 CV					90	70					73		0.8	6.1	15
E32-SLSA6-70-M42	1	6	9	1.5	70	42	8	13.4	20	18	62	0.2	0.5	4.8	16
-SLRA6-50-M22	1	6	12	3	50	22	8	14.3	26	18	39	0.2	0.5	1.2	17
-70-M42					70	42		16.4			62			2.4	18
-85-M42					85		23		25		77		0.9	2.5	19
-SLSA6-60 CV	3	6	9	1.5	60	40	—	26	—	18	43	0.2	0.7	1.9	20
-90 CV					90	70					73		0.9	4.9	21
E32-SLRA8-50-M22	1	8	14	3	50	22	8	16.3	26	24	39	0.2	0.5	1	22
-85-M42					85	42	23	18.4	25		48		0.9	2.1	23
-SLSA8-60 CV	3	8	11	1.5	60	40	—	26	—	24	38	0.2	0.7	1.6	24
-90 CV					90	70							1	4	25
E32-SLRA10-55-M22	1	10	16	3	55	22	13	18.3	26	25	44	0.2	0.6	0.9	26
-SLSA10-60 CV	3	10	13	1.5	60	40	—	26	—	30	48	0.2	0.8	1.4	27
-90 CV					90	70					60		1.1	3.5	28
E32-SLRA12-55-M22	1	12	20	4	55	22	13	22.3	26	30	44	0.2	0.7	0.7	29
E32-SLRA16-55-M35	2	16	26	5	55	35	—	—	—	32	44	0.2	0.6	0.7	30

▮主轴锥孔用 清洁工具
STAR DUST

型号
CLT-E32-G1

P.194



▮刀柄台

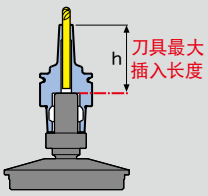
P.14



⚠ 留意最大插入长！

装夹刀具时如超过刀具最大插入长(h)，刀柄将无法准确被加工中心主轴夹持，产生故障。热装时，请使用专用的适配器（ADH-HSK32）。





ADH-HSK32 使用例

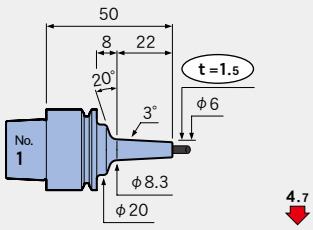
SUGINO	Xion α-5AX
SODICK	UH430L / UH650L
DMG MORI	HSC 20 linear
HORKOS	NJ35-5AX
MAKINO	V22 / V33*i* / iQ300 / iQ500
MITSUI SEIKI	VL30 / VL50
MITSUBISHI	μV1
YASDA	YMC650 / YMC430 ver III



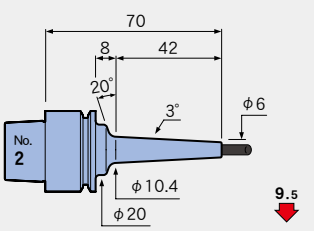
S=1:3

φ3

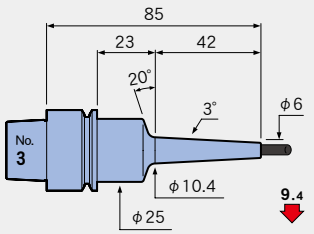
E32-SLSA3-50-M22



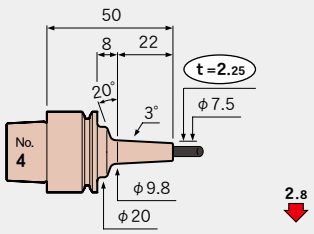
E32-SLSA3-70-M42



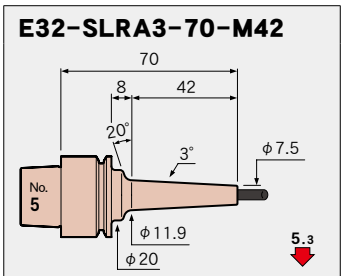
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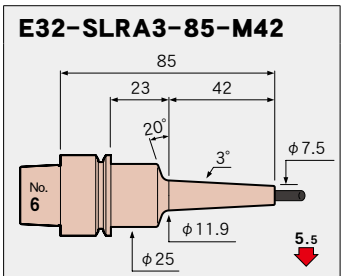
E32-SLRA3-50-M22



E32-SLRA3-70-M42

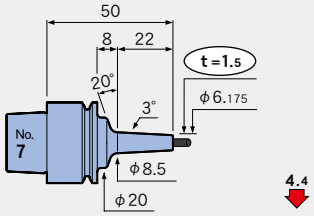


E32-SLRA3-85-M42



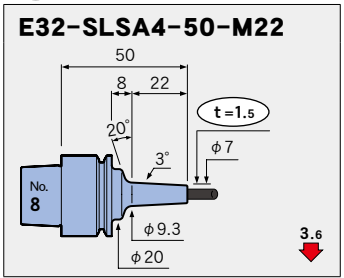
φ3.175

E32-SLSA3.175-50-M22

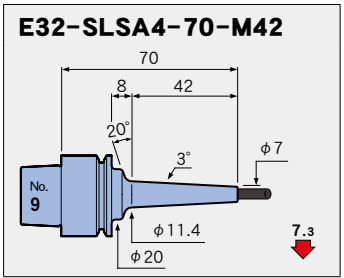


φ4

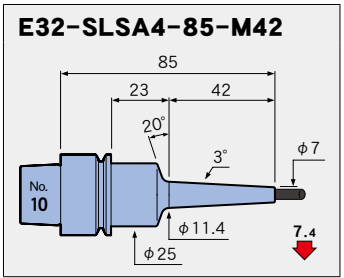
E32-SLSA4-50-M22



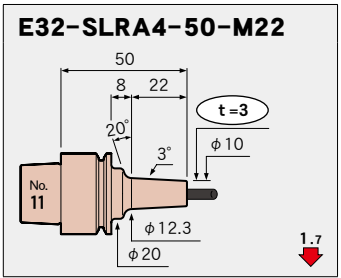
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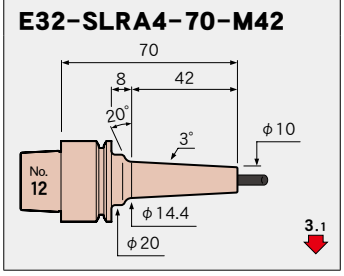
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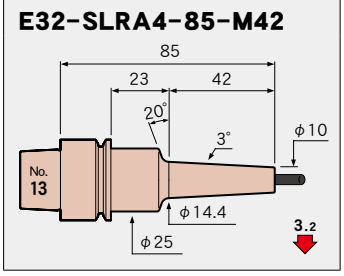
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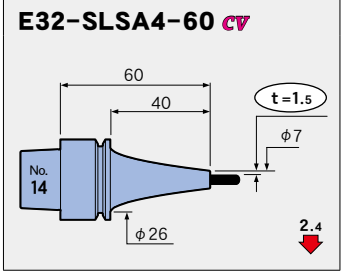
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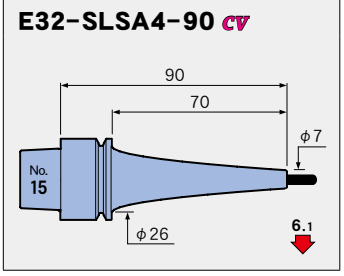
E32-SLRA4-85-M42



E32-SLSA4-60 CV



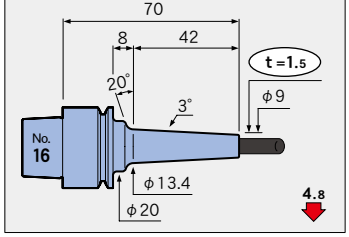
E32-SLSA4-90 CV



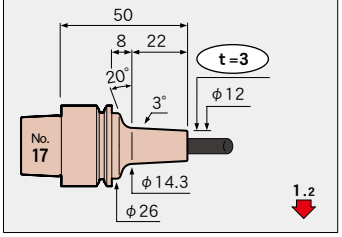
E32 S=1:3

φ6

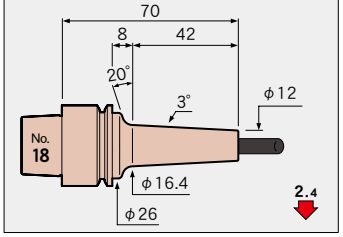
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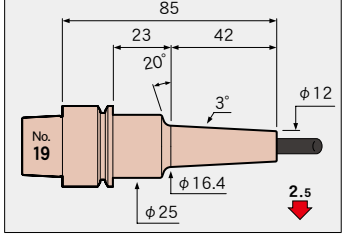
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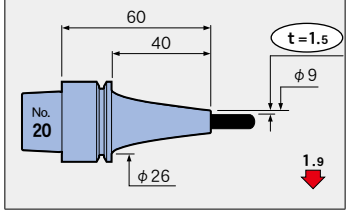
E32-SLRA6-70-M42



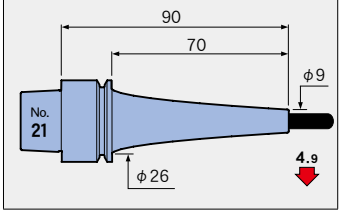
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E32-SLSA6-60 CV

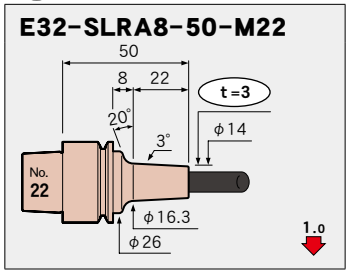


E32-SLSA6-90 CV

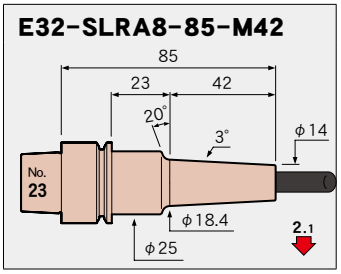


φ8

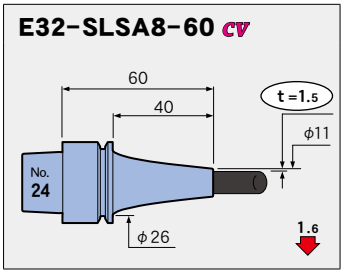
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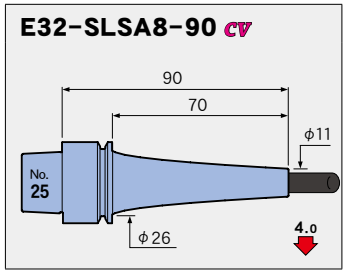
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E32-SLSA8-60 CV

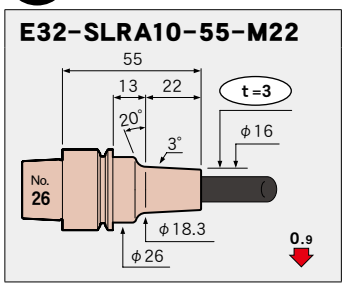


E32-SLSA8-90 CV

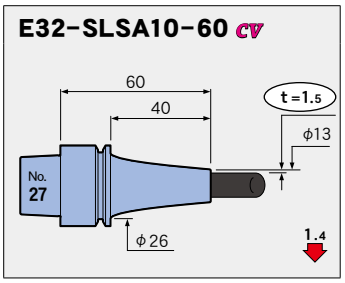


φ10

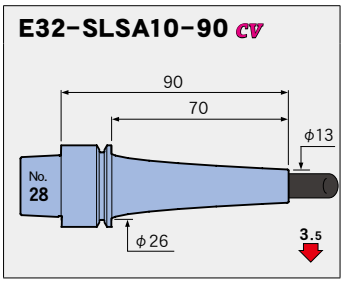
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E32-SLSA10-60 CV

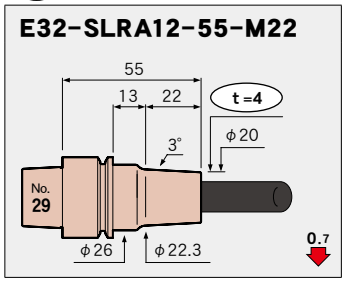


E32-SLSA10-90 CV



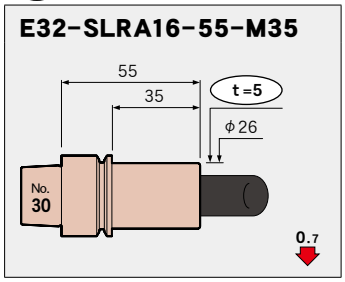
φ12

E32-SLRA12-55-M22



φ16

E32-SLRA16-55-M35



E40

一体型 3°



Fig. 1

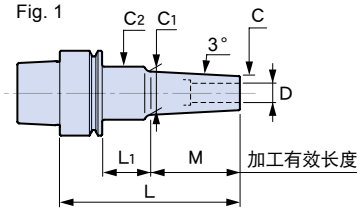
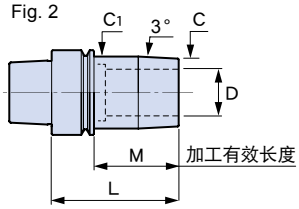


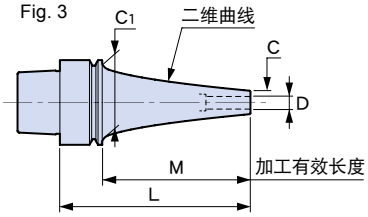
Fig. 2



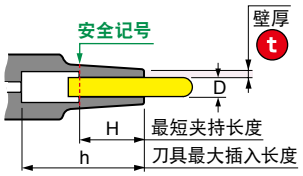
一体型 CURVE CV



Fig. 3



■注意事项
- HSK-E锥柄的刀柄没有附带冷却液导管。如需使用,请向敝司垂询。
- 刀具安装…插入刀具时,请务必将刀具插入比安全记号更深的位置。



CV : 曲线

壁厚

型号	Fig.	φD	φC	t	L	M	L1	φC1	φC2	H	h	Kg	N	S	缩略图
E40-SLSA3- 50-M22	1	3	6	1.5	50	22	8	8.3	20	9	42	0.2	0.7	4.6	1
- 70-M42					70	42		10.4			62			9.4	2
- 85-M42					85		23		25		69	0.3	1.1	9.3	3
-110-M67					110	67		13			94		2.2	15	4
-SLRA3- 50-M22	1	3	7.5	2.25	50	22	8	9.8	20	9	42	0.2	0.7	2.8	5
- 70-M42					70	42		11.9			62			5.3	6
- 85-M42					85		23		25		69	0.3	1.1	5.4	7
-110-M67					110	67		14.5			94			9	8
E40-SLSA3.175-50-M22	1	3.175	6.175	1.5	50	22	8	8.5	20	9	42	0.2	0.7	4.4	9
E40-SLSA4- 50-M22	1	4	7	1.5	50	22	8	9.3	20	12	42	0.2	0.7	3.6	10
- 70-M42					70	42		11.4			62			7.2	11
- 85-M42					85		23		25		74	0.3	1.1	7.3	12
-110-M67					110	67		14			99		1.2	11.9	13
-SLRA4- 50-M22	1	4	10	3	50	22	8	12.3	20	12	42	0.2	0.7	1.6	14
- 70-M42					70	42		14.4			62	0.3		3	15
- 85-M42					85		23		25		69		1.1	3.1	16
-110-M67					110	67		17			94		1.2	5.2	17
-SLSA4- 90 CV	3	4	7	1.5	90	70	—	34	—	12	74	0.3	1.5	2.9	18
-120 CV					120	100					104	0.4	1.8	6.5	19
-150 CV					150	130					134	0.5	2.4	8.6	20
-SLRA4- 90 CV	3	4	10	3	90	70	—	34	—	12	74	0.4	1.6	2	21
-120 CV					120	100					104		1.9	4.2	22
E40-SLSA6- 50-M22	1	6	9	1.5	50	22	8	11.3	20	18	39	0.2	0.7	2.2	23
- 70-M42					70	42		13.4			54			4.7	24
- 85-M42					85		23		25		69	0.3	1.1	4.9	25
-110-M67					110	67		16			94		1.2	8	26
-SLRA6- 50-M22	1	6	12	3	50	22	8	14.3	26	18	39	0.2	0.7	1.2	27
- 70-M42					70	42		16.4			54	0.3	0.8	2.3	28
- 85-M42					85		23		25		69		1.2	2.5	29
-110-M67					110	67		19			94	0.4		4.1	30
-SLSA6- 90 CV	3	6	9	1.5	90	70	—	34	—	18	74	0.3	1.6	2.5	31
-120 CV					120	100					104	0.4	1.9	5.6	32
-150 CV					150	130					134	0.5	2.5	7.7	33
-SLRA6- 90 CV	3	6	13	3.5	90	70	—	34	—	18	74	0.4	1.7	1.7	34
-120 CV					120	100					104	0.5	2.4	2.6	35

型号	Fig.	φD	φC	t	L	M	L1	φC1	φC2	H	h	Kg	N	S	缩略图
E40-SLSA 8- 60-M22	1	8	11	1.5	60	22	18	13.3	26	24	49	0.3	1	1.5	36
- 80-M42					80	42		15.4			64			3.3	37
-100-M42					100		38		25		84		1.5	3.8	38
-SLRA 8- 50-M22	1	8	14	3	50	22	8	16.3	26	20	39	0.2	0.7	0.9	39
- 85-M42					85	42	23	18.4	25	24	69	0.3	1.2	2.1	40
-100-M42					100		38				84	0.4	1.5	2.4	41
-SLSA 8- 90 CV	3	8	11	1.5	90	70	—	34	—	24	74	0.3	1.7	2.2	42
-120 CV					120	100					104	0.4	2	3.4	43
-150 CV					150	130					134	0.5	3	5.1	44
-SLRA 8- 90 CV	3	8	16	4	90	70	—	34	—	24	74	0.4	1.8	1.6	45
-120 CV					120	100					104	0.5	2.5	2.4	46
E40-SLSA10- 60-M22	1	10	13	1.5	60	22	18	15.3	26	30	49	0.3	1	1.2	47
- 80-M42					80	42		17.4			64		1.1	2.4	48
-100-M42					100		38		25		89		1.5	3.1	49
-SLRA10- 55-M22	1	10	16	3	55	22	13	18.3	26	25	44	0.3	0.9	0.8	50
- 85-M42					85	42	23	20.4	25	30	64		1.2	1.7	51
-100-M42					100		38					0.4	1.6	2.2	52
-SLSA10- 90 CV	3	10	13	1.5	90	70	—	34	—	30	74	0.3	1.7	2	53
-120 CV					120	100					104	0.4	2.4	3.2	54
-150 CV					150	130					134	0.5	3.1	5	55
-SLRA10- 90 CV	3	10	19	4.5	90	70	—	34	—	30	74	0.4	2.1	1.1	56
-120 CV					120	100					104	0.5	2.9	2	57
E40-SLRA12- 55-M22	1	12	20	4	55	22	13	22.3	26	25	44	0.3	1	0.6	58
- 85-M42					85	42	23	24.4	32	30	74	0.4	1.6	1.1	59
E40-SLRA16- 55-M22	1	16	26	5	55	22	13	28.3	34	32	44	0.3	1.2	0.4	60
E40-SLRA20- 60-M40	2	20	32	6	60	40	—	34	—	38	49	0.4	1.6	0.4	61

■主轴锥孔用 清洁工具
STAR DUST

型号
CLT-E40-G2

P. 194



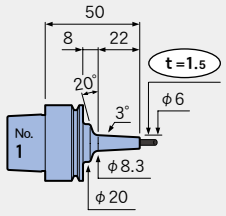
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MITSUI SEIKI	VL30 / VL50
MATSUURA	LS-160 / LX-160 / LF-160 LV-500
YASUDA	YMC650
YAMAZAKI MAZAK	UD-400 5X
ROKU-ROKU	VISION/CEGA HC series



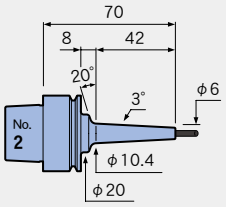
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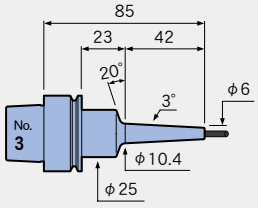
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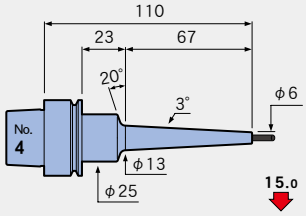
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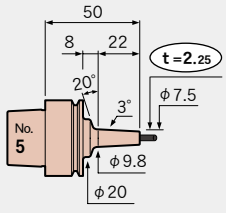
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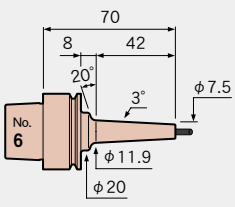
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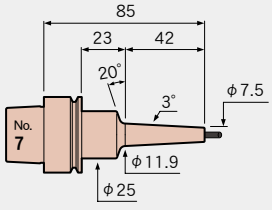
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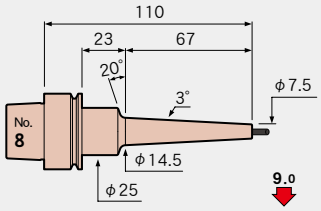
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E40-SLRA3-85-M42

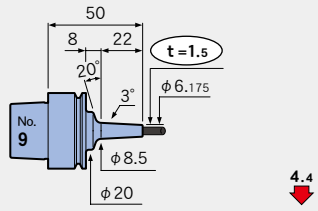


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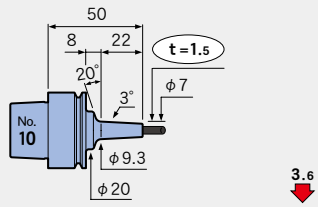
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E40-SLSA3.175-50-M22

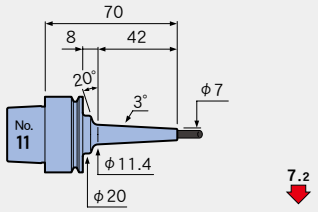


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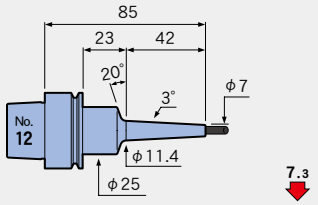
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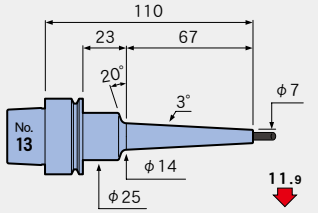
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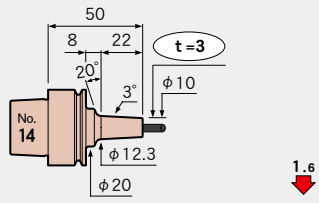
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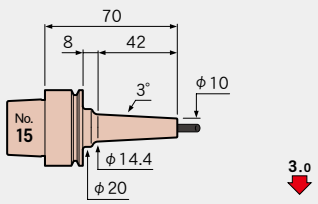
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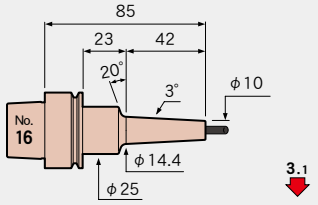
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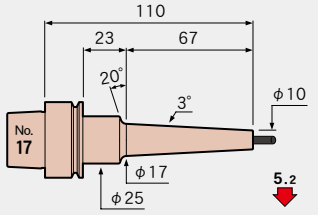
E40-SLRA4-70-M42



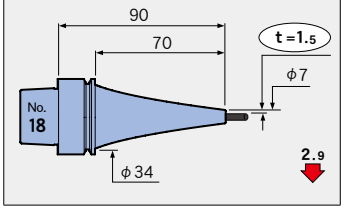
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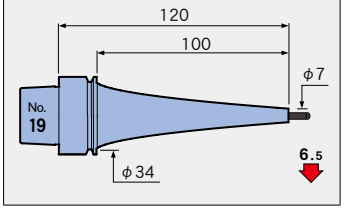
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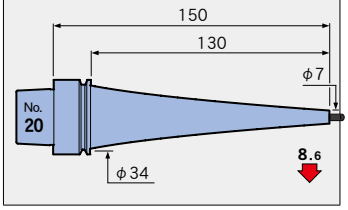
E40-SLSA4-90 CV



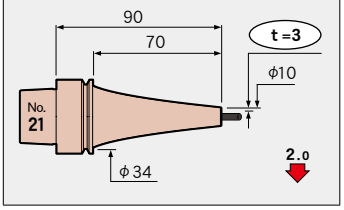
E40-SLSA4-120 CV



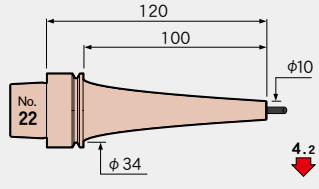
E40-SLSA4-150 CV



E40-SLRA4-90 CV

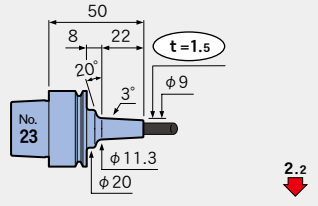


E40-SLRA4-120 CV

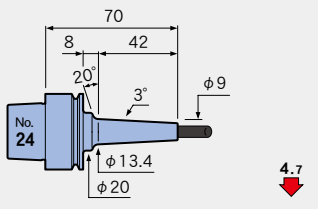


φ6

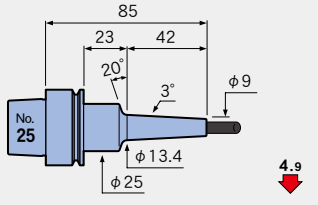
E40-SLSA6-50-M22



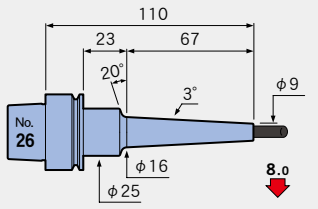
E40-SLSA6-70-M42



E40-SLSA6-85-M42

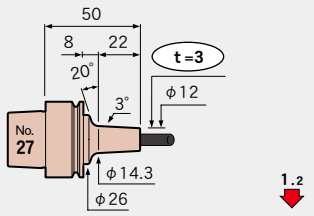


E40-SLSA6-110-M67

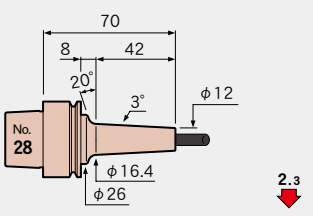


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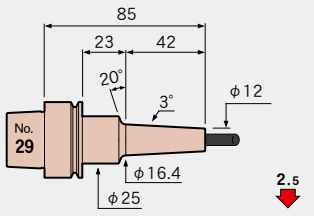
E40-SLRA6-50-M22



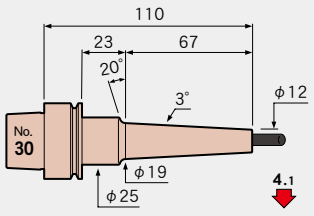
E40-SLRA6-70-M42



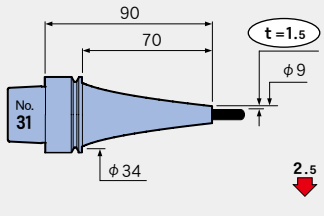
E40-SLRA6-85-M42



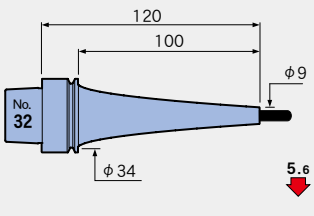
E40-SLRA6-110-M67



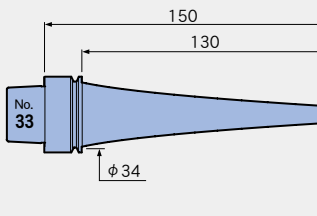
E40-SLSA6-90 CV



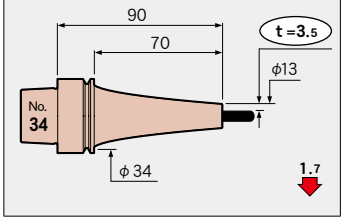
E40-SLSA6-120 CV



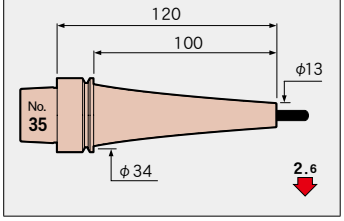
E40-SLSA6-150 CV



E40-SLRA6-90 CV

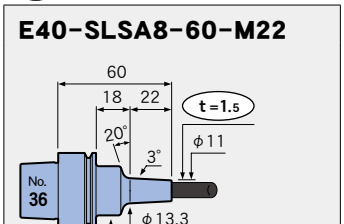


E40-SLRA6-120 CV

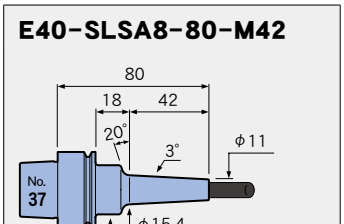


ϕ8

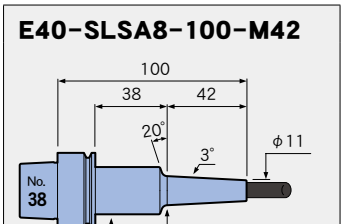
E40-SLSA8-60-M22



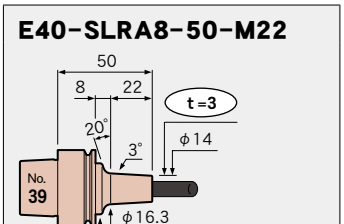
E40-SLSA8-80-M42



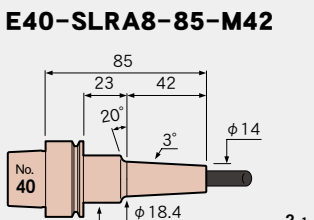
E40-SLSA8-100-M42



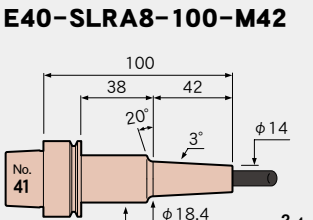
E40-SLRA8-50-M22



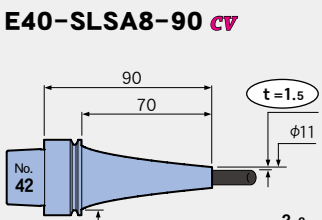
E40-SLRA8-85-M42



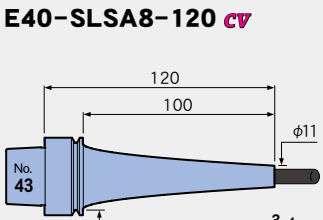
E40-SLRA8-100-M42



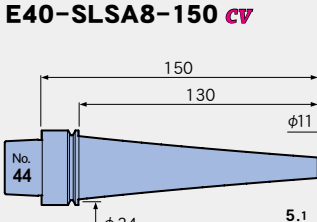
E40-SLSA8-90 CV



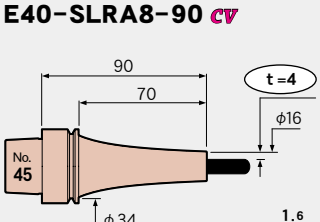
E40-SLSA8-120 CV



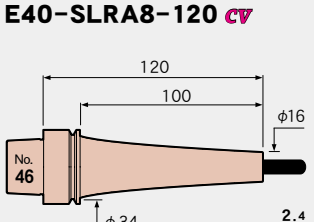
E40-SLSA8-150 CV



E40-SLRA8-90 CV

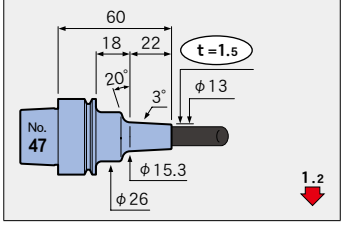


E40-SLRA8-120 CV

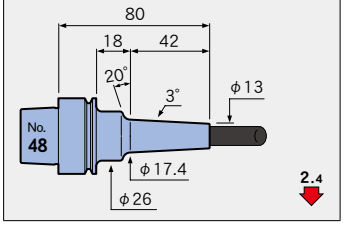


ϕ10

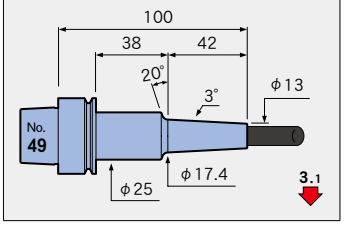
E40-SLSA10-60-M22



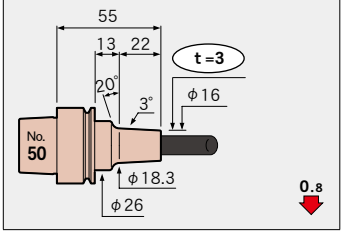
E40-SLSA10-80-M42



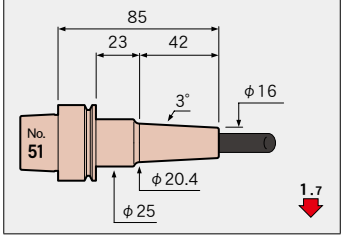
E40-SLSA10-100-M42



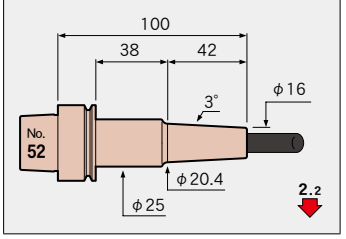
E40-SLRA10-55-M22



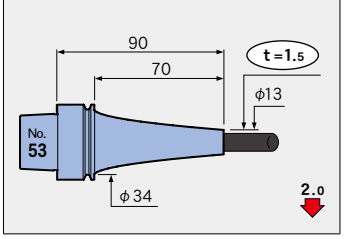
E40-SLRA10-85-M42



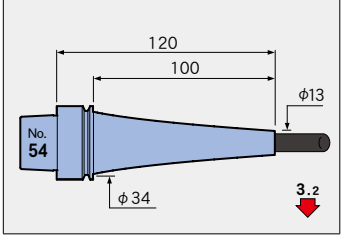
E40-SLRA10-100-M42



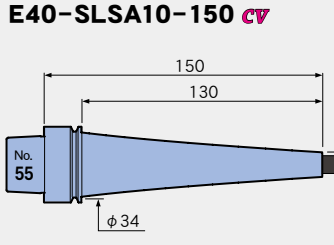
E40-SLSA10-90 CV



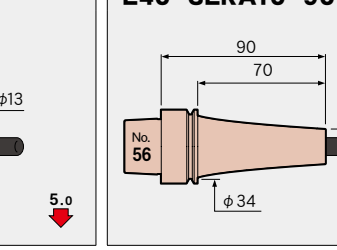
E40-SLSA10-120 CV



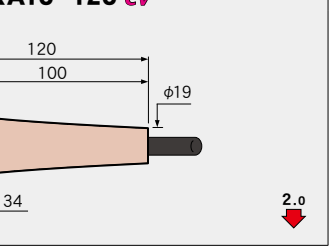
E40-SLSA10-150 CV



E40-SLRA10-90 CV

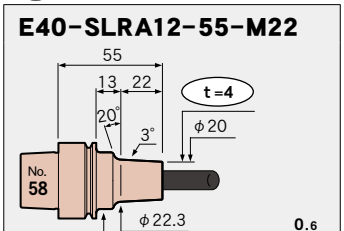


E40-SLRA10-120 CV

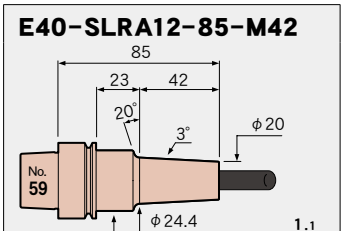


ϕ12

E40-SLRA12-55-M22

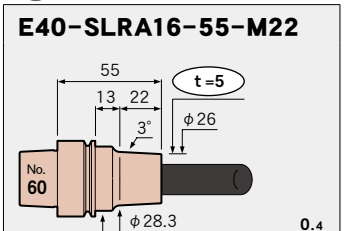


E40-SLRA12-85-M42



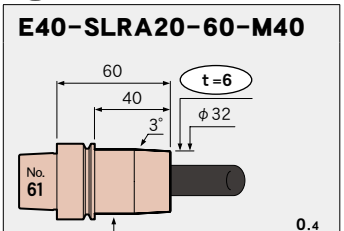
ϕ16

E40-SLRA16-55-M22



ϕ20

E40-SLRA20-60-M40



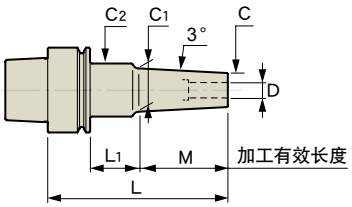
E50

一体型 3°



E50-SLSA8-65-M22

Fig. 1

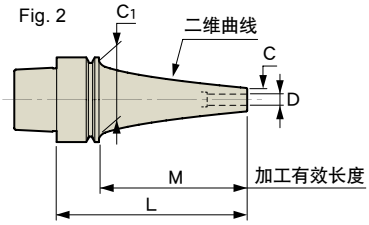


一体型CURVE CV

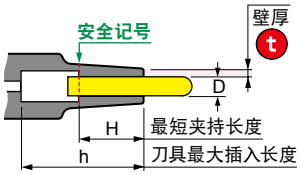


E50-SLSA6-150 cv

Fig. 2



■注意事项
- HSK-E锥柄的刀柄没有附带冷却液导管。如需使用,请向敝司垂询。
- 刀具安装···插入刀具时,请务必将刀具插入比安全记号更深的位置。





HEATROBO电磁 1200S (HRD-01S-230AS) 电磁式加热器对应表

[○] 可加热 [×] 不可加热

CV：曲线　　壁厚

型号	Fig.	φD	φC	t	L	M	L1	φC1	φC2	H	h	Kg	N	S		缩略图
E50-SLSA3- 60-M22	1	3	6	1.5	60	22	12	8.3	20	9	50	0.4	1.3	4.7	○	1
- 75-M22					75		27		25		61	0.5		4.5		2
- 80-M42					80	42	12	10.4	20		70			9.3		3
- 95-M42					95		27		25		81		1.7	9.1		4
-SLRA3- 75-M22	1	3	7.5	2.25	75	22	27	9.8	25	9	61	0.5	1.7	2.8	○	5
- 95-M42					95	42		11.9			81			5.3		6
-120-M67					120	67		14.5			106		1.8	8.9		7
-150-M97					150	97		17.7			136	0.6		12.9		8
-SLFB3- 75-M22	1	3	9.5	3.25	75	22	27	11.8	25	9	61	0.5	1.8	1.9	○	9
E50-SLSA4- 75-M22	1	4	7	1.5	75	22	27	9.3	25	12	61	0.5	1.3	3.6	○	10
- 95-M42					95	42		11.4			81		1.8	7.2		11
-SLRA4- 75-M22	1	4	10	3	75	22	27	12.3	25	12	61	0.5	1.7	1.7	○	13
- 95-M42					95	42		14.4			81		1.8	3.1		14
-120-M67					120	67		17			106	0.6		5.2		15
-150-M97					150	97		20.2			135	0.7	2.2	7.8		16
-SLFB4- 75-M22	1	4	12	4	75	22	27	14.3	25	12	61	0.5	1.9	1.4	○	12
-SLSA4- 90 CV	2	4	7	1.5	90	64	—	42	—	12	74	0.6	2.2	1.8	○	17
-120 CV					120	94					104		2.6	4.2		18
-150 CV					150	124					134	0.7	3.3	6		19
-180 CV					180	154					164	0.8	3.5	12		20
-SLRA4-120 CV	2	4	10	3	120	94	—	42	—	12	104	0.7	2.8	2.7	○	21
-150 CV					150	124					134	0.8	3.4	4.1		22

SLFB

HRD-01S

型号	Fig.	φD	φC	t	L	M	L1	φC1	φC2	H	h	Kg	N	S		缩略图
E50-SLSA6- 75-M22	1	6	9	1.5	75	22	27	11.3	25	18	61	0.5	1.3	2.3	○	23
- 95-M42					95	42		13.4			81		1.6	4.8		24
-120-M67					120	67		16			106		1.8	8.1		25
-150-M97					150	97		19.2	32		135	0.6	2.3	11		26
-SLSB6- 95-M42	1	6	10	2	95	42	27	14.4	25	18	81	0.5	1.8	3.7	○	27
-120-M67					120	67		17			106	0.6		6.2		28
-150-M97					150	97		20.2	32		135	0.7	2.3	8.5		29
-SLRA6- 75-M22	1	6	12	3	75	22	27	14.3	25	18	61	0.5	1.5	1.3	○	30
- 95-M42					95	42		16.4			81		1.8	2.5		31
-120-M67					120	67		19			106	0.6	1.9	4.1		32
-SLRB6- 95-M42	1	6	14	4	95	42	27	18.4	32	18	80	0.6	2.2	1.6	○	33
-SLFB6- 75-M22	1	6	14	4	75	22	27	16.3	32	18	60	0.6	2.1	1	○	34
-SLSA6- 90 CV	2	6	9	1.5	90	64	—	42	—	18	74	0.6	2.3	1.6	○	35
-120 CV					120	94					104		2.7	3.5		36
E50 -150 CV					150	124					134	0.7	3.4	5.4		37
-180 CV					180	154					164	0.9	4.2	7.6		38
-SLRA6-120 CV	2	6	13	3.5	120	94	—	42	—	18	104	0.8	3.3	1.8	○	39
-150 CV					150	124					132	0.9	4	2.7		40
E50-SLSA8- 65-M22	1	8	11	1.5	65	22	17	13.3	26	24	49	0.5	1.5	1.5	○	41
- 75-M22					75		27	15.4	25		61		1.6	1.6		42
- 85-M42					85	42	17		26		67			3.2		43
- 95-M42					95		27		25		81		2.2	3.5		44
-120-M67					120	67		18	32		105	0.6	2.3	5.4		45
-150-M97					150	97		21.2			132	0.7	2.4	8.1		46
-SLSB8- 95-M42	1	8	13	2.5	95	42	27	17.4	32	24	80	0.6	2.2	2.1	○	47
-120-M67					120	67		20			105		2.3	3.5		48
-150-M97					150	97		23.2			135	0.7	2.4	5.3		49
-SLRA8- 60-M22	1	8	14	3	60	22	12	16.3	26	24	44	0.5	1.4	0.9	○	50
- 75-M22					75		27		25		61		1.5	1.1		51
- 95-M42					95	42		18.4			81		1.8	2		52
-SLRB8- 95-M42	1	8	18	5	95	42	27	22.4	32	24	80	0.6	2.2	1.1	○	53
-120-M67					120	67		25			105	0.7	2.3	1.7		54
-SLFB8- 75-M22	1	8	18	5	75	22	27	20.3	32	24	60	0.6	2.2	0.7	×	55
-SLSA8- 90 CV	2	8	11	1.5	90	64	—	42	—	24	74	0.6	2.5	1.4	○	56
-120 CV					120	94					104	0.7	3.2	2.2		57
-150 CV					150	124					134		3.5	4.9		58
-180 CV					180	154					164	0.8	4.2	7.1		59
-SLRA8-120 CV	2	8	16	4	120	94	—	42	—	24	102	0.8	3.8	1.3	○	60
-150 CV					150	124					132	0.9	4	2.7		61



