

bilz

ThermoGrip®
热胀刀柄
Shrink Chucks





亲爱的用户：

众所周知，利润来自于刀具，而刀具的生产率会影响总的切削成本，进而占到总成本的4% - 6%，绝大部分的生产和切削专家认可这个观点。

那么，什么方法能够让您从刀具性能上获得充分的收益，并且增加刀具寿命呢？这本手册能帮助您给您的刀具选择最佳的夹持系统。

我们是一个拥有多年经验的家族企业，这些经验帮助我们开发出许多可靠的产品和汇集出广泛的产品范围。最新的产品也包含在这个样本上。

“但求更好”不仅仅是一句口号，而是我们对质量的承诺。我们，还有我们的产品一直在坚持我们的承诺。

对于超出样本范围的产品，我们也可提供特殊订制的解决方案，请联系我们讨论您的解决方案需求。

比尔兹产品支持团队





Dear reader,

As everyone knows, money is made at the „cutting edge“. The productivity of this cutting edge influences the total costs of cutting processes, however its contributions only amount to 4 – 6 %. Most production and cutting experts will agree with these statements.

What should you do to fully profit from the cutting edge performance and to increase tool life? This manual will support you in selecting the optimal clamping tools for your “cutting edges”.

Our long experience as a traditional family-run company helps us to develop products you can rely on and compile a comprehensive product range in this manual. Many improvements have been included.



“Always better” is not just a slogan for us. It is a promise for quality. We and our products keep our promises. Beyond this product range, we can offer you various custom-designed solutions. Please speak with us about new solutions for your applications.

Many people react, we act.

On behalf of the whole Bilz Team

T 标准热胀刀柄 Shrink Chucks

									
HSK-A	页码 Page	HSK-C	页码 Page	HSK-E	页码 Page	HSK-F	页码 Page	CAT	页码 Page
HSK-A32	15	HSK-C32	27	HSK-E25	28	HSK-F40	40	CAT 40 Inch	43
HSK-A40	15	HSK-C40	27	HSK-E32	29	HSK-F63	41	CAT 40	44
HSK-A50	15	HSK-C50	27	HSK-E40	31	HSK-E63 Inch	42	CAT 50 Inch	45
HSK-A63	16	HSK-C63	27	HSK-E40 Inch	32			CAT 50	46
HSK-A80	21			HSK-E50	35				
HSK-A100	22			HSK-E50 Inch	36				
				HSK-E63	39				

							
AD	页码 Page	ADB/ADF	页码 Page	BT/JD	页码 Page	BT/JDF	页码 Page
AD30	48	ADB40	51	BT30 Inch	56	BT40	57
AD40	49	ADB50	53	BT50	60		

TSF 细长型热胀刀柄 Slim Shrink Chucks

									
HSK-A	页码 Page	HSK-E	页码 Page	HSK-F	页码 Page	AD	页码 Page	BT/JD	页码 Page
HSK-A63	19	HSK-E25	28	HSK-F40	40	AD40	52	BT40	59
		HSK-E32	30						
		HSK-E40 Inch	33-34						
		HSK-E50	37-38						

热胀仪 Thermogrip® Shrink Units		页码 page
ISG系列总览 Overview ISG Series		83
热胀仪配件 Equipment Thermogrip® Shrink Units		87-88
TDS数据芯片 TDS Data Carrier		89

THD 重载热胀刀柄 Heavy Duty Shrink Chucks

HSK-A	页码 Page	ADB/ADF	页码 Page	BT/JD	页码 Page	CAT	页码 Page
HSK-A100	25	ADB50	55	BT50	59	CAT40 Inch	47
HSK-A125	26					CAT50 Inch	47

T Cool Jet 热胀刀柄 Shrink Chucks

HSK-A	页码 Page	AD40	页码 Page	ADF50	页码 Page	JDF40	页码 Page	JD50	页码 Page
HSK-A63	17	AD40	50	ADF50	54	JDF40	58	JD50	61
HSK-A100	23								

ER 热胀筒夹 ER Shrink Fit Adaptor	
ER	页码 Page
ER	68
ER Inch	69

延长杆 Extensions	抗振延长杆 Chuck Extensions with Vibration Damping		
TSFV	页码 Page	VIDAT	页码 Page
110-160	62	LNE-T..;20	65
200-250	63	LNE-T..;25	65
110-250Inch	63	LNE-T..;32	65
		LNE-MH	65

MMS MQL	
HSK-A	页码 Page
MQ1	72
MQ2	73 - 75

热胀刀柄配件 Equipment Shrink Chucks	页码 page
调节螺丝 Adjusting Screws	76
测量 Measuring	77
万能装刀长度预调棒 (MMS 1+2 Kanal) Universal Measuring Adaptor (MQL 1+2 Channel)	78
装刀长度预调器 Length Adjusting Sleeve	79
拉钉 Pull Stud	80-81
内冷管安装说明 Assembly Instructions – Coolant Transfer Set	82
重要提示 Important Hints	91



最佳稳定性

通过设计平衡达到极高的动平衡精度

- 获得更好的表面质量
- 硬质合金高速加工完美解决方案
- 降低主轴磨损

Optimized stability through “Balanced by Design” and subsequent fine balancing

- Better surface quality
- Ideal for HPC/HSC processing
- Low wear of the machine spindle

超长的使用寿命

由于使用了特殊的耐高温钢材因此形状十分稳定

- 更高的径向刚性
- 更低的挠曲变形
- 可用于横向高速进给

Longest tool life and form stability due to the use of high heat resisting, special purpose steel

- High radial rigidity
- Low deflection
- High rate of infeeds possible

安全

- 所有类型的柄部标准均可被夹持，如DIN 1835 A型，B型和E型及DIN 6535 HA型，HB型和HE型
- 不会因为柄部有油而失去夹持力

Security

- All cylindrical shanks acc. to DIN 1835 Form A, B and E as well as DIN 6535 Form HA, HB and HE can be clamped
- No loss of clamping force on greasy and oily shanks

专利沉孔设计

常温下可允许刀具放入进而实现全自动的加热程序，简化操作，并能减少15% - 20%加热能量。

The patented counterbore

allows insertion of the tool under cold conditions, as well as an automatic shrinking process and simplified handling.
15% - 20% less heat required when heating the shrink chuck

高同心度

小于0.003mm的夹持精度和锥部精度，在恒温车间制造

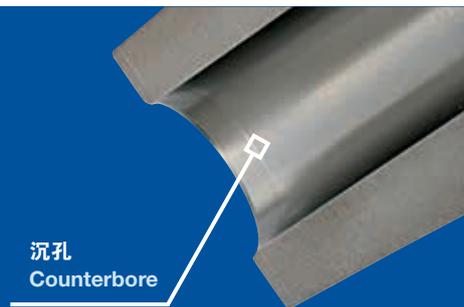
- 提高刀具寿命降低成本，实现恒定的刃口接触
- 减少震纹

Highest concentricity

< 0,003 mm and precise taper tolerances, manufactured in an air-conditioned production area

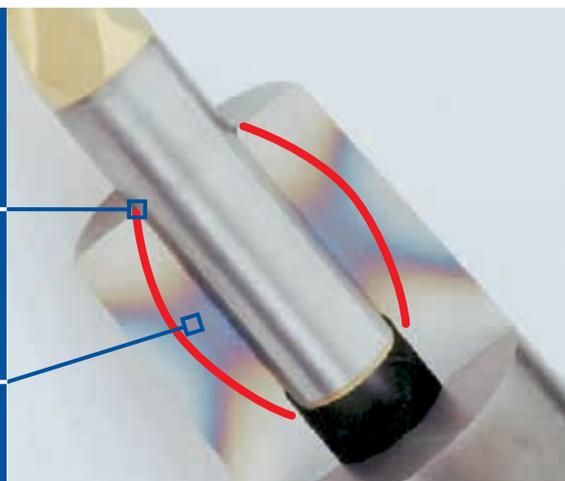
- Reduced tool costs due to improved tool life, allows a constant cutting edge contact
- Reduced chatter marks

- 预装刀具实现全自动热装过程
 - 减少15% – 20%加热量
 - 优化高速钢刀具拆卸
-
- Precentering of the tool for an automatic shrinking process
 - 15% – 20% less heat needed during heating – low wear
 - Optimal shrinking out of HSS shanks



Bilz沉孔设计专利确保换刀无故障
The patented Bilz counterbore allows problem free tool change

加热区域对称扩大
Hot Spot produces symmetric widening



技术信息 Information

上面的照片显示了感应加热刀柄的剖视图，刀柄表面的加热区域被快速加热，这个区域位于线圈中部，由于刀柄表面的温度高于内部，刀柄会涨开几微米——像一个香蕉，轻微的向外张开。因此在刀柄加热区域总是比内孔轻微膨胀的多一点，圆柱导向沉孔减少了临界区域的能量需求。由于这种低损耗的加热方式，保证了刀柄的超长使用寿命。

The picture above shows the cross section of an inductively heated shrink chuck. The surface of the chuck mainly heats the Hot Spot area very quickly. This area is situated in the middle of the coil spindle. Since the temperature is always higher on the surface of the chuck than in the inner part, the chuck opens by micrometres – similar to a banana – slightly outwards.

Because of this, the chuck is always slightly more open at the Hot Spot than at the boring entry. The cylindrical counterbore bypasses this critical area securely at reduced energy requirement. Due to this low wear heating process, a longer tool life of the shrink chucks is guaranteed.