型号	Fig.	φD	φC	t	L	M	L1	φC1	φC2	H	h	Kg	N	S	HRD-01S	缩略图
E50-SLSA10- 65-M22	1	10	13	1.5	65	22	17	15.3	26	30	49	0.5	1.5	1.1	○	62
- 75-M22 (E50)					75		27		25		61		1.6	1.3		63
- 85-M42					85	42	17	17.4	26		64			2.4		64
- 95-M42					95		27		25		81		2.2	2.6		65
-120-M67					120	67		20	32		105	0.6	2.3	4.1		66
-150-M97					150	97		23.2			64	0.7	2.5	6.2		67
-SLSB10- 95-M42	1	10	16	3	95	42	27	20.4	32	30	80	0.6	2.2	1.5	○	68
-120-M67					120	67		23			105	0.7	2.4	2.4		69
-150-M97					150	97		26.2			135		2.5	3.7		70
-SLRA10- 75-M22	1	10	16	3	75	22	27	18.3	25	30	60	0.6	1.5	1	○	71
-SLRB10- 95-M42	1	10	22	6	95	42	27	26.4	32	30	80	0.7	2.3	0.9	○	72
-120-M67					120	67		29	42		107	0.8	3.2	1.1		73
-SLFB10- 75-M22	1	10	22	6	75	22	27	24.3	32	30	60	0.6	2.2	0.6	×	74
-SLSA10- 90 CV	2	10	13	1.5	90	64	—	42	—	30	74	0.6	2.5	1.3	○	75
-120 CV					120	94					104	0.7	3.3	2.1		76
-150 CV					150	124					134	0.8	4.1	3.4		77
-180 CV					180	154					162		4.3	6.9		78
-SLRA10-150 CV	2	10	19	4.5	150	124	—	42	—	30	132	0.9	4.4	2.2	○	79
E50-SLSA12- 65-M22	1	12	15	1.5	65	22	17	17.3	26	25	49	0.5	1.6	0.9	○	80
- 75-M22					75		27		25	30	60		1.7	1.1		81
- 95-M42					95	42		19.4	32		80		2.2	1.9		82
-120-M67					120	67		22			105	0.6	2.4	3.3		83
-SLSB12- 95-M42	1	12	19	3.5	95	42	27	23.4	32	30	80	0.6	2.3	1.2	○	84
-120-M67					120	67		26			105	0.7	2.5	1.9		85
-150-M97					150	97		29.2			135	0.9	3.5	2.5		86
-SLRA12- 75-M22	1	12	20	4	75	22	27	22.3	25	30	62	0.6	1.6	0.9	○	87
-SLRB12- 95-M42	1	12	26	7	95	42	27	30.4	42	30	82	0.8	3.1	0.6	×	88
-120-M67					120	67		33			107	0.9	3.3	0.9		89
-SLFB12- 75-M22	1	12	26	7	75	22	27	28.3	42	30	62	0.7	3	0.4	×	90
E50-SLSB16- 95-M42	1	16	24	4	95	42	27	28.4	42	32	82	0.7	3.2	0.7		91
-120-M67					120	67		31			107	0.8	3.5	1.2		92
-SLRA16- 60-M22	1	16	26	5	60	22	12	28.3	34	32	44	0.6	1.7	0.4		93
-SLRB16- 75-M22	1	16	32	8	75	22	27	34.3	42	32	62	0.7	3	0.4		94
-SLFB16- 75-M22	1	16	32	8	75	22	27	34.3	42	32	62	0.7	3	0.4		95
E50-SLSB20- 95-M42	1	20	29	4.5	95	42	27	33.4	42	40	82	0.7	3.3	0.6		96
-SLRA20- 65-M22	1	20	32	6	65	22	17	34.3	40	38	49	0.6	2.2	0.3		97

SLFB



■主轴锥孔用 清洁工具
STAR DUST

型号
CLT-E50-G2

P.194

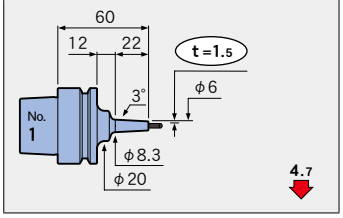


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MAKINO	V33*i* / D200Z
MITSUBISHI	μV5
ROKU-ROKU	ZEUS-86

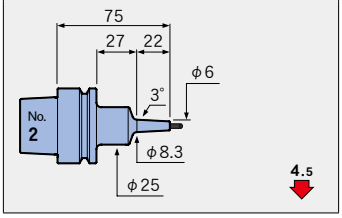


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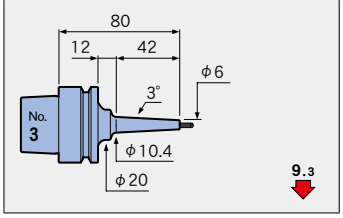
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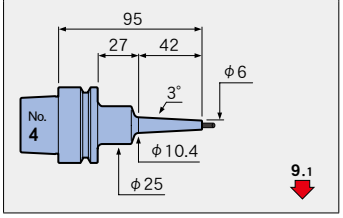
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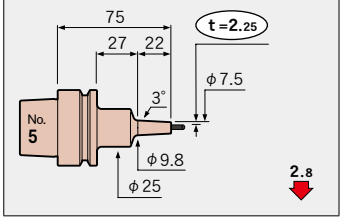
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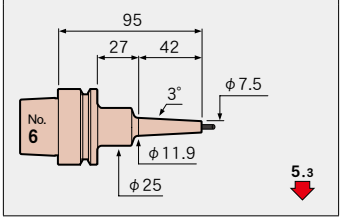
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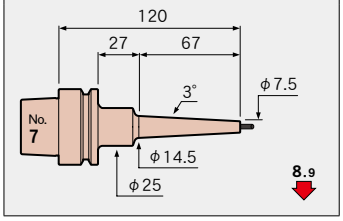
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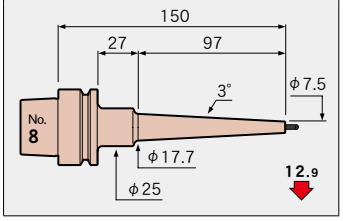
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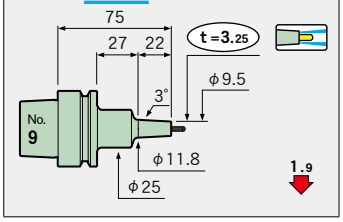
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E50-SLRA3-150-M97

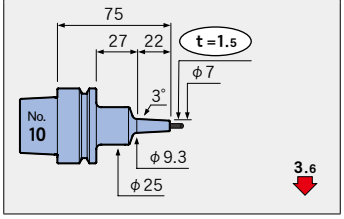


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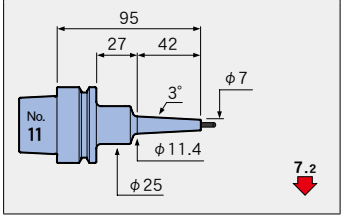


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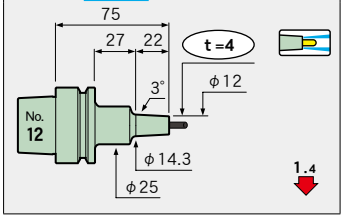
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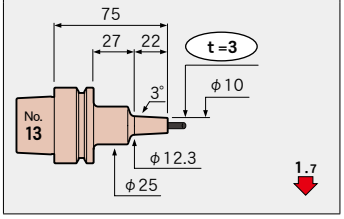
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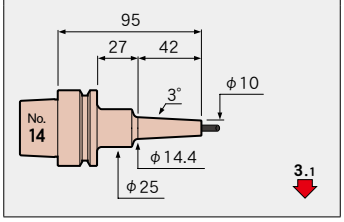
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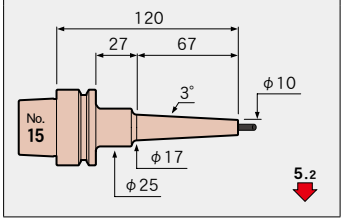
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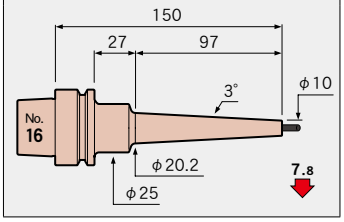
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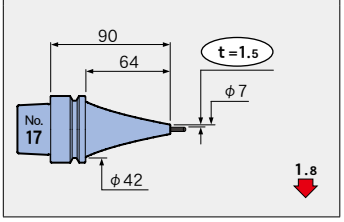
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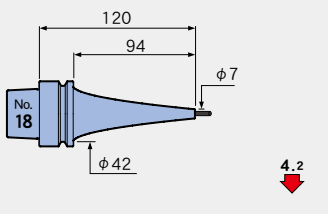
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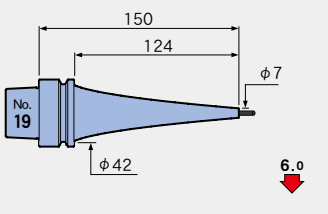
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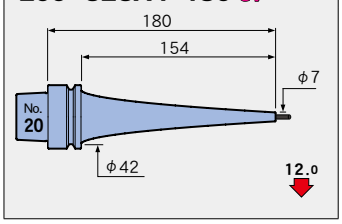
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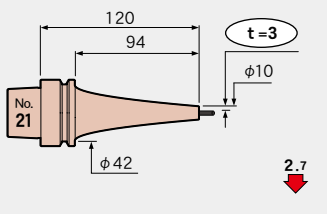
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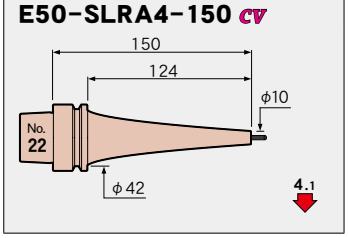
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E50-SLRA4-120 CV



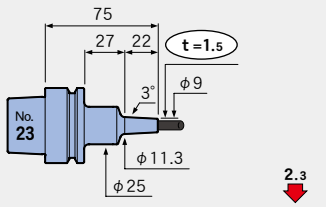
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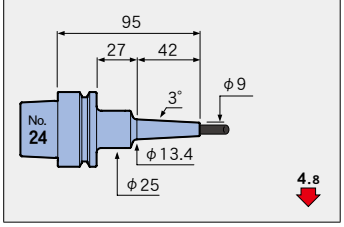
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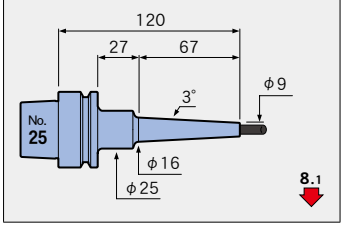
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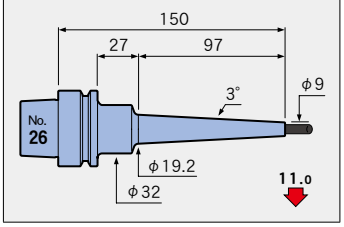
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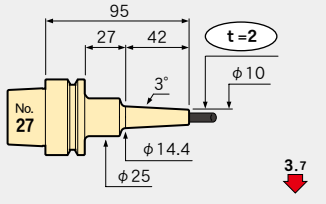
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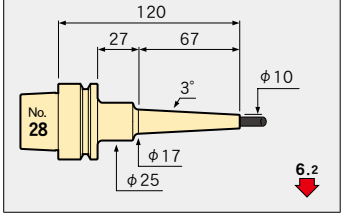
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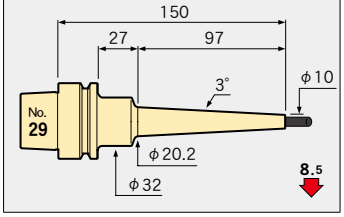
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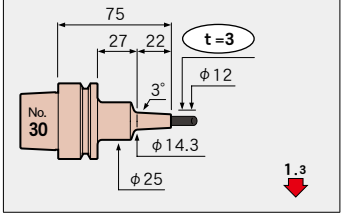
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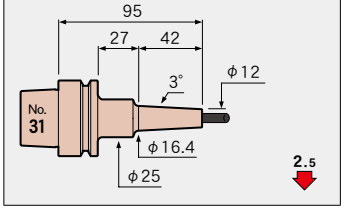
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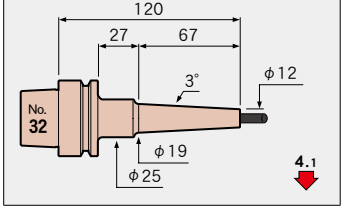
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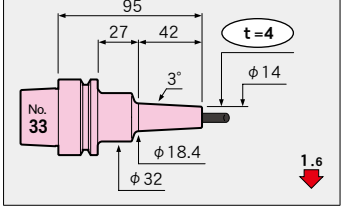
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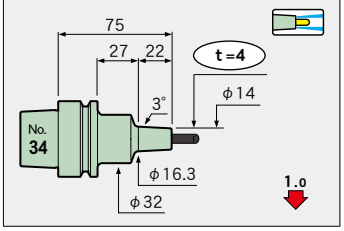
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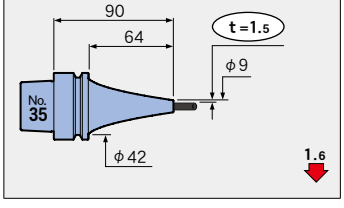
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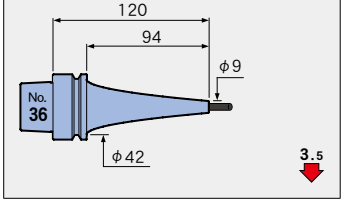
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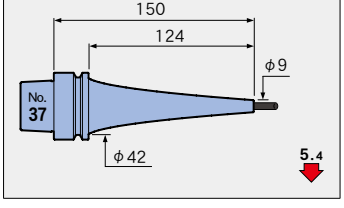
E50-SLSA6-90 CV



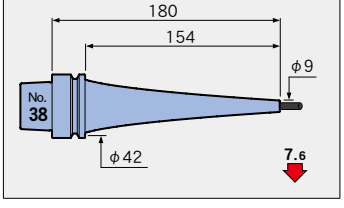
E50-SLSA6-120 CV



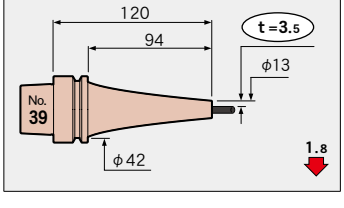
E50-SLSA6-150 CV



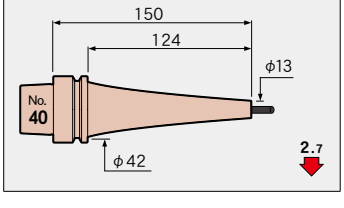
E50-SLSA6-180 CV



E50-SLRA6-120 CV

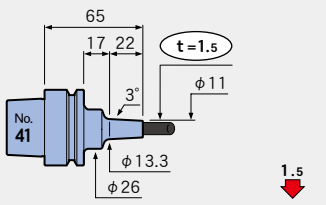


E50-SLRA6-150 CV

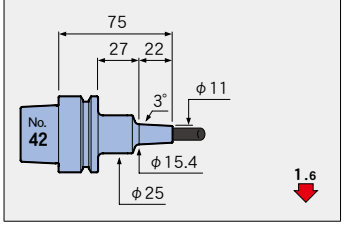


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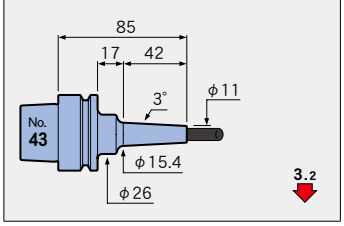
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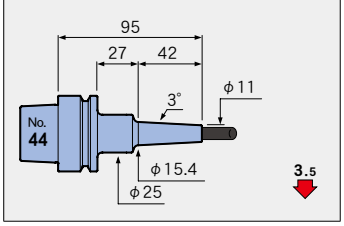
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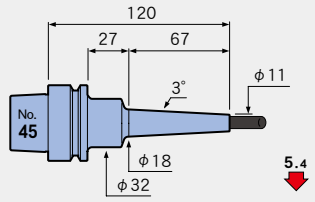
E50-SLSA8-85-M42



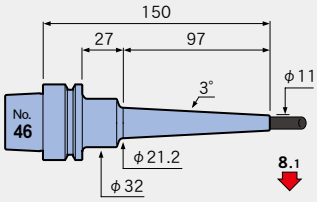
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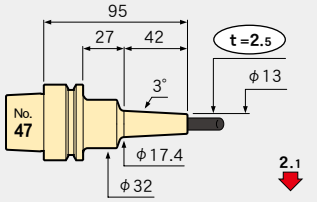
E50-SLSA8-120-M67



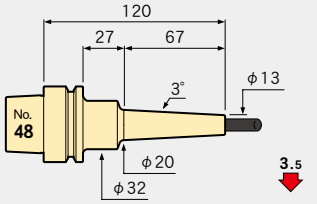
E50-SLSA8-150-M97



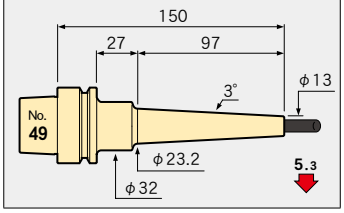
E50-SLSB8-95-M42



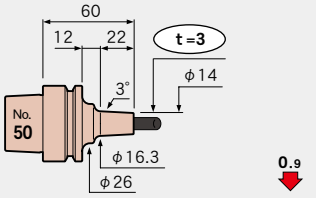
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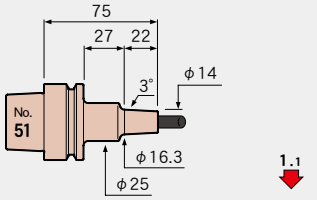
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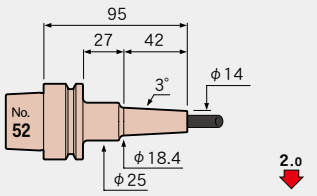
E50-SLRA8-60-M22



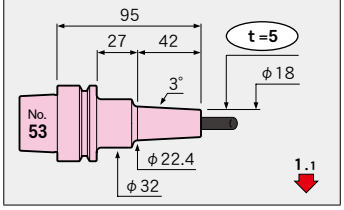
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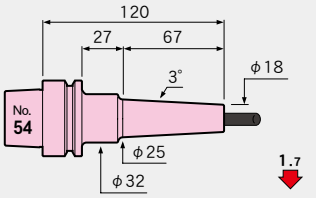
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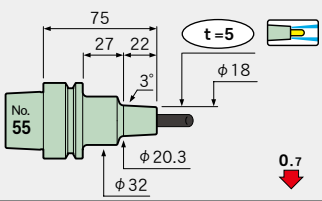
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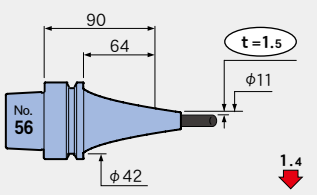
E50-SLRB8-120-M67



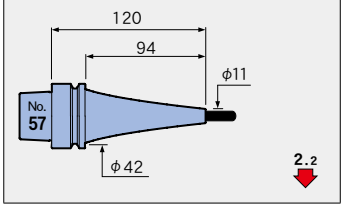
E50-SLFB8-75-M22



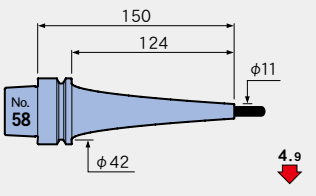
E50-SLSA8-90 CV



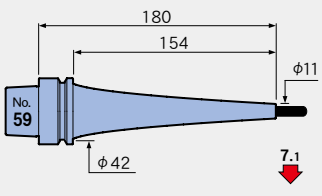
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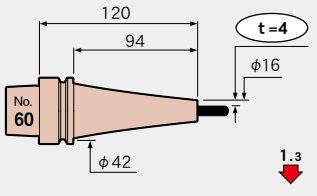
E50-SLSA8-150 CV



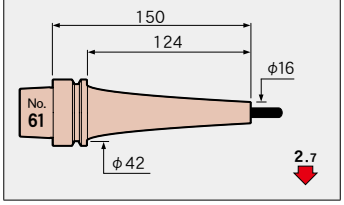
E50-SLSA8-180 CV



E50-SLRA8-120 CV

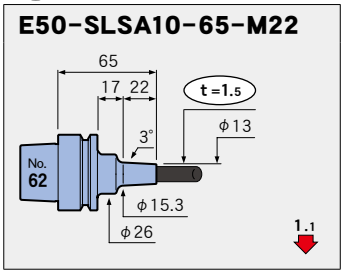


E50-SLRA8-150 CV

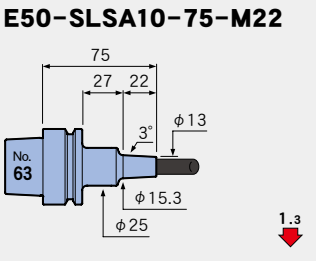


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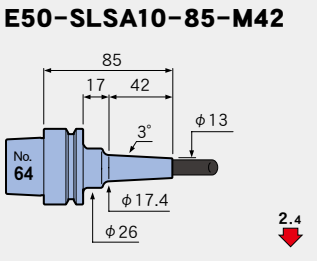
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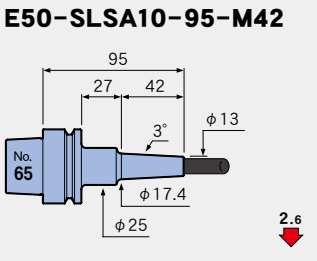
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E50-SLSA10-85-M42

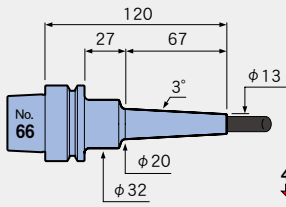


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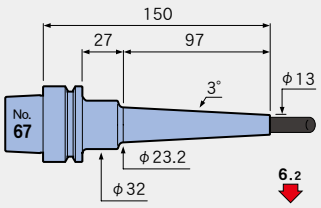


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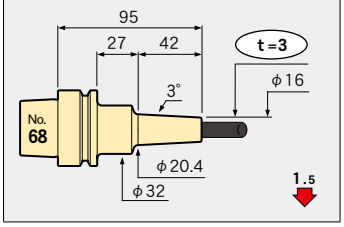
E50-SLSA10-120-M67



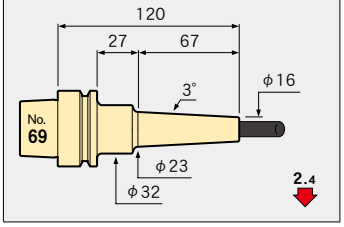
E50-SLSA10-150-M97



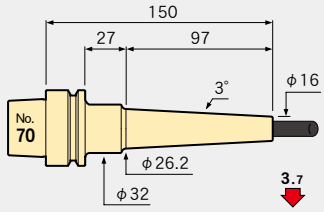
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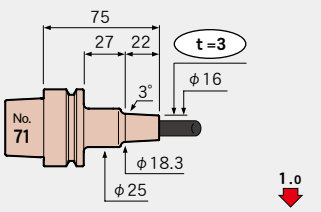
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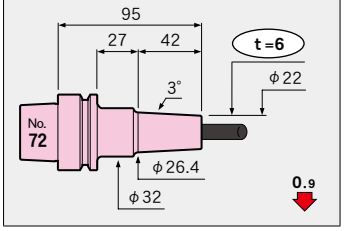
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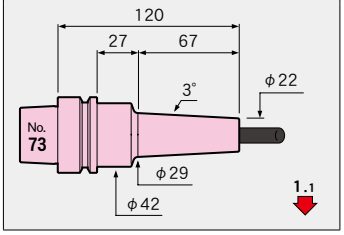
E50-SLRA10-75-M22



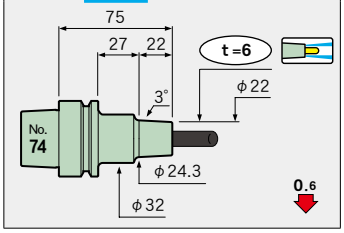
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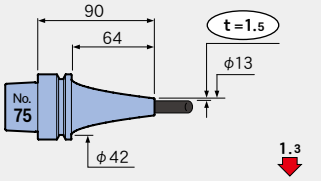
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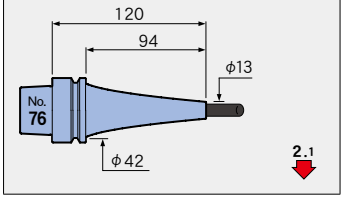
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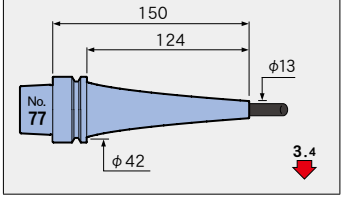
E50-SLSA10-90 CV



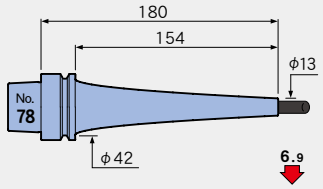
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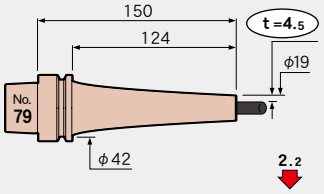
E50-SLSA10-150 CV



E50-SLSA10-180 CV

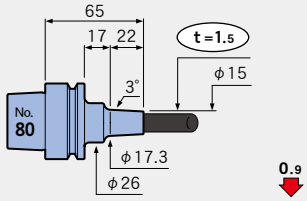


E50-SLRA10-150 CV

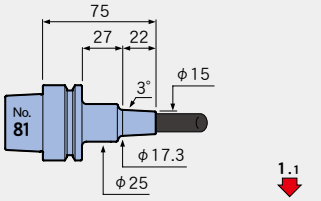


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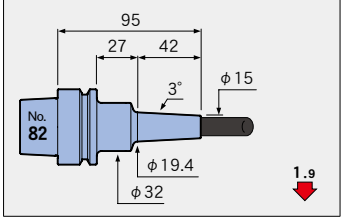
E50-SLSA12-65-M22



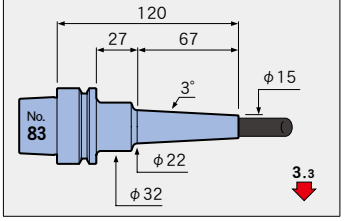
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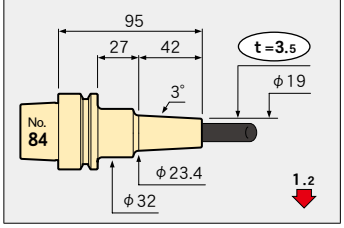
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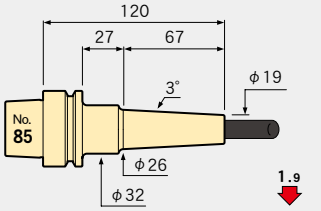
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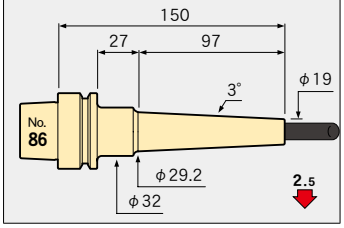
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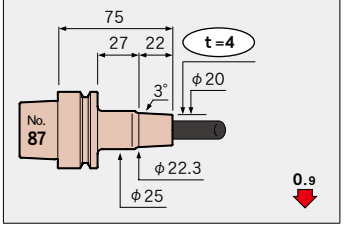
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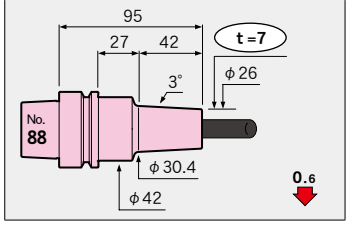
E50-SLSB12-150-M97



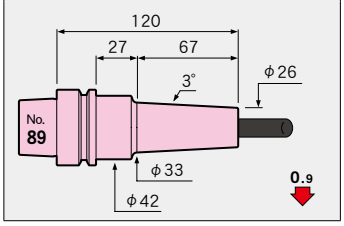
E50-SLRA12-75-M22



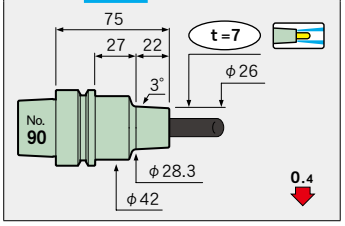
E50-SLRB12-95-M42



E50-SLRB12-120-M67

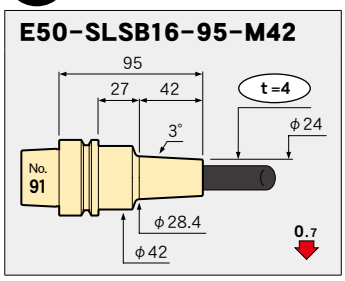


E50-SLFB12-75-M22

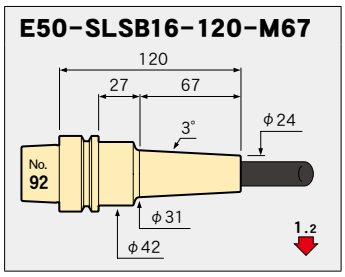


φ16

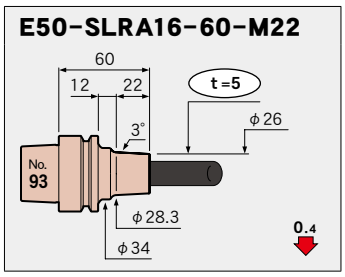
E50-SLSB16-95-M42



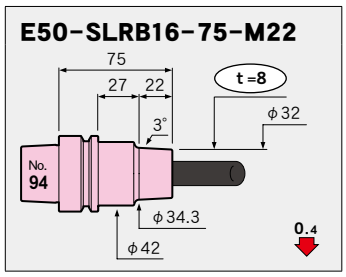
E50-SLSB16-120-M67



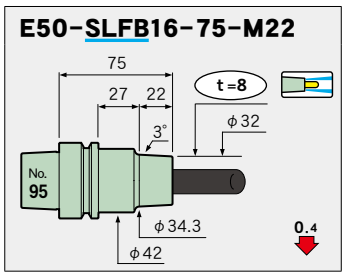
E50-SLRA16-60-M22



E50-SLRB16-75-M22

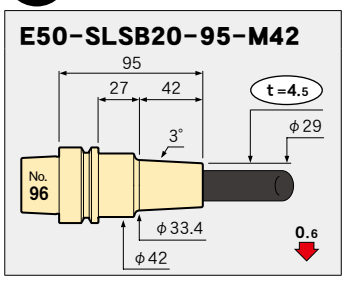


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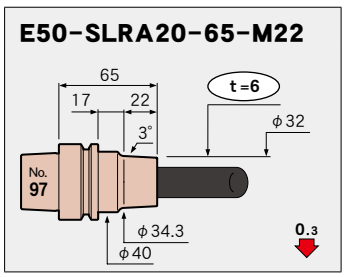


φ20

E50-SLSB20-95-M42



E50-SLRA20-65-M22



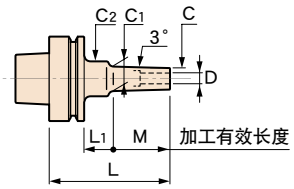
F63

一体型 3°

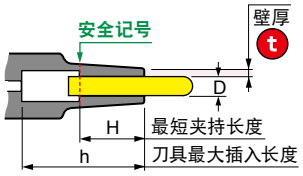


F63-SLRA4-75-M22

Fig. 1



■注意事项
- 无附带冷却液导管。需要使用的客户，请与敝司联系。
- 刀具安装…插入刀具时，请务必将刀具插入比安全记号更深的位置。

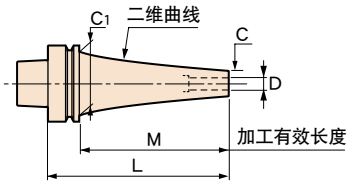


一体型CURVE CV



F63-SLRA6-120cv

Fig. 2





HEATROBO电磁 1200S
(HRD-01S-230AS)
电磁式加热器对应表

[○] 可加热　[×] 不可加热
[▲] 垫高加热器后可进行加热 →P.201
[★] 使用线圈和标准时不同
请使用2号加热线圈

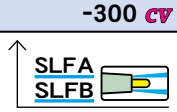
CV：曲线　　壁厚

型号	Fig.	φD	φC	t	L	M	L1	φC1	φC2	H	h	Kg	N	S	○	缩略图
F63-SLSA3- 95-M42	1	3	6	1.5	95	42	27	10.4	25	9	78	0.7	1.8	9.1	○	2
-SLRA3- 75-M22	1	3	7.5	2.25	75	22	27	9.8	25	9	54	0.7	1.8	2.8	○	4
- 95-M42					95	42		11.9			78		1.9	5.3		5
-SLFB3- 75-M22	1	3	9.5	3.25	75	22	27	11.8	25	9	58	0.7	1.9	1.9	○	6
- 95-M42					95	42		13.9			78	0.8	2	3.2		7
-120-M67					120	67		16.5			103			5.4		8
F63-SLSA4- 95-M42	1	4	7	1.5	95	42	27	11.4	25	12	78	0.7	1.9	7.2	○	9
-SLRA4- 75-M22	1	4	10	3	75	22	27	12.3	25	12	58	0.7	1.8	1.7	○	10
- 95-M42					95	42		14.4			78	0.8	1.9	3.1		11
-SLFB4- 75-M22	1	4	12	4	75	22	27	14.3	25	12	58	0.7	2	1.3	○	12
- 95-M42					95	42		16.4			78	0.8		2.2		13
-120-M67					120	67		19			103		2.1	3.6		14
-SLSA4- 90 CV	2	4	7	1.5	90	64	—	53	—	12	65	0.9	2.7	1.8	○	15
-120 CV					120	94					95	1	3.6	2.7		16
-150 CV					150	124					125	1.2	4.4	4		17
-180 CV					180	154					154	1.3	5	6.6		18
-210 CV					210	184					185		5.3	11.6		19
-240 CV					240	214					214	1.6	6.5	14		20
-270 CV					270	244					245	1.9	8.8	11.9		21
-300 CV					300	274					275	2	9.7	15.9		22
-SLRA4-120 CV	2	4	10	3	120	94	—	53	—	12	95	1	3.6	1.9	○	23
-150 CV					150	124					125	1.1	4.4	2.9		24
-180 CV					180	154					155	1.4	6	3.3		25
-210 CV					210	184					185	1.5	6.2	5.6		26
F63-SLSA6- 95-M42	1	6	9	1.5	95	42	27	13.4	25	18	78	0.7	1.9	4.8	○	28
-SLSB6- 95-M42	1	6	10	2	95	42	27	14.4	25	18	78	0.7	1.9	3.7	○	29
-SLRA6- 75-M22	1	6	12	3	75	22	27	14.3	25	18	58	0.7	1.8	1.3	○	30
- 95-M42					95	42		16.4			78	0.8	1.9	2.4		31
-SLFB6- 75-M22	1	6	14	4	75	22	27	16.3	32	18	58	0.8	2.2	1	○	32

SLFB 

HRD-01S

型号	Fig.	φD	φC	t	L	M	L1	φC1	φC2	H	h	Kg	N	S		缩略图
F63-SLSA 6- 90 CV	2	6	9	1.5	90	64	—	53	—	18	65	0.9	2.8	1.6	○	33
-120 CV					120	94					95	1	3.6	2.3		34
-150 CV					150	124					125	1.2	4.4	3.6		35
-180 CV					180	154					154	1.3	5.2	5.7		36
F63 -210 CV					210	184					184	1.5	6.4	7.3		37
-240 CV					240	214					214	1.6	6.7	12		38
-270 CV					270	244					245	2	9.7	8.5	▲	39
-300 CV					300	274					275	2.2	10.6	11.7		40
-SLRA 6- 90 CV	2	6	13	3.5	90	64	—	53	—	18	65	1	3.4	0.8	★	41
-120 CV					120	94					95	1.2	4.3	1.2		42
-150 CV					150	124					125	1.3	5.2	1.9	○	43
-180 CV					180	154					155	1.4	6.1	2.8		44
-210 CV					210	184					185	1.5	6.6	4.8		45
-SLFA 6- 90 CV	2	6	13	3.5	90	64	—	53	—	18	65	1	3.4	0.8	★	46
-120 CV					120	94					95	1.2	4.3	1.2		47
-150 CV					150	124					125	1.3	5.2	1.9	○	48
-180 CV					180	154					155	1.4	6.1	2.8		49
-210 CV					210	184					185	1.5	6.6	4.8		50
F63-SLSA 8- 95-M42	1	8	11	1.5	95	42	27	15.4	25	24	78	0.7	1.9	3.4	○	51
-SLSB 8- 95-M42	1	8	13	2.5	95	42	27	17.4	32	24	78	0.8	2.3	2.1	○	52
-SLRA 8- 75-M22	1	8	14	3	75	22	27	16.3	25	24	58	0.7	1.9	1.1	○	53
- 95-M42					95	42		18.4			78	0.8		2		54
-SLFB 8- 75-M22	1	8	18	5	75	22	27	20.3	32	24	58	0.8	2.2	0.7	×	55
-SLSA 8- 90 CV	2	8	11	1.5	90	64	—	53	—	24	65	0.9	2.9	1.4	○	56
-120 CV					120	94					94	1.1	3.8	2		57
-150 CV					150	124					124	1.3	5	2.7		58
-180 CV					180	154					155		5.2	5		59
-210 CV					210	184					184	1.5	6.6	6.6	▲	60
-240 CV					240	214					214	1.8	7.8	8.3		61
-270 CV					270	244					244	2.1	10.7	6.9		62
-300 CV					300	274					274	2.3	11.9	8.9		63
-SLRA 8- 90 CV	2	8	16	4	90	64	—	53	—	24	65	1	3.4	0.7	○	64
-120 CV					120	94					95	1.2	4.6	1		65
-150 CV					150	124					125	1.4	5.9	1.4		66
-180 CV					180	154					155	1.6	7	2		67
-210 CV					210	184					185		7.6	3.5		68
-SLFA 8- 90 CV	2	8	16	4	90	64	—	53	—	24	65	1	3.4	0.7	○	69
-120 CV					120	94					95	1.2	4.6	1		70
-150 CV					150	124					125	1.4	5.9	1.4		71
-180 CV					180	154					155	1.6	7	2		72
-210 CV					210	184					185		7.6	3.5		73
F63-SLSA10- 95-M42	1	10	13	1.5	95	42	27	17.4	25	30	74	0.8	2	2.6	○	74
-SLSB10- 95-M42	1	10	16	3	95	42	27	20.4	32	30	74	0.8	2.3	1.4	○	75
-SLRA10- 75-M22	1	10	16	3	75	22	27	18.3	25	30	54	0.8	1.9	1	○	76
-SLFB10- 75-M22	1	10	22	6	75	22	27	24.3	32	30	54	0.8	2.3	0.6	×	77
F63-SLSA10- 90 CV	2	10	13	1.5	90	64	—	53	—	30	65	0.9	2.9	1.3	○	78
-120 CV					120	94					95	1.2	4.4			79
-150 CV					150	124					125	1.3	5.2	2.2		80
-180 CV					180	154					154	1.5	6.3	3.4		81
-210 CV					210	184					184	1.6	6.8	6		82
-240 CV					240	214					212	2	9.4	5.8	▲	83
-270 CV					270	244					244	2.1	10.9	6.6		84
-300 CV					300	274					274	2.3	12.2	8.5		85



HRD-01S

型号	Fig.	φD	φC	t	L	M	L1	φC1	φC2	H	h	Kg	N	S		缩略图
F63-SLRA10- 90 CV	2	10	19	4.5	90	64	—	53	—	30	65	1	3.5	0.6	×	86
-120 CV					120	94					95	1.2	4.6	0.9	○	87
-150 CV					150	124					125	1.4	5.8	1.4		88
-180 CV					180	154					155	1.6	7.2	2		89
-210 CV					210	184					185		8	3.1		90
-SLFA10- 90 CV	2	10	19	4.5	90	64	—	53	—	30	65	1	3.5	0.6	×	91
-120 CV					120	94					95	1.2	4.6	0.9	○	92
-150 CV					150	124					125	1.4	5.8	1.4		93
-180 CV					180	154					155	1.6	7.2	2		94
-210 CV					210	184					185		8	3.1		95
F63-SLSA12- 95-M42	1	12	15	1.5	95	42	27	19.4	32	30	74	0.8	2.3	1.8	○	96
-SLSB12- 95-M42	1	12	19	3.5	95	42	27	23.4	32	30	74	0.8	2.4	1.1	○	97
-SLRA12- 75-M22	1	12	20	4	75	22	27	22.3	25	30	54	0.9	2.1	0.8	○	98
-SLFB12- 75-M22	1	12	26	7	75	22	27	28.3	42	30	54	0.9	3	0.4	×	99
-SLSA12- 90 CV	2	12	15	1.5	90	64	—	53	—	30	64	1	3.4	0.9	○	100
-120 CV					120	94					94	1.2	4.7	1.2		101
-150 CV					150	124					124	1.3	5.2	2.4		102
-180 CV					180	154					154	1.5	6.5	3.3		103
-210 CV					210	184					184	1.7	7.7	4.6		104
-240 CV					240	214					212	2	9.6	5.5	▲	105
-270 CV					270	244					244	2.2	11.8	5.4		106
-SLRA12- 90 CV	2	12	22	5	90	64	—	53	—	30	64	1	3.6	0.6	×	107
-120 CV					120	94					94	1.3	5.5	0.7		108
-150 CV					150	124					124	1.5	6.7	1.1	○	109
-180 CV					180	154					154	1.6	7.5	1.8		110
-210 CV					210	184					184	1.7	8.5	2.8		111
F63-SLFA12- 90 CV	2	12	22	5	90	64	—	53	—	30	64	1	3.6	0.6	×	112
-120 CV					120	94					94	1.3	5.5	0.7		113
-150 CV					150	124					124	1.5	6.7	1.1	○	114
-180 CV					180	154					154	1.6	7.5	1.8		115
-210 CV					210	184					184	1.7	8.5	2.8		116
F63-SLFB16- 75-M22	1	16	32	8	75	22	27	34.3	42	32	54	1	3.1	0.3		117
-SLSB16- 90 CV	2	16	21	2.5	90	64	—	53	—	32	62	1.1	3.9	0.6		118
-120 CV					120	94					92	1.4	5.8	0.8		119
-150 CV					150	124					122	1.5	6.9	1.5		120
-180 CV					180	154					152	1.9	8.8	1.9		121
-210 CV					210	184					182	2	9.9	3		122
-240 CV					240	214					212	2.3	11.8	3.7		123
-270 CV					270	244					242	2.7	13.7	4.6		124
F63-SLFB20- 75-M22※	1	20	38	9	75	22	27	40.3	50	40	53	1.1	3.6	0.3		125
-SLSB20- 90 CV	2	20	26	3	90	64	—	51	—	40	62	1.1	4.2	0.5		126
-120 CV					120	94		53			92	1.4	6.2	0.8		127
-150 CV					150	124					122	1.6	7.6	1.3		128
-180 CV					180	154					152	2	9.6	1.8		129
-210 CV					210	184					182	2.3	11.6	2.3		130
-240 CV					240	214					212	2.6	13.7	3		131
-270 CV					270	244					242	3.1	16.3	3.4		132
F63-SLFB25- 75-M22	1	25	45	10	75	22	27	47.3	50	45	53	1.1	3.7	0.2		133

SLFA
SLFB

※1 使用电磁5000S加热器对SLFB20加热时，所使用加热线圈号码不同。
请使用加热线圈No.4进行加热。

■主轴锥孔用 清洁工具
STAR DUST

型号
CLT-F63-G2

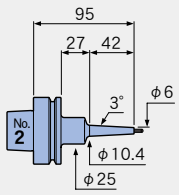
P.194



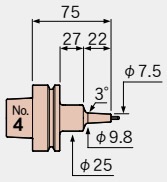
DMG MORI NVD4000 DCG
NV4000 DCG
MAKINO V33*i* / V56*i*



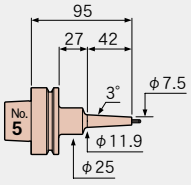
φ3

F63-SLSA3-95-M42


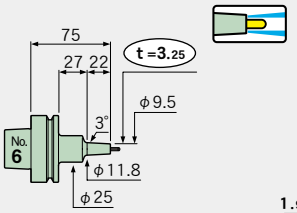
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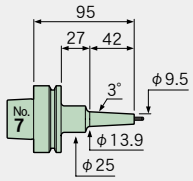
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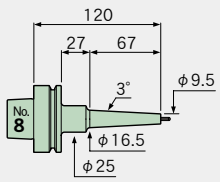
5.3

F63-SLFB3-75-M22


1.9

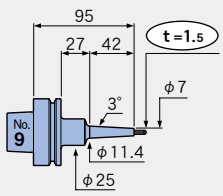
F63-SLFB3-95-M42


3.2

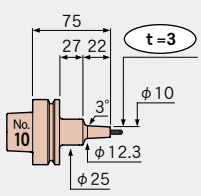
F63-SLFB3-120-M67


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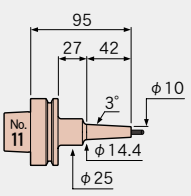
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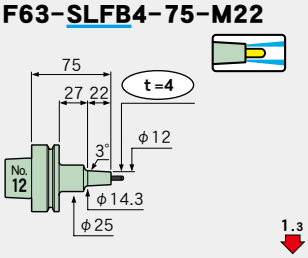
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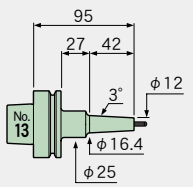
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F63-SLRA4-95-M42


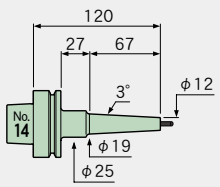
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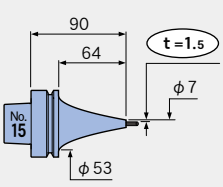
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F63-SLFB4-95-M42