ThermoGrip® 细长型热胀刀柄

ThermoGrip® Slim Shrink Chucks

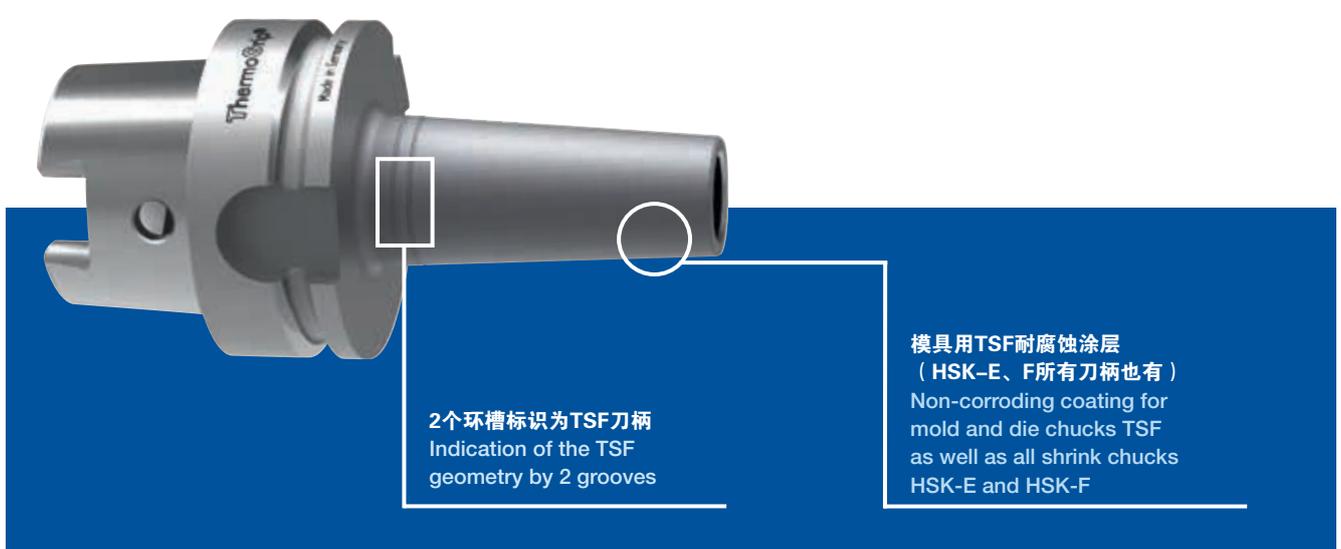
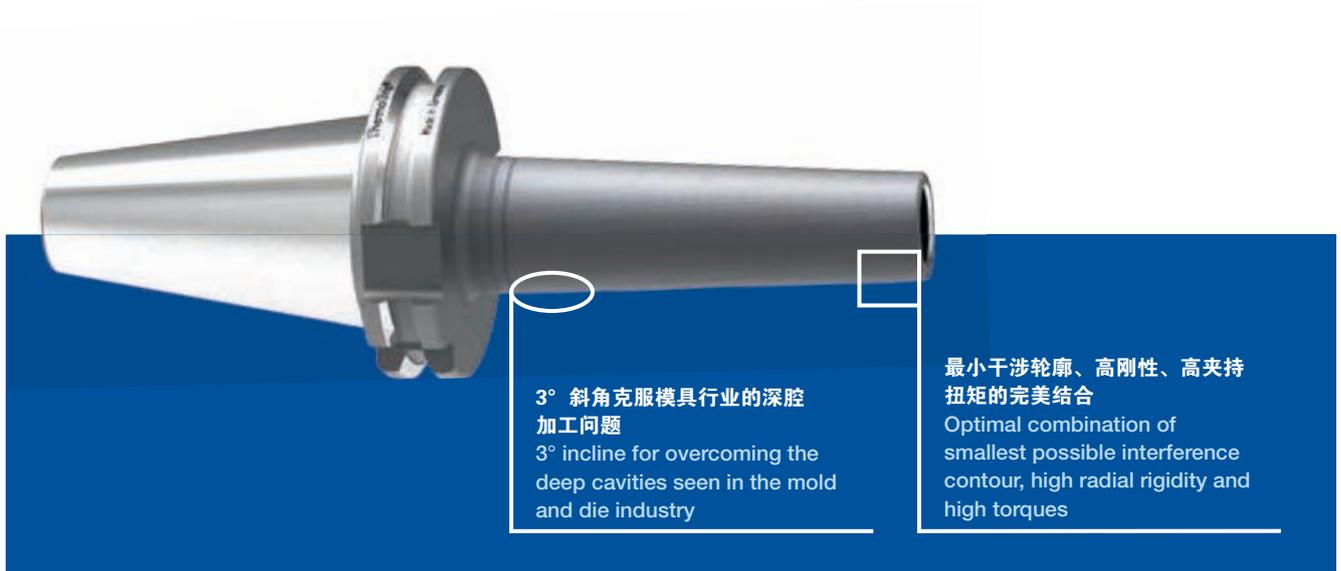
TSF新型热胀刀柄——专为模具行业开发的细长型版本。
 仅适用于柄部公差h6的硬质合金刀具，细长的外型可避免干涉问题。
 新型TSF热胀刀柄的外部形状设计成3° 斜角，适用于模具加工。

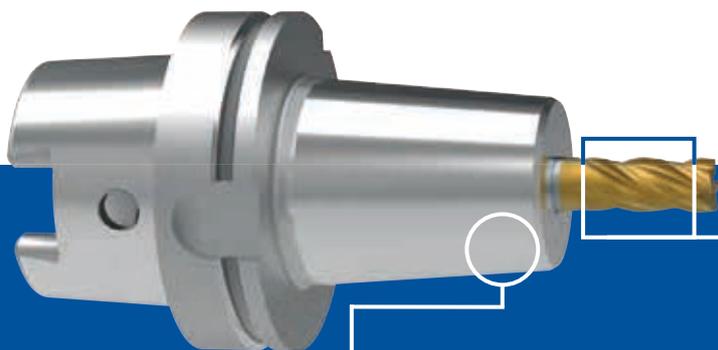
细长型热胀刀柄带有耐腐蚀涂层。
 这种刀柄的同心度小于0.003毫米，平衡精度小于1 gmm/kg。所有新的热胀仪都已经增加了针对不同加热柄径的参数化程序，老型号的热胀仪也可进行升级，因此薄壁刀柄可进行绝对可靠的加热而不会有过加热的风险。
 广泛的产品范围可应用于不同长度，不同主轴接口。

Introducing the new shrink chuck TSF ThermoGrip® – the slim version has been developed especially for the mold and die industry. This chuck type is used for induction shrinking of carbide tools. Due to the slim shape of this new chuck, interfering edges are a thing of the past.

The external geometry of the new shrink chuck TSF is designed with a 3° incline, compatible with dies and molds.

The slim shrink chucks have a non-corroding coating.
 The chucks have a concentricity of < 0,003 mm and are fine balanced at < 1 gmm/kg. Specifically for these slim chucks, all new ThermoGrip® shrink units are programmed with the parameters of heating time and generator output to shrink all possible shank diameters. Older version shrink units can be upgraded with these parameters. As a result, thin-walled chucks can be shrunk with the highest reliability and without the risk of overheating.
 The broad product range means that chucks with different lengths are available for all applications on all standard spindles.





增加了壁厚，结合短的刚性设计，即使在高速加工中也可以避免振动。
Increased wall thickness combined with the short and rigid design help prevent vibrations even at high speeds.

极高的径向刚性保证高金属去除率下的形状稳定
High radial rigidity for best form stability at highest metal removal rate

多达50%的情况适合高性能切削

注意：重载型刀柄只能在如下设备和线圈中使用：

- Ø 16, 20, 25可以在ISG34xxWK-WS和线圈ISG3200-2上加热
- Ø 32mm或更大的只能在HL-机型ISG44xx上使用

Up to 50 % more overlap – Suited for *HPC cutting

Attention: THD chuck can be used only with the following units / coils:

- Ø 16, 20, 25: on ISG34xxWK-WS and coil ISGS3200-2 possible
- Ø 32 and above: only on HL-units ISG44xx

* High Performance Cutting



ISG4410WK-HL

重型刀柄的冠军最大可以加热40千克的刀柄

Vollautomatisches Schrumpfen und Kühlen auch großer und schwerer Schrumpffutter

夹紧范围Ø: 3mm到51mm

冷却类型：水冷

冷却时间：30秒

The Heavyweight Champion - shrinking of tools up to 40 kg

Fully automatic Shrinking and Cooling, also suitable for large and heavy Shrink Chucks

Clamping range Ø: 3 mm – 50 mm

Cooling type: Water

Cooling time: 30 seconds

TSFV – 热胀延长杆
TSFV – Shrink Extensions



HSK

CAT

AD/ADF

JD/JDF/BT

TSFV

LNE

TER

MMS/MQL

Appendix



最小干涉轮廓，高刚性、高夹持
扭矩的完美结合
Optimal combination of the
smallest possible interference
contour, high radial rigidity,
and high torques

模块化柄部可以进入深窄内腔

Shanks for modular build up to access deep and restricted cavities



ThermoGrip® Cool Jet 应用

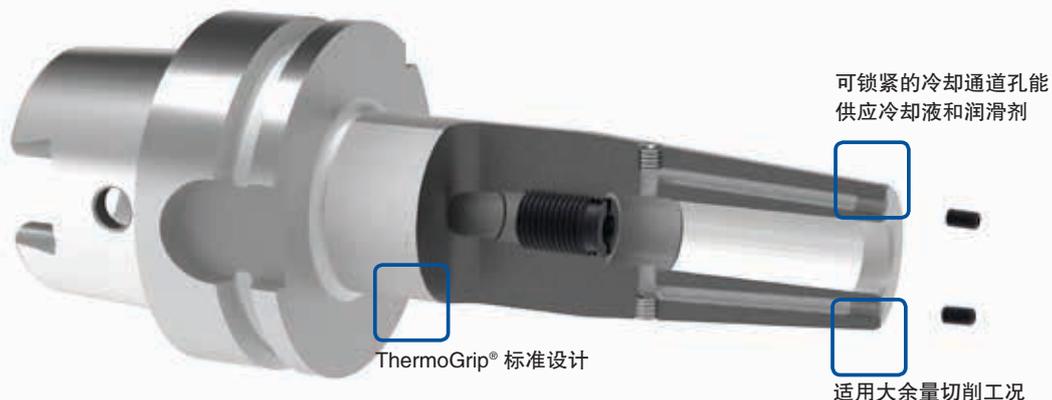
由于冷却液能直接冲到切削刃, 即使在最困难的铣削工况, ThermoGrip® Cool Jet也能安全可靠地工作。刀柄带锁紧螺钉能灵活运用于各种应用。

- 所有类型刀具, 带内冷或不带内冷均可
- 通常适用于所有金属、木材和复合材料加工

ThermoGrip® Cool Jet Applications

Even with the most difficult milling operations, ThermoGrip® Cool Jet works reliably and safely due to the coolant jet directed to the cutting edge is flexibly adapted to each application due to the locking screws provided.

- all tool types with and without internal cooling
- universal suitability for all metal, wood and composite applications



ThermoGrip® Cool Jet 通过可关闭的冷却液供应通道优化冷却液供应

- 以冷却切削刃需求为导向
- 优化空气和润滑油供应
- 能保持切削刃处的恒定稳定, 刀具寿命更长
- 最佳的排屑性能改善表面质量——避免铁屑刮伤
- 热装非常方便

ThermoGrip® Cool Jet可提供直径3 mm ~ 50mm标准型刀柄

ThermoGrip® Cool Jet stands for optimised coolant supply through closable coolant supply channels

- demand-orientated cooling of the cutting edge
- optimized air and lubricant feed
- longer tool life due to constant tool preserving cutting temperatures at the cutting edge
- improved surface quality due to optimal chip removal – no second chip cutting
- excellent usability in shrinking and insertion

ThermoGrip® Cool Jet is available for standard shrink chuck shanks T... from diameter 3 mm up to 50 mm

ThermoGrip® Corona Jet 应用

创新的冷却液进给方式：刀柄前端装有一个射流环，带不同角度的喷嘴，喷到切削刃和排屑槽。

- 用于不带内冷刀具
- 适用于金属、木材和复合材料的加工
- 特别适合铣外形，型腔和深腔加工

ThermoGrip® Corona Jet Applications

Innovative Type of Coolant Feed: The front end of the chuck contains a jet ring with integrated jets set at varying angles, directed at the cutting edge and cutters flutes.

- for Tools without coolant channels
- Treatment of metal, wood and composites
- particularly suitable for peripheral milling, circular pocket milling and deep cavities



ThermoGrip® Corona Jet 通过冷却液直接喷到切削刃优化冷却液和润滑油供应

- 最佳的排屑性能改善表面质量——避免铁屑刮伤
- 能保持切削刃处的恒定稳定，刀具寿命更长
- 喷嘴特殊角度设计，刀具充分冷却
- 排屑顺畅，减少刀具损坏
- 热装非常方便

ThermoGrip® Corona Jet 可提供直径6 mm ~ 20 mm标准型刀柄

ThermoGrip® Corona Jet stands for optimal coolant and lubricant feed directly at the cutting edge

- improved surface quality due to optimal chip removal – No second cutting of chips
 - longer tool life due to constant tool cutting temperatures at the cutting edge
 - complete coolant spraying of the cutter due to the special angled design of the jets
 - reduction in tool breakage due to effective chip removal
 - excellent usability in shrinking and insertion
- ThermoGrip® Corona Jet is available for standard shrink chuck shanks T... from diameter 6 mm up to 20 mm