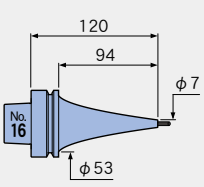
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F63-SLFB4-120-M67


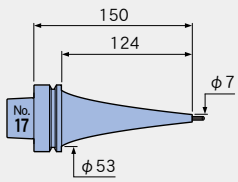
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F63-SLSA4-90 CV


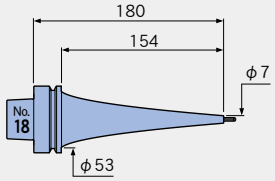
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F63-SLSA4-120 CV


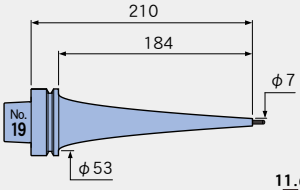
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F63-SLSA4-150 CV


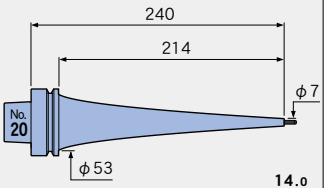
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F63-SLSA4-180 CV


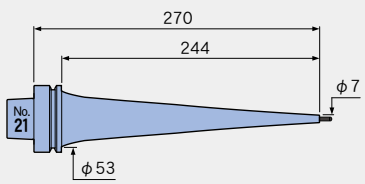
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F63-SLSA4-210 CV


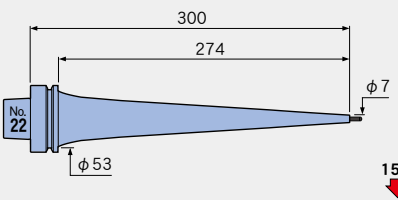
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F63-SLSA4-240 CV


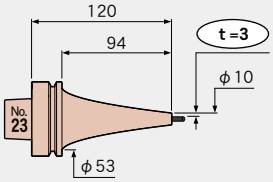
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F63-SLSA4-270 CV


11.9

F63-SLSA4-300 CV


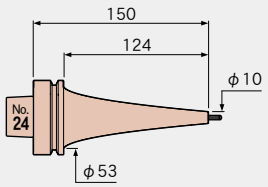
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F63-SLRA4-120 CV


1.9

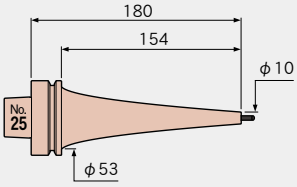
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F63-SLRA4-150 CV



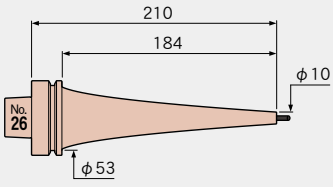
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F63-SLRA4-180 CV



3.3

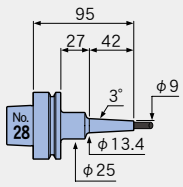
F63-SLRA4-210 CV



5.6

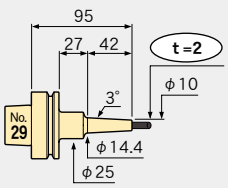
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F63-SLSA6-95-M42



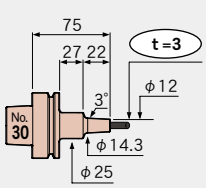
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F63-SLSB6-95-M42



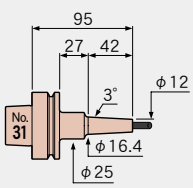
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F63-SLRA6-75-M22



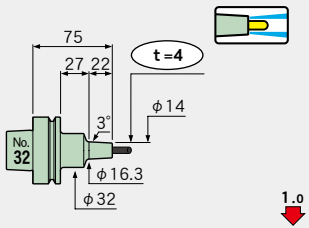
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F63-SLRA6-95-M42



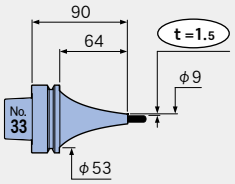
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F63-SLFB6-75-M22



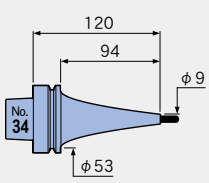
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F63-SLSA6-90 CV



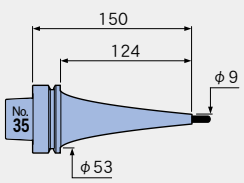
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F63-SLSA6-120 CV



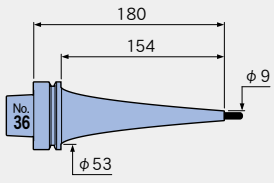
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F63-SLSA6-150 CV



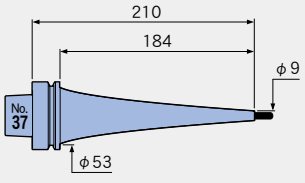
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F63-SLSA6-180 CV



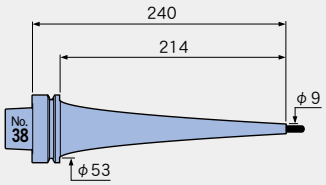
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F63-SLSA6-210 CV



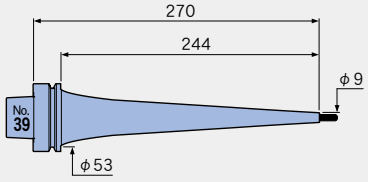
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F63-SLSA6-240 CV



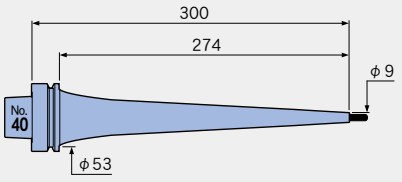
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F63-SLSA6-270 CV



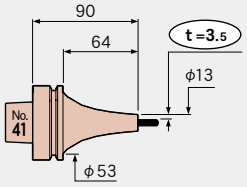
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F63-SLSA6-300 CV



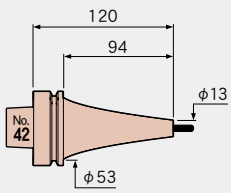
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F63-SLRA6-90 CV



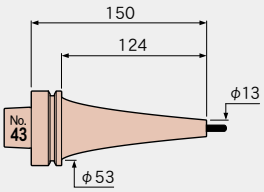
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F63-SLRA6-120 CV



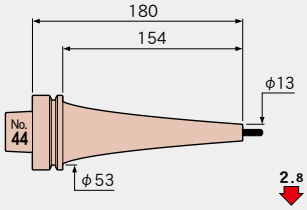
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F63-SLRA6-150 CV



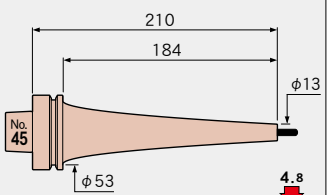
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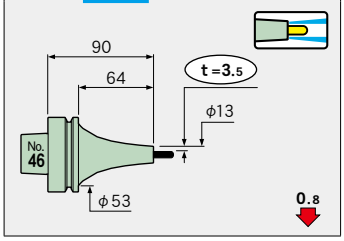
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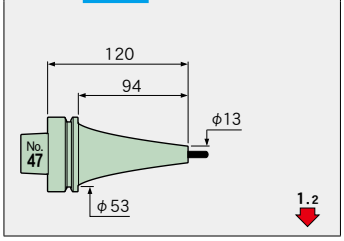


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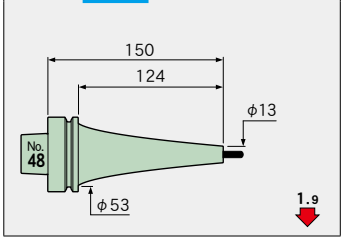
F63-SLFA6-90 CV



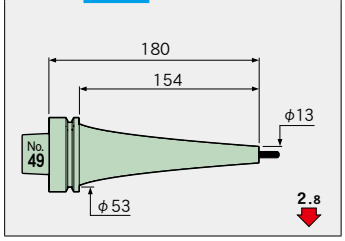
F63-SLFA6-120 CV



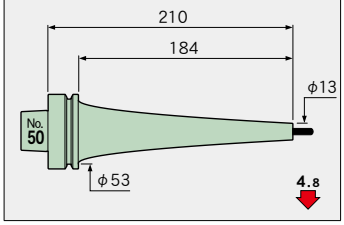
F63-SLFA6-150 CV



F63-SLFA6-180 CV

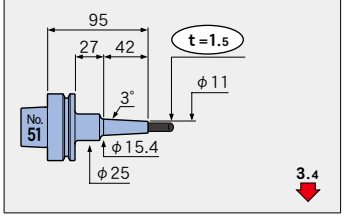


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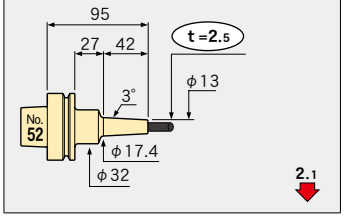


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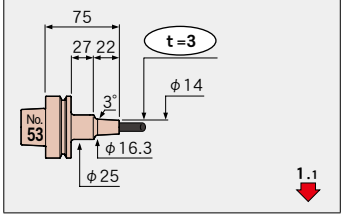
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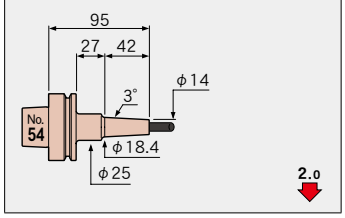
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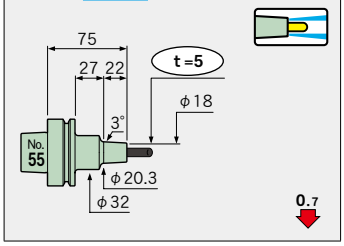
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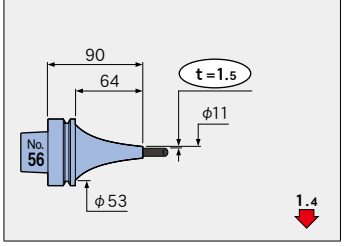
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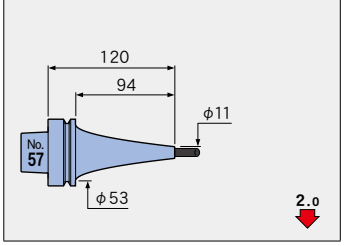
F63-SLFB8-75-M22



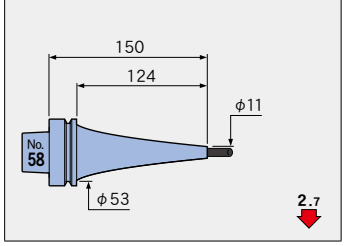
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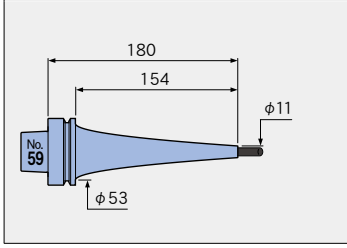
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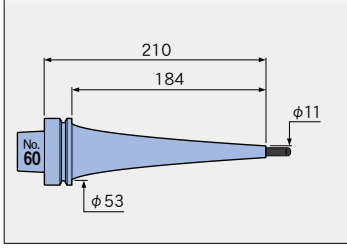
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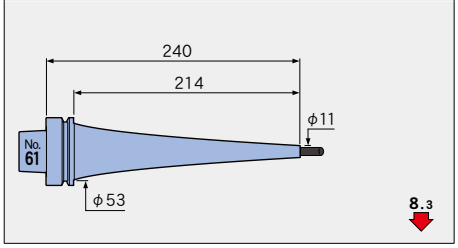
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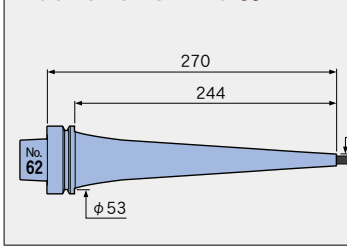
F63-SLSA8-210 CV



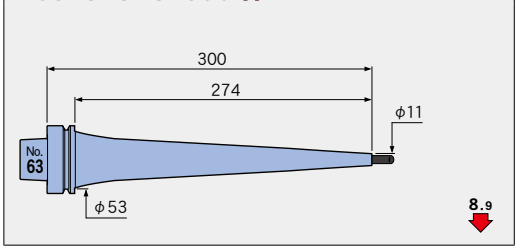
F63-SLSA8-240 CV



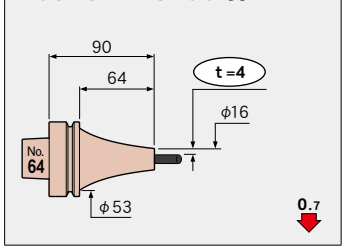
F63-SLSA8-270 CV



F63-SLSA8-300 CV

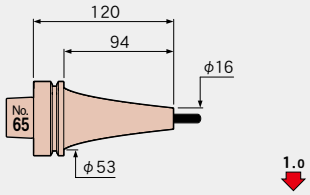


F63-SLRA8-90 CV

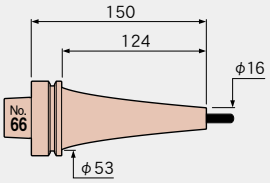


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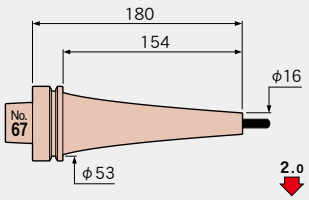
F63-SLRA8-120 CV



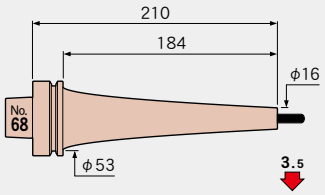
F63-SLRA8-150 CV



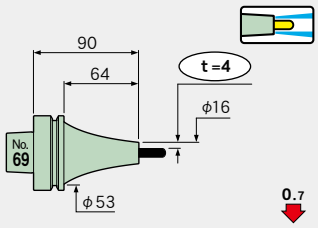
F63-SLRA8-180 CV



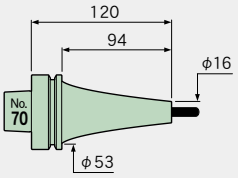
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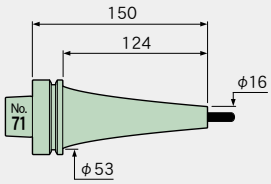
F63-SLFA8-90 CV



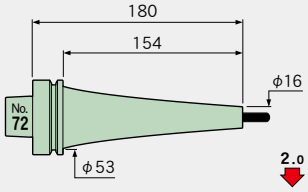
F63-SLFA8-120 CV



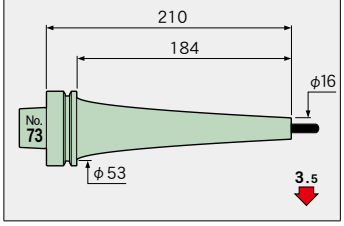
F63-SLFA8-150 CV



F63-SLFA8-180 CV

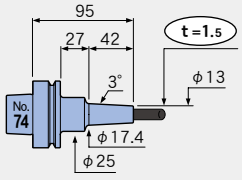


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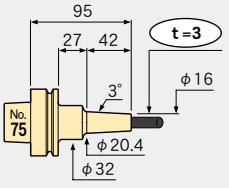


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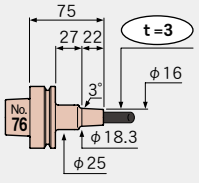
F63-SLSA10-95-M42



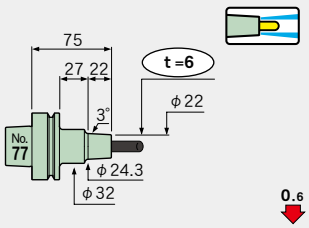
F63-SLSB10-95-M42



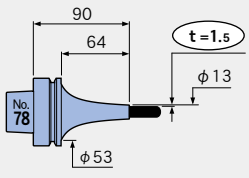
F63-SLRA10-75-M22



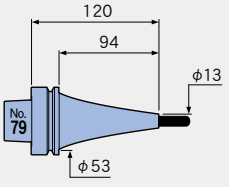
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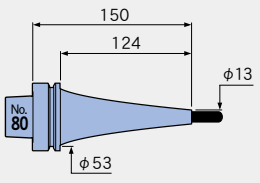
F63-SLSA10-90 CV



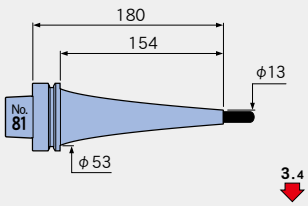
F63-SLSA10-120 CV



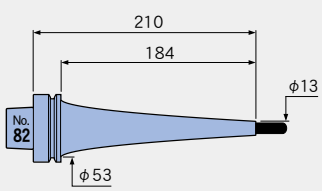
F63-SLSA10-150 CV



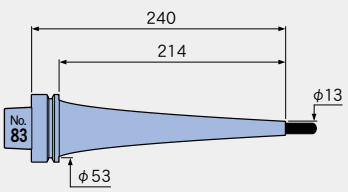
F63-SLSA10-180 CV



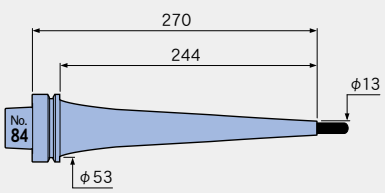
F63-SLSA10-210 CV



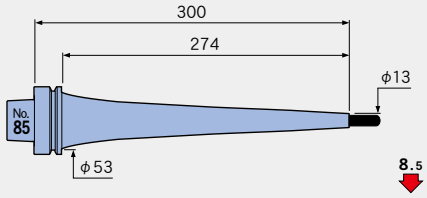
F63-SLSA10-240 CV



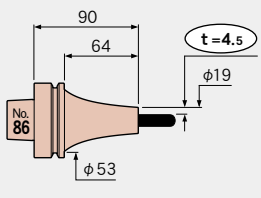
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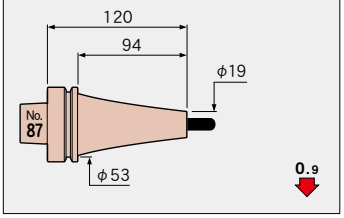
F63-SLSA10-300 CV



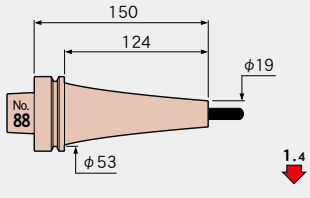
F63-SLRA10-90 CV



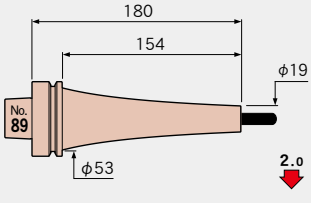
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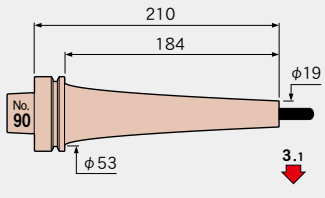
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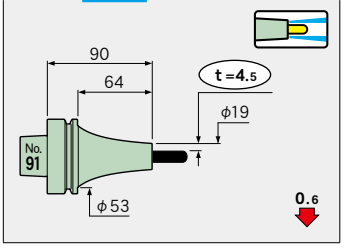
F63-SLRA10-180 CV



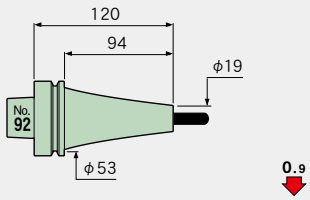
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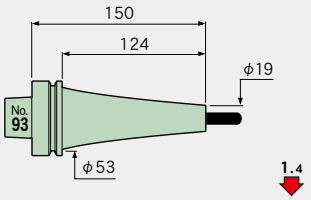
F63-SLFA10-90 CV



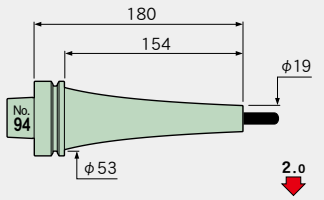
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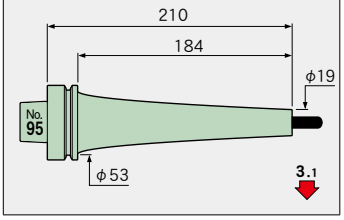
F63-SLFA10-150 CV



F63-SLFA10-180 CV

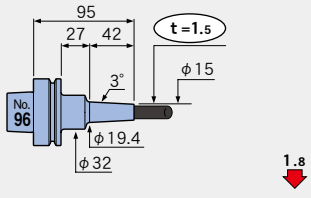


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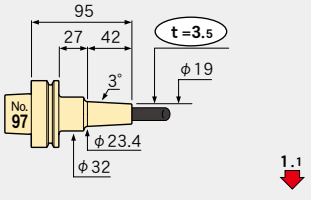


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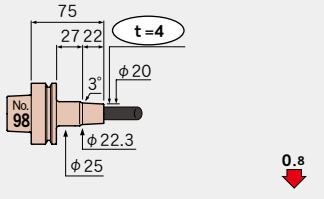
F63-SLSA12-95-M42



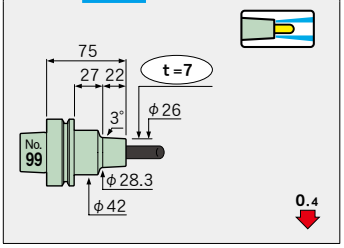
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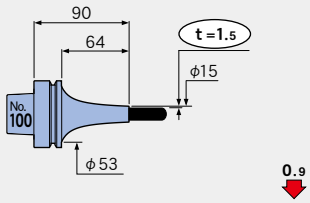
F63-SLRA12-75-M22



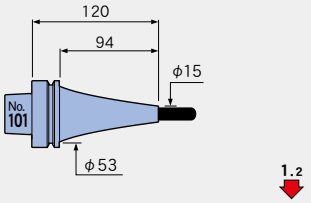
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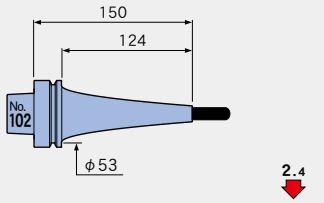
F63-SLSA12-90 CV



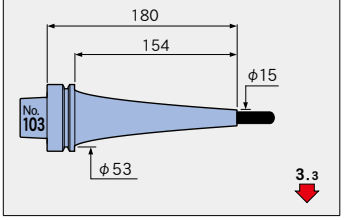
F63-SLSA12-120 CV



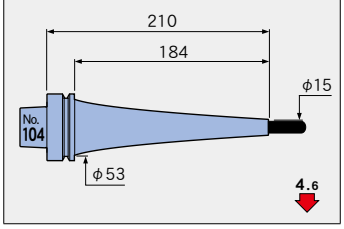
F63-SLSA12-150 CV



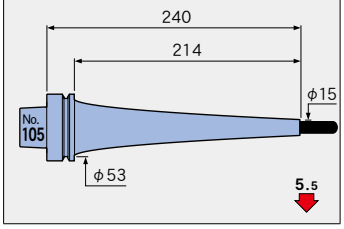
F63-SLSA12-180 CV



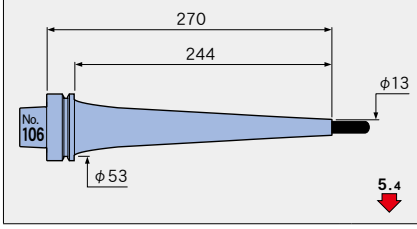
F63-SLSA12-210 CV



F63-SLSA12-240 CV

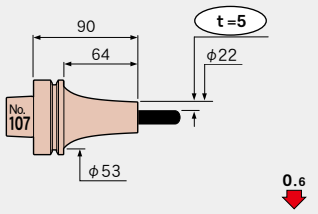


F63-SLSA12-270 CV

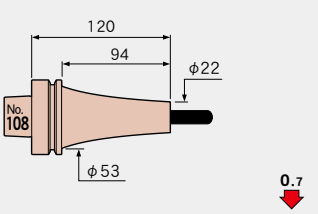


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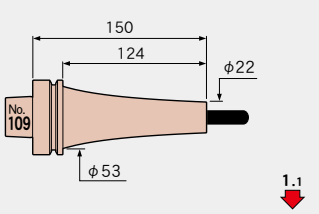
F63-SLRA12-90 CV



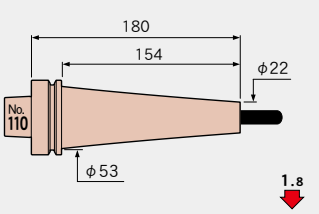
F63-SLRA12-120 CV



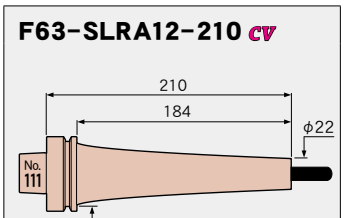
F63-SLRA12-150 CV



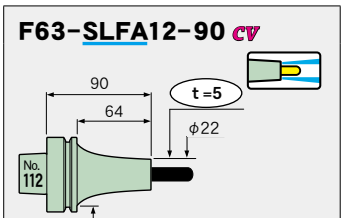
F63-SLRA12-180 CV



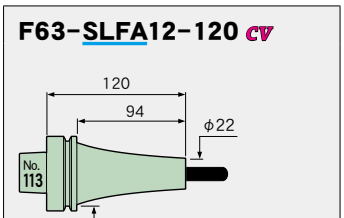
F63-SLRA12-210 CV



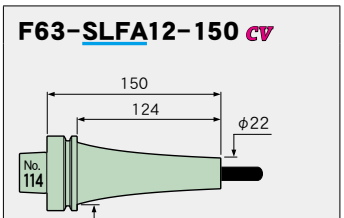
F63-SLFA12-90 CV



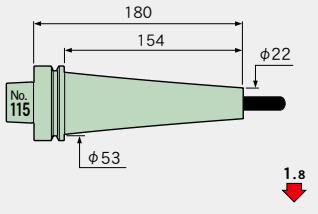
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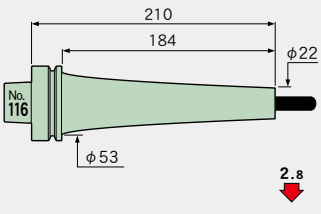
F63-SLFA12-150 CV



F63-SLFA12-180 CV

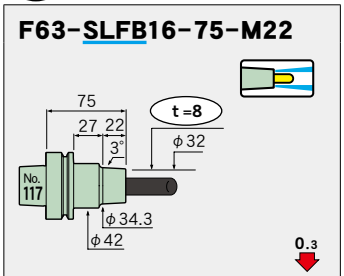


F63-SLFA12-210 CV

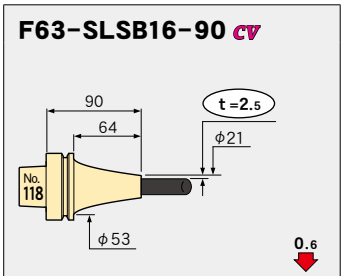


ϕ16

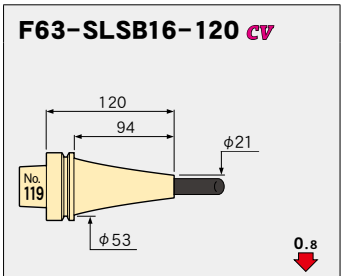
F63-SLFB16-75-M22



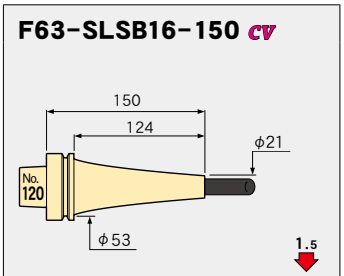
F63-SLSB16-90 CV



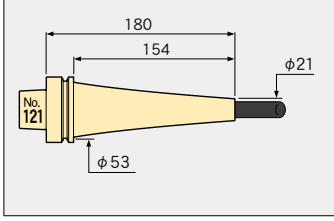
F63-SLSB16-120 CV



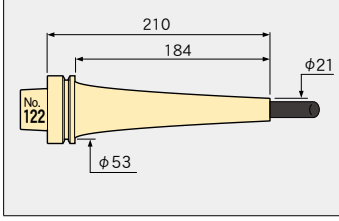
F63-SLSB16-150 CV



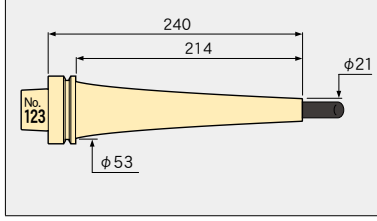
F63-SLSB16-180 CV



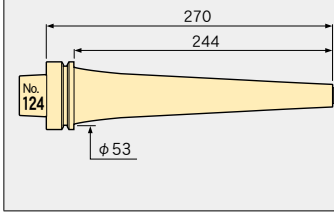
F63-SLSB16-210 CV



F63-SLSB16-240 CV

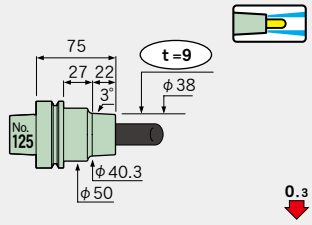


F63-SLSB16-270 CV

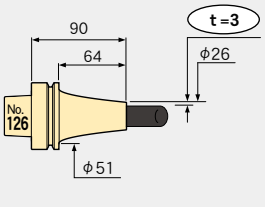


φ20

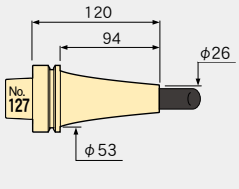
F63-SLFB20-75-M22



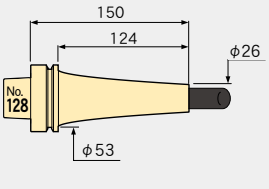
F63-SLSB20-90 CV



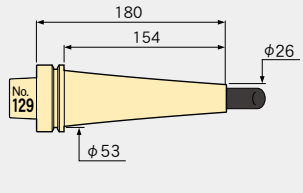
F63-SLSB20-120 CV



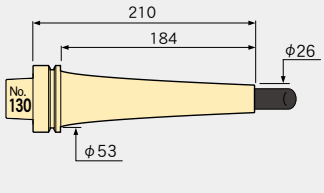
F63-SLSB20-150 CV



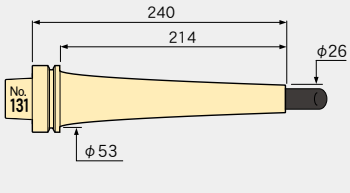
F63-SLSB20-180 CV



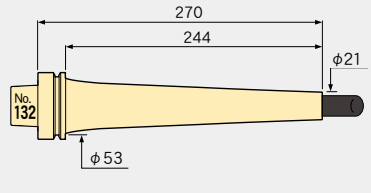
F63-SLSB20-210 CV



F63-SLSB20-240 CV

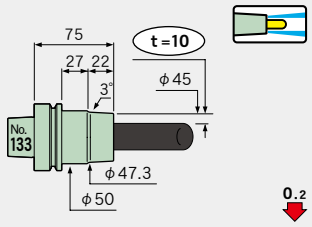


F63-SLSB20-270 CV



φ25

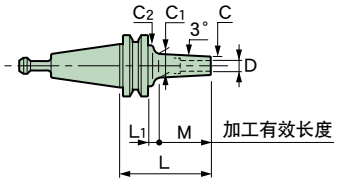
F63-SLFB25-75-M22



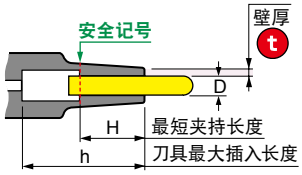
15T

一体型 3°





■注意事项
- 刀具安装…插入刀具时,请务必将刀具插入比安全记号更深的位置。



BROTHER TC-20A TC-20B





HEATROBO电磁 1200S (HRD-01S-230AS) 电磁式加热器对应表

[○] 可加热 [×] 不可加热

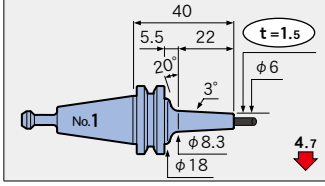
壁厚

型号	φD	φC	t	L	M	L1	φC1	φC2	H	h	Kg	N	S		缩略图
15TR3-SLSA 3-40	3	6	1.5	40	22	5.5	8.3	18	9	46	0.1	0.3	4.7	○	1
-60				60	42		10.4			66			9.3		2
15TR3-SLSA3.175-40	3.175	6.175	1.5	40	22	5.5	8.5	18	9	46	0.1	0.3	4.4	○	3
-60				60	42		10.6			66			8.8		4
15TR3-SLSA 4-40	4	7	1.5	40	22	5.5	9.3	18	12	46	0.1	0.3	3.6	○	5
-60				60	42		11.4			66			7.3		6
15TR3-SLSA 5-40	5	8	1.5	40	22	5.5	10.3	18	15	46	0.1	0.3	2.9	○	7
-60				60	42		12.4			66			5.9		8
15TR3-SLSA 6-60	6	9	1.5	60	42	5.5	13.4	18	18	66	0.1	0.4	4.9	○	9
-SLRA 6-35		12	3	35	19.6	2.9	14.1	—		46		0.2	1.2		10
15TR3-SLRA 8-35	8	14	3	35	19.6	2.9	16.1	—	20	51	0.1	0.3	0.9	×	11
15TR3-SLRA10-35	10	16	3	35	19.6	2.9	18.1	—	20	51	0.1	0.4	0.8	×	12

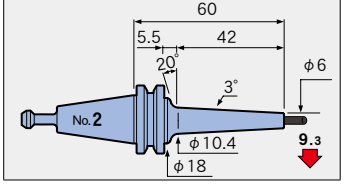
S=1:3

φ3

15TR3-SLSA3-40

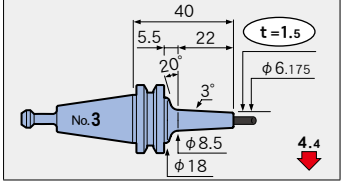


15TR3-SLSA3-60

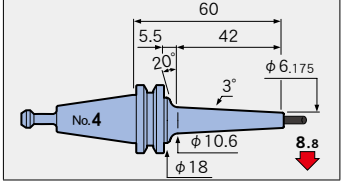


φ3.175

15TR3-SLSA3.175-40

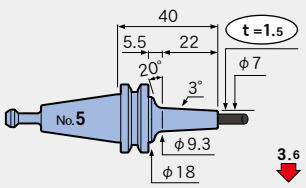


15TR3-SLSA3.175-60

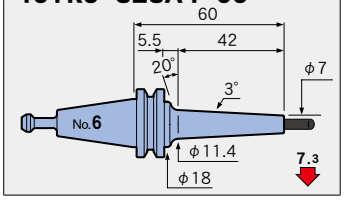


φ4

15TR3-SLSA4-40

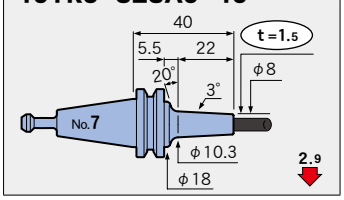


15TR3-SLSA4-60

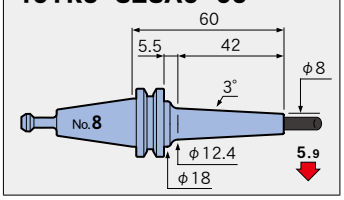


φ5

15TR3-SLSA5-40

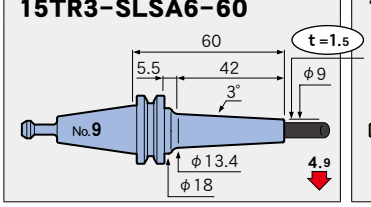


15TR3-SLSA5-60

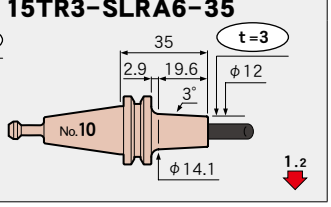


φ6

15TR3-SLSA6-60

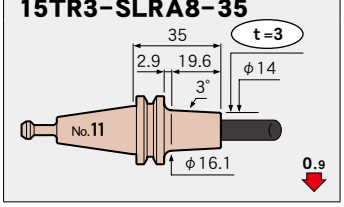


15TR3-SLRA6-35



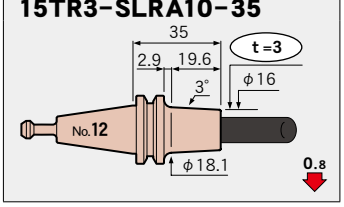
φ8

15TR3-SLRA8-35



φ10

15TR3-SLRA10-35

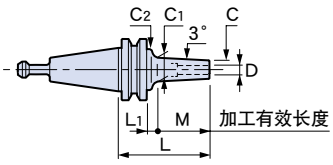


S20T

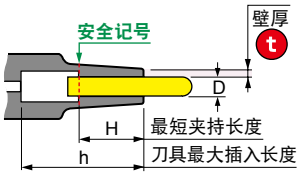
一体型 3°



S20TR2-SLRA8-35



■注意事项
- 刀具安装…插入刀具时，请务必将刀具插入比安全记号更深的位置。





HEATROBO电磁 1200S (HRD-01S-230AS) 电磁式加热器对应表

[○] 可加热　[×] 不可加热

SUGINO
V9/NSV9/H5/H7/H9



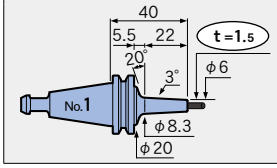
壁厚 t

型号	φD	φC	t	L	M	L1	φC1	φC2	H	h	Kg	N	S		缩略图
S20TR2-SLSA 3-40	3	6	1.5	40	22	5.5	8.3	20	9	46	0.1	0.4	4.6	○	1
-60				60	42		10.4			66			9.2		2
S20TR2-SLSA3.175-40	3.175	6.175	1.5	40	22	5.5	8.5	20	9	46	0.1	0.4	4.4	○	3
-60				60	42		10.6			66			8.8		4
S20TR2-SLSA 4-40	4	7	1.5	40	22	5.5	9.3	20	12	46	0.1	0.4	3.6	○	5
-60				60	42		11.4			66			7.2		6
S20TR2-SLSA 5-40	5	8	1.5	40	22	5.5	10.3	20	15	46	0.1	0.4	2.8	○	7
-60				60	42		12.4			66		0.5	5.8		8
S20TR2-SLSA 6-60	6	9	1.5	60	42	5.5	13.4	20	18	66	0.1	0.5	4.7	○	9
-SLRA 6-35		12	3	35	19.6	2.9	14.1	—		46		0.3	1.1		10
S20TR2-SLRA 8-35	8	14	3	35	19.6	2.9	16.1	—	20	51	0.1	0.4	0.9	×	11
S20TR2-SLRA10-35	10	16	3	35	19.6	2.9	18.1	—	20	51	0.1	0.5	0.8	×	12
S20TR2-SLRA12-45	12	20	4	45	32.5	—	23.4	—	30	51	0.2	0.6	0.8	×	13

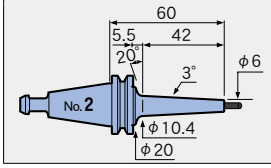
S=1:4

φ3

S20TR2-SLSA3-40

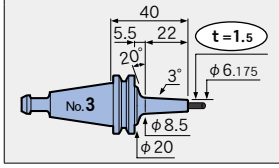


S20TR2-SLSA3-60

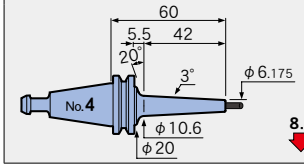


φ3.175

S20TR2-SLSA3.175-40

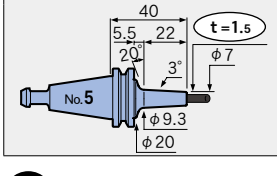


S20TR2-SLSA3.175-60

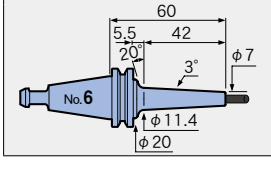


φ4

S20TR2-SLSA4-40

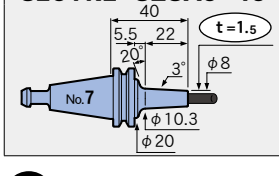


S20TR2-SLSA4-60

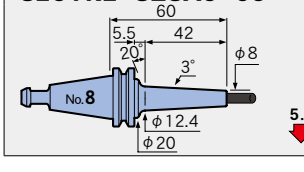


φ5

S20TR2-SLSA5-40

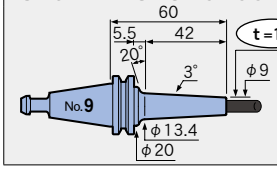


S20TR2-SLSA5-60

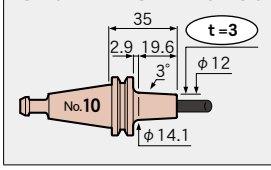


φ6

S20TR2-SLSA6-60

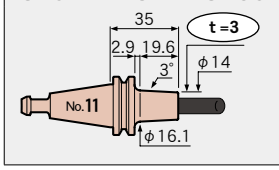


S20TR2-SLRA6-35



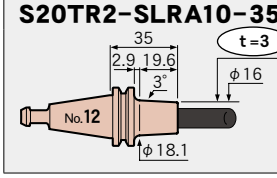
φ8

S20TR2-SLRA8-35



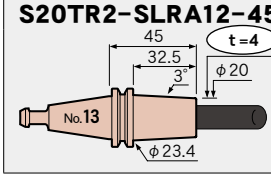
φ10

S20TR2-SLRA10-35



φ12

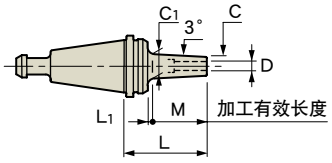
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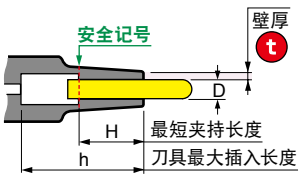
RS20

一体型 3°





■注意事项
- 刀具安装…插入刀具时,请务必将刀具插入比安全记号更深的位置。



ROKU-ROKU
MEGA





HEATROBO电磁 1200S (HRD-01S-230AS) 电磁式加热器对应表
[○] 可加热 [×] 不可加热

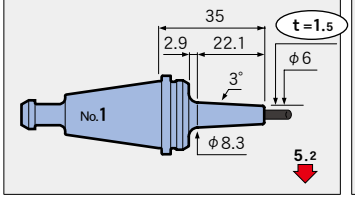
壁厚

型号	φD	φC	t	L	M	L1	φC1	H	h	Kg	N	S		缩略图
RS20-SLSA 3-35	3	6	1.5	35	22.1	2.9	8.3	9	46	0.1	0.2	5.2	○	1
-SLSA 3.175-35	3.175	6.175	1.5	35	22.1	2.9	8.5	9	46	0.1	0.2	4.9	○	2
-SLSA 4-35	4	7	1.5	35	22.1	2.9	9.3	12	46	0.1	0.2	4	○	3
-SLSA 5-35	5	8	1.5	35	22.1	2.9	10.3	15	46	0.1	0.2	3.2	○	4
-SLRA 6-30	6	12	3	30	17.1	2.9	13.8	18	46	0.1	0.2	1.1	×	5
-SLRA 8-30	8	14	3	30	17.2	2.8	15.8	20	51	0.1	0.3	0.9	×	6
-SLRA10-30	10	16	3	30	17.6	2.4	17.9	20	51	0.1	0.4	0.7	×	7

S=1:2.5

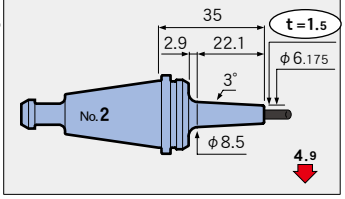
φ3

RS20-SLSA3-35



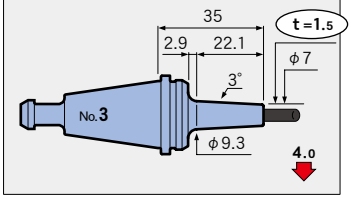
φ3.175

RS20-SLSA3.175-35



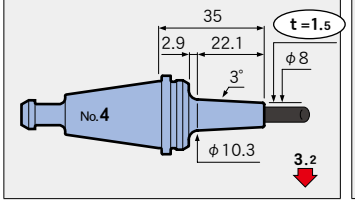
φ4

RS20-SLSA4-35



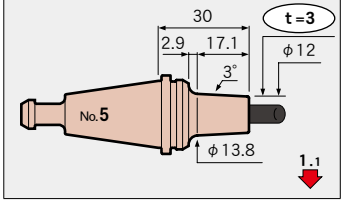
φ5

RS20-SLSA5-35



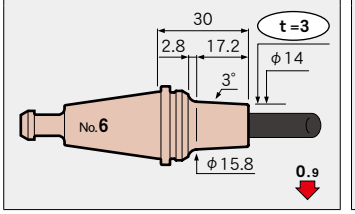
φ6

RS20-SLRA6-30



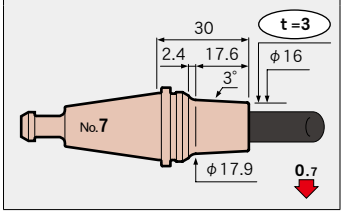
φ8

RS20-SLRA8-30



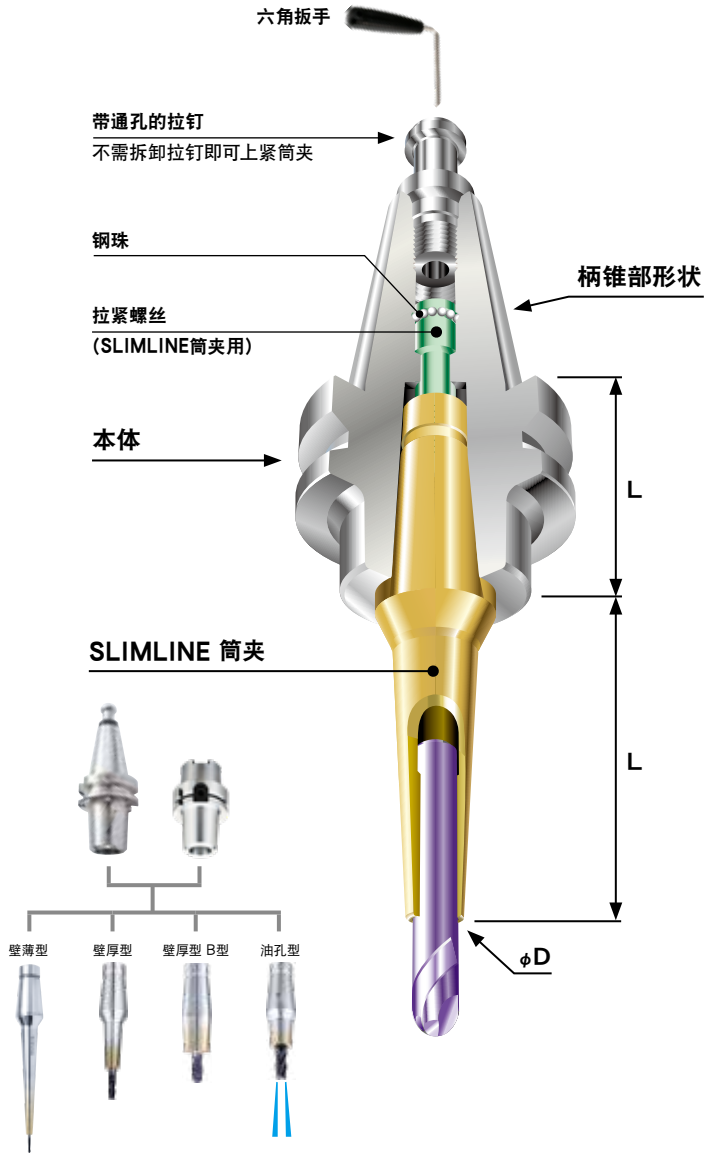
φ10

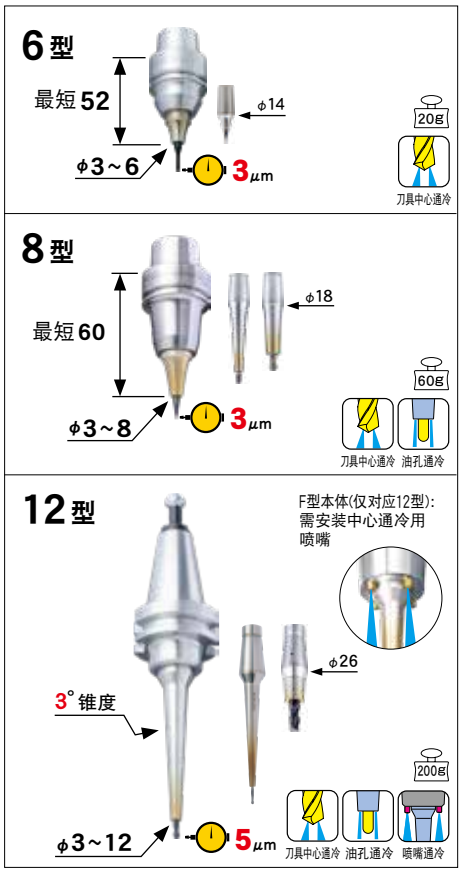
RS20-SLRA10-30

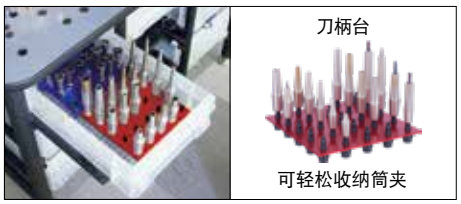


2 体型系列

■ 经济实惠的通用型组合式刀柄







本体

BT40 – SL K 12 – 45 F

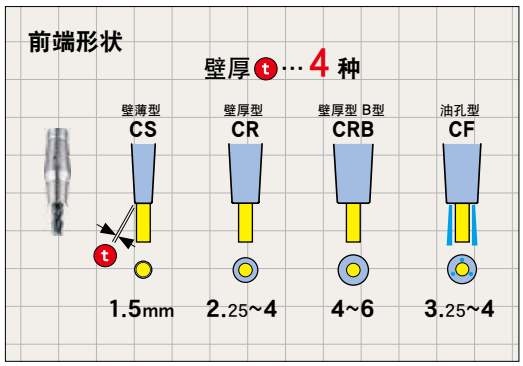
- BT40：柄锥部形状
- SL：SLIMLINE
- K：型
- 12：型
- 45：L
- F：油孔通冷

PAGE		
160	6 型	BT30 HSK-A40, A50 HSK-E32, E40, E50
161	8 型	BT30, BT40 HSK-A40, A50, A63 HSK-E40, E50, F63
162	12 型	BT30, BT40, BT50 HSK-A50, A63, A100 HSK-E50, F63 DN40,DN50

SLIMLINE 筒夹

CR 12 – 4 – 80

- CR：筒夹式
- 12：
- 4：φD
- 80：L



■ 本体 6型



Fig. 1

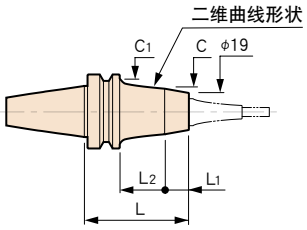
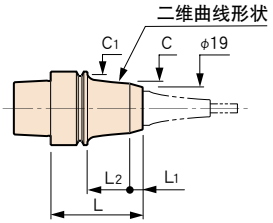


Fig. 2



型号	Fig.	L	L1	L2	φC	φC1	Kg	N
BT30-SLK 6-35-MAS1	1	35	13	—	—	34	0.5	1.4
-MAS2								
-65-MAS1		65	15	28	25.1		0.6	2.2
-MAS2								
A40 -SLK 6-37	1	37	17	—	—	34	0.2	3
50		50	7	23	23.5		0.3	3.9
A50 -SLK 6-42	2	42	16	—	—	42	0.4	5.3
55		55	7	22	24.6		0.5	6.4
E32 -SLK 6-37	2	37	7	10	26	—	0.2	1.3
-50		50		23				2.2
E40 -SLK 6-37	2	37	17	—	—	34	0.3	1.7
-50		50	7	23	23.5			2.6
E50 -SLK 6-42	2	42	16	—	—	42	0.5	3.4
-55		55	7	22	24.6		0.6	4.4

■选购品
- SLIMLINE 筒夹6型
- 六角扳手

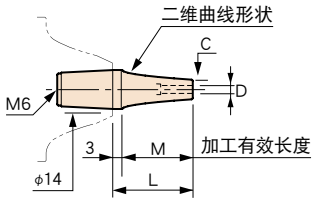
■标准附属品
- 冷却液导管 (HSK-A)
- 拉钉 (BT30)

■备考
- BT30锥柄附带专用拉钉。请确认机床品牌和型号。关于拉钉的交换请向弊司垂询。

■注意事项
- 如果无法将热装筒夹从本体上卸下时，请参照P.200页。
- HSK-E锥柄的刀柄没有附带冷却液导管。如需使用，请向敝司垂询。

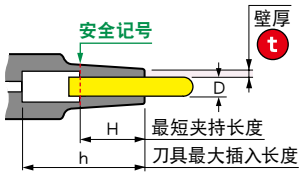
■ SLIMLINE筒夹 6型





■备考
- S 是E32-SLK6-37与SLIMLINE热装式筒夹组合使用时的弯曲量。无论同哪种锥柄组合，其数值大致相同。

■注意事项
- 刀具安装…插入刀具时，请务必将刀具插入比安全记号更深的位置。

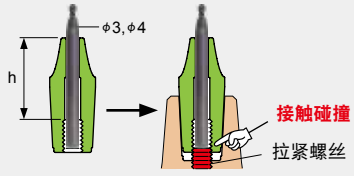


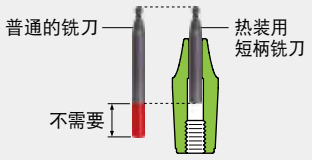
型号	φD	φC	t (壁厚)	L	M	H	S	N	g	h
CS6-3-15	3	6	1.5	15	12	9	1.5	0.1	20	24
-30				30	27		3.2	0.2	30	39
-45				45	42		9	0.3	40	54
CR6-3-30	3	7.5	2.25	30	27	9	1.3	0.1	30	39
-45				45	42		6.2	0.3	40	54
CS6-4-15	4	7	1.5	15	12	12	1.2	0.1	30	24
-30				30	27		2.8	0.2		39
-45				45	42		7.9	0.4	40	54
CR6-4-30	4	10	3	30	27	12	1	0.1	30	39
-45				45	42		4.4	0.5	50	54
CS6-6-15	6	9	1.5	15	12	15	1	0.1	20	24
-30				30	27		2.4	0.3	30	35
-45				45	42		6.5	0.5	40	
CR6-6-30	6	12	3	30	27	15	0.8	0.2	20	35
-45				45	42		4	0.6		

⚠ 在装夹刀具时，请勿超出刀具最大插入长 (h)

安装φ3、φ4的刀具时，如将刀具柄部插入长超过最大插入长度，刀具会接触碰撞上本体部的拉紧螺丝，无法进行6型和8型两体式筒夹的正常安装。

由于6型和8型两体式筒夹的刀具插入长度较短，推荐使用热装用短柄刀具。若有切断刀具柄部时，请注意去除毛刺。





■六角扳手 (6型8型通用)

使用于SLIMLINE热装式6型・8型本体和筒夹的紧固。



型号	柄锥部形状
TW- 4	HSK-A, E, F, BT40
DW-14	BT30

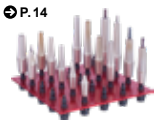
■主轴锥孔用 清洁工具 STAR DUST

P. 194



■刀柄台

P. 14



■ 本体 8型



Fig. 1

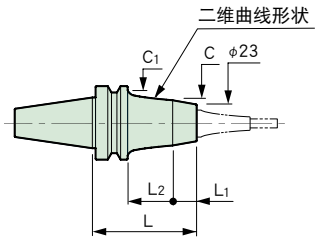
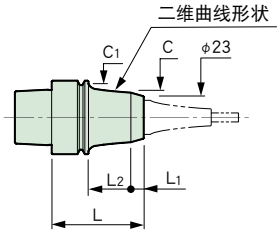


Fig. 2



型号	Fig.	L	L1	L2	φC	φC1	Kg	N
BT30-SLK8-35-MAS1	1	35	13	—	—	34	0.4	1.5
-MAS2								
-65-MAS1		65	15	28	27.5		0.6	2.3
-MAS2								
BT40-SLK8-40	2	40	13	—	—	53	1	1.8
-70		70	15	28	31.2		1.2	2.5
A40 -SLK8-50	2	50	7	23	27	34	0.3	2.5
-70		70	15	35	27.3		0.4	3.3
A50 -SLK8-55	2	55	7	22	28.1	42	0.5	4
-75		75	15	34	28.7		0.6	4.8
A63 -SLK8-55	2	55	7	22	29.5	53	0.8	5.7
-75		75	15	34	30.5		0.9	5.9
E40 -SLK8-50	2	50	7	23	27	34	0.3	2.1
-70		70	15	35	27.3		0.4	2.9
E50 -SLK8-55	2	55	7	22	28.1	42	0.6	2.7
-75		75	15	34	28.7		0.7	3.5
F63M-SLK8-55	2	55	7	22	29.5	53	0.8	4.4
-75		75	15	34	30.5		1	5.2

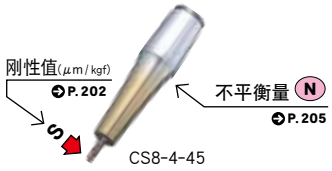
■选购品
- SLIMLINE 筒夹8型
- 六角扳手

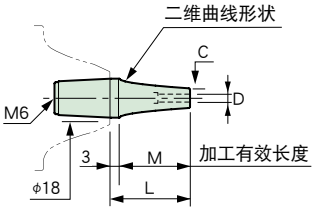
■标准附属品
- 冷却液导管 (HSK-A)
- 拉钉 (BT30)

■备考
- BT30锥柄附带专用拉钉。
  请确认机床品牌和型号。
  关于拉钉的交换请向弊司垂询。

■注意事项
- 如果无法将热装筒夹从本体上卸下时，
  请参照P.200页。
- HSK-E,F锥柄的刀柄没有附带冷却液导管。
  如需使用，请向敝司垂询。

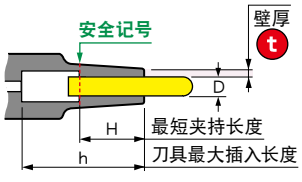
■ SLIMLINE筒夹 8型





■备考
- S 是E40-SLK8-50与SLIMLINE热装式筒夹组合使用时的弯曲量。
  无论同哪种锥柄组合，其数值大致相同。

■注意事项
- 刀具安装…插入刀具时，请务必将刀具插入比安全记号更深的位置。



型号	φD	φC	t (壁厚)	L	M	H	S	N	g	h
CS8-3-25	3	6	1.5	25	22	9	2.1	0.2	60	37.5
-45				45	42		4.8	0.4	70	57.5
-65				65	62		10.3	0.6	80	77.5
CR8-3-45	3	7.5	2.25	45	42	9	3.6	0.5	70	57.5
-65				65	62		7.4	0.7	90	77.5
CF8-3-45	3	9.5	3.25	45	42	9	2.8	0.5	80	57.5
-65				65	62		5.3	0.8	100	77.5
CS8-4-25	4	7	1.5	25	22	12	1.8	0.3	60	37.5
-45				45	42		4.4	0.5	70	57.5
-65				65	62		9.2	0.6	80	77.5
CR8-4-45	4	10	3	45	42	12	2.7	0.6	80	57.5
-65				65	62		5.3	0.8	100	77.5
CF8-4-45	4	12	4	45	42	12	2.3	0.7	90	57.5
-65				65	62		4.2	0.9	110	77.5
CS8-6-25	6	9	1.5	25	22	15	1.5	0.3	60	35
-45				45	42		3.7	0.6	80	
-65				65	62		7.6	0.8	90	
CR8-6-45	6	12	3	45	42	15	2.5	0.7	90	35
-65				65	62		4.8	1	110	
CF8-6-45	6	14	4	45	42	15	2.1	0.8	100	35
-65				65	62		3.9	1.1	120	
CS8-8-25	8	11	1.5	25	22	20	1.4	0.4	60	37
-45				45	42		3.3	0.7	70	49
CR8-8-45	8	14	3	45	42	20	2.4	0.8	90	49
CF8-8-45	8	16	4	45	42	20	2.1	1.1	110	49

CF

■ 本体 12型



BT40-SLK12-75

Fig. 1

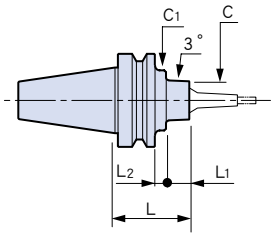
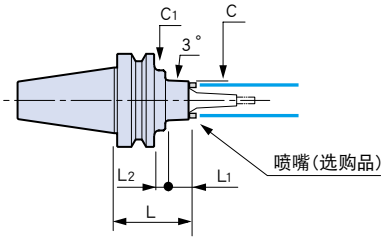


Fig. 2





A63-SLK12-75F

Fig. 3

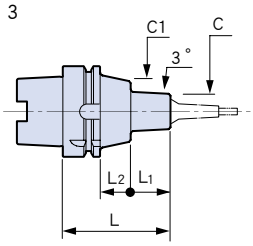
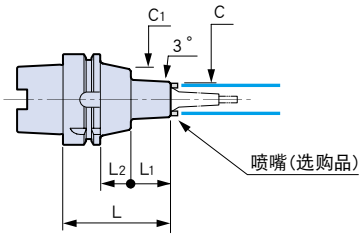


Fig. 4



型号	Fig.	L	ϕC	L1	L2	ϕC1	Kg	N
BT30-SLK12- 35-MAS1	1	35	38	13	—	—	0.4	1
-MAS2								
BT40-SLK12- 45	1	45	38	18	—	—	1.1	1.4
- 45F	2		41					1.6
- 75	1	75	38	48			1.4	
- 75F	2		41					1.8
-135F		135		108			2.2	3.2
BT50-SLK12- 75	1	75	38	25	12	65	4	4.7
- 75F	2		41					4.9
-105F		105		55			4.4	5.3
-135F		135		85			4.7	5.7
-225	1	225	38	175			6.4	14.8
-315		315		225	52		11	31.3
A50 -SLK12- 75	3	75	38	49	—	—	0.8	4.8
A63 -SLK12- 75	3	75	38	49	—	—	1	5
- 75F	4		41				1.1	5.5
-135	3	135	38	109			1.7	8.5
-135F	4		41				1.9	8.6
A100-SLK12-105	3	105	38	43	33	65	3.4	41.3
-105F	4		41				3.5	41.5
-135F		135		73			3.8	42.2
-225	3	225	38	163			5.4	36.3
-315		315		253			6.4	46.5
E50 -SLK12- 75	3	75	38	49	—	—	0.8	2.9
F63M-SLK12- 75	3	75	38	49	—	—	1	3.4
DN40AD-SLK12- 45	1	45	38	13.8	12.1	45	1	4.6
- 45F	2		41	7.9	18			4.3
- 75	1	75	38	43.8	12.1		1.3	5.8
- 75F	2		41	55.9	—			5.5
DN50AD-SLK12- 75	1	75	38	40	15.9	70	3.4	12.6
- 75F	2						3.5	12.3
-135F		135	41	100			4.3	19



■选购品
- SLIMLINE筒夹12型
- 六角扳手 (W-135)
- 喷嘴 (喷嘴型:NOZ)
- 拉钉 (BT40/50, DIN)→P.184

■标准附属品
- 冷却液导管 (HSK-A)
- 拉钉 (BT30)

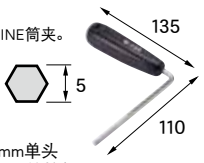
■备考
- BT30锥柄附带专用拉钉。请确认机床品牌和型号。关於拉钉的交换请向弊司垂询。

■注意事项
- 如果无法将热装筒夹从本体上卸下时，请参照P.200页。
- HSK-E, F锥柄的刀柄没有附带冷却液导管。如需使用，请向敝司垂询。

▮六角扳手

用于拧紧本体和SLIMLINE筒夹。

型号
W-135



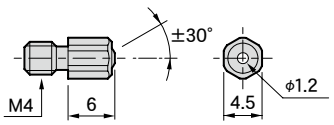
■备考
- 请使用市售的14mm单头六角扳手拧紧BT30 的拉钉。

▮喷嘴

型号	数量
NOZ-M4-12	12
-60	60



■标准附属品 ● 专用扳手
■备考 ● 每个本体需要4个



▮主轴锥孔用 清洁工具 STAR DUST

P. 194



关于SLIMLINE筒夹的安装

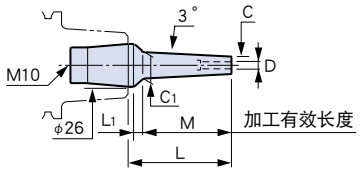
若通孔拉钉的孔径直径在6mm以上，无需取下拉钉，就能直接进行SLIMLINE筒夹的装卸操作。





■ SLIMLINE筒夹 12型



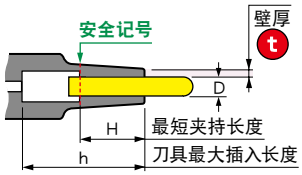


■备考

● S 是BT40-SLK12-45与SLIMLINE热装式筒夹组合使用时的弯曲量。
无论同哪种锥柄组合，其数值大致相同。

■注意事项

● 刀具安装…插入刀具时，请务必将刀具插入比安全记号更深的位置。



壁厚 ↓

型号	φD	φC	t	L	M	L1	φC1	H	S	N	Kg	h
CS12 -3 - 35	3	6	1.5	35	22	9.5	8.4	10	4.8	0.5	0.2	60
- 55				55	42		10.5		9.5			80
- 80				80	67		13.1		15	0.7		105
-110				110	97		16.2		20.6	0.8		135
CR12 -3 - 35	3	7.5	2.25	35	22	9.5	9.9	10	2.9	0.5	0.2	60
- 55				55	42		12		5.5			80
- 80				80	67		14.6		8.9	0.7		105
CF12 -3 - 35	3	9.5	3.25	35	22	9.5	11.9	10	1.9	0.5	0.2	60
- 55				55	42		14		3.3	0.6		80
- 80				80	67		16.6		5.3	0.8		105
CS12 -3.175- 35	3.175	6.175	1.5	35	22	9.5	8.5	10	4.6	0.5	0.2	60
- 55				55	42		10.6		9			80
- 80				80	67		13.2		14.3	0.7		105
-110				110	97		16.4		19.7	0.8		135
CS12 -4 - 35	4	7	1.5	35	22	9.5	9.4	12	3.8	0.5	0.2	60
- 55				55	42		11.5		7.5			80
- 80				80	67		14.1		11.9	0.7		105
-110				110	97		17.2		16.6	0.9		135
CR12 -4 - 35	4	10	3	35	22	9.5	12.4	12	1.7	0.5	0.2	60
- 55				55	42		14.5		3.1	0.6		80
- 80				80	67		17.1		5.1	0.8		105
CF12 -4 - 35	4	12	4	35	22	9.5	14.4	12	1.3	0.6	0.2	60
- 55				55	42		16.5		2.2	0.8		80
- 80				80	67		19.1		3.4	0.9		105
CS12 -5 - 35	5	8	1.5	35	22	9.5	10.4	15	3	0.5	0.2	60
- 55				55	42		12.5		6	0.6		80
- 80				80	67		15.1		9.7	0.8		105
-110				110	97		18.2		13.6	1		135
CS12 -6 - 35	6	9	1.5	35	22	9.5	11.4	18	2.4	0.5	0.2	60
- 55				55	42		13.5		4.9	0.7		80
- 80				80	67		16.1		8	0.8		105
-110				110	97		19.2		11.4	1		135
CR12 -6 - 35	6	12	3	35	22	9.5	14.4	18	1.3	0.6	0.2	60
- 55				55	42		16.5		2.4	0.7		80
- 80				80	67		19.1		3.9	0.9		105
CRB12-6 - 35	6	14	4	35	22	9.5	16.3	18	1	0.7	0.2	60
- 55				55	42		18.0		1.7	0.8		80
- 80				80	67		21.0		2.7	1	0.3	105
CF12 -6 - 35	6	14	4	35	22	9.5	16.4	18	1	0.7	0.2	60
- 55				55	42		18.5		1.7	0.9		80
- 80				80	67		21.1		2.7		0.3	105

型号	φD	φC	t	L	M	L1	φC1	H	S	N	Kg	h
CS12 - 7- 35	7	10	1.5	35	22	9.5	12.4	20	2	0.6	0.2	60
- 55				55	42		14.5		4.1	0.7		80
- 80				80	67		17.1		6.8	0.9		105
-110				110	97		20.2		9.7	1.2	0.3	135
CS12 - 8- 35	8	11	1.5	35	22	9.5	13.4	25	1.6	0.6	0.2	60
- 55				55	42		15.5		3.4	0.7		80
- 80				80	67		18.1		5.6	0.9		105
-110				110	97		21.2		8.2	1.2	0.3	135
CR12 - 8- 35	8	14	3	35	22	9.5	16.4	25	1.1	0.6	0.2	60
- 55				55	42		18.5		1.9	0.8		80
- 80				80	67		21.1		3.1	1	0.3	105
CRB12- 8- 35	8	18	5	35	22	9.5	20.3	25	0.7	0.7	0.2	60
- 55				55	42	6.5	22.4		1.1	0.9		80
- 80				80	—	—	—		1.8		0.3	105
CF12 - 8- 35	8	16	4	35	22	9.5	18.4	25	0.9	0.8	0.2	60
- 55				55	42		20.5		1.4	1		80
- 80				80	67		23.1		2.3	1.2	0.3	105
CS12 - 9- 35	9	12	1.5	35	22	9.5	14.4	30	1.4	0.7	0.2	60
- 55				55	42		16.5		2.9	0.9		
- 80				80	67		19.1		4.8	1.1		
-110				110	97		22.2		7.1	1.3	0.3	
CS12 -10- 35	10	13	1.5	35	22	9.5	15.4	30	1.3	0.8	0.2	60
- 55				55	42		17.5		2.5	0.9		
- 80				80	67		20.1		4.3	1.1		
-110				110	97		23.2		6.2	1.4	0.3	
CR12 -10- 35	10	16	3	35	22	9.5	18.4	30	0.9	0.7	0.2	60
- 55				55	42		20.5		1.6	0.9		
- 80				80	67		23.1		2.6	1.1	0.3	
CRB12-10- 35	10	22	6	35	22	9.5	24.3	30	0.6	0.9	0.2	60
- 55				55	—	—	25.5		0.9		0.3	
- 80				80					1.5	1.1	0.4	
CF12 -10- 35	10	18	4	35	22	9.5	20.4	30	0.7	0.9	0.2	60
- 55				55	42		22.5		1.1	1.1		
- 80				80	—	—	—		1.9	1	0.3	
CS12 -11- 35	11	14	1.5	35	22	9.5	16.4	30	1.1	0.9	0.2	60
- 55				55	42		18.5		2.3	1		
- 80				80	67		21.1		3.8	1.3		
-110				110	97		24.2		5.6	1.5	0.3	
CS12 -12- 35	12	15	1.5	35	22	9.5	17.4	30	1	1	0.2	60
- 55				55	42		19.5		2.1	1.1		
- 80				80	67		22.1		3.5	1.4		
-110				110	—	—	—		5	1.3	0.3	
CR12 -12- 35	12	20	4	35	22	9.5	22.4	30	0.7	0.9	0.2	60
- 55				55	42		24.5		1.1	1.1		
- 80				80	—	—	25.5		1.9	1	0.3	
CF12 -12- 35	12	20	4	35	22	9.5	22.4	30	0.7	1	0.2	60
- 55				55	42		24.5		1.1	1.2		
- 80				80	—	—	—		1.9	1.1	0.3	

▮刀柄台

SLIMLINE筒夹、直柄延长杆、HSK-E25、E32刀柄用安放台。共有4种颜色，方便分类整理。

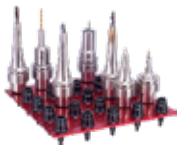
型号	颜色	正面	反面	放置个数
SDKT-RE	红色	SLIMLINE筒夹用 直柄延长杆用	小径刀柄用 (HSK-E25/E32)	各25支
-BL	蓝色			
-GR	绿色			
-GD	金色			



尺寸：190×190[mm]



正面



反面

UNO

■最适用于超高速、高精度加工中心、小径微细刀具加工

次微米刀柄

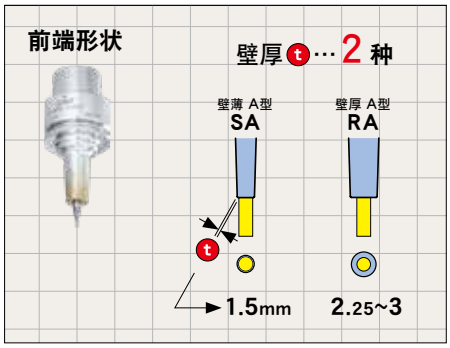




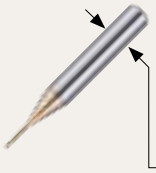
E32 – SL RA 3 – 50 – M22 U

- E32：柄锥部形状
- SL：SLIMLINE
- RA：壁厚
- 3：φD
- 50：L
- M22：加工有效长度
- U：UNO / BU：BLACK UNO

UNO	E25
	E32
	E40
	E50
	F63
BLACK UNO	E25
	E32



刀具精度（柄部）



φD = h4 公差
真圆度 = 0.3μm
圆筒度 = 0.5μm

推荐刀具

偏摆精度

刀尖偏摆精度必须控制在每刃切深的1/3以下

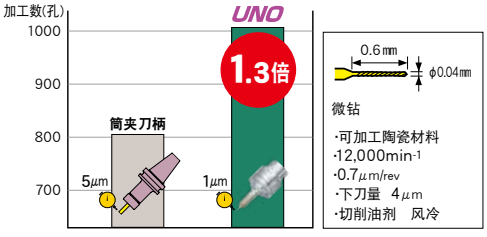


精加工5μm切深的情况下，
刀尖偏摆必须控制在
1.5μm以下



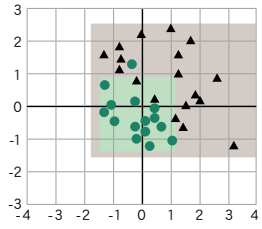
刀具寿命

在微细加工下，偏摆精度对刀具寿命影响较大。



钻头偏摆与孔加工位置精度

偏摆精度越小，孔的位置精度越高
(μm)



● UNO (1μm)　▲筒夹刀柄 (5μm)

φ0.55mm
NC Pointing Drill
· S50C
· 12,000min-1
· 0.02mm/rev
· 下刀量 0.1mm
· 切削油剂 油雾

偏摆最大位置处有标记(▲)

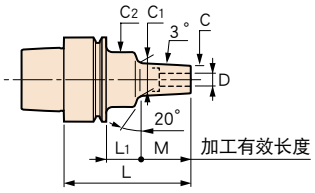
全品附带精度检测报告。



UNO



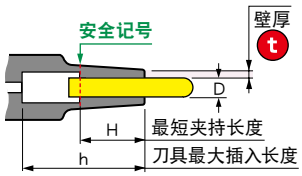
E32-SLRA4-50-M22 U



■选购品
- 3S气球(BLG)

■备考
- 可对应制作下表中没有的刀柄柄径和孔径。具体请向敝司垂询。

■注意事项
- HSK-E,F锥柄的刀柄没有附带冷却液导管。
- 如需使用,请向敝司垂询。
- 刀具安装…插入刀具时,请务必将刀具插入比安全记号更深的位置。



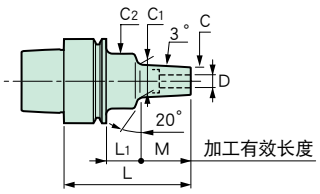
壁厚

型号	φD	φC	t	L	M	L1	φC1	φC2	H	h	Kg	N	S
E25-SLRA3-35 U	3	7.5	2.25	35	17	8	9.3	18	9	29	0.05	0.37	2.3
-SLRA4-35 U	4	10	3				11.8		12		0.06	0.38	1.4
-SLSA3.175-35 U	3.175	6.175	1.5				8		9		0.05	0.37	3.5
E32-SLRA3-50-M22 U	3	7.5	2.25	50	22	8	9.8	20	9	42	0.14	0.4	2.8
-SLRA4-50-M22 U	4	10	3				12.3		12		0.15		1.7
-SLSA3.175-50-M22 U	3.175	6.175	1.5				8.5		9		0.14		4.4
E40-SLRA3-50-M22 U	3	7.5	2.25	50	22	8	9.8	20	9	42	0.2	0.7	2.8
-SLRA4-50-M22 U	4	10	3				12.3		12				1.6
-SLSA3.175-50-M22 U	3.175	6.175	1.5				8.5		9				4.4
E50-SLRA3-75-M22 U	3	7.5	2.25	75	22	27	9.8	25	9	65	0.5	1.7	2.8
-SLRA4-75-M22 U	4	10	3				12.3		12				1.7
F63-SLRA3-75-M22 U	3	7.5	2.25	75	22	27	9.8	25	9	54	0.7	1.8	2.8
-SLRA4-75-M22 U	4	10	3				12.3		12	58			1.7

BLACK UNO

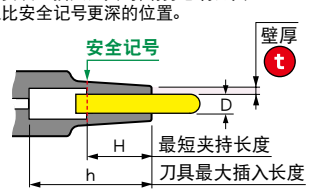


E32-SLRA4-50-M22 BU



■选购品
- 3S气球(BLB)

■注意事项
- HSK-E锥柄的刀柄没有附带冷却液导管。
- 如需使用,请向敝司垂询。
- 刀具安装…插入刀具时,请务必将刀具插入比安全记号更深的位置。



壁厚

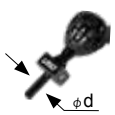
型号	φD	φC	t	L	M	L1	φC1	φC2	H	h	Kg	N	S
E25-SLRA3-35 BU	3	7.5	2.25	35	17	8	9.3	18	9	29	0.05	0.37	2.3
-SLRA4-35 BU	4	10	3				11.8		12		0.06	0.38	1.4
-SLSA3.175-35 BU	3.175	6.175	1.5				8		9		0.05	0.37	3.5
E32-SLRA3-50-M22 BU	3	7.5	2.25	50	22	8	9.8	20	9	42	0.14	0.4	2.8
-SLRA4-50-M22 BU	4	10	3				12.3		12		0.15		1.7
-SLSA3.175-50-M22 BU	3.175	6.175	1.5				8.5		9		0.14		4.4

3S 气球

可清扫热装刀柄内孔,日常防止垃圾进入内孔。

BLACK UNO用(黑色)

型号	φd
BLB3	3
3.175	3.175
4	4
6	6



BLACK UNO标准附属品

UNO用(灰色)

型号	φd
BLG3	3
3.175	3.175
4	4
6	6





主轴锥孔用 清洁工具 STAR DUST

P.194



刀柄台

P.14

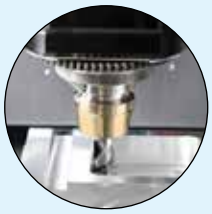


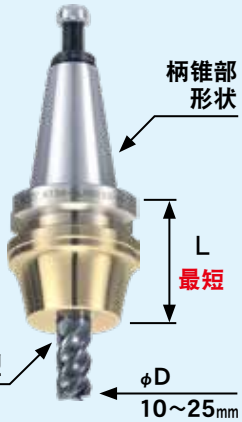
强力型 热装刀柄

■最大发挥机床性能，重切削用刀柄

高速主轴用 S 超短型

减轻主轴负荷，减少振刀，
切削效率提升2倍
（相比标准型热装刀柄）



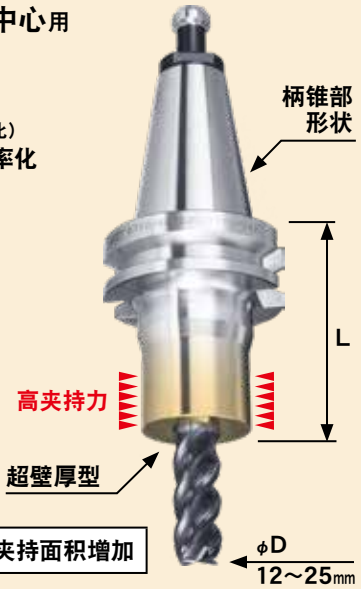


高刚性化 + 减轻主轴负荷

高刚性主轴加工中心用 H 重切削型

夹持力3倍（与其他品牌比）
防止掉刀，滑刀，高效率化

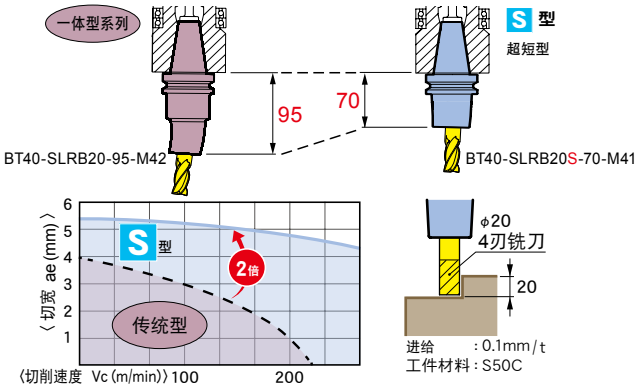




夹持面压力UP × 夹持面积增加

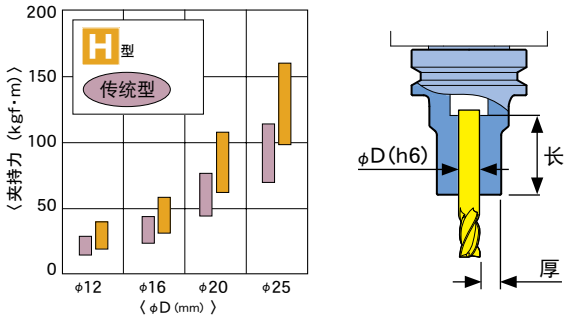
相比标准一体型热装刀柄（BT40）

切削效率2倍（同传统产品相比）

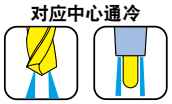


相比标准一体型热装刀柄

夹持力1.4倍（同传统产品相比）

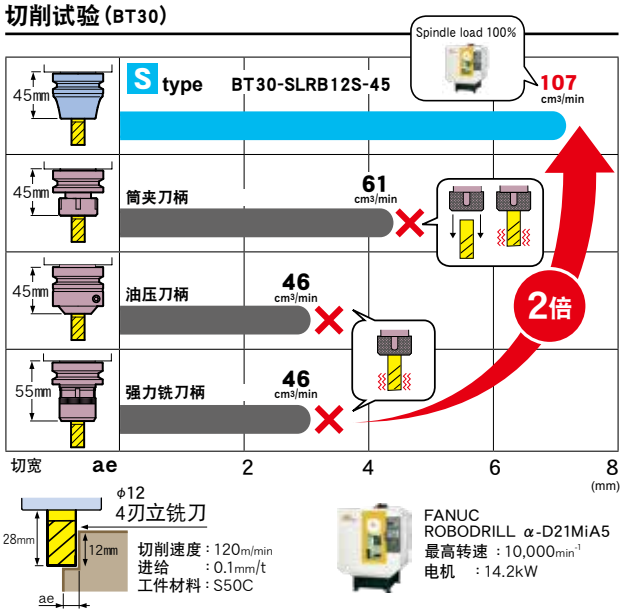


对应中心通冷



刀具中心通冷　油孔通冷

切削试验（BT30）



BT40 − SL RB 20 S − 60 − M42

柄锥部形状　SLIMLINE　φD　强力型　L　加工有效长度

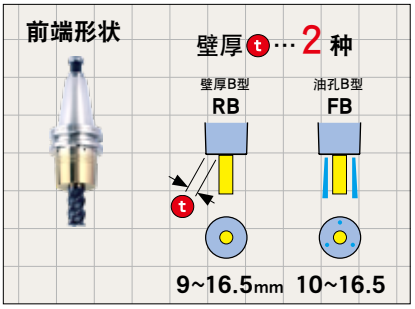
S：超短型
H：重切削型

S 超短型

BT30
BT40
A63
F80PD

H 重切削型

BT40
BT50
A63
A100



超短型



BT30-SLRB12S-45



BT40-SLFB20S-70-M41

Fig. 1

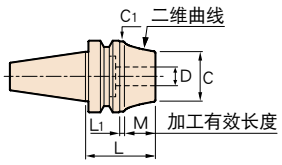


Fig. 2

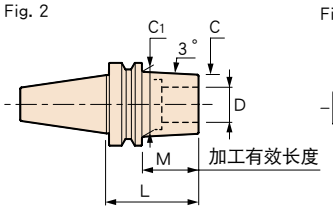


Fig. 3

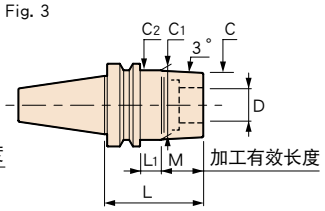


Fig. 4

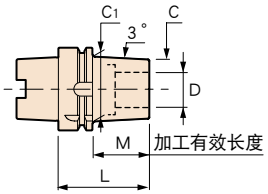
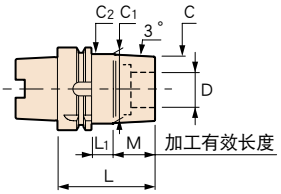


Fig. 5

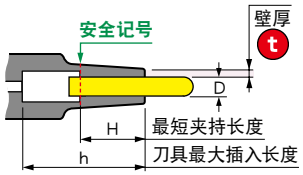


■选购品
- 拉钉 (BT)→P.184

■标准附属品
- 冷却液导管（固定式）(HSK-A63)→P.186

■备考
- 可对应可动式冷却液导管 (HSK-A63)→P.186

■注意事项
- 拉钉···请在加热时取下,或使用通孔拉钉。
- 刀具安装···插入刀具时,请务必将刀具插入比安全记号更深的位置。
- 加热装置请使用HRB-03S-230AS(温风式)或HRD-02SH(电磁式)
- 使用电磁5000S(HRD-02SH)加热时,请选择NO.6 加热线圈(HRD2-CL6)
- 使用温风式加热器(HRB-03S-230AS)加热,请取下冷却液导管(HSK-A63)→P.200



壁厚 t

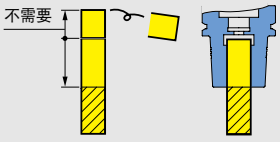
型号	Fig.	φD	φC	t	L	M	L1	φC1	φC2	H	h	Kg	N	S
BT30-SLRB10S-45	1	10	28	9	45	20	3	45	—	21	68	0.5	1.0	0.4
-SLRB12S-45		12	32	10						22	61		1.2	0.3
-SLRB16S-45		16	38	11						25	57		1.5	
BT40-SLRB12S-60-M28	2	12	32	10	60	28	—	35	—	27	95	1.1	1.9	0.3
-SLFB12S-60-M28														
-SLRB16S-65-M33		16	38	11	65	33		41.5		30	85	1.2	2.8	
-SLFB16S-65-M33														
-SLRB20S-70-M41		20	45	12.5	70	41		49.4		36	100	1.3	4.1	0.2
-SLFB20S-70-M41														
-SLRB25S-75-M30	3	25	49	12	75	30	18	52.2	53	42		1.4	5.4	
-SLFB25S-75-M30														
A63 -SLRB12S-60-M29	4	12	32	10	60	29	—	35.1	—	27	35	0.8	8.3	0.3
-SLFB12S-60-M29														
-SLRB16S-65-M34		16	38	11	65	34		41.6		30	40	1	9.2	
-SLFB16S-65-M34														
-SLRB20S-70-M42		20	45	12.5	70	42		49.5		36	45	1.1	10.4	0.2
-SLFB20S-70-M42														
-SLRB25S-75-M30	5	25	49	12	75	30	19	52.2	53	42	50	1.3	11.6	
-SLFB25S-75-M30														

SLFB



关于刀具插入长

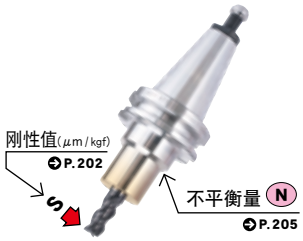
超短型刀柄进行了最短设计,因此刀具的最大插入长(h)较短。
切断多余柄部,在最适合刀具突出长下使用。
A63需要特别注意。



推荐刀具

欧士机		黛杰工业		泰珂洛		三菱综合材料		菱材日立刀具	
WX-PHSS	通用	DV-OCSAR	难切削材用	SEF4000	难切削材用	C-3SA	铝合金用	EPSMS-PN	通用
UP-PHS	通用	AL-SEESS	铝合金用	SEE4000-A	铝合金用	VF-6MHV	难切削材用	EPPS	普通钢用

重切削型



BT50-SLRB20H-110-M42

Fig. 1

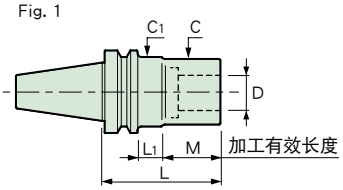
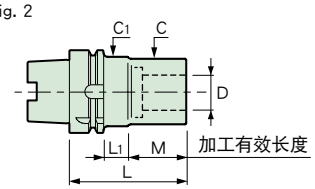


Fig. 2

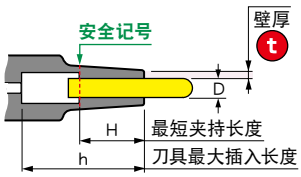


■选购品
- 拉钉 (BT)→P.184

■标准附属品
- 冷却液导管（固定式）(HSK-A)→P.186

■备考
- 可对应可动式冷却液导管 (HSK-A)→P.186

■注意事项
- 拉钉…请在加热时取下，或使用通孔拉钉。
- 刀具安装…插入刀具时，请务必将刀具插入比安全记号更深的位置。
- 加热装置请使用HRB-03S-230AS(温风式)或HRD-02SH(电磁式)
- 电磁5000S(HRD-02SH)加热所需使用加热线圈，请参考「HRD-02SH加热线圈号码」列表
- 使用温风式加热器(HRB)加热，请取下冷却液导管(HSK-A)→P.200
- 温风式加热器(HRB-03S-230AS)需要使用φ70喷嘴(HRB-NZL70)



HEAT ROBO电磁 5000S
HRD-02SH 加热线圈号码

壁厚

型号	Fig.	φD	φC	t	L	M	L1	φC1	H	h	Kg	N	S	
BT40-SLRB12H- 80-M32	1	12	36	12	80	32	21	53	35	115	1.3	5.1	0.3	6
-SLFB12H- 80-M32											1.4			
-SLRB16H- 80-M32		16	42	13					37	90		5.4		
-SLFB16H- 80-M32														
-SLRB20H- 90-M42		20	50	15	90	42			47	100	1.6	6.3		7
-SLFB20H- 90-M42														
-SLRB25H- 95-M42		25	51	13	95		26		50	105		7		
-SLFB25H- 95-M42														
BT50-SLRB12H- 95-M32	1	12	36	12	95	32	25	53	35	150	3.8	8.8	0.3	6
-SLFB12H- 95-M32														
-SLRB16H- 95-M32		16	42	13					37		3.9	9		
-SLFB16H- 95-M32														
-SLRB20H-110-M42		20	50	15	110	42	30	63	47	165	4	14.1	0.2	7
-SLFB20H-110-M42														
-SLRB25H-110-M42		25	58	16.5					52		4.2	14.4		
-SLFB25H-110-M42														
A63 -SLRB12H- 80-M32	2	12	36	12	80	32	22	53	35	55	1.1	11.3	0.3	6
-SLFB12H- 80-M32														
-SLRB16H- 80-M32		16	42	13					37		1.2	11.6		
-SLFB16H- 80-M32														
-SLRB20H- 90-M42		20	50	15	90	42			47	65	1.5	13.1		7
-SLFB20H- 90-M42														
-SLRB25H- 95-M42		25	51	13	95		27		50	70		14.1		
-SLFB25H- 95-M42														

SLFB

型号	Fig.	ϕD	ϕC	t	L	M	L1	ϕC1	H	h	Kg	N	S	HRD-02SH
A100-SLRB12H- 95-M32	2	12	36	12	95	32	34	53	35	63	2.7	26.9	0.3	6
-SLFB12H- 95-M32														
-SLRB16H- 95-M32		16	42	13					37			27.2		
-SLFB16H- 95-M32														
-SLRB20H-110-M42		20	50	15	110	42	39	63	47	78	3.2	31.3	0.2	7
-SLFB20H-110-M42														
-SLRB25H-110-M42		25	58	16.5					52		3.4	31.8		
-SLFB25H-110-M42									50					

SLFB

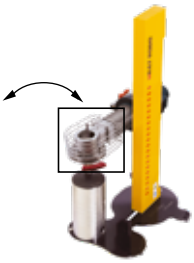
■主轴锥孔用 清洁工具
STAR DUST
P.194



■ϕ70 加热喷头 (HRB-03S-230AS)

型号
HRB-NZL70





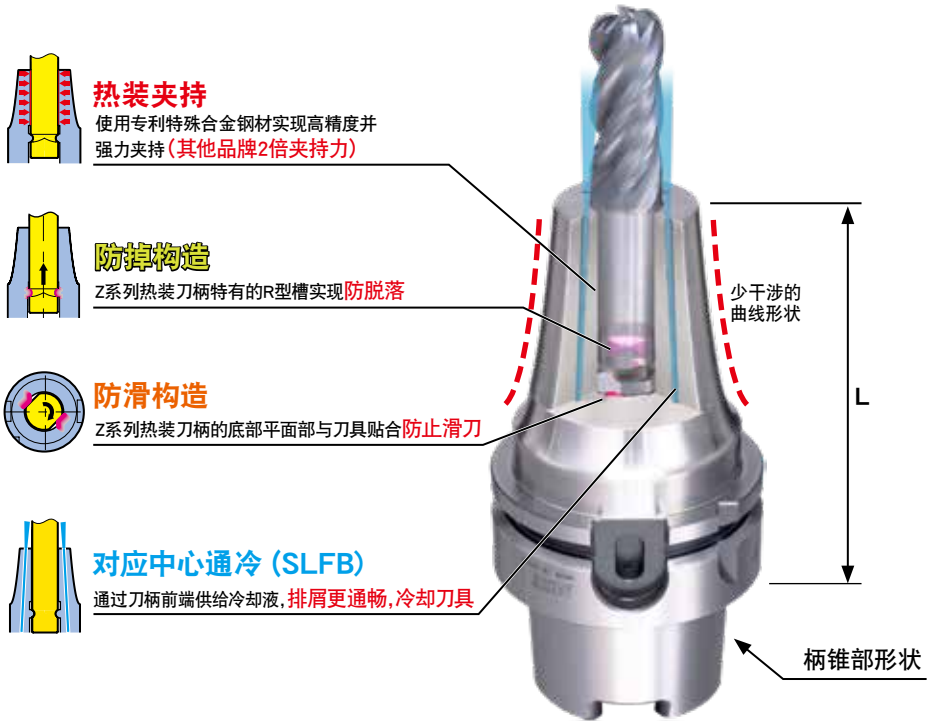
HEAT ROBO Baby3000S

SLIMLINE Z

■ 具有防止刀具脱落构造

PERFECT SAFETY!