≤ 3µm

刀柄同心度
Concentricity of the ThermoGrip® Shrink Chucks

max. 8.000 max. 10.000 max. 12.000 max. 15.000 max. 18.000 max. 20.000 max. 24.000 max. 25.000 max. 30.000 max. 35.000 max. 36.000 max. 40.000 max. 42.000 max. 50.000

最大转速 Max. RPM

G2.5/25.000

动平衡: 针对重量≥1 kg的刀柄, 出厂时按照G2.5 RMP2500做精密动平衡; 重量≤1 kg的刀柄, 残余不平衡量≤1 g mm
Balancing: The chucks are factory-made finely balanced with G2,5 at 25.000 rpm, for chucks with the mass of >= 1 kg; or chucks with the mass of < 1 kg with residual imbalance < 1 g mm

CHIP

带数据芯片安装孔 With data carrier bore

coated

防锈处理 Corrosion protected (coated)

适于深腔加工 — 适于模具行业
Suitable for deep cavities – especially for the mold and die industry

震动阻尼衰减 Vibration damping

HSS

适合直径6毫米以上的高速钢柄部 Suitable for HSS shanks from diameter 6 mm

如下的条件适用于所有BILZ刀柄:
夹持柄部公差: $\varnothing 3,4 = h4$ | $\varnothing 5 = h5$ | $\varnothing \geq 6 = h6$

The following applies for all ThermoGrip® shrink chucks:
Shank tolerance: $\varnothing 3,4 = h4$ | $\varnothing 5 = h5$ | $\varnothing \geq 6 = h6$

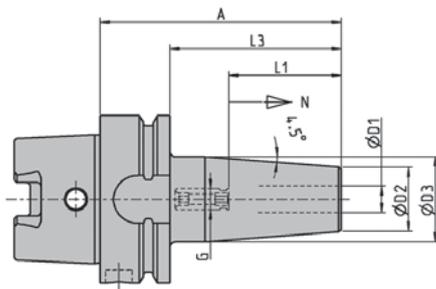
直接扫二维码提交非标刀柄需求:
Form special shrink chuck directly via QR Code:

DE



EN





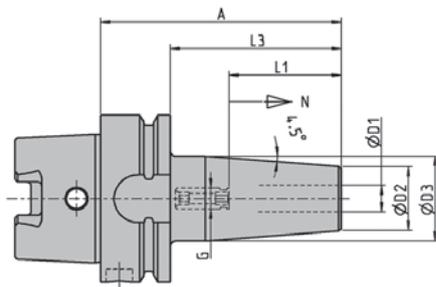
T... HSK - A32									G2,5/ 25.000	≤ 3µm	max. 40.000	CHIP	HSS
D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.				
3	65	45	15	20	20	5	M6	T0300/HSK-A32	6727280				
4	65	45	15	20	20	5	M6	T0400/HSK-A32	6727281				
5	65	45	15	20	25	5	M6	T0500/HSK-A32	6727282				
6	75	55	21	26	36	10	M5	T0600-75/HSK-A32	5053729				
8	75	55	21	26	36	10	M6	T0800-75/HSK-A32	9129720				
10	75	55	24	29	42	10	M8x1	T1000/HSK-A32	6726214				
12	80	60	24	29	47	5	M10x1	T1200/HSK-A32	6726215				
		5064893				6738740		附件请参考82页 Accessories, page 82					

T... HSK - A40									G2,5/ 25.000	≤ 3µm	max. 36.000	CHIP	HSS
D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.				
3	60	40	15	20	20	5	M6	T0300/HSK-A40	6726615				
4	60	40	15	20	20	5	M6	T0400/HSK-A40	6726616				
5	60	40	15	20	25	5	M6	T0500/HSK-A40	6726617				
6	80	60	21	27	36	10	M5	T0600/HSK-A40	6726222				
8	80	60	21	27	36	10	M6	T0800/HSK-A40	6726223				
10	80	60	24	32	42	10	M8x1	T1000/HSK-A40	6726224				
12	90	70	24	32	47	10	M10x1	T1200/HSK-A40	6726225				
14	90	70	27	34	47	10	M10x1	T1400/HSK-A40	6726226				
16	90	70	27	34	50	10	M12x1	T1600/HSK-A40	6726227				
		5028425				6738741		附件请参考82页 Accessories, page 82					

T... HSK - A50									G2,5/ 25.000	≤ 3µm	max. 30.000	CHIP	HSS
D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.				
3	80	54	15	20	20	5	M6	T0300/HSK-A50	5038902				
4	80	54	15	20	20	5	M6	T0400/HSK-A50	9179308				
5	80	54	15	20	25	5	M6	T0500/HSK-A50	5000253				
6	80	54	21	27	36	10	M5	T0600/HSK-A50	6726232				
8	80	54	21	27	36	10	M6	T0800/HSK-A50	6726233				
10	85	59	24	32	42	10	M8x1	T1000/HSK-A50	6726234				
12	90	64	24	32	47	10	M10x1	T1200/HSK-A50	6726235				
14	90	64	27	34	47	10	M10x1	T1400/HSK-A50	6726236				
16	95	69	27	34	50	10	M12x1	T1600/HSK-A50	6726237				
18	95	69	33	42	50	10	M12x1	T1800/HSK-A50	6726238				
20	100	74	33	42	52	10	M16x1	T2000/HSK-A50	6726239				
		5028426				6738442		附件请参考82页 Accessories, page 82					

T... HSK-A63, DIN 69893

热胀刀柄 Shrink Chucks



T... HSK-A63

G2,5/
25.000

≤ 3µm

max.
24.000

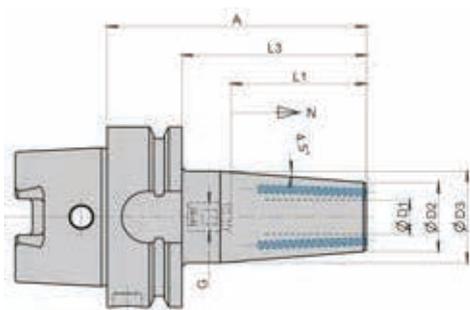
CHIP

HSS

D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.
3	80	54	15	20	20	5	M6	T0300/HSK-A63	6726618
4	80	54	15	20	20	5	M6	T0400/HSK-A63	6726619
5	80	54	15	20	25	5	M6	T0500/HSK-A63	6726620
6	80	54	21	27	36	10	M5	T0600/HSK-A63	6726201
8	80	54	21	27	36	10	M6	T0800/HSK-A63	6726202
10	85	59	24	32	42	10	M8x1	T1000/HSK-A63	6726203
12	90	64	24	32	47	10	M10x1	T1200/HSK-A63	6726204
14	90	64	27	34	47	10	M10x1	T1400/HSK-A63	6726205
16	95	69	27	34	50	10	M12x1	T1600/HSK-A63	6726206
18	95	69	33	42	50	10	M12x1	T1800/HSK-A63	6726211
20	100	74	33	42	52	10	M16x1	T2000/HSK-A63	6726207
25	115	89	44	52,5	58	10	M16x1	T2500/HSK-A63	6726208
32	120	94	44	52,5	62	10	M16x1	T3200/HSK-A63	6726209
6	120	94	21	27	36	10	M5	T0600-120/HSK-A63	6726388
8	120	94	21	27	36	10	M6	T0800-120/HSK-A63	6726391
10	120	94	24	32	42	10	M8x1	T1000-120/HSK-A63	6726392
12	120	94	24	32	47	10	M10x1	T1200-120/HSK-A63	6726410
14	120	94	27	34	47	10	M10x1	T1400-120/HSK-A63	6726401
16	120	94	27	34	50	10	M12x1	T1600-120/HSK-A63	6726399
18	120	94	33	42	50	10	M12x1	T1800-120/HSK-A63	6726539
20	120	94	33	42	52	10	M16x1	T2000-120/HSK-A63	6726662
25	120	94	44	52,5	58	10	M16x1	T2500-120/HSK-A63	6726416
32	120	94	44	52,5	62	10	M16x1	T3200/HSK-A63	6726209
6	160	134	21	32	36	10	M5	T0600-160/HSK-A63	6726411
8	160	134	21	32	36	10	M6	T0800-160/HSK-A63	6726402
10	160	134	24	34	42	10	M8x1	T1000-160/HSK-A63	6726403
12	160	134	24	34	47	10	M10x1	T1200-160/HSK-A63	6726404
14	160	134	27	42	47	10	M10x1	T1400-160/HSK-A63	6726405
16	160	134	27	42	50	10	M12x1	T1600-160/HSK-A63	6726406
18	160	134	33	51	50	10	M12x1	T1800-160/HSK-A63	6726407
20	160	134	33	51	52	10	M16x1	T2000-160/HSK-A63	6726468
25	160	134	44	52,5	58	10	M16x1	T2500-160/HSK-A63	6726408
32	160	134	44	52,5	62	10	M16x1	T3200-160/HSK-A63	6726409
6	200	174	21	32	36	10	M5	T0600-200-K1-HSKA63	6726634
8	200	174	21	32	36	10	M6	T0800-200-K1-HSKA63	6726356
10	200	174	24	34	42	10	M8x1	T1000-200-K1-HSKA63	6726498
12	200	174	24	34	47	10	M10x1	T1200-200-K1-HSKA63	9073374
14	200	174	27	42	47	10	M10x1	T1400-200-K1-HSKA63	5135423
16	200	174	27	42	50	10	M12x1	T1600-200-K1-HSKA63	9079363
18	200	174	33	51	50	10	M12x1	T1800-200-K1-HSKA63	5134245
20	200	174	33	51	52	10	M16x1	T2000-200-K1-HSKA63	5066417
25	200	174	44	52,5	58	10	M16x1	T2500-200-K1-HSKA63	5134246
32	200	174	44	52,5	62	10	M16x1	T3200-200-K1-HSKA63	5134247
	5025376			6738421		附件请参考82页 Accessories, page 82			