Z系列热装刀柄拥有4处防脱构造，实现对难切削材料的高效加工。
无需担心高负荷及高进给加工中的产生振刀、掉刀等问题！



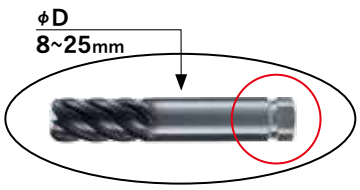
热装夹持
使用专利特殊合金钢材实现高精度并
强力夹持（其他品牌2倍夹持力）

防掉构造
Z系列热装刀柄特有的R型槽实现防脱落

防滑构造
Z系列热装刀柄的底部平面部与刀具贴合防止滑刀

对应中心通冷（SLFB）
通过刀柄前端供给冷却液，排屑更通畅，冷却刀具

Z柄刀具



防滑刀・防掉刀
双保险

操作简单



加热装置
(→P.10)

难切削材料的高效加工

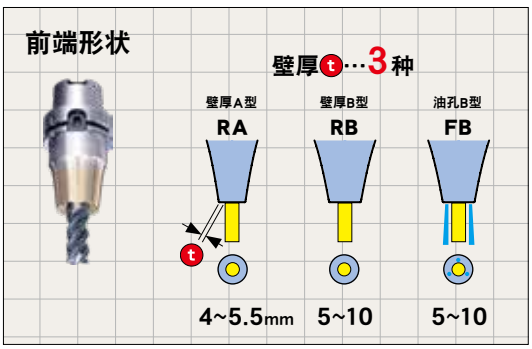
在航空航天产业中，有效预防高额昂贵加工材料的浪费风险，钢件、铝件的大切深量重切削加工也可放心使用



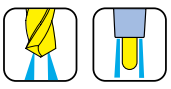
BT40 − SL RB 16 Z − 90

- BT40：柄锥部形状
- SL：SLIMLINE
- RB：前端形状
- 16：φD
- Z：SLIMLINE Z
- 90：L

柄锥部形状
BT40
BT50
A63
A100
DN40
DN50



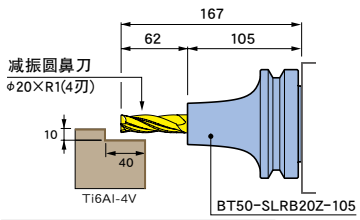
对应中心通冷



刀具中心通冷　油孔通冷

加工例

有效防止刀具脱落，在加工昂贵的工件材料时也可放心提高加工参数

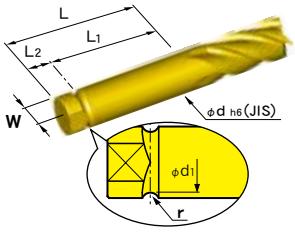


转速	2,100 min⁻¹
切削速度	132 m/min
进给	1,260 mm/min
每刃进给	0.15 mm/t

排屑量：
504 cm³/min

Z柄刀具 尺寸表

Z系列热装刀柄用刀具柄径规格为开放的通用规格，无论谁都可生产制作。



φd (h6)	W -0.1 -0.2	φd1 -0.1 -0.2	L min.	L Max.	L1	L2 min.	L2 Max.	r
8	6.5	6.5	36	45	29	7	16	2
10	8.5	8.5	42	51	35			
12	10	10						
16	14	14	45	54	38			
20	17	17	53	62	46			
25	22	22	60	69	53			2.5

制作对应厂商

DIJET 黛杰工业　DKT 大光研磨　三菱综合材料 三菱综合材料　MOLDINO 菱材日立刀具

※Z系列用刀具柄部的追加工MST也可代加工，详情垂询敝司



BT50-SLRB16Z-120



A63-SLRB16Z-120

Fig. 1

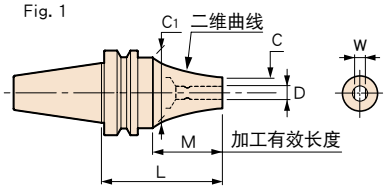


Fig. 2

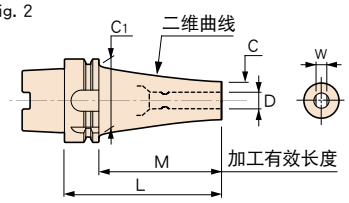
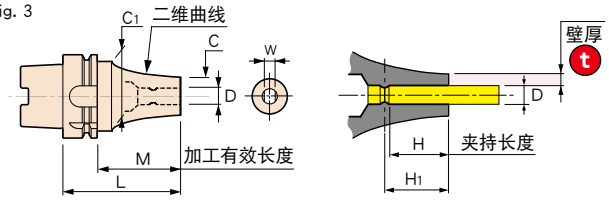


Fig. 3



■选购品
- 需要使用Z柄刀具→P.171
- 拉钉(BT)→P.184

■标准附属品
- 冷却液导管(固定式)→P.186

■注意事项
- 拉钉···请在加热时取下,或使用通孔拉钉。
- 加热装置请使用HRB-03S-230AS(温风式)或HRD-02SH(电磁式)
- 使用温风式加热器(HRB)加热,请取下冷却液导管。(HSK-A)→P.200

■备考
- 电磁5000S(HRD-02SH)加热所需使用加热线圈,请参考「HRD-02SH 加热线圈号码」列表。
- 可对应可动式冷却液导管。

HEAT ROBO电磁 5000S
HRD-02SH 加热线圈号码

壁厚

型号	Fig.	φD	φC	t	L	M	φC1	H	H1	W	Kg	N	S	
BT40-SLRB 8Z- 90	1	8	18	5	90	52	53	24	29	6.5	1.2	4.6	0.6	2
-120					120						1.6	6.8	0.7	
-150					150						2	8.9	0.8	
-180					180						2.4	11	0.9	
-SLFB 8Z- 90	1	8	18	5	90	52	53	24	29	6.5	1.2	4.6	0.6	
-120					120						1.6	6.8	0.7	
-150					150						2	8.9	0.8	
-180					180						2.4	11	0.9	
BT40-SLRB10Z- 90	1	10	22	6	90	52	53	30	35	8.5	1.3	4.8	0.5	3
-120					120						1.7	6.9	0.6	
-150					150						2	9	0.7	
-180					180						2.4	11.1	0.8	
-SLFB10Z- 90	1	10	22	6	90	52	53	30	35	8.5	1.3	4.8	0.5	
-120					120						1.7	6.9	0.6	
-150					150						2	9	0.7	
-180					180						2.4	11.1	0.8	
BT40-SLRB12Z- 90	1	12	26	7	90	52	53	30	35	10	1.3	5	0.4	
-120					120						1.7	7.1	0.5	
-150					150						2.1	9.2	0.6	
-180					180						2.5	11.3	0.8	
-SLFB12Z- 90	1	12	26	7	90	52	53	30	35	10	1.3	5	0.4	
-120					120						1.7	7.1	0.5	
-150					150						2.1	9.2	0.6	
-180					180						2.5	11.3	0.8	
BT40-SLRB16Z- 90	1	16	32	8	90	52	53	32	38	14	1.4	5.3	0.4	
-120					120						1.7	7.5	0.5	
-150					150						2.1	9.6	0.6	
-SLFB16Z- 90	1	16	32	8	90	52	53	32	38	14	1.4	5.3	0.4	
-120					120						1.7	7.5	0.5	
-150					150						2.1	9.6	0.6	
BT40-SLRB20Z- 90	1	20	38	9	90	42	53	40	46	17	1.5	5.9	0.3	4
-120					120						1.9	8	0.4	
-150					150						2.3	10.1	0.6	
-SLFB20Z- 90	1	20	38	9	90	42	53	40	46	17	1.5	5.9	0.3	
-120					120						1.9	8	0.4	
-150					150						2.3	10.1	0.5	

SLFB

型号	Fig.	ϕD	ϕC	t	L	M	ϕC1	H	H1	W	Kg	N	S	HRD-02SH
BT40-SLRB25Z- 95	1	25	45	10	95	42	53	45	53	22	1.6	6.7	0.3	4
-125					125						2	8.8	0.4	
-SLFB25Z- 95	1	25	45	10	95	42	53	45	53	22	1.6	6.7	0.3	
-125					125						2	8.8	0.4	
BT50-SLRA12Z-105	1	12	22	5	105	67	85	30	35	10	3.9	13	0.5	2
-135					135	97					4.5	14.8	0.6	
-165					165	127					5.1	16.1	0.7	
-195					195	157					5.6	18	0.8	
-SLRB12Z-165	1	12	26	7	165	127	85	30	35	10	5.1	17.3	0.6	3
-195					195	157					5.4	18.9	0.7	
-SLFB12Z-165	1	12	26	7	165	127	85	30	35	10	5.1	17.3	0.6	
-195					195	157					5.4	18.9	0.7	
BT50-SLRA16Z-105	1	16	27	5.5	105	67	85	32	38	14	3.9	13.3	0.4	
-135					135	97					4.3	15.4	0.5	
-165					165	127					5	17.2	0.6	
-195					195	157					5.3	18.8	0.8	
-SLRB16Z-165	1	16	32	8	165	127	85	32	38	14	5.1	17.5	0.5	
-195					195	157					5.8	20.3	0.6	
-SLFB16Z-165	1	16	32	8	165	127	85	32	38	14	5.1	17.5	0.5	
-195					195	157					5.8	20.3	0.7	
BT50-SLRB20Z-105	1	20	38	9	105	67	85	40	46	17	4.1	13.8	0.3	4
-135					135	97					4.8	17.2		
-165					165	127					5.5	20.7	0.4	
-SLFB20Z-105	1	20	38	9	105	67	85	40	46	17	4.1	13.8	0.3	
-135					135	97					4.8	17.2		
-165					165	127					5.5	20.7	0.4	
BT50-SLRB25Z-110	1	25	45	10	110	72	85	45	53	22	4.3	15	0.3	
-140					140	102					4.8	17.7		
-SLFB25Z-110	1	25	45	10	110	72	85	45	53	22	4.3	15	0.3	
-140					140	102					4.8	17.7		
A63 -SLRA 8Z- 90	2	8	16	4	90	64	53	24	29	6.5	1	8.4	0.7	2
-120					120	94					1.2	9.6	1	
-150					150	124					1.4	10.8	1.4	
-SLRB 8Z- 90	3	8	18	5	90	52	53	24	29	6.5	1.1	10.9	0.6	
-120					120						1.4	14.1	0.8	
-150					150						1.8	17.2		
-180					180						2.2	20.4	0.9	
-SLFB 8Z- 90	3	8	18	5	90	52	53	24	29	6.5	1.1	10.9	0.6	
-120					120						1.4	14.1	0.7	
-150					150						1.8	17.2		
-180					180						2.2	20.4	0.9	
A63 -SLRA10Z- 90	2	10	19	4.5	90	64	53	30	35	8.5	1	8.5	0.6	
-120					120	94					1.2	9.6	0.9	
-150					150	124					1.3	10.9	1.4	
-SLRB10Z- 90	3	10	22	6	90	52	53	30	35	8.5	1.1	11.1	0.5	3
-120					120						1.5	14.3	0.7	
-150					150						1.6	17.4		
-180					180						2.3	20.6	0.8	
-SLFB10Z- 90	3	10	22	6	90	52	53	30	35	8.5	1.1	11.1	0.5	
-120					120						1.5	14.3	0.6	
-150					150						1.6	17.4		
-180					180						2.3	20.6	0.8	



HRD-02SH

型号	Fig.	φD	φC	t	L	M	φC1	H	H1	W	Kg	N	S	
A63 -SLRA12Z- 90	2	12	22	5	90	64	53	30	35	10	1	8.5	0.6	2
-120					120	94					1.3	10.4	0.7	
-150					150	124					1.5	11.7	1.1	
-SLRB12Z- 90	3	12	26	7	90	52	53	30	35	10	1.1	11.4	0.4	3
-120					120						1.5	14.6	0.5	
-150					150						1.6	17.7	0.6	
-180					180						2.3	20.9	0.7	
-SLFB12Z- 90	3	12	26	7	90	52	53	30	35	10	1.1	11.4	0.4	
-120					120						1.5	14.6	0.5	
-150					150						1.6	17.7	0.6	
-180					180						2.3	20.9	0.7	
A63 -SLRA16Z- 90	3	16	27	5.5	90	52	53	32	38	14	1.1	11.6	0.4	
-120	2				120	94					1.3	12.9	0.7	
-SLRB16Z- 90	3	16	32	8	90	52	53	32	38	14	1.2	12	0.4	
-120					120						1.6	15.1		
-150					150						2	18.3	0.6	
-SLFB16Z- 90	3	16	32	8	90	52	53	32	38	14	1.2	12	0.4	
-120					120						1.6	15.1		
-150					150						2	18.3	0.6	
A63 -SLRB20Z- 90	3	20	38	9	90	42	53	40	46	17	1.3	12.7	0.3	4
-120					120						1.4	15.9	0.4	
-150					150						2.1	19.1	0.5	
-SLFB20Z- 90	3	20	38	9	90	42	53	40	46	17	1.3	12.7	0.3	
-120					120						1.4	15.9	0.4	
-150					150						2.1	19.1	0.5	
A63 -SLRB25Z- 95	3	25	45	10	95	42	53	45	53	22	1.4	13.9	0.3	
-125					125						1.8	17.1	0.4	
-SLFB25Z- 95	3	25	45	10	95	42	53	45	53	22	1.4	13.9	0.3	
-125					125						1.8	17.1	0.4	
A100-SLRA12Z-105	2	12	22	5	105	76	85	30	35	10	3	27.7	0.4	3
-135					135	106					3.3	29.9	0.6	
-165					165	136					3.7	31.3	0.8	2
-195					195	166					4.5	35.6		
-SLRB12Z-165	2	12	26	7	165	136	85	30	35	10	4	34.3	0.6	3
-195					195	166					4.8	39.2		
-SLFB12Z-165	2	12	26	7	165	136	85	30	35	10	4	34.3	0.6	
-195					195	166					4.8	39.2	0.7	
A100-SLRA16Z-105	2	16	27	5.5	105	76	85	32	38	14	3	28.1	0.4	
-135					135	106					3.4	30.5	0.5	
-165					165	136					4	34.2	0.6	
-195					195	166					4.3	36.6	0.8	
-SLRB16Z-165	2	16	32	8	165	136	85	32	38	14	4	34.4	0.5	
-195					195	166					4.5	37.6	0.6	
-SLFB16Z-165	2	16	32	8	165	136	85	32	38	14	4	34.4	0.5	
-195					195	166					4.5	37.6	0.7	
A100-SLRB20Z-105	2	20	38	9	105	76	85	40	46	17	3.1	28.7	0.3	4
-135					135	106					3.8	33.4		
-165					165	136					4.6	38.9	0.6	
-SLFB20Z-105	2	20	38	9	105	76	85	40	46	17	3.1	28.7	0.3	
-135					135	106					3.8	33.4		
-165					165	136					4.6	38.9	0.4	
A100-SLRB25Z-110	2	25	45	10	110	81	85	45	53	22	3.1	29.7	0.3	
-140					140	111					3.8	34.4		
-SLFB25Z-110	2	25	45	10	110	81	85	45	53	22	3.1	29.7	0.3	
-140					140	111					3.8	34.4		



■ 主轴锥孔用 清洁工具
STAR DUST

P.194



型号	Fig.	φD	φC	t	L	M	φC1	H	H1	W	Kg	N	S	HRD-02SH
DN40AD-SLRB 8Z- 90	1	8	18	5	90	52	50	24	29	6.5	1.1	7.8	0.6	2
-120					120		53				1.5	10.9	0.7	
-150					150						1.9	14.1	0.8	
-180					180						2.3	17.3	0.9	
-SLFB 8Z- 90	1	8	18	5	90	52	50	24	29	6.5	1.1	7.8	0.6	2
-120					120		53				1.5	10.9	0.7	
-150					150						1.9	14.1	0.8	
-180					180						2.3	17.3	0.9	
DN40AD-SLRB10Z- 90	1	10	22	6	90	52	50	30	35	8.5	1.2	8	0.5	3
-120					120		53				1.6	11.2	0.6	
-150					150						2	14.3	0.7	
-180					180						2.3	17.5	0.9	
-SLFB10Z- 90	1	10	22	6	90	52	50	30	35	8.5	1.2	8	0.5	3
-120					120		53				1.6	11.2	0.6	
-150					150						2	14.3	0.7	
-180					180						2.3	17.5	0.8	
DN40AD-SLRB12Z- 90	1	12	26	7	90	52	50	30	35	10	1.2	8.3	0.5	3
-120					120		53				1.6	11.5	0.5	
-150					150						2	14.6	0.6	
-180					180						2.4	17.8	0.8	
-SLFB12Z- 90	1	12	26	7	90	52	50	30	35	10	1.2	8.3	0.4	3
-120					120		53				1.6	11.5	0.5	
-150					150						2	14.6	0.6	
-180					180						2.4	17.8	0.8	
DN40AD-SLRB16Z- 90	1	16	32	8	90	52	50	32	38	14	1.3	8.8	0.4	3
-120					120		53				1.7	12	0.5	
-150					150						2.1	15.2	0.6	
-SLFB16Z- 90	1	16	32	8	90	52	50	32	38	14	1.3	8.8	0.4	3
-120					120		53				1.7	12	0.5	
-150					150						2.1	15.2	0.6	
DN40AD-SLRB20Z- 90	1	20	38	9	90	42	50	40	46	17	1.4	9.6	0.3	4
-120					120		53				1.8	12.8	0.4	
-150					150						2.2	16	0.6	
-SLFB20Z- 90	1	20	38	9	90	42	50	40	46	17	1.4	9.6	0.3	4
-120					120		53				1.8	12.8	0.4	
-150					150						2.2	16	0.6	
DN50AD-SLRA12Z-105	1	12	22	5	105	70	70	30	35	10	3.5	16.7	0.4	3
-135					135	100					3.9	18.4	0.6	
-165					165	130					4.4	19.4	0.8	2
-195					195	160					4.5	20.6	1.2	
-SLRB12Z-165	1	12	26	7	165	130	70	30	35	10	4.5	22.1	0.6	3
-195					195	160					4.8	24.4	0.8	
-SLFB12Z-165	1	12	26	7	165	130	70	30	35	10	4.5	22.1	0.6	3
-195					195	160					4.8	24.4	0.8	
DN50AD-SLRA16Z-105	1	16	27	5.5	105	70	70	32	38	14	3.5	17	0.4	4
-135					135	100					3.9	18.4	0.5	3
-165					165	130					4.5	22.1	0.7	
-195					195	160					4.8	24.4	0.8	
-SLRB16Z-165	1	16	32	8	165	130	70	32	38	14	4.4	21.8	0.6	3
-195					195	160					5.0	25.5	0.7	
-SLFB16Z-165	1	16	32	8	165	130	70	32	38	14	4.4	21.8	0.6	3
-195					195	160					5.0	25.5	0.7	



型号	Fig.	ϕD	ϕC	t	L	M	ϕC1	H	H1	W	Kg	N	S	HRD-02SH
DN50AD-SLRB20Z-105	1	20	38	9	105	70	70	40	46	17	3.6	17.6	0.3	4
-135					135	100					4.0	21.0	0.4	
-165					165	130					4.7	25.4	0.5	
-SLFB20Z-105	1	20	38	9	105	70	70	40	46	17	3.6	17.6	0.3	4
-135					135	100					4.0	21	0.4	
-165					165	130					4.7	25.4	0.5	
DN50AD-SLRB25Z-110	1	25	45	10	110	75	70	45	53	22	3.7	18.8	0.3	4
-140					140	90					4.4	23.4	0.3	
-SLFB25Z-110	1	25	45	10	110	75	70	45	53	22	3.7	18.8	0.3	4
-140					140	90					4.4	23.4	0.4	

SLFB



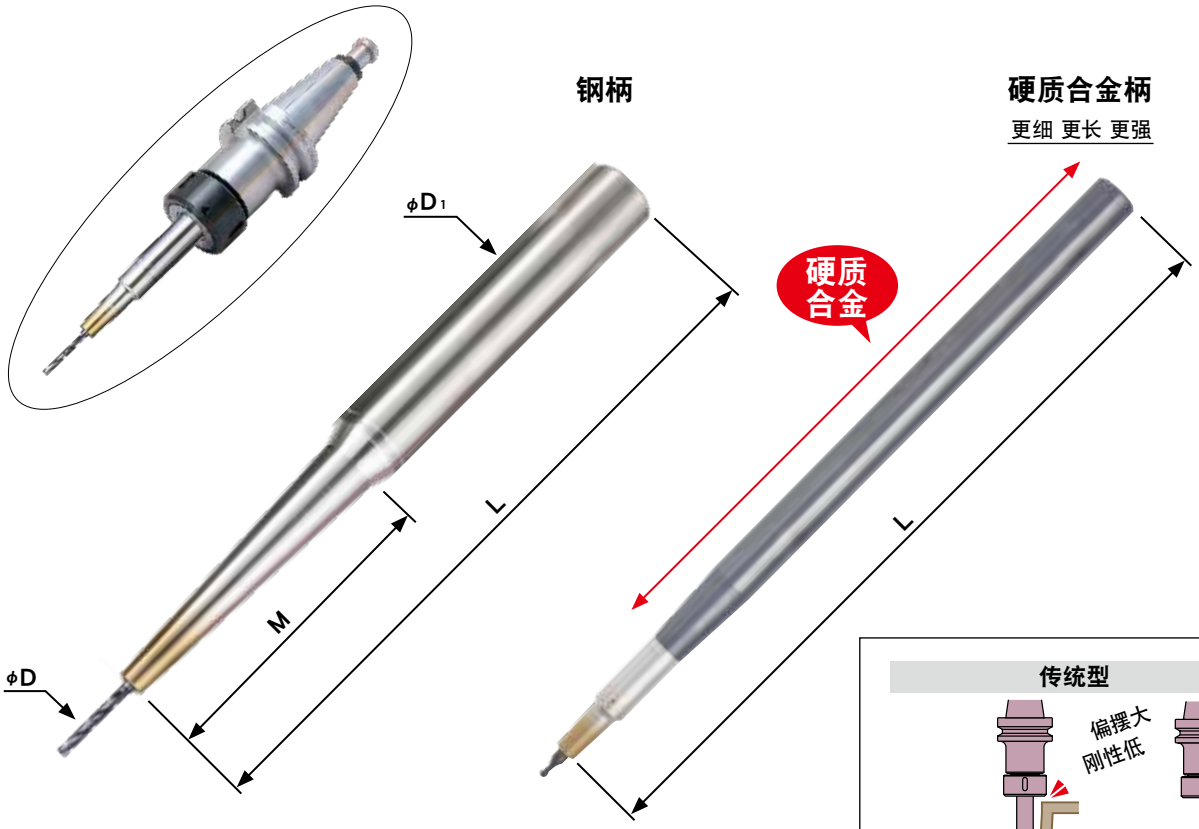
■ 主轴锥孔用 清洁工具
STAR DUST

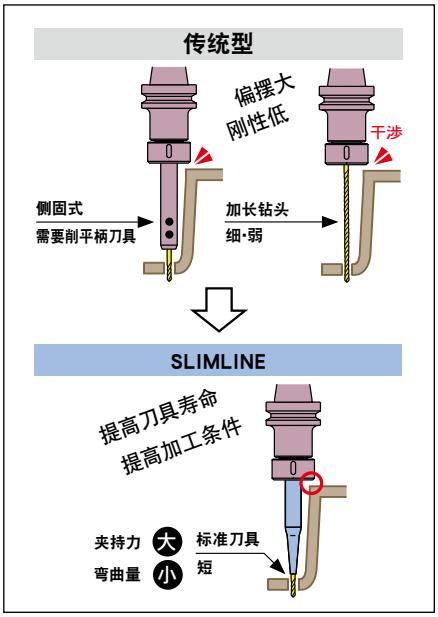
P.194



直柄延长杆

■高精度延长标准刀具

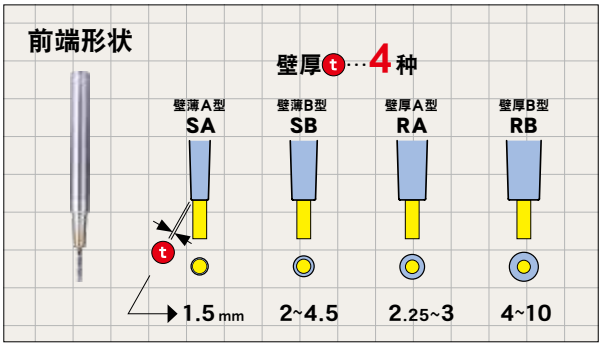




ST 10 C – SL SA 3 – 110 – M42

- ST：直柄延长杆
- 10：φD1
- C：硬质合金柄
- SL：SLIMLINE
- SA：前端形状
- 3：φD
- 110：L
- M42：加工有效长度

φD1
10
12
16
20
25
32
42



标准型



ST25-SLSA10-255

Fig. 1

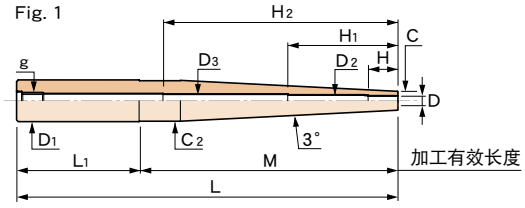
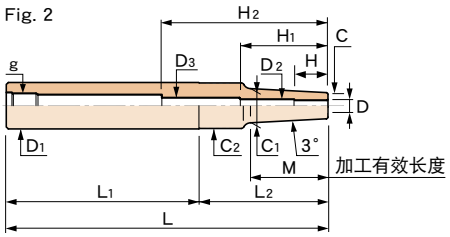
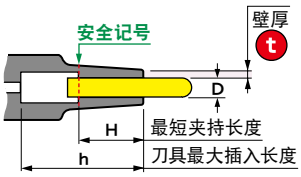


Fig. 2



■注意事项
- 刀具安装‥插入刀具时,请务必将刀具插入比安全记号更深的位置。





HEATROBO电磁 1200S (HRD-01S-230AS) 电磁式加热器对应表

[○] 可加热 [×] 不可加热
[▲] 垫高加热器后可进行加热 →P.201

壁厚

型号	Fig.	φD	φC	t	L	M	φD1	H	L1	L2	φC1	φC2	g	h	Kg	φD2	φD3	H1	H2	
ST10-SLSA3- 80-M 35	1	3	6	1.5	80	35	10	9	45	—	—	9.3	M 6	64	0.03	4	—	49.6	—	○
ST16-SLRA3- 90-M 22	2		7.5	2.25	90	22	16		60	30	9.8	15.5	M10	62	0.09			33.7		
-SLSA3-115-M 42			6	1.5	115	42				55	10.4			87				53.7		
-SLRA3-115-M 42			7.5	2.25					65	50	11.9				0.1					
-SLSA3-140-M 67			6	1.5	140	67			60	80	13			112			6	54.4	84.3	
-SLRA3-140-M 67			7.5	2.25					65	75	14.5									
ST20-SLRA3-175-M 97					175	97	20		70	105	17.7	19.5		147				53.4	109.3	
-SLSA3-200-M 97			6	1.5	200				90	110	16.2			172	0.3			54.4	104.3	
ST25-SLSA3-245-M 97					245		25		120	125		24.5		217	0.6		5	49.7	105.3	
-SLRA3-245-M 97			7.5	2.25							17.7							47.5	99.5	
-SLSA3-315-M195	1		6	1.5	315	195				—	—			287				49.7	112.1	
-SLRA3-315-M 67	2		7.5	2.25		67			220	95	14.5				0.9				75.3	
ST10-SLSA3.175-80-M35	1	3.175	6.175	1.5	80	35	10	10	45	—	—	9.3	M 6	64	0.03	4	—	49.6	—	○
ST10-SLSA4- 80-M 35	1	4	7	1.5	80	35	10	12	45	—	—	9.5	M 6	64	0.03	5	—	50	—	○
ST16-SLRA4- 90-M 22	2		10	3	90	22	16		60	30	12.3	15.5	M10	62	0.09			34		
-SLSA4-115-M 42			7	1.5	115	42				55	11.4			87	0.1			64		
-SLRA4-115-M 42			10	3					65	50	14.4							54		
-140-M 60	1				140	60			80	—	—			112				64		
-SLSA4-140-M 67	2		7	1.5		67			60	80	14						6	64.7	84.3	
ST20-SLRA4-175-M 95	1		10	3	175	95	20		80	—	—	19.5		147	0.3			53.7	99.3	
-SLSA4-200-M 97	2		7	1.5	200	97			90	110	17.2			172			7	39.4	104.5	
ST25-SLSA4-245-M 97					245		25		120	125		24.5		217	0.6		6	49.7	105.6	
-SLRA4-245-M 97			10	3							20.2							50.5	100.5	
-315-M 67					315	67			220	95	17			287	0.9				70.5	
-SLSA4-315-M195	1		7	1.5		195			120	—	—				0.7			49.7	112.4	
ST10-SLSA5- 80-M 35	1	5	8	1.5	80	35	10	15	45	—	—	9.5	M 6	70	0.03	—	—	—	—	○
ST20-SLSA5-200-M110					200	110	20		90			19.2	M10	182	0.3	6		69.3		
ST25-SLSA5-290-M 97	2				290	97	25		180	110	18.2	24.5		272	0.8		7	69.7	114.5	

HRD-01S

型号	Fig.	φD	φC	t	L	M	φD1	H	L1	L2	φC1	φC2	g	h	Kg	φD2	φD3	H1	H2	
ST12-SLSA 6- 80-M 35	1	6	9	1.5	80	35	12	18	45	—	—	11.5	M 8	52	0.04	–	–	–	–	○
ST16-SLSA 6-115-M 42	2				115	42	16		60	55	13.4	15.5	M10	87	0.1	7		84.5		
-SLSB 6-115-M 42			10	2					65	50	14.4							54.5		
ST20-SLRB 6-120-M 42			14	4	120		20		70		18.4	19.5		92	0.2					
ST16-SLSB 6-140-M 60	1		10	2	140	60	16		80	—	—	15.5		112	0.1			64.5		
-SLSA 6-140-M 70			9	1.5		70			70									74.5		
ST20-SLSA 6-175-M105					175	105	20					19.5		147	0.3			109.5		
-SLSB 6-175-M 95			10	2		95			80									99.5		
-SLRB 6-175-M 60			14	4		60			115									64.5		
ST25-SLSB 6-205-M127	2		10	2	205	127	25		70	135	23.3	24.5		177	0.5			104.5		
-SLSA 6-230-M 97			9	1.5	230	97			120	110	19.2			202				94.5		
-SLRB 6-240-M 42			14	4	240	42			170	70	18.4			212	0.7		11	50.8	160	
ST32-SLSB 6-255-M157			10	2	255	157	32		70	185	26.5	31.5	M16	227	0.8		8	49.7	107.4	
ST25-SLSA 6-305-M185	1		9	1.5	305	185	25		120	—	—	24.5	M10	277				91.7	166.1	
ST32-SLRB 6-345-M 67	2		14	4	345	67	32		250	95	21	31.5	M16	317	1.6			50.5	73.5	
-SLSB 6-375-M157			10	2	375	157			190	185	26.5			347	1.4			49.7	107.4	
ST25-SLSA 7-230-M 97	2	7	10	1.5	230	97	25	20	120	110	20.2	24.5	M10	212	0.5	8	–	69.8	–	○
-320-M 97					320				210					302	0.9	7.5		44.7		
ST20-SLRB 8-100-M 30	1	8	18	5	100	30	20	24	70	—	—	19.5	M10	72	0.2	–	–	–	–	○
ST16-SLSA 8-115-M 50			11	1.5	115	50	16		65			15.5		87	0.1					
ST20-SLSB 8-145-M 70			13	2.5	145	70	20		75			19.5		117	0.2					
ST25-SLRB 8-160-M 42	2		18	5	160	42	25		110	50	22.4	24.5		132	0.5					
ST20-SLSA 8-175-M 85	1		11	1.5	175	85	20		90	—	—	19.5		147	0.3					
ST25-SLSB 8-175-M 97	2		13	2.5		97	25		70	105	23.2	24.5			0.4					
-SLRB 8-210-M 90	1		18	5	210	90			120	—	—			182	0.6	9	11	71.4	150	
-SLSA 8-230-M 97	2		11	1.5	230	97				110	21.2			202		–	–	–	–	
-SLSB 8-260-M140	1		13	2.5	260	140				—	—			232	0.7	9	11	121.4	200	
-SLSA 8-280-M160			11	1.5	280	160								252				141.4	220	
ST32-SLRB 8-285-M 67	2		18	5	285	67	32		190	95	25	31.5	M16	257	1.3		14	75.8	185	
-SLSB 8-375-M157			13	2.5	375	157				185	29.5			347	1.5		12	94.1	166.4	
ST25-SLSA 9-230-M 97	2	9	12	1.5	230	97	25	30	120	110	22.2	24.5	M10	60	0.6	9.6	–	61	–	○
-320-M 97					320				210						0.9					
ST25-SLRB10-120-M 35	1	10	22	6	120	35	25	30	85	—	—	24.5	M10	60	0.4	10.6	–	61	–	○
ST20-SLSB10-120-M 50			16	3		50	20		70			19.5			0.2					
ST25-SLSB10-145-M 67	2				145	67	25			75	23	24.5			0.4					
ST20-SLSA10-145-M 70	1		13	1.5		70	20		75	—	—	19.5			0.2					
ST25-SLSB10-175-M105			16	3	175	105	25		70			24.5		154	0.5	11		155		
-SLRB10-210-M 90			22	6	210	90			120					149	0.7			150		
ST32-SLSB10-240-M170			16	3	240	170	32		70			31.5	M16	212	0.9		14	151.1	200	
ST25-SLSA10-255-M135			13	1.5	255	135	25		120			24.5	M10	194	0.7		–	195	–	
-SLSB10-275-M105			16	3	275	105			170						0.8					
ST32-SLRB10-285-M 67	2		22	6	285	67	32		190	95	29	31.5	M16	257	1.4		14	76.1	185	
-SLSA10-340-M210	1		13	1.5	340	210			130	—	—			312	1.3			191.1	270	
-SLSB10-360-M170			16	3	360	170			190					332	1.5			151.1	260	
ST42-SLSB10-445-M157	2				445	157	42		260	185	32.5	41.5	M24	417	2.7			97.1	165	×
ST25-SLSA11-230-M110	1	11	14	1.5	230	110	25	30	120	—	—	24.5	M10	60	0.6	11.6	–	61	–	○
-320-M110					320				210						0.9					

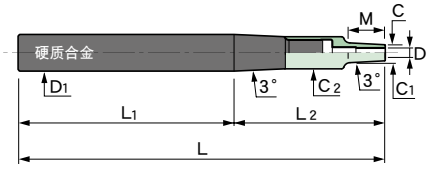
HRD-01S

型号	Fig.	φD	φC	t	L	M	φD1	H	L1	L2	φC1	φC2	g	h	Kg	φD2	φD3	H1	H2	
ST25-SLSB12-120-M 42	2	12	19	3.5	120	42	25	30	70	50	23.4	24.5	M10	60	0.3	12.6	–	61	–	○
ST20-SLSA12-120-M 50	1		15	1.5		50	20			–	–	19.5			0.2					
ST32-SLRB12-140-M 60			26	7	140	60	32		80			31.5	M16	112	0.7	13		109.5		×
ST25-SLSB12-150-M 80			19	3.5	150	80	25		70			24.5	M10	60	0.4		11	61	130	○
ST32-SLSB12-220-M150					220	150	32					31.5	M16	192	0.9		14	131.7	180	
ST25-SLSA12-230-M110			15	1.5	230	110	25		120			24.5	M10	60	0.6	12.6	11	61	–	
-SLSB12-250-M 80			19	3.5	250	80			170						0.8	13			170	
ST32-SLRB12-260-M 70			26	7	260	70	32		190			31.5	M16	232	1.3		14	51.7	160	×
-SLSA12-315-M185			15	1.5	315	185			130					287	1.2			166.7	245	○
-SLSB12-340-M150			19	3.5	340	150			190					312	1.5			131.7	240	
ST42-SLSB12-445-M157	2				445	157	42		260	185	35.5	41.5	M24	417	2.8	12.6		59.5	162.5	×
ST32-SLRB16-175-M 45	1	16	32	8	175	45	32	32	130	–	–	–	M16	80	0.8	16.6	–	81	–	
ST25-SLSB16-175-M 50			24	4		50	25		125				M10		0.5					
ST32-SLSB16-290-M100					290	100	32		190			31.5	M16		1.4	17	14		190	
ST42-SLRB16-355-M 67	2		32	8	355	67	42		260	95	39	41.5	M24	327	2.7		21	73.5	–	
-SLSB16-445-M157	1		24	4	445	157				–	40.5			417	3			165.8	424.5	
ST42-SLRB20-170-M 70	1	20	38	9	170	70	42	40	100	–	–	41.5	M24	142	1.3	21	21	109.5	154	
ST32-SLSB20-175-M 50			29	4.5	175	50	32		125			31.5	M16	80	0.8		–	81	–	
ST42-SLSB20-255-M155					255	155	42		100			41.5	M24	227	1.7		22	194.5		
-SLRB20-330-M 70			38	9	330	70			260					302	2.6		22.6	189.5	314	
-SLSB20-415-M155			29	4.5	415	155								387	2.9	21.6	22	69.5	135	
ST42-SLRB25-170-M 42	2	25	45	10	170	42	42	45	100	70	49.6	53	M24	120	1.5	26	22.6	121	154	
-250-M 42					250				180		49.4	50		80	2.1	25.6	22	81	–	