T....-C1-...HKA63 / Cool Jet, DIN 69893

Cool Jet 端面冷却热胀刀柄 Shrink Chucks



T....-C1-HSKA63									G2.5/ 25.000	≤ 3µm	max. 24.000	CHIP	HSS
D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.				
3	80	54	15	20	20	5	M6	T0300-80-C1-HSKA63	5150192				
4	80	54	15	20	20	5	M6	T0400-80-C1-HSKA63	5150201				
5	80	54	15	20	25	5	M6	T0500-80-C1-HSKA63	5147940				
6	80	54	21	27	36	10	M5	T0600-80-C1-HSKA63	5150210				
8	80	54	21	27	36	10	M6	T0800-80-C1-HSKA63	5150212				
10	85	59	24	32	42	10	M8 x1	T1000-85-C1-HSKA63	5150214				
12	90	64	24	32	47	10	M10 x1	T1200-90-C1-HSKA63	5150217				
14	90	64	27	34	47	10	M10 x1	T1400-90-C1-HSKA63	5150218				
16	95	69	27	34	50	10	M12 x1	T1600-95-C1-HSKA63	5150219				
18	95	69	33	42	50	10	M12 x1	T1800-95-C1-HSKA63	5150220				
20	100	74	33	42	52	10	M16 x1	T2000-100-C1-HSKA63	5150222				
25	115	89	44	52,5	58	10	M16 x1	T2500-115-C1-HSKA63	5150223				
32	120	94	44	52,5	62	10	M16 x1	T3200-120-C1-HSKA63	5150224				
6	120	94	21	27	36	10	M5	T0600-120-C1-HSKA63	5150225				
8	120	94	21	27	36	10	M6	T0800-120-C1-HSKA63	5150226				
10	120	94	24	32	42	10	M8 x1	T1000-120-C1-HSKA63	5150227				
12	120	94	24	32	47	10	M10 x1	T1200-120-C1-HSKA63	5150228				
14	120	94	27	34	47	10	M10 x1	T1400-120-C1-HSKA63	5150229				
16	120	94	27	34	50	10	M12 x1	T1600-120-C1-HSKA63	5150230				
18	120	94	33	42	50	10	M12 x1	T1800-120-C1-HSKA63	5150231				
20	120	94	33	42	52	10	M16 x1	T2000-120-C1-HSKA63	5150232				
25	120	94	44	52,5	58	10	M16 x1	T2500-120-C1-HSKA63	5150233				
32	120	94	44	52,5	62	10	M16 x1	T3200-120-C1-HSKA63	5150224				
6	160	134	21	32	36	10	M5	T0600-160-C1-HSKA63	5150235				
8	160	134	21	32	36	10	M6	T0800-160-C1-HSKA63	5150236				
10	160	134	24	34	42	10	M8 x1	T1000-160-C1-HSKA63	5150238				
12	160	134	24	34	47	10	M10 x1	T1200-160-C1-HSKA63	5150240				
14	160	134	27	42	47	10	M10 x1	T1400-160-C1-HSKA63	5150241				
16	160	134	27	42	50	10	M12 x1	T1600-160-C1-HSKA63	5150242				
18	160	134	33	51	50	10	M12 x1	T1800-160-C1-HSKA63	5150940				
20	160	134	33	51	52	10	M16 x1	T2000-160-C1-HSKA63	5150245				
25	160	134	44	52,5	58	10	M16 x1	T2500-160-C1-HSKA63	5150247				
32	160	134	44	52,5	62	10	M16 x1	T3200-160-C1-HSKA63	5150248				
		5025376				6738241		附件请参考82页 Accessories, page 82					

Cool-Jet 特点

- 可转为外冷
- 两个冷却孔
- 可选四个冷却孔

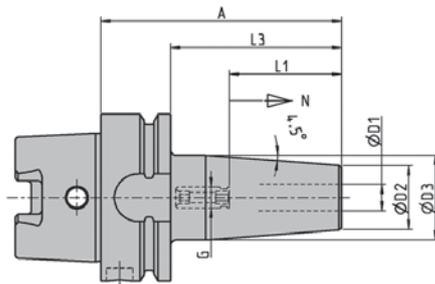
Cool-Jet execution

- for optional external cooling
- 2 closable cooling channel holes
- Optionally with 4 cooling channel holes



T... HSK-A63, DIN 69893

热胀刀柄 Shrink Chucks



T... HSK-A63 – 英寸 Inch

G2,5/25.000

≤ 3 μm

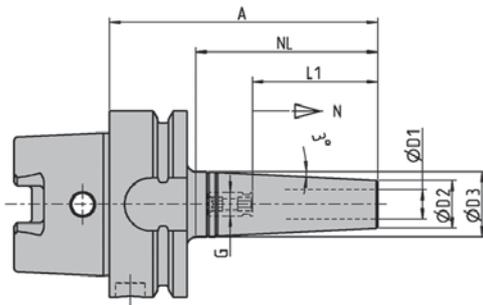
max. 24.000

CHIP

HSS

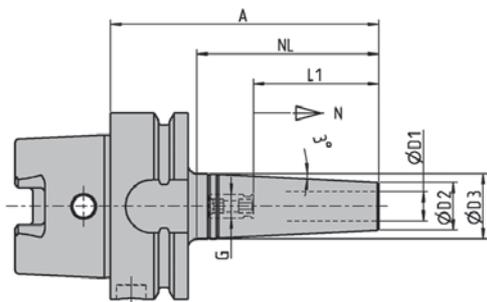
D1 [Inch]	A [Inch]	L3 [Inch]	D2 [Inch]	D3 [Inch]	L1 [Inch]	N [Inch]	G	型号 Designation	订货号 Ident No.	
0,125	3,15	2,13	0,59	0,79	0,79	0,20	M6	T0318/HSK-A63	9079266	
0,187	3,15	2,13	0,59	0,79	0,98	0,20	M6	T0476/HSK-A63	9079278	
0,250	3,15	2,13	0,83	1,06	1,42	0,39	M5	T0635/HSK-A63	6726420	
0,312	3,15	2,13	0,83	1,06	1,42	0,39	M6	T0794/HSK-A63	6726421	
0,375	3,35	2,32	0,94	1,26	1,65	0,39	M8X1	T0953/HSK-A63	6726422	
0,500	3,54	2,52	1,06	1,34	1,85	0,39	M10X1	T1270/HSK-A63	6726424	
0,625	3,74	2,72	1,06	1,34	1,97	0,39	M12X1	T1588/HSK-A63	6726426	
0,750	3,94	2,91	1,30	1,65	2,05	0,39	M16X1	T1905/HSK-A63	6726428	
1,000	4,53	3,50	1,73	2,07	2,44	0,39	M16X1	T2540/HSK-A63	6726430	
0,125	4,72	3,70	0,59	0,79	0,79	0,20	M6	T0318-120/HSK-A63	9079267	
0,187	4,72	3,70	0,59	0,79	0,98	0,20	M6	T0476-120/HSK-A63	9079279	
0,250	4,72	3,70	0,83	1,06	1,42	0,39	M5	T0635-120/HSK-A63	6727392	
0,375	4,72	3,70	0,94	1,26	1,65	0,39	M8X1	T0953-120/HSK-A63	6727393	
0,500	4,72	3,70	1,06	1,34	1,85	0,39	M10X1	T1270-120/HSK-A63	6727394	
0,625	4,72	3,70	1,06	1,34	1,97	0,39	M12X1	T1588-120/HSK-A63	9079254	
1,000	4,72	3,70	1,73	2,07	2,44	0,39	M16X1	T2540-120/HSK-A63	5099442	
1,250	4,72	3,70	1,73	2,07	2,44	0,39	M16X1	T3175/HSK-A63	6726431	
0,125	6,30	5,28	0,59	1,06	0,79	0,20	M6	T0318-160/HSK-A63	9079268	
0,187	6,30	5,28	0,59	1,06	0,98	0,20	M6	T0476-160/HSK-A63	9079280	
0,250	6,30	5,28	0,83	1,26	1,42	0,39	M5	T0635-160/HSK-A63	6726614	
0,375	6,30	5,28	0,94	1,34	1,65	0,39	M8X1	T0953-160/HSK-A63	9079221	
0,500	6,30	5,28	1,06	1,65	1,85	0,39	M10X1	T1270-160/HSK-A63	9079247	
0,625	6,30	5,28	1,06	1,65	1,97	0,39	M12X1	T1588-160/HSK-A63	9079255	
0,750	6,30	5,28	1,30	2,01	2,05	0,39	M16X1	T1905-160/HSK-A63	9079258	
1,000	6,30	5,28	1,73	2,07	2,44	0,39	M16X1	T2540-160/HSK-A63	9079259	
1,250	6,30	5,28	1,73	2,07	2,44	0,39	M16X1	T3175-160/HSK-A63	9079261	
	5025376			6738421			附件请参考82页 Accessories, page 82			