硬质合金型

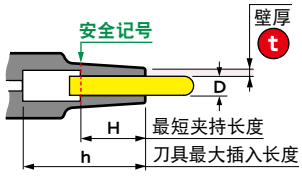


ST16C-SLSB6-225



■注意事项

● 刀具安装…插入刀具时，请务必将刀具插入比安全记号更深的位置。

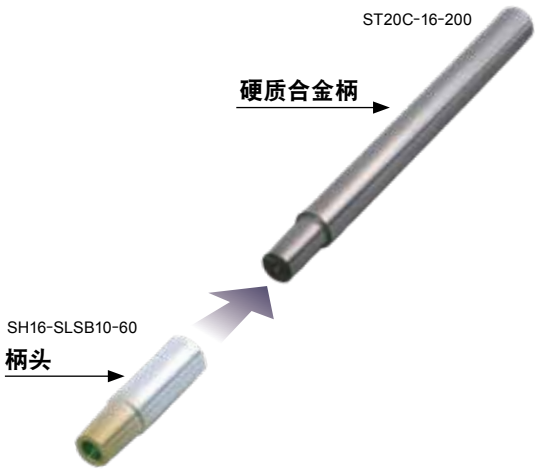


壁厚 t

型号	φD	φC	t	L	M	φD1	H	L1	L2	φC1	φC2	h	Kg	H1
ST10C-SLSA 3-160	3	6	1.5	160	12	10	9	120	40	7.3	10	19	0.2	17
ST16C-SLSA 3-280				280		16		182	98				0.7	
ST10C-SLSA 4-160	4	7	1.5	160	12	10	12	120	40	8.3	10	19	0.2	17
ST16C-SLSA 4-280				280		16		182	98				0.7	
ST12C-SLSB 6-175	6	10	2	175	19.1	12	18	125	50	—	12	27	0.3	25
ST16C-SLSB 6-225				225	22	16		165	60	12.3	16	32	0.6	28
ST20C-SLSB 6-320				320		20		221	99				1.3	
ST25C-SLSB 6-360				360		25		242	118		20	38	2.2	33
ST16C-SLSB 8-225	8	13	2.5	225	22	16	24	165	60	15.3	16	32	0.6	28
ST20C-SLSB 8-270				270		20		200	70		20	38	1.1	33
ST25C-SLSB 8-360				360		25		242	118				2.2	
ST20C-SLSB10-270	10	16	3	270	22	20	30	200	70	18.3	20	38	1.1	33
ST25C-SLSB10-360				360		25		242	118				2.2	

硬质合金直柄延长杆部件型号表

组合型号	硬质合金柄型号	柄头型号
ST10C-SLSA 3-160	ST10C－ 7 －120	SH 7 －SLSA 3－40
-SLSA 4-160		－SLSA 4－40
ST12C-SLSB 6-175	ST12C－ 9 －125	SH 9 －SLSB 6－50
ST16C-SLSA 3-280	ST16C－ 7 －240	SH 7 －SLSA 3－40
-SLSA 4-280		－SLSA 4－40
-SLSB 6-225	－12.5－165	SH12.5－SLSB 6－60
-SLSB 8-225		SH12.5－SLSB 8－60
ST20C-SLSB 6-320	ST20C－12.5－260	SH12.5－SLSB 6－60
-SLSB 8-270	－16 －200	SH16 －SLSB 8－70
-SLSB10-270		SH16 －SLSB10－70
ST25C-SLSB 6-360	ST25C－16 －290	SH16 －SLSB 6－70
-SLSB 8-360		－SLSB 8－70
-SLSB10-360		－SLSB10－70

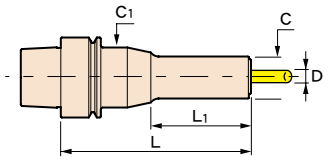


相关商品

DETa-1 超弹性筒夹刀柄(DTA / DTB)

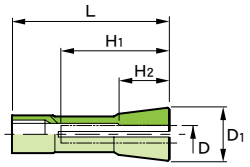


E32-DTB7-65K



■DETa-1 筒夹





型号	φD	L	φC	L1	Kg	N
E25 -DTB 3- 58	0.5 ~3.175	58	10	27	0.1	0.4
E32 -DTA 3- 75	0.5 ~3.175	75	10	27	0.2	1.8
-DTB 3- 65		65				0.6
-DTB 7- 65K※	1 ~ 7		21	30		0.9
E40 -DTA 3- 75	0.5 ~3.175	75	10	27	0.3	1.7
-DTB 3- 70		70			0.3	0.9
-DTB 7- 95	1 ~ 7	95	21	50	0.4	1.6
-DTB12-110	2.5 ~13	110	30	90	0.5	2.8
E50 -DTA 3- 80	0.5 ~3.175	80	10	27	0.5	2.1
-DTB 3- 75		75				1.7
-DTB 7-100	1 ~ 7	100	21	50	0.6	3.2
-DTB12-115	2.5 ~13	115	30	89	0.8	4.2
F63 -DTA 3- 90	0.5 ~3.175	90	10	27	0.8	2.3
-120		120			0.9	2.7
-DTB 3- 75		75			0.8	2.1
-105		105			0.9	2.5
-105L				57	0.8	2.1
F63M-DTB 7-100	1 ~ 7	100	21	50	0.9	3.3
-DTB12-120	2.5 ~13	120	30	70	1.1	4.8

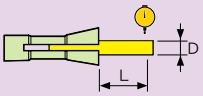
型号 超精密级别	φD	伸缩范围	φD1	L	H1	H2	刀柄型式
D 3-0.6 -P	0.5 ~ 0.6	0.1	7	40	36	6.9	DTA 3 DTB 3
-0.8 -P	0.6 ~ 0.8	0.2					
-1 -P	0.8 ~ 1					7	
-1.5 -P	1 ~ 1.5	0.5				7.2	
-2 -P	1.5 ~ 2					7.3	
-2.5 -P	2 ~ 2.5					7.4	
-3 -P	2.5 ~ 3					7.6	
-3.175-P	2.7 ~ 3.175						
D 7- 1.5-P	1 ~ 1.5	0.5	17	50	36	7	DTA 7 DTB 7
- 2 -P	1.5 ~ 2					10	
- 2.5-P	2 ~ 2.5					12	
- 3 -P	2.5 ~ 3						
- 4 -P	3 ~ 4	1				14	
- 5 -P	4 ~ 5					16	
- 6 -P	5 ~ 6						
- 7 -P	6 ~ 7						
D12- 4 -P	2.5 ~ 4	1.5	26	70	50	16	DTB12
- 6 -P	4 ~ 6	2				20	
- 8 -P	6 ~ 8					22	
-10 -P	8 ~ 10						
-12 -P	10 ~ 12						
-13 -P	11 ~ 13						

■选购品 ●DETa-1筒夹 ●扳手・内六角扳手
■标准附属品 ●销(DTA3)
■注意事项 ●※=无法利用筒夹伸缩范围。夹持径仅为筒夹基准径。

全夹持范围 高精度保证

偏摆精度(实测值)	D3	D7・D12
超精密级(P级)	3 (6)μm	5 (10)μm

※筒夹单体的精度
( ) 内表示为使用伸缩范围时



D	L
~10	4 ×D
10 ~13	40

■扳手・内六角扳手

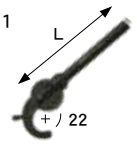
Fig. 1


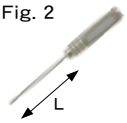
Fig. 2


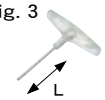
Fig. 3


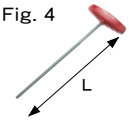
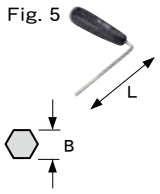
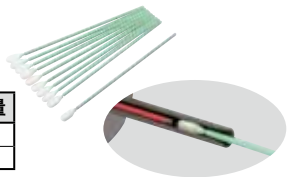
Fig. 4


Fig. 5


型号	刀柄型式	Fig.	L	B	紧固扭力 (N·m)
F -22	DTA 3	1	110	—	2~3
DW-2.5-110	DTB 3	2			
TW-4	E32 - DTB 7	3	77	4	14
-5	E40 - DTB 7	4	153	5	
-6	DTB12		173	6	
W -135DR	E40 - DTB12	5	110	5	18
	F63M - DTB 7				14
	DTB12				18

■清洁用具 毛毡型(DTA3型 / DTB3型)

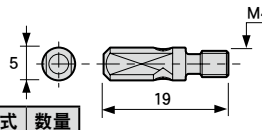
请用于刀柄内部清洁



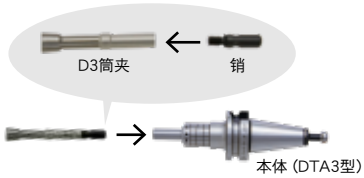
型号	数量
PCT01-10	10
-25	25

■销(DTA3型)

本体(DTA3型)安装筒夹时需要。



型号	刀柄型式	数量
PR-DTA3	DTA3	2



弹簧筒夹刀柄（CTH / CTS）



E32-CTH10-55



E32-CTS10-50

Fig. 1

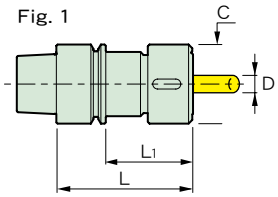
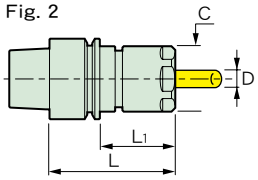


Fig. 2



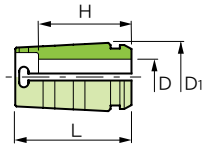
型号	Fig.	φD	L	φC	L1	Kg
E32-CTH10-55	1	2.4 ～ 10	55	32	35	0.2
-CTS10-50 ※	2		50	26	30	
E40-CTH10-55	1	2.4 ～ 10	55	32	34	0.4
E50-CTH10-60	1	2.4 ～ 10	60	36	34	0.7
-90			90		64	0.9
-CTH20-75		5.8 ～ 20	75	50	49	
F63-CTH10-60	1	2.4 ～ 10	60	36	34	0.9
-90			90		64	1.1
-CTH20-75		5.8 ～ 20	75	50	49	

■选购品　●弹簧筒夹(P级)　●扳手・内六角扳手

■注意事项　●※=无法利用筒夹伸缩范围。夹持径仅为筒夹基准径。

弹簧筒夹 超精密级(P级)





型号	φD	L	φD1	H	刀柄型式
C10-D-P	2.6～ 5.8 (0.2㎜ 間隔)	26	17.2	18	CTH10
	6 ～10 (0.2㎜ 間隔)			20	
C20-D-P	6 ～ 9.8 (0.2㎜ 間隔)	50	29.5	29	CTH20
	10 ～15.8 (0.2㎜ 間隔)			33	
	16 ～20 (0.2㎜ 間隔)			40	

型号例　φD C20 -10-P

扳手・内六角扳手

Fig. 1

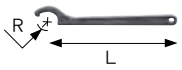


Fig. 2

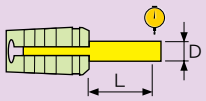


型号	Fig.	刀柄型式	R	L
FC-32	1	E32 - CTH10 E40 -	16	120
-36		F63 - CTH10	18	208
-50		- CTH20	25	281
RC-26	2	E32 - CTS10	—	240



全夹持范围 高精度保证

偏摆精度(实测值)	基准径时
超精密级(P级)	5 μm



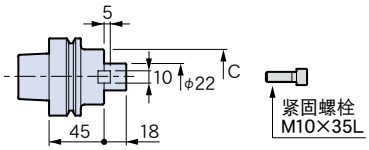
※筒夹单体的精度

D	L
～ 10	4 ×D
10.2 ～ 20	40

面铣刀柄（FMC）



E50-FMC22-45



型号	刀径	φC	Kg
E50-FMC22-45	50, 63	42	0.7
F63-FMC22-45	50, 63	45	1

■标准附属品　●紧固螺栓　●止动键

■备考　●根据刀具形状不同,紧固螺栓也不同。

拉钉

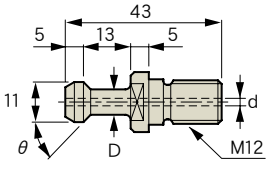


注意事项

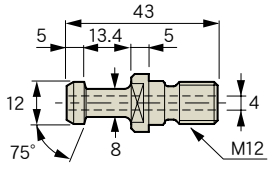
- 下述记载仅为各机床厂商具有代表性的拉钉型号，实际上有和本记载不符情况。请务必确认机床产品规格书。
- 未列入下表记载的拉钉型号也可生产。详情请垂询敝司。
- 一体型热装式刀柄在进行热装操作时，请使用通孔拉钉或在取下拉钉后进行加热。若使用标准拉钉，空气无法流出，将导致无法插入刀具。
  敝司准备有在标准拉钉上通孔排气用的“标准通孔拉钉”。

对应厂商	标准型						中心通冷型		
	BT30		BT40		BT50		BT30	BT40	BT50
	标准	标准通孔	标准	标准通孔	标准	标准通孔			
大隈	–		P40T-2 (MB系列)	P-339	P50T-2	P-419	–	P-499	P-419
			P40T-1 (MILLAC系列)	P-297					
OKK	–		P40T-1	–	P-143	–	–	–	–
大鸟机工	–		P40T-1	P-297	P50T-1	P-299	–	–	–
北村机械	P30T-1	P-445	P-348	P-323-1	P-400		–	P-323-1	P-400
	P-399 (Mycenter-1Xi)								
KIRA CORPORATION	P30T-1	P-445	P40T-1	P-297	–		–	P-323-1	–
纪和机械	P30T-1	P-445	P-348	P-323-1	P-400		–	P-323-1	P-400
仓敷机械	–		P40T-1	P-297	P50T-1	P-299	–	–	–
小松NTC	P30T-1	P-445	P40T-1	P-297	P50T-1	P-299	P-522	P-505	P-384
捷太格特	–		P40T-1	P-297	P50T-1	P-299	–	P-297	P-299
静冈铁工所	P30T-1	P-445	P-141	P-498	P-143	P-402	–	–	–
新日本工机	–		P40T-2	P-339	P50T-2	P-419	–	–	–
杉野	P30T-2	P-497	–		–		–	–	–
DMG MORI	P30T-1	P-445	P-141	–	P-143	–	–	P-435	P-513
东芝机械	–		–		P50T-1	P-299	–	–	–
新泻机械技术	–		–		P50T-2	P-419	–	–	–
发那科	P30T-1	P-522	–		–		P-522	–	–
兄弟工业	P30T-2	P-511	–		–		P-511	–	–
丰和工业	P30T-1	P-445	P40T-1	P-297	P50T-1	P-299	–	–	–
牧野机床	–		P40T-1 (V系列)	P-297	P50T-1 (A, MCC, V系列)	P-299	–	P-323-1	P-299
			P-348 (a系列, D系列)	P-323-1	P-400 (A系列, a系列)				
松浦机械	P30T-2	P-511	P-348	P-323-1	P50T-2	P-419	–	P-323-1	–
	P-399				P-400				
三井精机	–		P-007	–	P-008	P-250	–	–	–
三菱重工	–		P40T-1	–	P50T-2	–	–	–	–
安田工业	–		P-348	P-438	P50T-1	P-299	–	P-509	P-585
					P-400 (YBM1218V)				
山崎技研	–		P40T-1	P-297	P50T-2	P-419	–	–	–
山崎马扎克	–		P-227		P-514		–	P-227	P-514

BT30

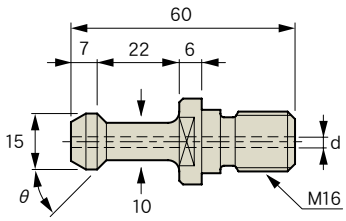


型号	ϕD	ϕd	θ	备考
P30T-1	7	–	45	MAS-1
P-445		3		P30T-1 通孔
P30T-2		–	60	MAS-2
P-497		2		P30T-2 通孔
-522	8	4	45	发那科 中心通冷
-511	7.5	2.5	60	兄弟工业 中心通冷

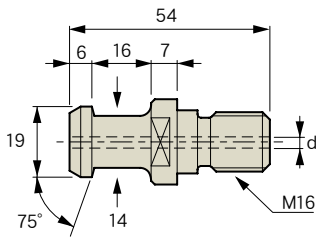


型号	备考
P-399	JIS30P

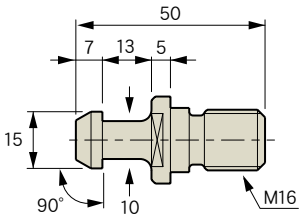
BT40



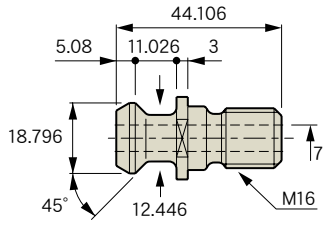
型号	ϕd	θ	备考
P40T-1	—	45	MAS-1
P-297	4		P40T-1 通孔
P40T-2	—	60	MAS-2
P-339	4		P40T-2 通孔
P-141	—	90	—
P-498	4		P-141 通孔
P-505	3	45	小松NTC 中心通冷



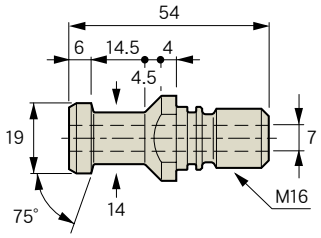
型号	ϕd	备考
P-348	—	JIS40P
P-323-1	7	P-348 通孔
P-499	4	大隈中心通冷
P-438	7	安田工业 标准通孔
P-509		安田工业 中心通冷



型号	备考
P-007	三井精机

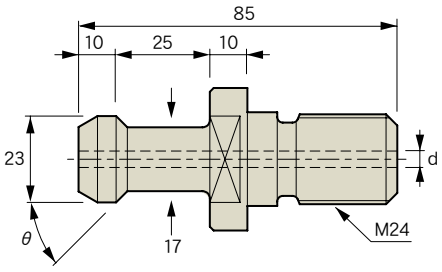


型号	备考
P-227	山崎马扎克

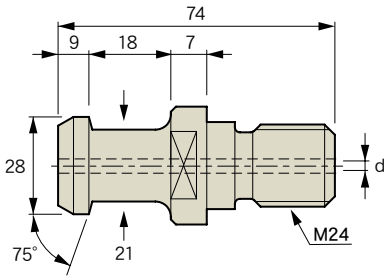


型号	备考
P-435	DMG MORI 中心通冷

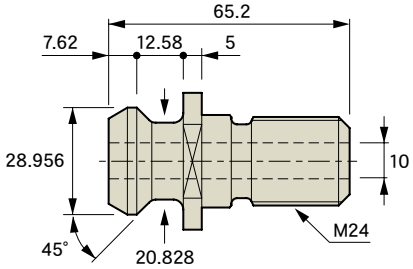
BT50



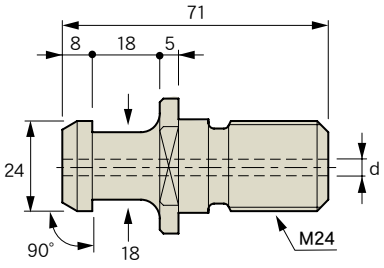
型号	ϕd	θ	备考
P50T-1	—	45	MAS-1
P-299	6		P50T-1 通孔
P50T-2	—	60	MAS-2
P-419	6		P50T-2 通孔
P-143	—	90	—
P-402	7		P-143 通孔
P-513	8	90	DMG MORI 中心通冷
P-384	5.5	45	小松NTC 中心通冷



型号	ϕd	备考
P-400	10	JIS50P
P-288-1	6	P-400 通孔
P-585	5.5	安田工业 中心通冷



型号	备考
P-514	山崎马扎克



型号	ϕd	备考
P-008	—	三井精机
P-250	8	P-008 通孔

关于SLIMLINE筒夹的安装

若拉钉的通孔直径在6mm以上，无需取下拉钉，就能直接进行SLIMLINE筒夹的装载操作。





冷却液导管

■ 冷却液导管（固定式）

型号	Fig.	ϕC	L	ϕD	W	G	适用本体
CD 40-01	1	8	29.5	4	4	M12×1	HSK-A40
-03	3		35.5				
-04			36.5				
CD 50-01	1	10	33	5	5	M16×1	HSK-A50
-03	3		39				
-04			59				
CD 63-01	1	12	36.5	6	6	M18×1	HSK-A63
-02	2						
-03	3				5		
-04			60.5				
CD100-01	1	16	44	8	8	M24×1.5	HSK-A100
-02	2			10.3			

Fig. 1

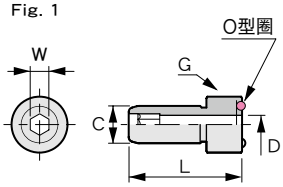


Fig. 2

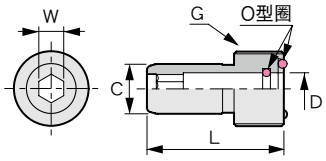
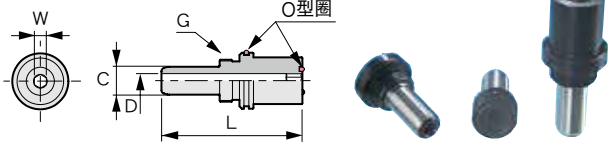


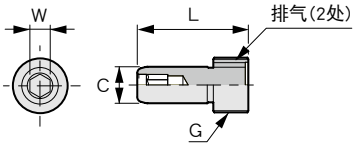
Fig. 3



■备考
- 刀柄本体标准附属品。
  但是,「CD50-04」是「CD50-03」,「CD63-04」是「CD63-03」的选购品。

■ 填充管

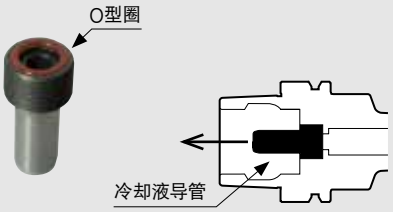
型号	ϕC	L	W	G	适用本体
CD 40-A1	8	29.5	4	M12×1	HSK-A40
CD 50-A1	10	33	5	M16×1	HSK-A50
CD 63-A1	12	36.5	6	M18×1	HSK-A63
CD100-A1	16	44	8	M24×1.5	HSK-A100





⚠ 热装作业注意事项

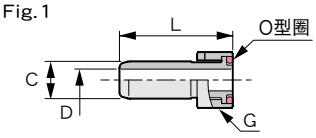
使用温风式加热器(HRB)加热时,请取下冷却液导管。
带着冷却液导管加热时,会损坏导管的O型圈。
不利用主轴中心通冷时,弊司提供可以安装着进行
热装操作的填充导管。



■ 冷却液导管（可动式）

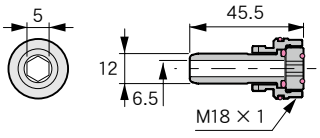
型号	Fig.	ϕC	L	ϕD	G	适用本体
CD 63-01F	1	12	36.5	7	M18×1	HSK-A63
-03F	2		45.5	6.5		
CD100-01F	1	16	44	10	M24×1.5	HSK-A100

Fig.1



■备考
- 有推荐使用可动式冷却液导管的机床。
  订购刀柄时,可根据客户指示进行更换。
- 交货后需要更换冷却液导管时,请使用冷却液导管专用扳手(CD63-01F-RNT)。

Fig.2



周边机器

刀具安装工作站
刀具工作台
6S工作台
6SD



P. 188

刀柄刀具清洗机
高压清洗机
CBX



P. 189

刀具防护罩
刀具保护套 TCC型
TCC



P. 190

刀具保护盒
铣刀小管家
EMO



P. 191

刀柄收纳箱
HBX



P. 192

刀具紧固台
PETIT BALL
MY CUBE
HF系列



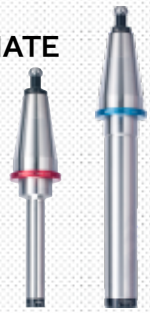
P. 193

主轴锥孔用 清洁工具
STAR DUST
CLT



P. 194

机床主轴保养用
测试棒
CHECKMATE
CMA
CMB



P. 195

Z 轴原点设定、测定基准位置用工具
Goo Checker
ZPM



P. 196

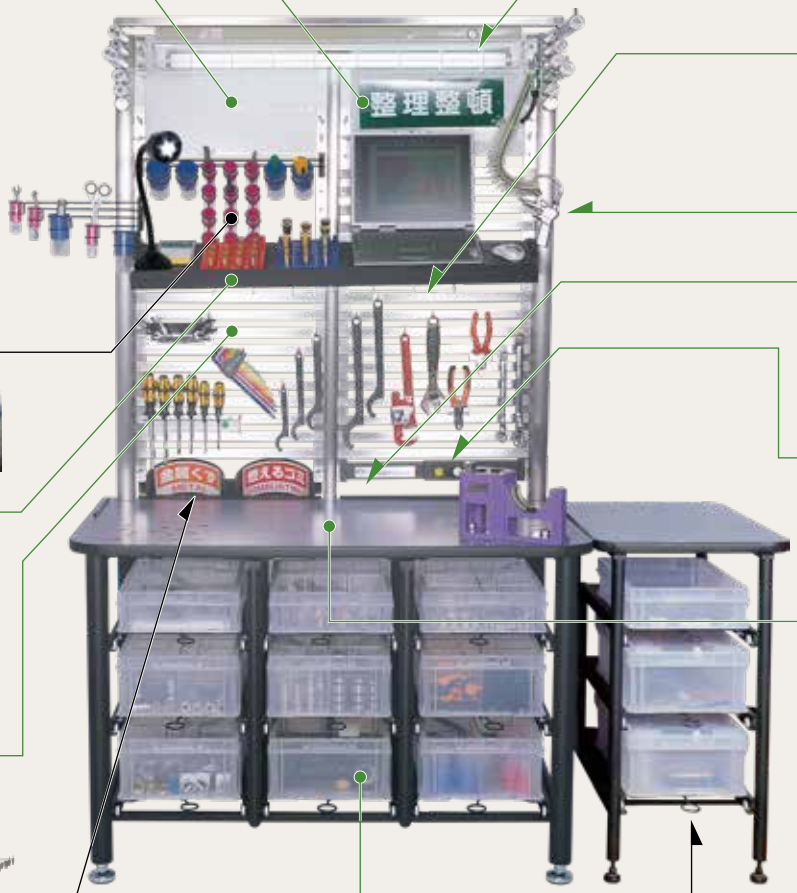
刀具安装工作站

6S工作台

刀柄换装操作快速、安全!
改善工厂的作业环境!

▷ 进一步深化工厂 5S。
▷ 改善工厂工作环境!
▷ 节省空间,组装简单。

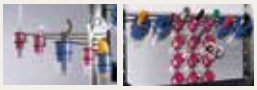




白板 & 网板
可用于公告牌,联络板,
及图面粘贴很方便。



工具插入架 (选购品)
方便收纳刀具和文具。



架 子
安装角度有两种选择。



挂钩底板
挂钩可随意安装,组换自由,
背面也可使用。



垃圾筒 (选购品)
可将垃圾简单分类。

收纳箱
可以看清里面存放内容,
便于管理。



侧桌 (选购品)
收纳箱(CN-103)1个
(CN-150)2个
附带3个收纳箱盖(CN-FT)

上部照明
附照明安全罩。

下部照明
照亮工作桌面确保安全。



风枪组套
可选择悬挂位置(左侧或右侧)

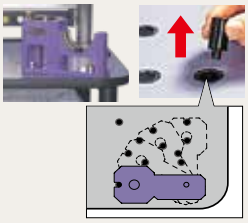
防掉落挡杆
防止工具和刀具掉落。



照明开关和插座
上部照明(32w) 上部照明(20w)
最大对应1500w



桌 面
可利用桌面已有的小孔来安装
选购品的刀具紧固台。



刀具紧固台 (选购品)
➲ P. 193


MY CUBE

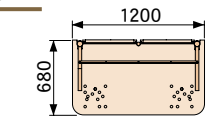

PETIT BALL

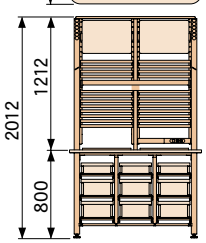
※不包含未标记的 电脑、面板和工具类。

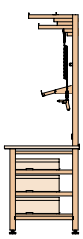
型号

6SD-01

寸法







132kg 均等承受负荷 100kg

MST

备有专用目录



标准附属品

型号	名称	数量
6SD-FBP	挂钩底板	12个
-FS	短挂钩	3个
-FL	长挂钩	2个
-UFS	U型短挂钩	3个
-UFL	U型长挂钩	1个
-FSP	扳手挂钩	1个
-FDR	螺丝刀挂架	1个
CN -103	收纳箱	3个
-150		6个
6SD-AIR	风枪组套	1套装

名称	数量
棚板	1个
上部照明/下部照明 ※选择50Hz 或60Hz	各1个
电源组套 (插座照明开关电源线)	1套装
白板	1套装
白板笔	
板擦	
磁扣袋	
网板	
磁铁×3个	
记事本	
标签组套	

■注意事项
- 需用户自己组装
- 邮资另计
- 电源为100V规格,请自备变压器。

高压清洗机

充分清洗刀柄/筒夹/螺帽/刀具/小型工件，维持高精度！

- ▷ 不仅可清洗刀柄，也可直接清洗刀具・治具
- ▷ 无需安装给排水管，可随意放置
- ▷ 安全的水洗净装置。循环式设计，利于环保
- ▷ 内置清洗液加温装置，增强清洁力

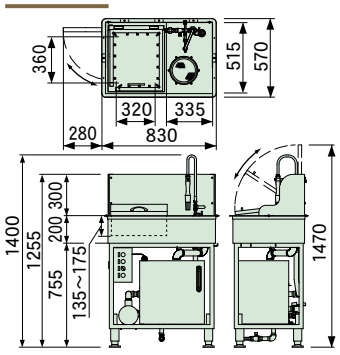


清洗池，冲洗槽，蓄水池均采用不锈钢材质。
污渍不易附着，清洗简单。

型号

CBX-01

寸法



规格

材质	SUS304(水槽，水箱，清洗单元) SS400(底座框架)
水箱	约65L(附带温度计和水平仪)
泵	0.3～0.51kw (50/60Hz) (Grundfos 制)
电加热器	3kw (带温度调节功能)
重量	约100kg(含清洗液约165kg)
电源	3相 200V(额定15A)

标准附属品

型号	名称	数量
CBX-HNZ	手持喷嘴	1个
-MFIL	主过滤器	2个
-SFIL	辅助过滤器	2个
-TRP	排水口圈网	1个
-GSTP	排水口橡胶栓	1个
-WBSK	清洗筐	1个
-WTBL	清洗台	1个
水槽外周防护罩		1套装
挂钩		2个
竹制刷子		1个
总侧电源线(带插座 15m)		1个

■注意事项

- ●请务必使用水溶性清洗剂。
- ●邮资另计
- ●电源为200V规格，请自备变压器。

刀具保护套 TCC型

透明可见，可安全简单管理刀具

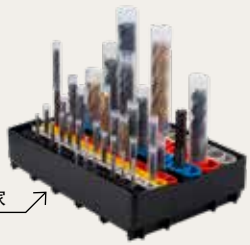


里面清晰可见

φ5.4～60

降低刀具费用

保管时使用刀具保护套，防止刀具之间互相碰撞造成的破损。
可降低重新研磨刀具时的研磨量，节约刀具费用。



铣刀小管家
P.191

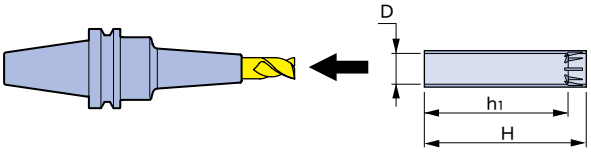


倒提刀柄也不会脱落





型号	φD	h1	H	数量
TCD03-50	3	—	25	50个
TCD04-50	4	—	32	50个
TCC0607- 50	5.4～ 6.7	35	40	50个
-100				100个
-500				500个
TCC0709- 50	6.8～ 8.9	35	40	50个
-100				100个
-500				500个
TCC0911- 50	8.9～10.9	65	70	50个
-100				100个
-500				500个
TCC1113- 50	10.9～13.4	65	70	50个
-100				100个
-500				500个
TCC1418- 25	13.8～17.8	100	110	25个
- 50				50个
-250				250个
TCC1822- 25	17.8～22.4	100	110	25个
- 50				50个
-250				250个
TCC2228- 25	22.3～28	135	150	25个
- 50				50个
-250				250个
TCC2836- 10	28 ～36	130	150	10个
- 20				20个
- 50				50个
-200				200个
TCC3646- 10	36.2～47	165	190	10个
- 20				20个
- 50				50个
-200				200个
TCC4760- 10	46 ～60	160	190	10个
- 20				20个
- 50				50个
-200				200个



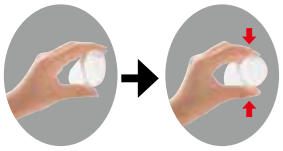
每套品种尺寸

各放置2个。

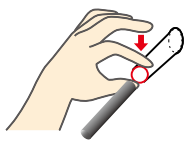
型号	数量
TCC-F	TCC0607～4760 各 2 个 共计 20 个

使用方法

1 捏住刀具保护套口，将椭圆按成正圆。



2 在正圆的状态下，套上刀具或刀柄。



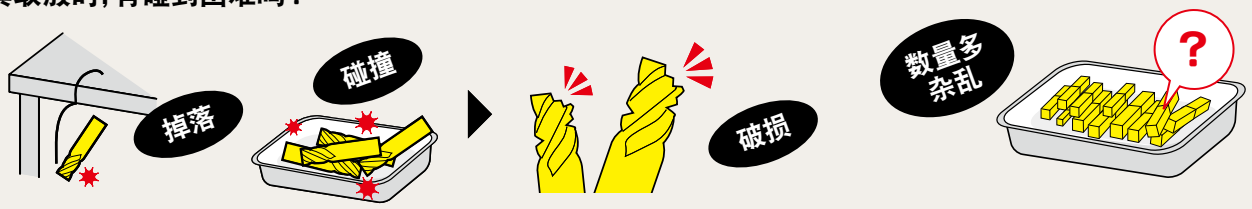
TCA型 — 安装在刀柄先端
TCB型 — 安装在刀具
请配合使用。

详细内容请参考综合目录！



铣刀小管家

刀具取放时，有碰到困难吗？



刀具折断，刀具费用增大

找不到需要使用的刀具

通过最合适工具作业，节约刀具费和时间！

▷ 防止刀具接触碰撞，延长刀具寿命

▷ 方便找出需要使用刀具



优惠套装

立即就可使用的便利优惠套装可收纳刀具柄径φ3～12（收纳支数156支）

套装型号

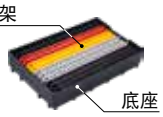
EMO-SET-01

刀架

刃物径	数量
φ 3	1个
φ 4	2个
φ 6	3个
φ 8	2个
φ 10	2个
φ 12	2个

底座

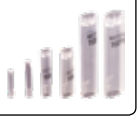
数量
1个



+

刀具保护套

刃物径	数量
φ 3	50个
φ 4	50个
φ 6	50个
φ 8	50个
φ 10	50个
φ 12	50个



+

刀具保护套收纳盒

数量
1个

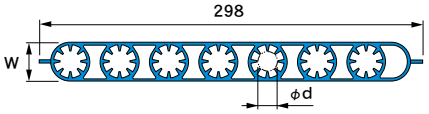


φ3…13支　φ4 …26支　φ6 …39支
φ8…26支　φ10…26支　φ12…26支

▮刀架

收纳,固定刀具用部件。可通过颜色识别刀具尺寸,所需刀具一目了然。
请设置到底座上进行使用。



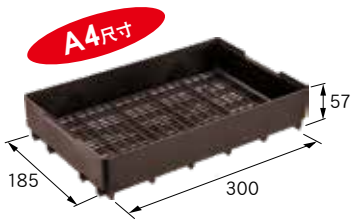


型号	φd	W	放置个数	Color	数量
EMO-STD 3-2	3	15mm（1W）	13支/1刀架	Black	2个
-5					5个
-STD 4-2	4			Brown	2个
-5					5个
-STD 6-2	6			Gray	2个
-5					5个
-STD 8-2	8			Yellow	2个
-5					5个
-STD10-2	10			Orange	2个
-5					5个
-STD12-2	12			Black	2个
-5					5个
-STD16-2	16	30mm（2W）	7支/1刀架	Blue	2个
-5					5个
-STD20-2	20			Orange	2个
-5					5个
-STD25-2	25			Gray	2个
-5					5个

▮底座

收纳刀架的容器。
可自由变更刀架组合。

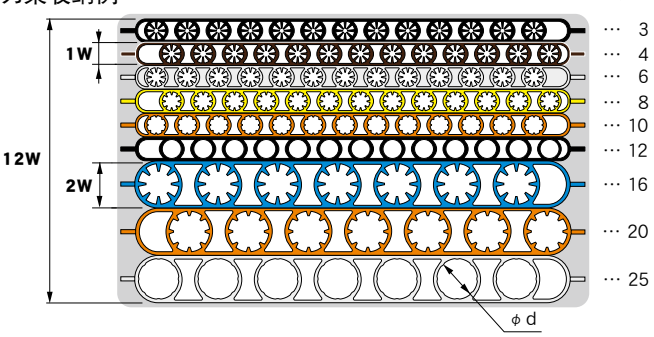
型号	数量
EMO-BAS-1	1个
-3	3个



■备考

- φ3～12的刀架可摆12排、φ16～25的刀架可摆6排
- 刀架左右朝向可自由摆放

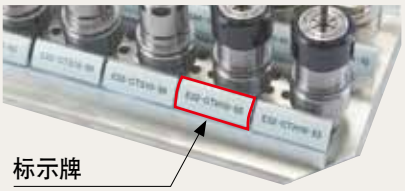
刀架收纳例

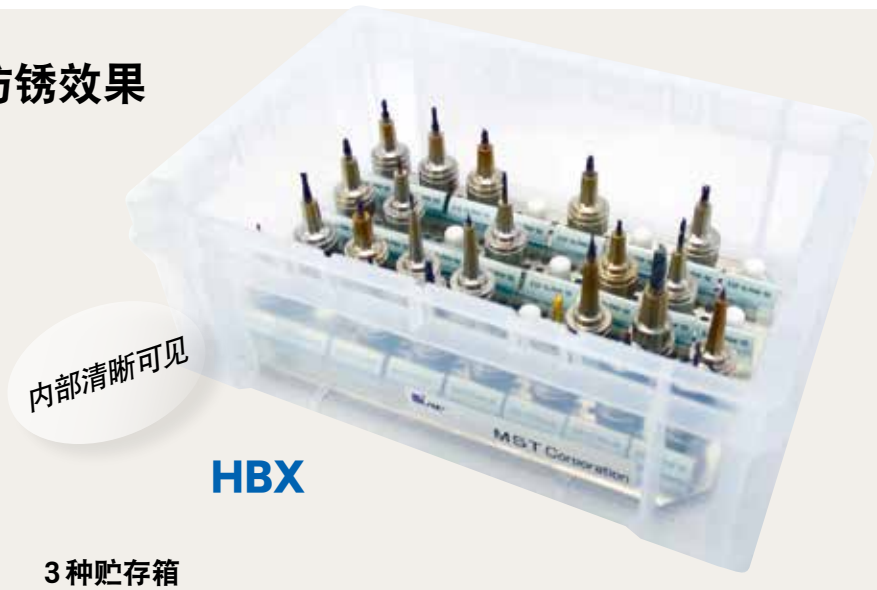


刀柄收纳箱

整齐收纳摆放，提升防锈效果

标示牌整理整顿



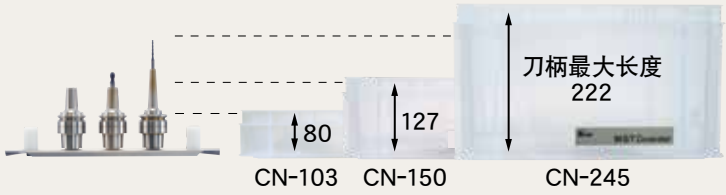


整理自由·重组自在

底板是多孔式。自由交换重排插栓，
可以对应各种各样的规格。



3 种贮存箱



标准组套

套装型号	最大收纳数量	贮存箱	插栓	数量	刀柄型式
HBX-A40	24	CN-150	HBX-PNE40	18个	HSK-A40
-A50	15	-245	-PNE50	15个	-A50
-E25	40	-150	-PNE25	32个	-E25
-E32			-PNE32		-E32
-E40	24		-PNE40	18个	-E40
-E50	15	-245	-PNE50	15个	-E50
-F63	10				-F63
-15T	40	-150	-PN15T	16个	15T(BROTHER)
-20T			-PN20T		RS20/20T(SUGINO)

■套装内容
●定位板 ●贮存箱 ●插栓

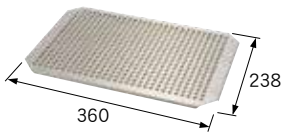
■选购品
●护栏 ●标示牌 ●贮存箱盖 ●环首螺帽

■备考
●组装式。需要扳手（5mm）。

定位板

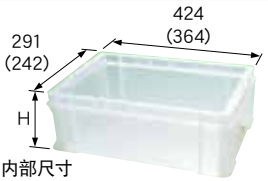
多孔式可对应各种各样的锥柄尺寸。

型号
HBX-BP01



贮存箱

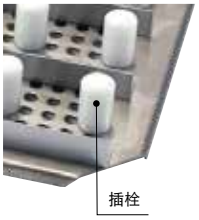
型号	H		刀柄型式
	外尺寸	内尺寸	
CN-103	103	88	—
-150	150	135	E25, 32, 40/15T/20T
-245	245	230	A50, E50, F63



※（ ）为内部尺寸

插栓

型号	数量	尺寸
HBX-PNE25	10个	φ13.5 × H20
-PNE32		φ16.5 × H25
-PNE40	5个	φ20.5 × H29
-PNE50		φ25.5 × H36
-PN15T		φ26.5 × H54
-PN20T		φ30.5 × H62

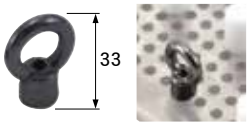


■标准附属品
●安装螺栓 (M6)

环首螺帽

型号	数量
HBX-ENM6	2个

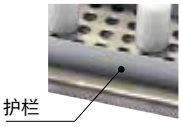
■标准附属品
●安装螺栓 (M6)



护栏（标示牌用）

型号	数量	L	备考
HBX-R210	6个	210	纵向规格
-R330	4个	330	横向规格

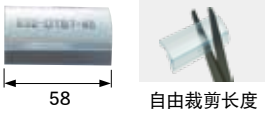
■标准附属品
●安装螺栓 (M5)
安装标示牌时使用



标示牌

型号	数量
HBX-NP01	40个

可简单装载到护栏上。



贮存箱盖

型号
CN-FT

刀具紧固台

快速安装刀具和拉钉！缩短准备时间！

Petit Ball40
BT40/DIN40



纵横自如

保证精度

使用不伤害锥柄的
特殊树脂



MY CUBE50
BT50/DIN50

MY CUBE100
HSK-A100





虎钳安装型
HF系列
BT30/ BT40/ BT50
HSK-A40/ A50/ A63/ A100
E32/ E40/ E50/ F63



价格便宜





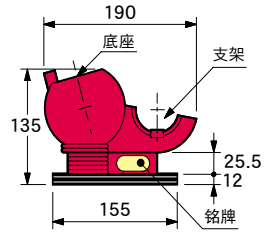
PETIT BALL / MY CUBE

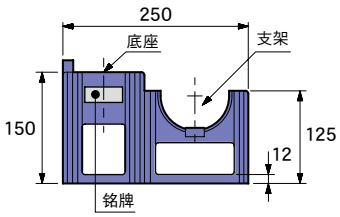
型号	刀柄型式	Kg
PETIT BALL 40	BT40 / DIN40	6.1
MY CUBE 50	BT50 / DIN50	9.7
MY CUBE100	HSK-A100、T100	9.6

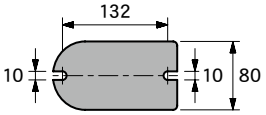
■选购品
- 适配器(PETIT BALL 40, MY CUBE 50)

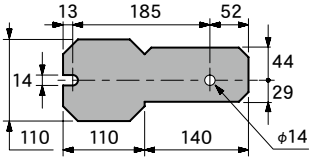
■标准附属品
- 铭牌

■注意事项
- 没有附带安装螺栓。
安装时请使用2 个M8 螺栓
(PETIT BALL : M8, MY CUBE : M12).









HF系列

型号	Fig.	刀柄型式	H	W	t	Kg
HF-BT30	1	BT30	77	70	30	0.8
-BT40		BT40	90	90	37	1.2
-BT50	2	BT50	—	—	—	2.2
HF-A40	1	HSK-A40、T40	72	60	30	0.8
-A50		-A50、T50	77	70	37	1
-A63		-A63、T63	87	90		1.2
-A100	2	-A100、T100	—	—	—	2.1
HF-E32	3	HSK-E32	98	64	—	1
-E40		-E40	100	70		1.1
-E50		-E50	106	80		1.3
HF-F63	3	HSK-F63	120	90	—	1.6

高通用性

■适配器

型号	本体	适配器	刀柄型式
AP40-T30V	PETIT BALL 40	刀座用	BT30
-T30H		刀架用	BT30
-S25H			ST25T-DTB7
-S32H			ST32T-DTB7、12
AP50-T30V	MY CUBE 50	刀座用	BT30
-T40V			BT40/DIN40
-A63V			HSK-A63、T63
-F63V			HSK-F63
AP50-T30H		刀架用	BT30
-T40H			BT40
-A63H			HSK-A63、T63
-F63H			HSK-F63
-S25H			ST25T-DTB7
-S32H			ST32T-DTB7、12



附带特制精加工的金属铭牌，
可雕刻贵公司芳名。
可雕刻英文(大写)，
数字及一(连字短横线) 共12字。



Fig. 1

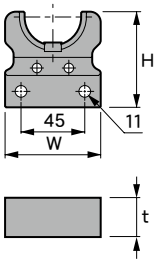


Fig. 2

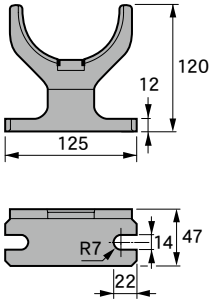
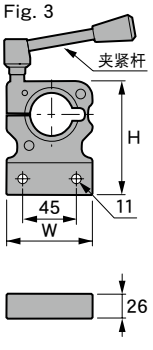


Fig. 3

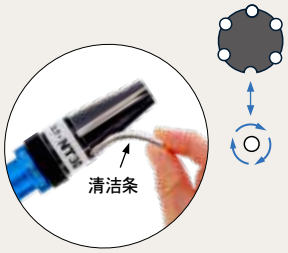


清洁机床主轴锥孔，实现高精度加工

主轴锥孔附着1μm的铁屑粉，刀尖会偏摆10μm

可交换式清洁条

将清洁条脏污面转变方向一圈使用后，可更换清洁条。保持始终在洁净状态清扫主轴，不会造成脏污再次粘附主轴，比起以往的一次性产品更加经济实惠。

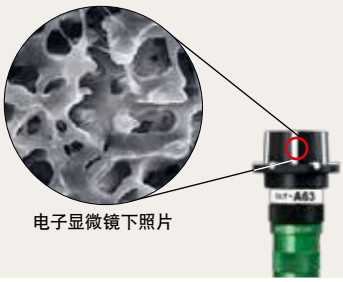






良好的脏污吸附性

清洁条使用微米级孔洞树脂，可吸附细小油污及铁屑。



电子显微镜下照片

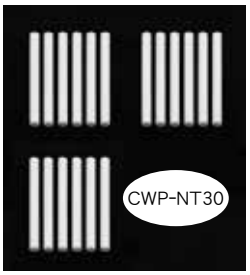
第31回奖励赏 中小企业优秀新技术，新产品赏
Resona小企业促进基金会
Nikkan Kogyo Shimbun

	套装型号	对应主轴型号	清洁锥型号	握柄型号
主轴锥孔用	CLT-NT30-G2	BT30 / DIN30 / CAT.30	CLT-NT30	GR25-100
	-NT40-G3	BT40 / DIN40 / CAT.40	-NT40	GR35-100
	-NT50-G3	BT50 / DIN50 / CAT.50	-NT50	
	-A40 -G2	HSK-A40 / T40	-A40	GR25-100
	-A50 -G2	-A50 / T50	-A50	
	-A63 -G3	-A63 / T63	-A63	GR35-100
	-A100-G3	-A100 / T100	-A100	
	-E25 -G1	-E25	-E25	GR18- 80
	-E32 -G1	-E32	-E32	
	-E40 -G2	-E40	-E40	GR25-100
	-E50 -G2	-E50	-E50	
	-F63 -G2	-F63	-F63	GR25-100
	-F80 -G3	-F80	-F80	GR35-100
刀柄锥孔用	CLT-SLK 6-G1	SLK 6	CLT-SLK 6	GR18- 80
	-SLK 8-G1	SLK 8	-SLK 8	
	-SLK12-G2	SLK12	-SLK12	GR25-100
	-C10 -G1	CTH10 / CTA10	-C10	GR18- 80
	-C20 -G2	CTH20 / CTA20	-C20	GR25-100
	-C25 -G3	CTH25 / CTA25	-C25	GR35-100
	-D 7 -G1	DTA 7 / DTB 7 / DTE 7	-D 7	GR18- 80
	-D12 -G2	DTA12 / DTB12 / DTE12	-D12	GR25-100

	型号
主轴锥孔用	CWP-NT30
	-NT40
	-NT50
	-A40
	-A50
	-A63
	-A100
	-E25
	-E32
	-E40
	-E50
	-F63
	-F80
刀柄锥孔用	CWP-SLK 6
	-SLK 8
	-SLK12
	-C10
	-C20
	-C25
	-D 7
	-D12

■替换用清洁条

内含3套



※清洁锥和握柄均可单独购买
※购买套装时附赠清洁条3套



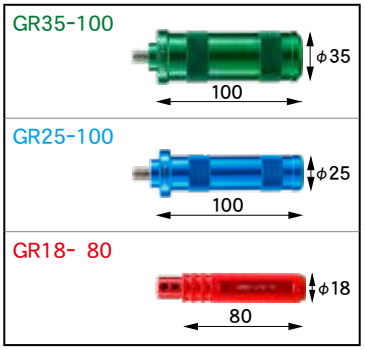
主轴锥孔用　刀柄锥孔用

■清洁锥

CLT-NT30 -NT40 -NT50		CLT-SLK 6 -SLK 8 -SLK12	
CLT-A40 -A50 -A63 -A100		CLT-C10 -C20 -C25	
CLT-E25 -E50 -E32 -F63 -E40 -F80		CLT-D 7 -D12	

+

■握柄





外包装盒可吸附于机床钣金用于收纳清洁棒

测试棒 CHECKMATE

建议每月
定期点检

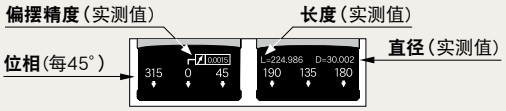
通过管理机床主轴的偏摆精度，可最大发挥刀柄性能，提高加工效率！

- ▷ 中空,轻量！(重量比传统产品轻20%)操作简单！
- ▷ 实测值标记于本体
- ▷ 方便进行Z轴原点找中
- ▷ 价格合理



可知道主轴正确的偏摆精度和偏摆位相

利用标记在本体上的实测值
来进行准确测定。



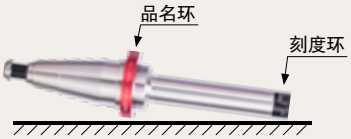
任意位相都可安装

没有驱动键槽,测定时不受相位的影响。



品名环和刻度环可以防止撞伤

锥柄部及直柄部不会接触。





轻巧 CMA型
修正动平衡(选购)
可测量动态精度



专业 CMB型
可以测试Z轴的
垂直度以及移动精度

	型号	Fig.	φD	φD1	L	L1	L2	Kg
BT / DIN兼用	NT30 -CMA20-125	1	20	32	125	45	65	0.7
	NT40 -CMA25-175	2	25	42	175	50	110	1.3
	NT50 -CMA30-225		30	53	225	65	145	3.5
	NT30 -CMB30-175	1	30	32	175	45	115	1.0
	NT40 -CMB40-325	2	40	42	325		265	2.8
	NT50 -CMB50-325		50	53		60	250	5.7
HSK-A/ HSK-E兼用	HSK32 -CMA20-125	3	20	26	125	35	75	0.4
	HSK40 -CMA20-125			32		45	65	0.5
	HSK50 -CMA25-175		25	42	175	50	110	1.0
	HSK63 -CMA25-175							1.2
	HSK80 -CMA30-225		30	53	225	65	145	2.2
	HSK100-CMA30-225							3.0
	HSK125-CMA30-225							4.1
	HSK32 -CMB25-175	3	25	26	175	35	125	0.7
	HSK40 -CMB30-175		30	32		40	120	0.9
	HSK50 -CMB40-225		40	42	225	45	165	1.8
	HSK63 -CMB40-325				325		265	2.7
	HSK80 -CMB50-325		50	53		60	250	4.4
	HSK100-CMB50-325							5.2
	HSK125-CMB50-325							6.3
HSK-F专用	HSK63F-CMA25-175	3	25	42	175	50	110	1.2
	HSK80F-CMA30-225		30	53	225	65	145	2.3
	HSK63F-CMB40-325	3	40	42	325	45	265	2.7
	HSK80F-CMB50-325		50	53		60	250	4.5

Fig. 1

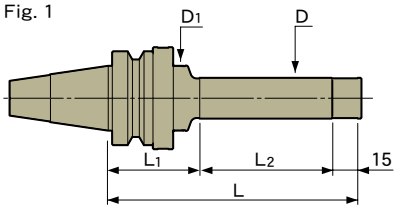


Fig. 2

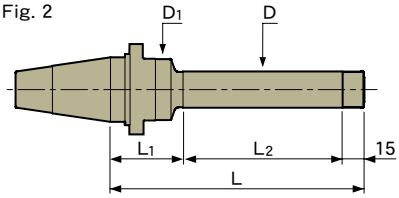
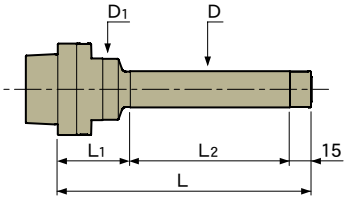


Fig. 3



所有产品均经过低温
处理,延长使用寿命

■选购品
- ●冷却液导管(HSK-A) ●拉钉(BT) ●专用拉钉(DIN)
- ●平衡修正(仅限CMA) G2.5以下/30000min-1
  NT50、HSK80、HSK100、HSK125为G2.5以下/20000min-1
  订单时,请在编码末尾请注明**BL**
  〈例如：NT40-CMA25-175**BL**〉

■标准附属品
- ●精度检查表(偏摆/长度/直径/圆筒度/真圆度)

■备考
- ●NT型通过交换拉钉,可兼用BT/DIN主轴。
- ●HSK锥柄系列可对应HSK-A和HSK-E主轴。
- ●HSK F型为HSK-F主轴专用。
- ●BT主轴请使用市售拉钉。
- ●360° 任何相位均可安装(NT30系列仅限0° 和180°)

■注意事项
- ●无法自动换刀。(除NT30外)

▌专用拉钉

型号	刀柄型式
P-578	DIN40
P-577	DIN50

Goo Checker ZPM 型

Z 轴原点设定、测定基准位置用工具

多台加工中心的Z轴原点共通化
可简单设定工件原点
可正确测定工件的水平,高低段差!





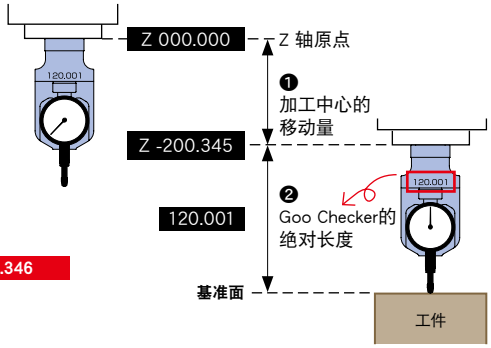


也对应5轴加工机
(ZPM型)



简单设定Z轴原点

可简单测定Z轴原点到工件
基准面的距离。



〈使用例〉

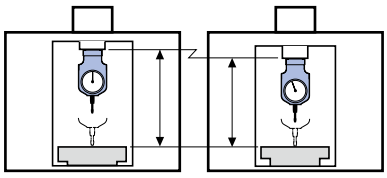
从Z 轴原点到工件的距离

200.345 ＋ 120.001 ＝ 320.346

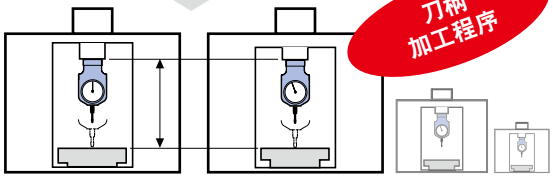
❶ 移动量　❷ Goo Checker的 绝对长度

将多个M/C的Z轴原点共通化

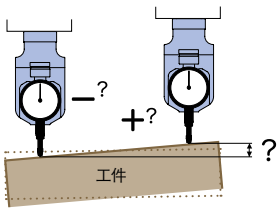
如果对每台机床Z轴原点到工作台面的距离
误差进行补正,就能实现多台加工中心间刀柄,
程序的共有。



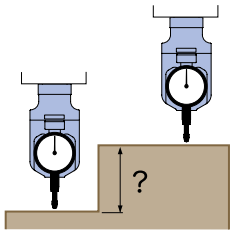
补正实际测量值的
误差

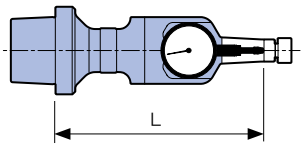


确定工件水平



测定段差





型号	L	Kg
BT30-ZPM-130	130	1
-165	165	1.2
BT40-ZPM-150	150	1.3
210	210	1.5
BT50-ZPM-180	180	2.9
-240	240	4.1
A63 -ZPM-150	150	1.2
-210	210	1.5
A100-ZPM-180	180	2.5
-240	240	3.8
E32 -ZPM-120	120	0.7
-165	165	1
E40 -ZPM-120	120	0.8
-180	180	1.1
E50 -ZPM-150	150	1
-195	195	1.3
F63 -ZPM-150	150	1.1
-210	210	1.3
F80PD-ZPM-180	150	1.1
-240	210	1.3

■选购品
- 拉钉(BT)→P.184

■标准附属品
- 原点设定块
- 千分表 1/1000

■注意事项
- 无法自动换刀。(除BT30外)

参考资料

售后服务体制



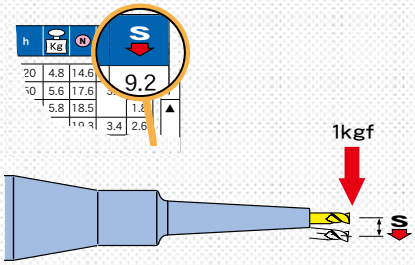
P. 198

使用时的注意事项



P. 199

SLIMLINE 的刚性



P. 202

SLIMLINE 刚性值计算软件



P. 204

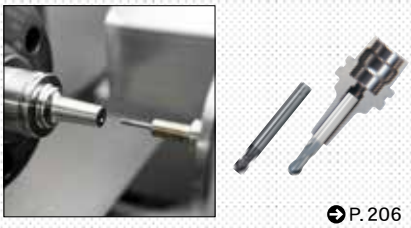
高转速的对应



P. 205

SLIMLINE 使用案例

热装式刀柄用
短柄硬质合金铣刀



P. 206

切削数据



P. 207

HSK 刀柄



P. 208

技术资料

海外销售网



P. 209

售后服务体制

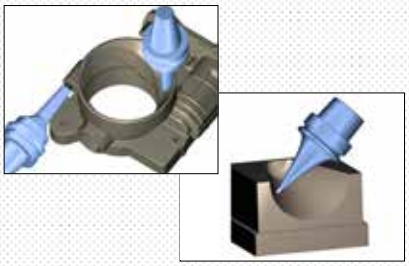
我们有万全的售后服务体制来确保客户能长期,安全,高精度的使用弊司产品。

1 售前技术交流

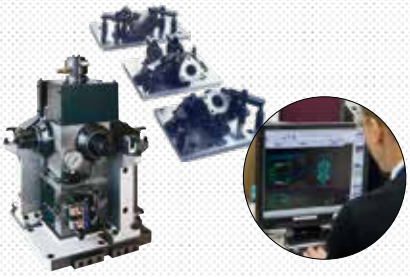
提供各种技术服务。



刀柄明细方案



3D图进行干涉检查



治具设计, 制作

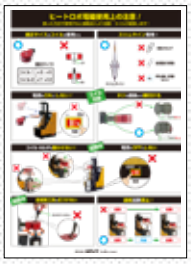
2 交货时

交货时进行使用说明。



加热器使用说明

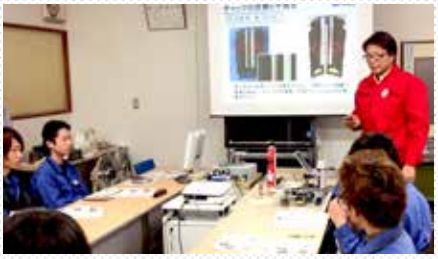




保养图册

3 售后服务 产品使用说明

专任员工访问客户工厂，
举行「使用方法」「维护保养方法」「常见问题诊断」「现场实地演示」的讲习会。



讲习会



保养方法指导



诊断, 建议

改善工厂的作业环境,充实的周边设备



刀具安装工作站
6S工作台
P. 188



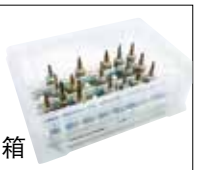
刀柄刀具清洗机
高压清洗机
P. 189



刀具防护罩
刀具保护套
P. 190



刀具保护盒
铣刀小管家
P. 191



刀柄收纳箱
P. 192



刀具紧固台
P. 193



主轴锥孔用 清洁工具
主轴清洁棒
STAR DUST
P. 194



机床维护保养用
测试棒
CHECKMATE
P. 195

使用时的注意事项

为了长时间，高精度且安全有效地使用弊司刀柄，在使用前请务必通读同捆的产品使用说明书，正确地进行使用。
万一有产品出现问题时，请联系弊司。

刀柄使用

注意伤痕和清洁

使用前请去除附着在刀柄上的防锈油。在有伤痕或附着异物的状态下使用刀柄，将导致性能劣化，精度下降。
请注意经常使用净布擦拭。弊司提供方便清洁刀柄的清洗机『高压清洗箱』。

▌刀柄·刀具清洗机
高压清洗机
P. 189





关于刀柄锥度部分

若将有伤痕或附着有异物的刀柄装入主轴，不仅会导致精度下降，还会造成主轴受伤。
刀柄锥度部生锈或有伤痕时，请使用磨石或细砂纸进行保养。刀柄锥度部无法进行再研磨。
若对刀柄锥度部进行再研磨，会造成ATC自动换刀异常。
请更换使用新刀柄。



保管

在安装刀具的状态保管时，请使用刀具保护套。
刀具互相触碰，有导致刀具损坏或致人受伤的可能。

▌刀具保护套
P. 190





关于热装式刀柄SLIMLINE的日常保养

为何会生锈?

- 空气中的水分附着于刀柄上，金属会与水分发生反应生锈。尤其SLIMLINE刀柄在加热时，表面的油份蒸发，处于易锈的状态。
- 金属表面的锈迹，随着时间发展会渐渐的腐蚀到内部。

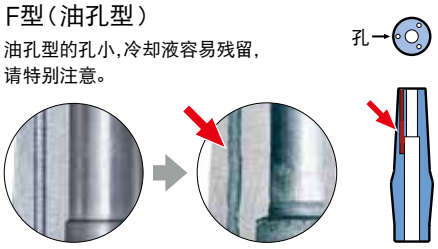
主轴中心通冷方式时

主轴中心通冷方式，冷却液在通过刀柄和筒夹内部时，刀柄内部深处的残留冷却液会引起生锈。



F型（油孔型）

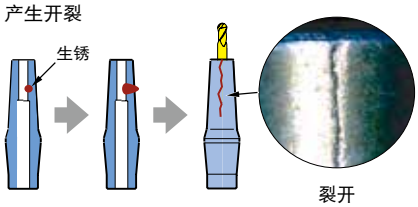
油孔型的孔小，冷却液容易残留，请特别注意。



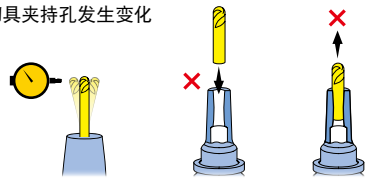
有生锈或氧化膜产生时会怎样?

- 如果在这种情况下夹持刀具，会发生刀具无法插入、或者是腐锈的部分在热装时，由于加热时受应力作用过于集中，导致产品开裂。
- 由于夹持力降低，产生滑刀，夹持精度降低。

产生开裂



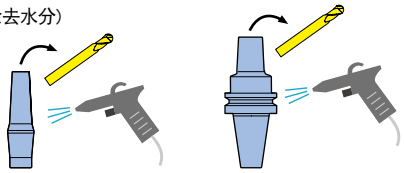
刀具夹持孔发生变化



如何才能不生锈?

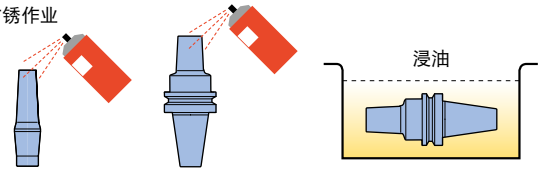
存在「水分」「空气(氧)」时，铁就会生锈。通过除去「水分」或「空气(氧)」使其无法直接接触到「金属」后，就可以防止生锈。

❶ 清除（除去水分）



- 使用后请用气体吹干「水分」。 特别是孔内和油孔型的细孔中要充分吹风。用去脂油清洗和清洗机清洗之后将水分吹干更有效。
- 请用热装式刀柄加热器加热，取下刀具。

❷ 防锈作业

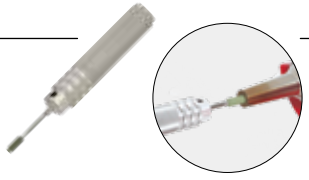


- 清洗后喷防锈油或浸在防锈油中。
- 热装之前，要充分去除附着在SLIMLINE 的防锈油之后，再使用。请使用清洗喷雾器和溶剂便于去除油。

出现刀具难以插入时?

刀具夹持孔产生氧化膜、油污、焦着的油份等。
请在热装前使用“橡胶磨石型清洁组套”。
简单去除以上杂物。

▌清洁用具
橡胶磨石型
P. 15



热装作业注意事项

热装前的保养

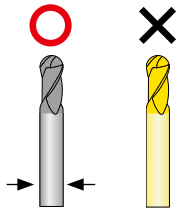
在热装前，请务必清洁刀具柄部和刀柄夹持部。
请使用方便的“清洁刷组套”来清除油污，铁屑粉等。



清洁刷组套 P.15

使用工具

- 请使用硬质合金刀具。
  高速钢刀具不能热卸。
- 使用公差范围外的刀具是刀柄破损和发生滑刀的原因。
- 另外，刀具柄部的细小铁屑等附着物会阻碍夹持孔正常装夹，造成刀具无法拔出。
  （请再度加热，切勿强行插拔）



硬质合金 高速钢
φ3～ 5：h6
φ6～32：h7

佩戴耐热手套

热装作业时，会产生高温，非常危险，请务必佩戴耐热手套。

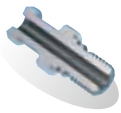


耐热手套
P. 14

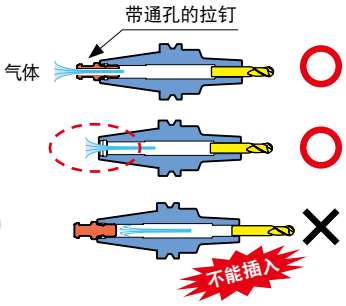


拉钉(BT)

请利用中心通孔拉钉，
或请将拉钉取下后再行加热。
普通拉钉排不出空气，
无法放入刀具。

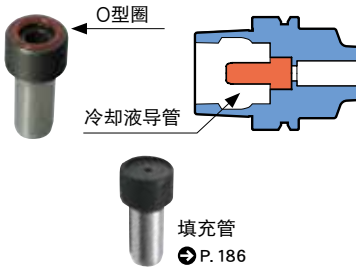


带通孔的拉钉



冷却液导管(HSK-A)

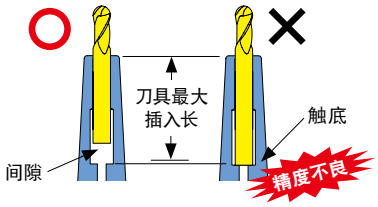
使用温风式加热器(HRB)加热时，
请取下冷却液导管。
带着冷却液导管加热时，
会损坏导管的O型圈。
不利用主轴中心通冷时，弊司提供可以安装着进行热装操作的填充导管。



P. 186

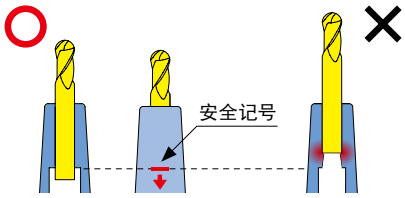
刀具最大插入长度

插入刀具时，如果刀具触底会造成精度不良。
请务必在刀具最大插入长范围内安装刀具。



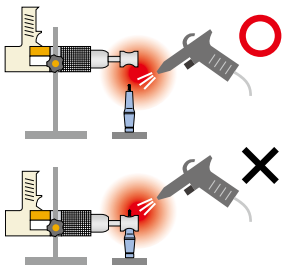
最短夹持长度

插入刀具时，如果插入过短将造成刀柄破损。
刀具插入长度请务必超过安全记号处。



用外部空气冷却

使用温风加热器(HRB)的情况下，
用外部空气冷却时，
请勿向加热器内部喷气。
否则会导致加热器内的风扇溶化，出现故障。



水冷时的注意

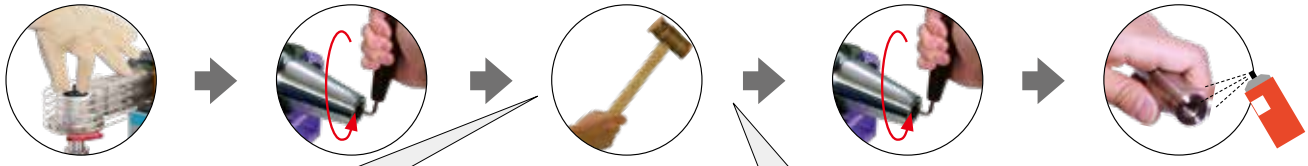
热装之后水冷，产生大量水蒸气，有烫伤的危险。
请在加热器冷却1分以上(COOL状态)之后进行水冷。
请完全除去水分。
如残留水分会引发生锈导致刀柄破损。

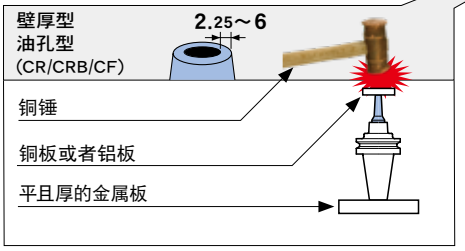


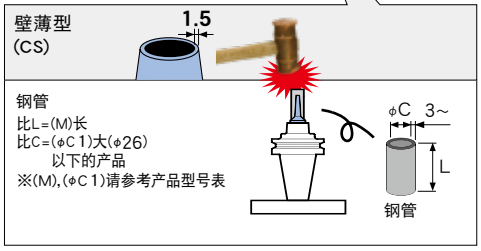
2 体型 ： SLIMLINE筒夹无法从本体中取出的情况

在这种情况下，请用橡胶锤轻轻敲击筒夹。去除本体和筒夹间螺纹部的溶着物，取出筒夹。

❶ 使用加热器来取出刀具　❷ 使用专用扳手，顺着取出方向加力　❸ 略加震动冲击　❹ 取出　❺ 给螺丝加润滑油

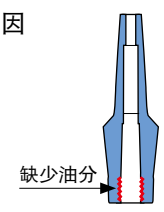






无法取出的原因

大多数情况下，
螺纹部由于油分挥发缺少润滑，
造成一部分溶着。



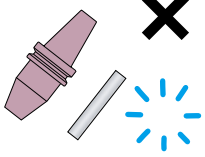
※通过上记方法也无法取出的时候，请垂询弊司。

HEATROBO电磁式（HRD-01S，HRD-02SH）：使用上的注意

SLIMLINE专用

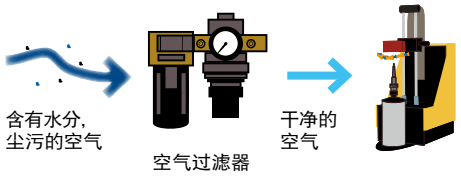
如使用以下的物品，会使HEATROBO电磁加热器本体内产生过电流，导致装置发生故障。

- ●其他公司的热装刀柄
- ●金属制异物
- ●在无被加热物状态（空加热）



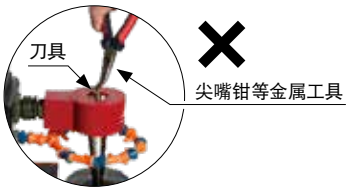
请安装过滤器

当气源里含有大量水分或空气温度很高时，是引发加热器故障的原因。

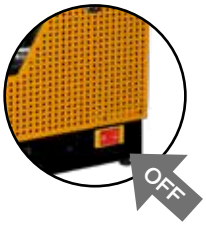


请勿使用金属工具来固定

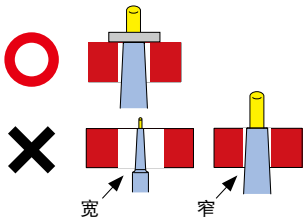
请带耐热手套，使用刀具防脱套。



交换加热线圈时…必须关闭电源

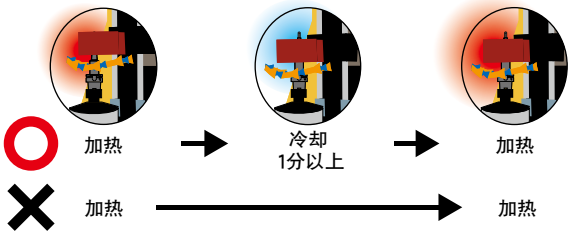


请使用相应大小的加热线圈

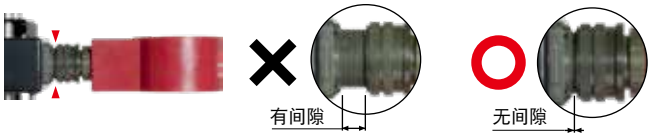


请勿连续加热

加热后必须冷却1分钟以上。否则加热器容易损坏。

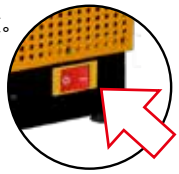


安装加热线圈时，请将螺丝拧到底



加热的时候…

请勿关闭电源。

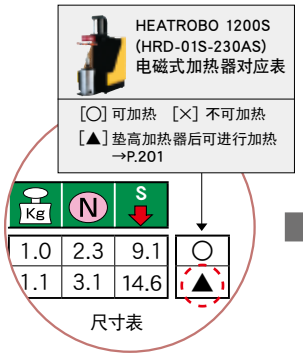


请勿移动刀柄和加热线圈。



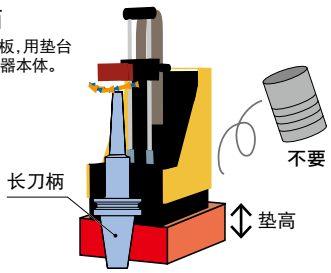
能够用HEATROBO电磁1200S（HRD-01S）进行热装操作的刀柄种类有限制

直柄延长杆，一体型的产品型号表里印有对应表。
请确认您的刀柄。另外，产品尺寸表内标有“▲”的热装式刀柄，请参考右图对应。



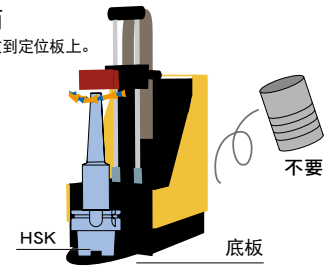
BT锥柄

请取下定位板，用垫台等垫高加热器本体。



HSK 锥柄

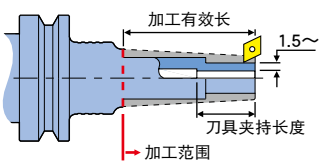
请把刀柄直接放到定位板上。



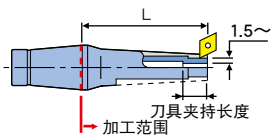
自制加工（追加工）

- ■请不要改变全长（刀具夹持长度）。
  刀具夹持长度变短后，会引起夹持力降低和精度不良。
- ■务必确保壁厚在1.5mm以上。
- ■追加工的范围，请仅局限于「➡」标志的前端部分进行，具体请参照型号表。
  ※直柄延长杆的加工范围请参照使用说明书。
- ■硬质合金直柄延长杆无法进行追加工。
- ■自制加工油孔型(SLFB/CF型)，要特别注意冷却液孔。
- ■可根据要求提供CAD数据(DXF形式)的尺寸图。
  方便制作追加工图。
  并可用于检查工件和夹具的干涉。
- ■自行追加工后本体刚性下降。请降低切削条件使用。

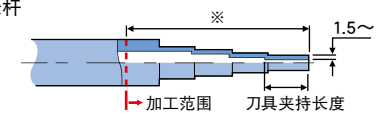
一体型系列 3°



2体型



直柄延长杆



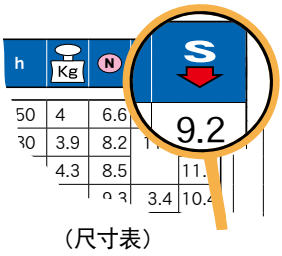
关于加工条件(车削加工)

- ●小切深，轻切削(0.1 ～ 0.2mm)。
- ●请使用水溶性冷却液，避免加工物温度上升。
- ●切削用刀具，请使用切削不锈钢用或正角刀片。
- ●加工条件的参考值是
  - ○切削速度…30～50m/min
  - ○切削进给…0.1～0.2mm/rev
  - ○切　　深…0.1～0.2mm

SLIMLINE 的刚性

刚性值 S 同L/D的关系

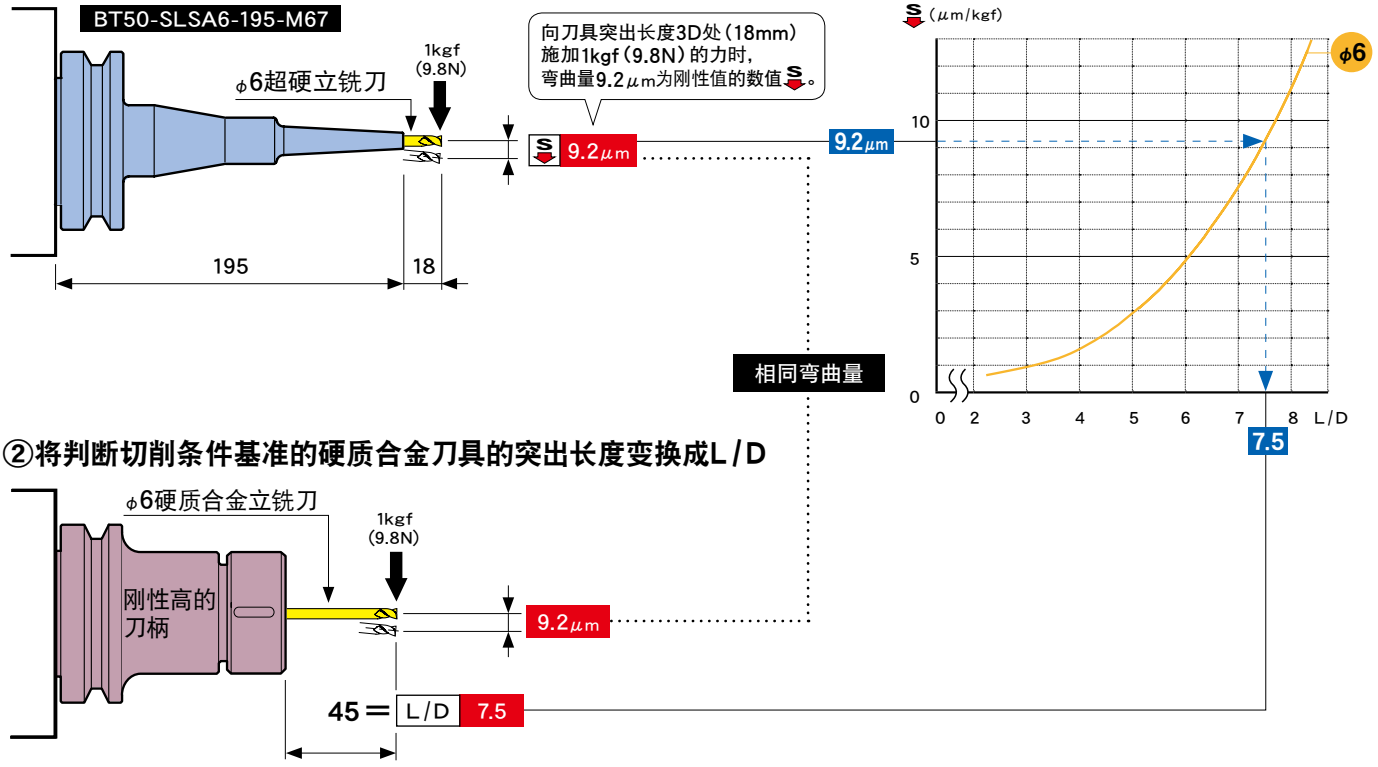
SLIMLINE外形细长。根据刀柄的形状以及刀具的突出长度，切削条件也会大幅变化。
尺寸表中的『刚性值S』为决定切削条件和选择刀柄的基准。
请参考以下例子并灵活运用。



（尺寸表）

刚性值 S 指刀具突出长度3D时刀柄和刀具的弯曲量

①SLIMLINE一体型3° 时的情况

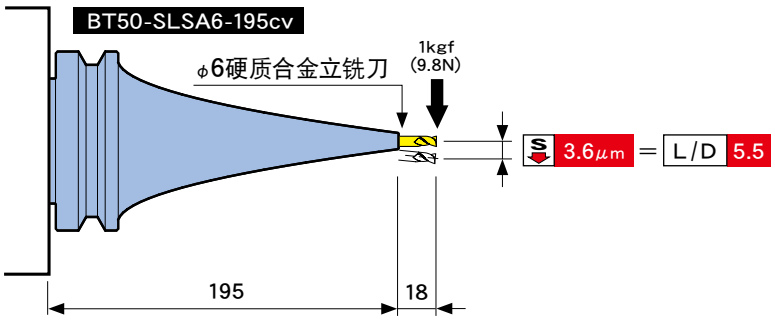


②将判断切削条件基准的硬质合金刀具的突出长度变换成L/D

SLIMLINE一体型3° BT50-SLSA6-195-M67（刀具突出18mm）的切削条件同将φ6硬质合金铣刀突出7.5D=45mm时一样。

③SLIMLINE热装式刀柄，即使刀柄长度相同，根据刀柄形状不同，刚性值也会大幅度变化。

相同长度的一体型曲线型刀柄BT50-SLSA6-195cv，刚性值S=3. 6μm、L/ D=5，可以进行更为稳定的加工。



SLIMLINE 刚性值计算软件

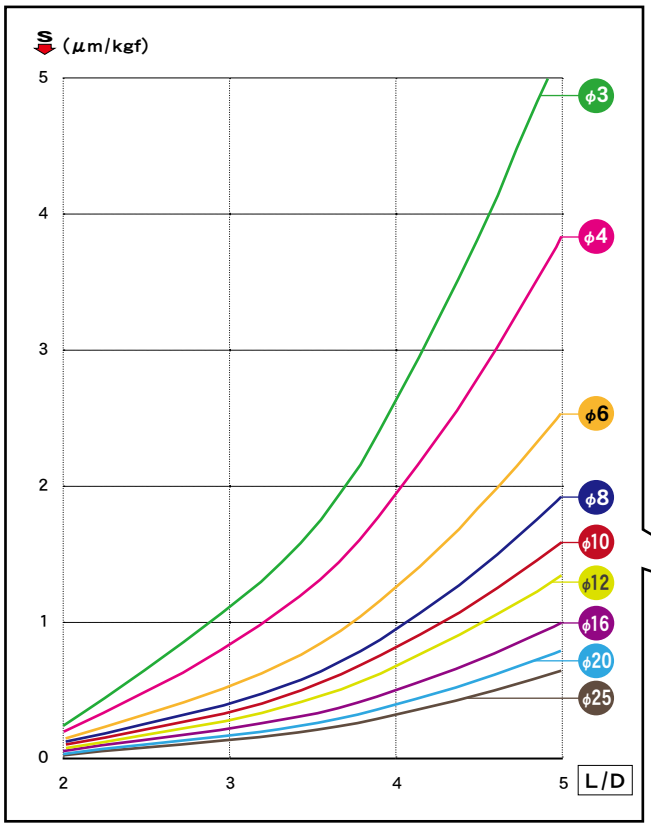
刀具的突出长度为3D之外，使用附有段差或者锥度形状刀具时，请使用『SLIMLINE刚性值计算软件』。
根据客户的加工条件计算刚性值。

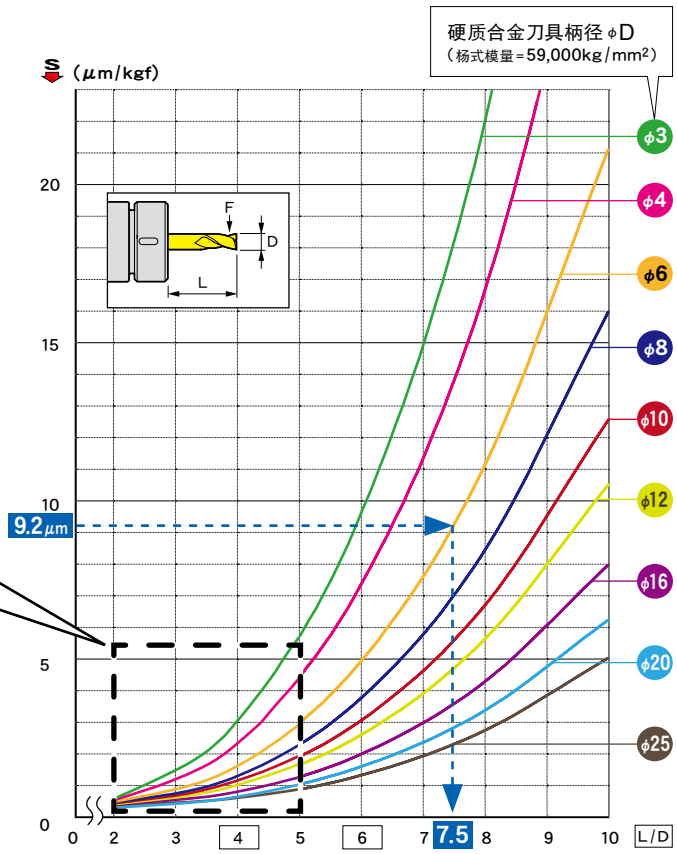


P. 204

刚性值S同L/D的关系图

以刚性值S为基准确认L/D值





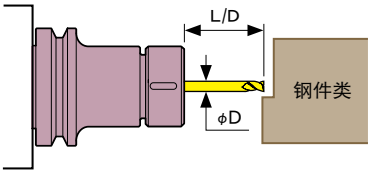
刚性值S(弯曲量)基本公式

$$S = \frac{6.8 \times F \times L^3}{E \times D^4}$$

D：刀具柄径
L：刀具突出长度
F：负荷
E：杨式模量

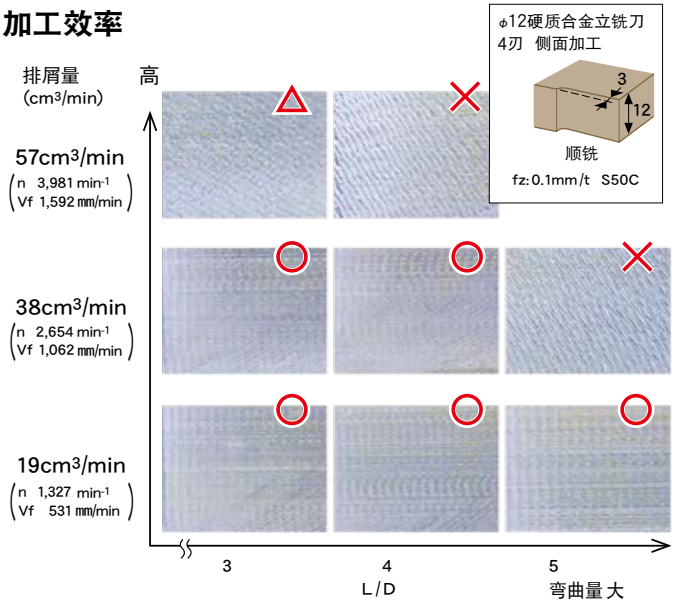
切削条件的基准

	切削条件	
	通常	需要注意
平底铣刀 圆鼻刀	L/D=4以下	L/D=4以上
球铣刀	L/D=6以下	L/D=6以上

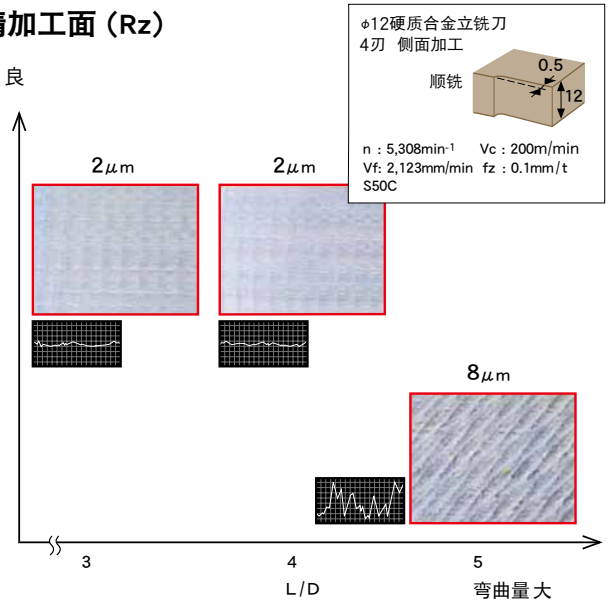


硬质合金刀具突出长度(L/D)不同时的加工面,加工效率的比较

加工效率



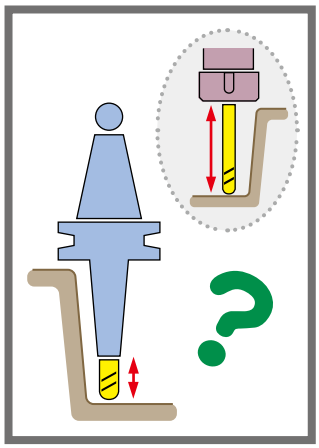
精加工面 (Rz)



SLIMLINE 刚性值计算软件

免费提供　CAM 操作员必备！　PAT.

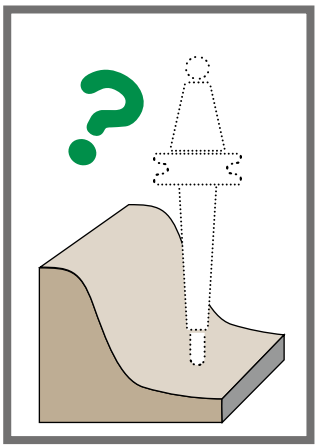
有没有这样的烦恼?



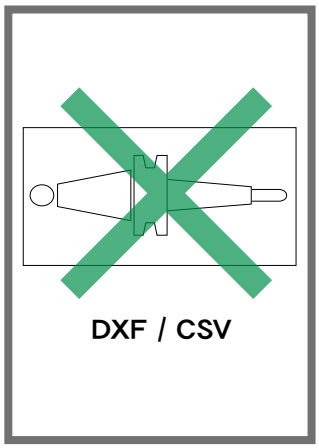
不清楚目前正在使用的SLIMLINE的加工条件。与高刚性刀柄在多大突出长度时刚性相同?



从4000种SLIMLINE中,能否找到可以在更好条件下加工的刀柄?



希望从工件形状能够知道可以以最高条件进行加工的刀柄+刀具的组合

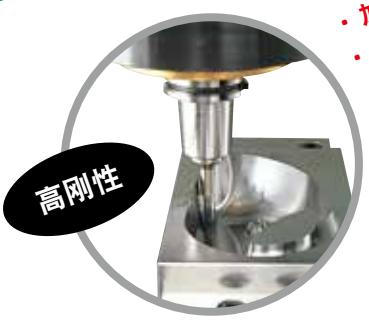


没有加工图数据,用CAM来检查干涉很麻烦!



设定简单的条件就能轻松解决!!

「SLIMLINE刚性值计算软件」,
可以简单地确认SLIMLINE安装刀具状态的刚性值和工件的干涉。
可以选定没有加工干涉, 刚性更高的最适合刀柄。



・加工效率UP！
・实现高品位加工！

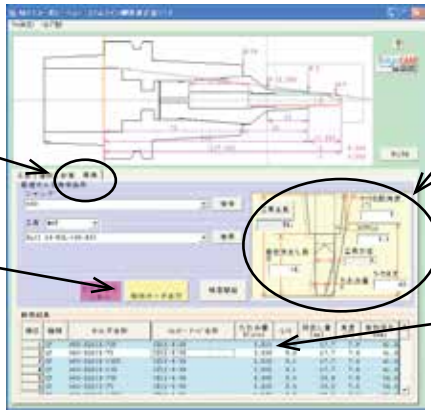
●最合适的SLIMLINE
＋
●刀具
＋
●刀具突出长度

④表示主要尺寸

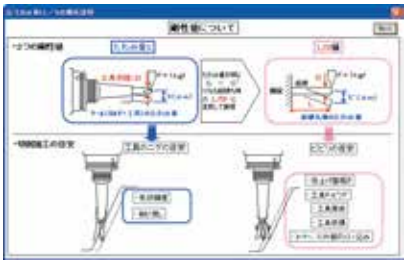
③自动选择最适合对于工件形状刚性高的SLIMLINE。

⑤可以把“所选SLIMLINE”+“刀具”+“突出长”的外形数据转换为DXF,CSV格式。

②按照没有干涉刚性高低顺序给出刀柄列表。



①设定工件形状(拔模角度和深度),
输入间距(工件和刀具·刀柄),
刀具的突出长度限制值(最短)



●下列CAM模拟,可以搭载热装式刀柄的全部外观形状数据资料。

CAM-TOOL	edgecam	worknc	hyperMILL 5AXIS	JBM Engineering	GENETEC	SIEMENS
CAM-TOOL	EDGECAM	WORK NC	HYPER MILL	JBM Engineering	GENETEC	Siemens PLM Software
FF/cam	tebis THE CAD/CAM EXPERTS	AUTODESK POWERMILL	CADmeister	VISI	VERICUT	SAEILO
FF/cam	TEBIS	PowerMill	CAD meister	VISI	VERICUT	SAEILO JAPAN

注意：外形数据的处理方法各不相同。请查询各家公司。

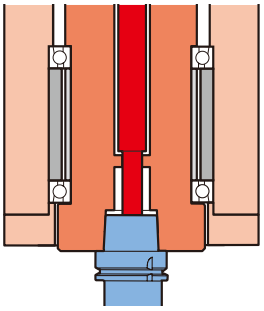
高转速的对应

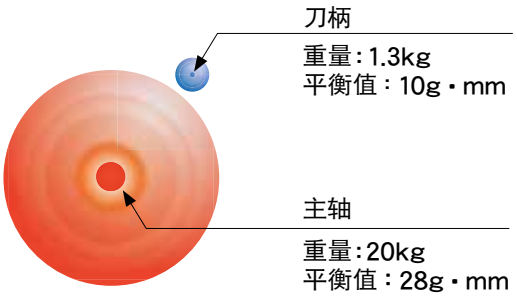
机床主轴与刀柄、刀具的不平衡量

加工中心高速旋转主轴时，刀柄的平衡值（G等级）会受到关注。但高转速是由机床主轴与刀柄、刀具3者一起旋转而实现。
与重量大的主轴相比，刀柄的重量非常轻（仅占主轴的1/10～1/20）。
因此，刀柄的不平衡量对综合旋转体（主轴、刀柄、刀具）所带来的影响极其微小。

对于刀柄本体，即使花费时间和费用进行平衡值修正，也无法得到相应的效果。







实现高速高效率加工，除了「不平衡量」以外，还有许多课题需要解决。

- 机床主轴、刀柄、切削刀具的偏摆精度如何?
- 机床主轴和刀柄的锥面接触率是多少?
- 切削刀具的直径是多少?
- 切削速度如何? 转数为多少?

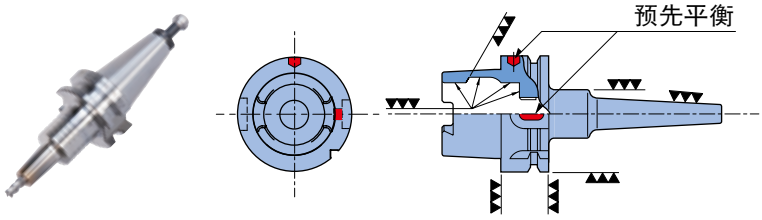
高转速下的注意点

- 尽可能缩短刀柄、刀具的长度。
- 使用高精度小巧的刀柄
- 设定最佳的加工条件（转速、进给、切深）。

MST在刀柄制造过程中，密切关注以上各个加工工艺。对于平衡量问题，也以独特的「预先动平衡设计」思维来制造生产刀柄。

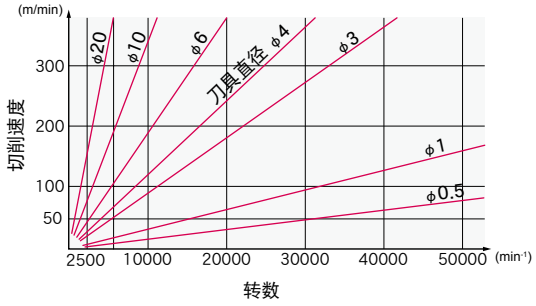
预先平衡

「预先动平衡设计」是按照预先轴对称理念进行刀柄设计，
通过研磨加工等方法，最大限度去除刀柄的不平衡量。
成品无需平衡调整，可在高速加工中放心使用。

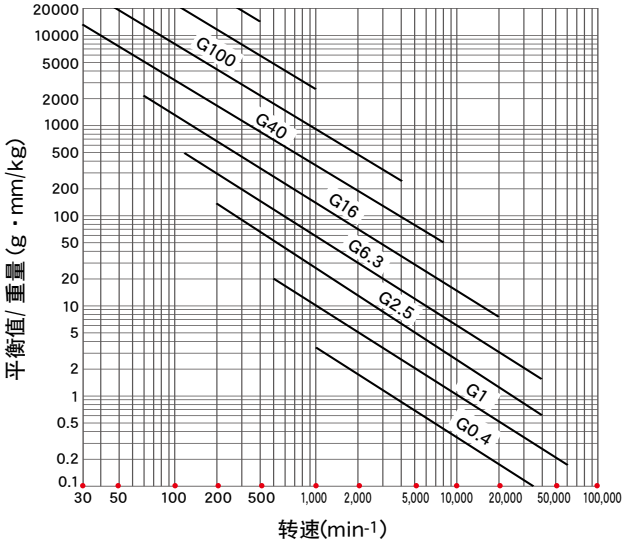


- 对于不平衡部分进行平衡加工
- 热处理后对于外形部分进行研磨加工

不同切削速度时刀具直径和转数关系图



■平衡程度(G等级值)等级的容许残留比不平衡



<<参考 >>

■各种旋转体推荐的G等级值

G 等级	G	旋转体
G40	～40	汽车车轮
G16	～16	农业机器部件　汽车卡车用机械部件
G 6.3	～ 6.3	机床及普通机器部件　组装后的飞机用气轮机转子
G 2.5	～ 2.5	**机床用主轴**　燃气轮机　蒸气轮机
G 1	～ 1	研磨盘的砂轮轴
G 0.4	～ 0.4	精密研磨盘的砂轮　陀螺仪

■刀柄G等级数值的计算方法

$$G = \frac{\text{不平衡量(N)g・mm}}{\text{重量　kg}} \times \frac{\text{使用转数}}{9{,}550}$$

对于可用于高速加工的刀柄，我们在尺寸表里注明了「平衡值」和「重量」。

■旋转体综合（主轴/刀柄/刀具）G等级数值计算方法

$$G = \frac{\text{(主轴 + 刀柄 + 刀具)不平衡量g・mm}}{\text{(主轴 + 刀柄 + 刀具)重量kg}} \times \frac{\text{使用转数}}{9{,}550}$$

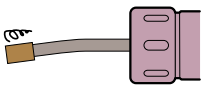
SLIMLINE 使用案例

内圆磨床用热装套筒

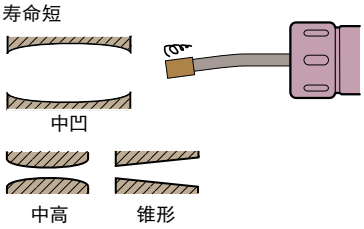
砂轮的夹紧精度大大影响加工精度(真圆度,表面粗糙度等)。用热装套筒进一步提高精度。

使用筒夹式夹持方法时

■设置时
- 偏摆精度差
- 需要找心操作



■加工时
- 加工精度差
- 深孔加工时磨石弯曲
- 寿命短



最适合内圆研磨



轻松解决!!

比较数据

测量项目	SLIMLINE	弹簧筒夹刀柄
真圆度	0.3 μm	0.6 μm
表面粗糙度Rz	1.38 μm	2.7 μm



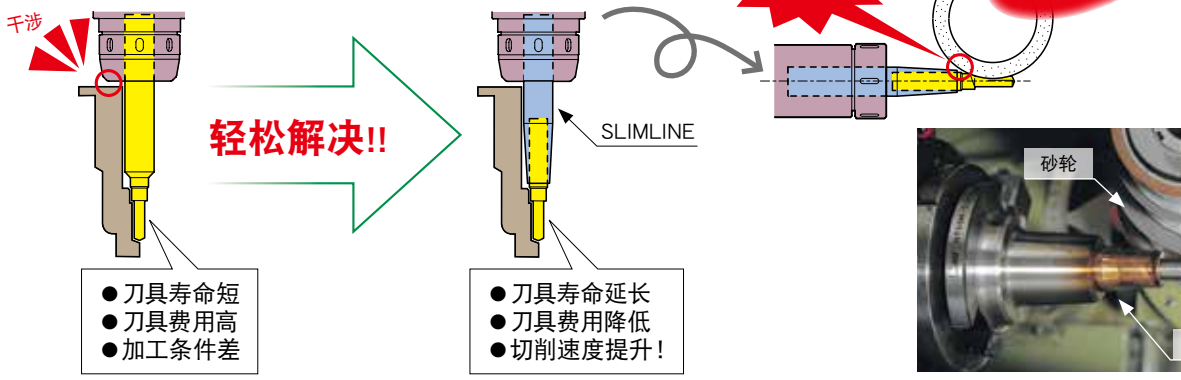


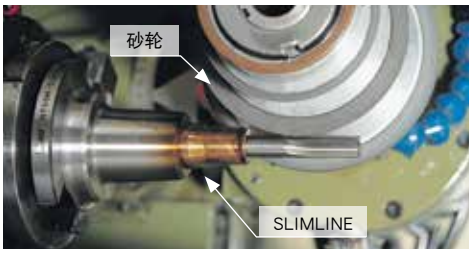
※有专用产品目录

刀具再研磨用热装刀柄

砂轮接近性能良好,进行更理想的刀具研磨。高精度和高刚性夹持,提高刀具研磨精度。用于重磨,提高刀具精度。
稳定的刀具研磨加工降低刀具费用。

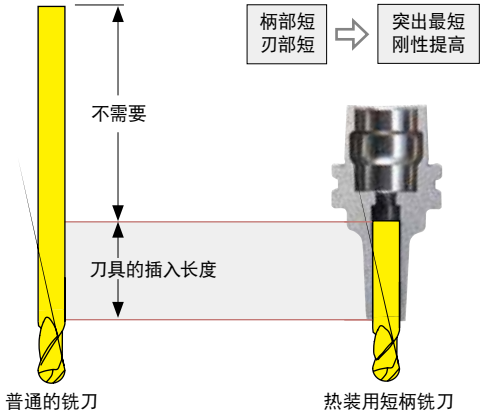
改善例





热装式刀柄用短柄硬质合金铣刀

超高速·小型加工中心用刀柄,由于刀具的插入量短,无需普通的长柄刀具。



DIJET 超短球铣刀 DZ-SSB	三菱综合材料 Impact Miracle 涂层球铣刀 VF-2SSB	MOLDINO 热装专用球铣刀 FSHB-TH
NS TOOL 短柄球铣刀 MSB230SF	OSG WXL短全长型铣刀 WXL-HS-EBD WXL-HS-LN-EBD	UNION TOOL 高效短柄球铣刀 HFB-S HSB-S HSLB-S

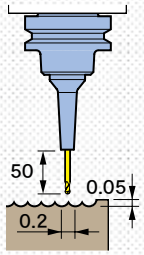
切削数据

BT40-SLK12-45 CF12-3-55

n : 20000 min-1
Vf : 2000 mm/min
Vc : 25 m/min
fz : 0.05 mm/t

R0.2硬质合金球铣刀 2刃刀

用户的声音
偏差精度良好,刀具寿命比以前延长1.5～2倍。
精加工表面比以往的好。



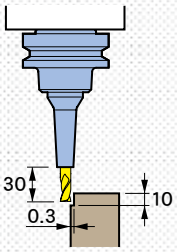
SKD61(50HRC)

BT40-SLK12-45 CR12-6-55

n : 15000 min-1
Vf : 2400 mm/min
Vc : 188 m/min
fz : 0.04 mm/t

φ6硬质合金立铣刀 2刃刀

与至今为止使用的筒夹刀柄相比,刀具寿命延长2倍以上。
去除逆铣的伤痕,表面粗糙度非常好。



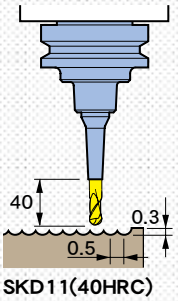
烧结材料

BT50-SLK12-75 CS12-10-55

n : 6000 min-1
Vf : 6000 mm/min
Vc : 188 m/min
fz : 0.5 mm/t

R5硬质合金球铣刀 2刃刀

提高表面粗糙度,
刀具寿命延长约3倍。



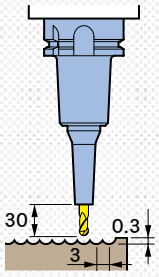
SKD11(40HRC)

A63-SLK12-75 CF12-6-55

n : 16000 min-1
Vf : 3200 mm/min
Vc : 301 m/min
fz : 0.1 mm/t

R3硬质合金球铣刀 2刃刀

偏差精度良好,
刀具寿命延长约3倍。
精加工表面良好,
缩短手工加工。



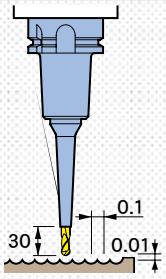
S55C(28HRC)

A63-SLK12-75 CS12-6-80

n : 20000 min-1
Vf : 4000 mm/min
Vc : 377 m/min
fz : 0.1 mm/t

R3硬质合金球铣刀 2刃刀

工具细长减轻了干涉检查。
旋转和进给增加1.5倍,
缩短了加工时间。
偏差精度良好,
延长刀具寿命。



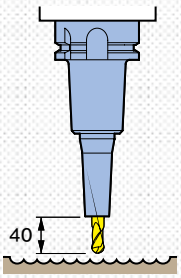
A7075

A63-SLK12-75 CF12-10-55

n : 20000 min-1
Vf : 6000 mm/min
Vc : 628 m/min
fz : 0.15 mm/t

R4硬质合金球铣刀 2刃刀

偏差精度稳定。深雕时,横进给刚性高,振动少,
精加工表面良好。
与筒夹刀柄相比,
刀具寿命延长1.5～2倍。



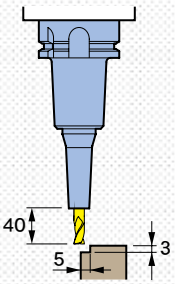
SKD11(50HRC)

A63-SLK12-75 CR12-10-55

n : 20000 min-1
Vf : 6000 mm/min
Vc : 628 m/min
fz : 0.15 mm/t

φ10立铣刀 2刃刀

高速旋转时风噪声少安静。
夹具干涉少,可以缩短设定刀长。
偏差精度良好,寿命延长了2倍。



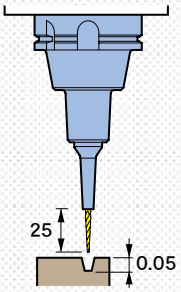
AL

A100-SLK12-105 CR12-4-55

n : 13000 min-1
Vf : 700 mm/min
Vc : 61 m/min
fz : 0.03 mm/t

φ4硬质合金锥度铣刀 (1°)2刃刀

偏差精度良好,比使用以往筒夹刀柄时,刀具寿命延长了2倍。



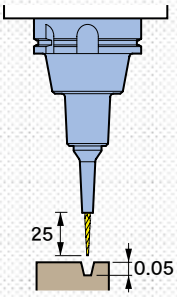
HPM7(32HRC)

BT40-SLSA6-95-M42

n : 2000 min-1
Vf : 100 mm/min
Vc : 38 m/min
fz : 0.025 mm/t

φ6硬质合金立铣刀 2刃刀

提高了精加工面和偏差的精度。



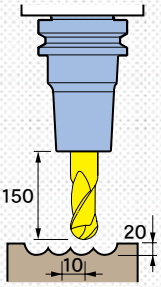
ADC12

BT50-SLRB20-110-M42

n : 4500 min-1
Vf : 4400 mm/min
Vc : 283 m/min
fz : 0.489 mm/t

R10硬质合金球铣刀 2刃刀

即使将Z方向切入增加2倍,
加工时刚性也充分保证。



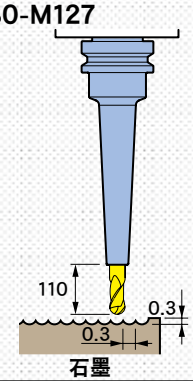
树脂

BT40-SLSB12-180-M127

n : 2500 min-1
Vf : 500 mm/min
Vc : 94 m/min
fz : 0.1 mm/t

R6硬质合金球铣刀 2刃刀

加工不产生振动,
精加工面良好。



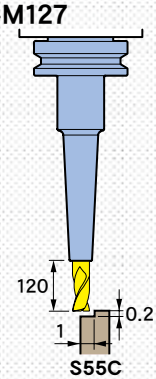
石墨

BT50-SLSB16-225-M127

n : 5600 min-1
Vf : 2000 mm/min
Vc : 281 m/min
fz : 0.179 mm/t

φ16硬质合金立铣刀 2刃刀

表面粗糙度和刀具寿命提高。(2～3倍)



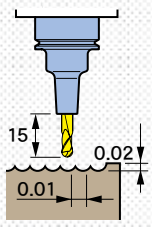
S55C

E40-SLRA6-50

n : 20000 min-1
Vf : 1500 mm/min
Vc : 377 m/min
fz : 0.038 mm/t

R3硬质合金球铣刀 2刃刀

能得到以往筒夹刀柄无法得到的表面粗糙度。



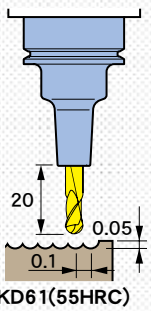
SKD11(60HRC)

F63-SLSA4-75-M22

n : 16000 min-1
Vf : 1200 mm/min
Vc : 100 m/min
fz : 0.038 mm/t

R1硬质合金球铣刀 2刃刀

刀具的偏差精度提高,表面粗糙度也提高了。同时,加快进给(切削条件),缩短加工时间,刀具寿命延长了2倍。



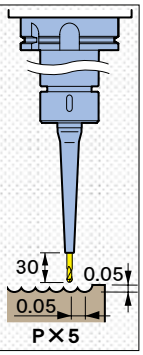
SKD61(55HRC)

A100-CTH25-195 ST25-SLSA6-320

n : 5000 min-1
Vf : 150 mm/min
Vc : 94 m/min
fz : 0.015 mm/t

硬质合金涂层立铣刀 2刃刀

相比传统强力铣刀柄加筒夹式延长杆夹持刀具的方式,前端使用热装式延长杆不仅提高了刚性和精度,也缩短了加工时间(360分→300分)



P×5

HSK刀柄

作为高速和高效率加工用 [两面拘束刀柄],
MST采用了在日本和世界广泛普及的HSK规格刀柄。

▷ HSK刀柄由于端面紧密接触(两面拘束) 横向进给刚性高,抑制加工时产生的震动,提高刀具寿命和精加工面的精度。

▷ 高速回转时中空形状的锥部追随主轴扩张, 可维持高精度。



A 型
标准使用型



E 型
去除驱动键,
适合高速回转型



F 型
锥体部和法兰部
不同尺寸结合型

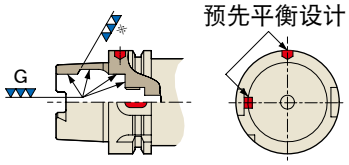


T 型
复合加工中心
车削刀具用接口

预先平衡设计

HSK-A型刀柄, 在规格上虽然不平衡,但通过MST独自的预先平衡加工,可以对应高速回转。
刀柄锥度内孔处DIN规格仅要求对※ 符号处进行精加工, 但MST为了追求更好地平衡,也对中空孔内部在热处理后进行精加工。

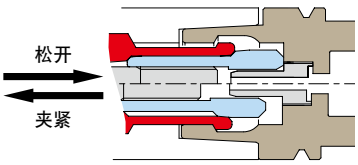
	MST	DIN 规格
A63	15 g·mm	75g·mm
A100	28 g·mm	170g·mm



夹紧力 3倍

HSK利用楔形效果的夹紧机构,刀柄锁紧力达到拉钉方式(BT40,BT50)的2.5～3倍,提高了刚性。

	拉杆的拉力	刀柄夹紧力
BT40	10~15 kN	10~15 kN
A63	5.8 kN	18.4 kN
BT50	20~25 kN	20~25 kN
A100	14.5 kN	45.9 kN



和BT刀柄的刚性比较

HSK在需要突出长度和横向进给刚性时发挥威力。高刚性,高速和高效率加工时抑制振动,对提高工具寿命和精加工面表面粗糙度作出很大贡献。



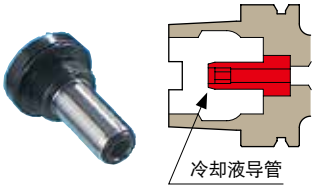
锥形量规

MST按照规格设定最适合的公差值来生产制造刀柄锥度用基准量规和主轴锥度用基准量规。



冷却液导管

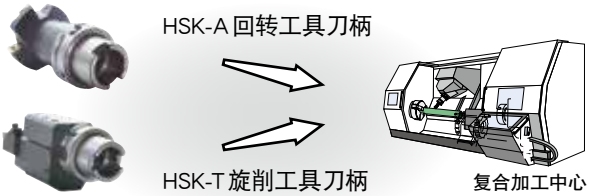
是HSK-A类型专用冷却液供给部件。
MST的HSK-A类型刀柄本体,各标准附带1个冷却液导管。



有些机器推荐用可动式冷却液导管。只定购刀柄本体时,根据顾客的指示更换为可动式。
可动式冷却液导管 P. 186

复合加工机用HSK-T刀柄

以HSK-A接口为基准,同日本国内17家厂商共同开发了复合加工中心用车削工具接口。其作为ISO世界标准,正被广泛使用。

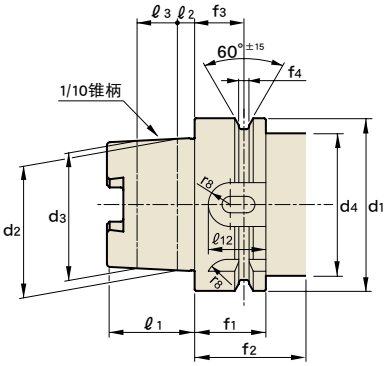


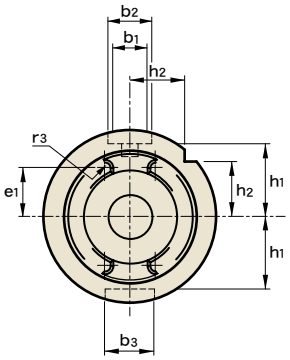
技术资料

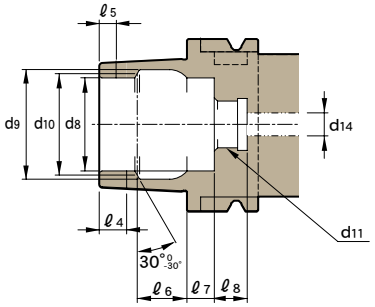
柄锥详细图

HSK-A（DIN 69893-1;1993-07 抽取）

柄锥	A40	A50	A63	A100	A125
b_1 (H10)	8	10.5	12.5	20	25
b_2 (H10)	9	12	16	20	25
b_3 (H10)	11	14	18	22	28
d_1 (h10)	40	50	63	100	125
d_2	30	38	48	5	95
	+0.007 +0.005	+0.009 +0.006	+0.011 +0.007	+0.015 +0.009	+0.018 +0.011
d_3	29.05	36.9	46.53	72.6	91.95
	+0.005 +0.003	+0.006 +0.003	+0.007 +0.003	+0.009 +0.003	+0.011 +0.004
d_4 (Max.)	34	42	53	85	105
d_8 (H10)	21	26	34	53	67
d_9 (H11)	25.5	32	40	63	80
d_{10}	23	29	37	58	73
d_{11}	M12 × 1	M16 × 1	M18 × 1	M24 × 1.5	M30 × 1.5
d_{14} (Max.)	5	6.8	8.4	12	14
e_1	10.88	13.797	17.862	27.329	35.324
f_1 ($^{0}_{-0.1}$)	20	26	26	29	29
f_2 (min.)	35	42	42	45	45
f_3 (± 0.1)	16	18	18	20	20
f_4 ($^{+0.15}_{0}$)	2	3.75	3.75	3.75	3.75
h_1 ($^{0}_{-0.2}$)	17	21	26.5	44	55.5
h_2 ($^{0}_{-0.3}$)	12	15.5	20	31.5	39.5
ℓ_1 ($^{0}_{-0.2}$)	20	25	32	50	63
ℓ_2	4	5	6.3	10	12.5
ℓ_3	9.5	11	14.7	24	30.5
ℓ_4 ($^{+0.2}_{0}$)	6	7.5	10	15	19
ℓ_5 ($^{+0.2}_{0}$)	3.5	4.5	6	10	12
ℓ_6 (JS10)	11.42	14.13	18.13	28.56	36.27
ℓ_7 ($^{0}_{-0.1}$)	8	10	10	12.5	16
ℓ_8 ($^{0}_{-0.3}$)	8	10	12	16	18
ℓ_{12}	12	19	21	24	24
r_3 ($^{\pm 0.05}_{-0.05}$)	1.88	2.38	2.88	4.88	5.88
r_8	4.5	6	8	10	5



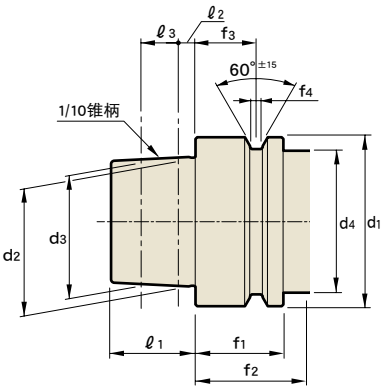




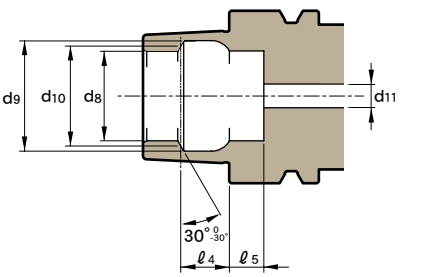


HSK-E（DIN V 69893-5;1996-01 抽取）

柄锥	E25	E32	E40	E50
d_1 (h10)	25	32	40	50
d_2	19	24	30	38
	+0.006 +0.004	+0.007 +0.005	+0.007 +0.005	+0.009 +0.006
d_3	18.15	23.27	29.05	36.90
	+0.004 +0.002	+0.005 +0.003	+0.005 +0.003	+0.006 +0.003
d_4 (Max.)	20	26	34	42
d_8 (H10)	14	17	21	26
d_9 (H11)	16.4	21	25.5	32
d_{10}	15	19	23	29
d_{11} (Max.)	3	4.2	5	6.8
ℓ_1 ($^{0}_{-0.2}$)	13	16	20	25
ℓ_2	2.5	3.2	4	5
ℓ_3	8.5	7.3	9.5	11
ℓ_4 (JS10)	7.21	8.92	11.42	14.13
ℓ_5 ($^{0}_{-0.1}$)	6	8	8	10
f_1 ($^{0}_{-0.1}$)	10	20	20	26
f_2 (min.)	20	35	35	42
f_3 (± 0.1)	4.5	16	16	18
f_4 ($^{+0.15}_{0}$)	2	2	2	3.75

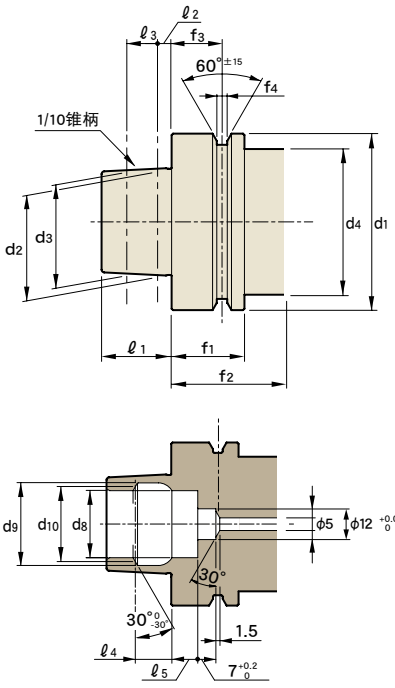






HSK-F（DIN V 69893-6;1996-01 抽取）

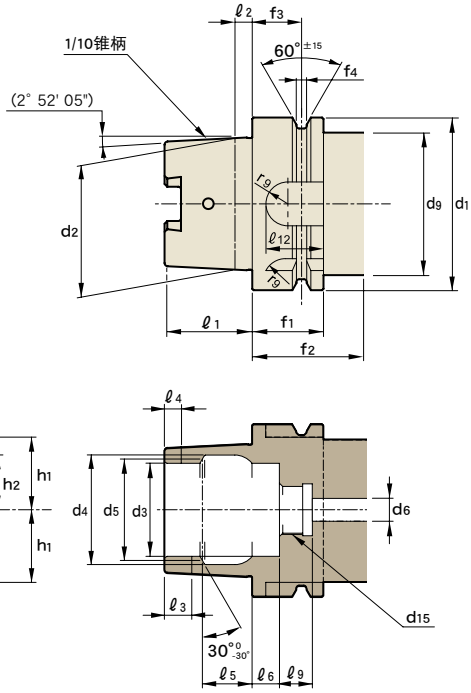
柄锥	F63	F80
d_1 (h10)	63	80
d_2	38	48
	+0.009 +0.006	+0.011 +0.007
d_3	36.9	46.53
	+0.006 +0.003	+0.007 +0.003
d_4 (Max.)	53	67
d_8 (H10)	26	34
d_9 (H11)	32	40
d_{10}	29	37
f_1 ($^{0}_{-0.1}$)	26	26
f_2 (min.)	42	42
f_3 (± 0.1)	18	18
f_4 ($^{+0.15}_{0}$)	3.75	3.75
ℓ_1 ($^{0}_{-0.2}$)	25	32
ℓ_2	5	6.3
ℓ_3	11	14.7
ℓ_4 (Js10)	14.13	18.13
ℓ_5 ($^{0}_{-0.1}$)	10	10
f_1 ($^{0}_{-0.1}$)	26	26
f_2 (min.)	42	42
f_3 (± 0.1)	18	18
f_4 ($^{+0.15}_{0}$)	3.75	3.75





HSK-T（ISO 12164-3;2008 抽取）　复合加工机的车削刀具用锥柄

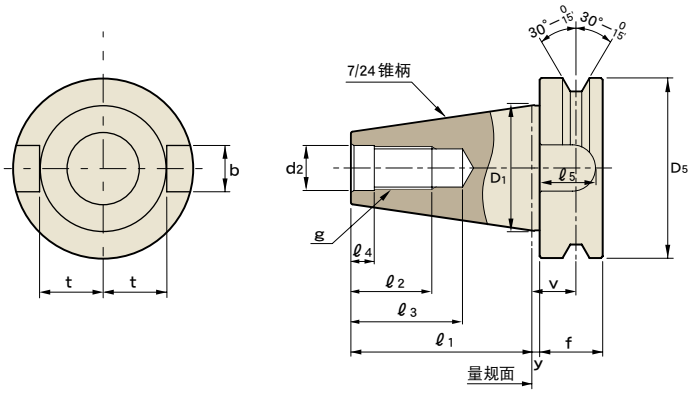
柄锥	T40	T50	T63	T100	T125
b_1 ($^{+0.04}_{-0.04}$)	8.05	10.54	12.54	20.02	25.02
b_2 (H10)	9	12	16	20	25
b_3 (H10)	11	14	18	22	28
b_5	7.932	10.425	12.425	19.91	24.915
	+0.03 0	+0.035 0			+0.04 0
d_1 (h10)	40	50	63	100	125
d_2	30.007	38.009	48.010	75.013	95.016
d_3 (H10)	21	26	34	53	67
d_4 (H11)	25.5	32	40	63	80
d_5	23	29	37	58	73
d_6 (Max.)	5	6.8	8.4	12	14
d_9 (Max.)	39	49	62	99	124
d_{15}	M12 × 1	M16 × 1	M18 × 1	M24 × 1.5	M30 × 1.5
e_1	11	13.88	17.99	27.37	35.37
f_1 ($^{0}_{-0.1}$)	20	26	26	29	29
f_2 (min.)	23	30	30	34	34
f_3 (± 0.1)	16	18	18	20	20
f_4 ($^{+0.15}_{0}$)	2	3.75	3.75	3.75	3.75
h_1 ($^{0}_{-0.2}$)	17	21	26.5	44	55.5
h_2 ($^{0}_{-0.3}$)	12	15.5	20	31.5	39.5
ℓ_1 ($^{0}_{-0.2}$)	20	25	32	50	63
ℓ_2	4	5	6.3	10	12.5
ℓ_3 ($^{+0.2}_{0}$)	6	7.5	10	15	19
ℓ_4 ($^{+0.2}_{0}$)	3.5	4.5	6	10	12
ℓ_5 (JS10)	11.42	14.13	18.13	28.56	36.27
ℓ_6 ($^{0}_{-0.1}$)	8	10	10	12.5	16
ℓ_9 ($^{0}_{-0.3}$)	8	10	12	16	18
ℓ_{12}	12	19	21	24	24
r_3 ($^{+0.05}_{-0.05}$)	1.88	2.38	2.88	4.88	5.88
r_9	4.5	6	8	10	5



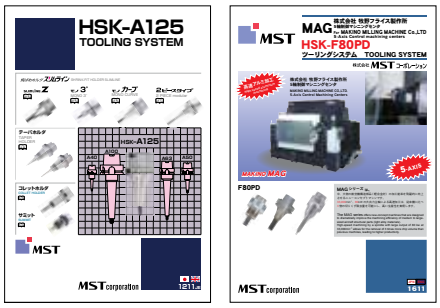


BT（MAS 403-抽取）

柄锥	BT30	BT40	BT50
D_1	31.75	44.45	69.85
ℓ_1 (±0.15)	48.4	65.4	101.8
d_2 (H8)	12.5	17	25
g (6H)	M12	M16	M24
ℓ_2 (min.)	24	30	45
ℓ_3 (min.)	34	43	62
ℓ_4	7	9	13
b (H12)	16.1	16.1	25.7
ℓ_5 (min.)	17	21	31
t ($^{0}_{-0.2}$)	16.3	22.6	35.4
D_5 (h8)	46	63	100
f	20	25	35
v (±0.1)	13.6	16.6	23.2
y (±0.4)	2	2	3



也备有HSK-A125/F80PD锥柄的产品系列。



备有专用目录，请垂询弊司。

常用的镶套尺寸容许偏差 (JIS B 0401)

尺寸的区分 (mm)		孔的尺寸容许偏差（μm）						轴的尺寸容许偏差（μm）					
超过	以下	H4	H5	H6	H7	H8	H9	h4	h5	h6	h7	h8	h9
—	3	+3 0	+4 0	+6 0	+10 0	+14 0	+25 0	0 -3	0 -4	0 -6	0 -10	0 -14	0 -25
3	6	+4 0	+5 0	+8 0	+12 0	+18 0	+30 0	0 -4	0 -5	0 -8	0 -12	0 -18	0 -30
6	10	+4 0	+6 0	+9 0	+15 0	+22 0	+36 0	0 -4	0 -6	0 -9	0 -15	0 -22	0 -36
10	18	+5 0	+8 0	+11 0	+18 0	+27 0	+43 0	0 -5	0 -8	0 -11	0 -18	0 -27	0 -43
18	30	+6 0	+9 0	+13 0	+21 0	+33 0	+52 0	0 -6	0 -9	0 -13	0 -21	0 -33	0 -52
30	50	+7 0	+11 0	+16 0	+25 0	+39 0	+62 0	0 -7	0 -11	0 -16	0 -25	0 -39	0 -62

SI 单位换算表

力量

N	kgf
1	1.01972×10^{-1}
9.80665	1

压力

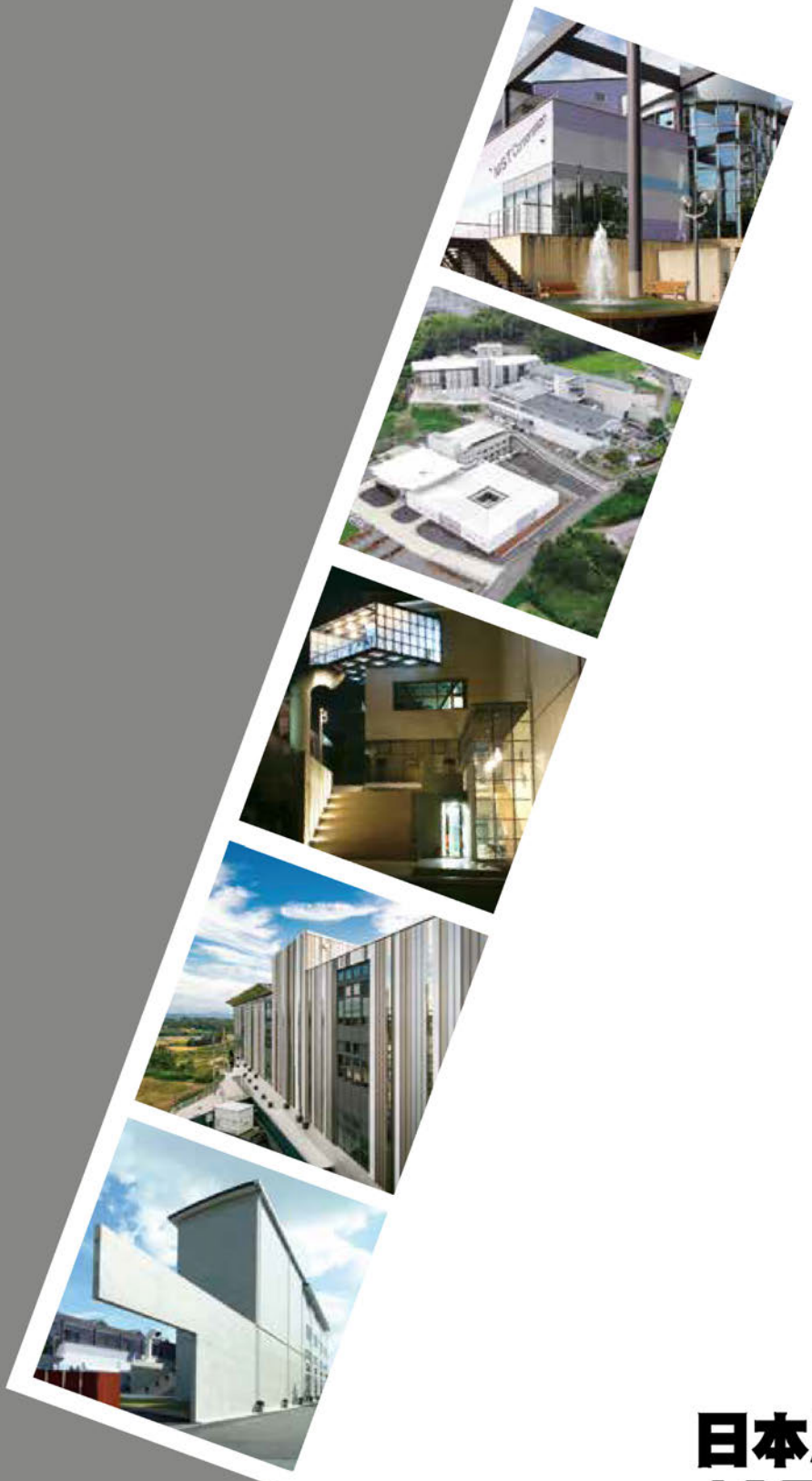
Pa	kgf/cm²
1	1.0197×10^{-5}
9.80665×10^{4}	1

应力

Pa	kgf/mm²
1	1.0197×10^{-7}
9.80665×10^{6}	1


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