TSF... HSK-A63, DIN69893
细长型热胀刀柄 Slim Shrink Chucks



TSF... HSK-A63									G2,5/ 25.000	≤ 3µm	max. 24.000	CHIP	coated	
D1 [mm]	A [mm]	NL [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.					
3	70	40	9	13	20	5	M6	TSF0300-40/HSK-A63	9078617					
4	70	40	10	14	20	5	M6	TSF0400-40/HSK-A63	9078654					
6	90	60	12	18	36	5	M5	TSF0600-60/HSK-A63	9078658					
8	90	60	14	20	36	5	M6	TSF0800-60/HSK-A63	9078670					
10	90	60	16	22	42	5	M8x1	TSF1000-60/HSK-A63	9078676					
12	90	60	18	24	47	5	M10x1	TSF1200-60/HSK-A63	9078725					
16	90	60	22	28	50	5	M12x1	TSF1600-60/HSK-A63	9078728					
3	100	70	9	16	20	5	M6	TSF0300-70/HSK-A63	9078652					
4	100	70	10	17	20	5	M6	TSF0400-70/HSK-A63	9078655					
6	120	90	12	21	36	5	M5	TSF0600-90/HSK-A63	9078660					
8	120	90	14	23	36	5	M6	TSF0800-90/HSK-A63	9078673					
10	120	90	16	25	42	5	M8x1	TSF1000-90/HSK-A63	9078677					
12	120	90	18	27	47	5	M10x1	TSF1200-90/HSK-A63	9078726					
16	120	90	22	31	50	5	M12x1	TSF1600-90/HSK-A63	9078729					
3	130	100	9	19	20	5	M6	TSF0300-100/HSK-A63	9078653					
4	130	100	10	20	20	5	M6	TSF0400-100/HSK-A63	9078657					
6	150	120	12	24	36	5	M5	TSF0600-120/HSK-A63	9078661					
8	150	120	14	26	36	5	M6	TSF0800-120/HSK-A63	9078674					
10	150	120	16	28	42	5	M8x1	TSF1000-120/HSK-A63	9078678					
12	150	120	18	30	47	5	M10x1	TSF1200-120/HSK-A63	9078624					
16	150	120	22	34	50	5	M12x1	TSF1600-120/HSK-A63	9078730					
3	200	174	9	26	20	5	M6	TSF0300-200-K1-HSKA63	5132995					
6	200	174	12	29	36	5	M6	TSF0600-200-K1-HSKA63	5132993					
8	200	174	14	31	36	5	M5	TSF0800-200-K1-HSKA63	5132996					
10	200	174	16	33	42	5	M8x1	TSF1000-200-K1-HSKA63	5132997					
12	200	174	18	35	47	5	M10x1	TSF1200-200-K1-HSKA63	5132999					
请使用TSF专用盘片, 详见附件87页 TSF discs, see accessories page 87														
5025376			6738421				附件请参考82页 Accessories, page 82							

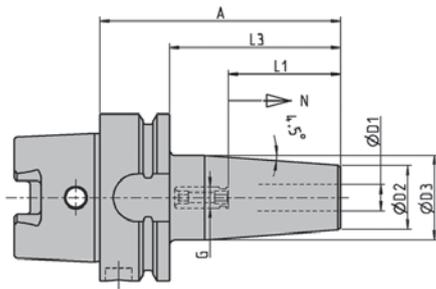
TSF... HSK-A63, DIN69893
细长型热胀刀柄 Slim Shrink Chucks



TSF... HSK-A63 – 英寸 Inch									G2,5/ 25.000	≤ 3µm	max. 24.000	CHIP	coated
D1 [Inch]	A [Inch]	NL [Inch]	D2 [Inch]	D3 [Inch]	L1 [Inch]	N [Inch]	G	型号 Designation	订货号 Ident No.				
0,125	2,76	1,57	0,35	0,51	0,79	0,20	M6	TSF0318-40/HSK-A63	5053808				
0,187	3,54	2,36	0,43	0,71	0,98	0,20	M6	TSF0476-60/HSK-A63	5053812				
0,250	3,54	2,36	0,47	0,71	1,42	0,20	M5	TSF0635-60/HSK-A63	5053814				
0,375	3,54	2,36	0,63	0,87	1,65	0,20	M8X1	TSF0953-60/HSK-A63	5048183				
0,500	3,54	2,36	0,79	1,02	1,85	0,20	M10X1	TSF1270-60/HSK-A63	5053816				
0,625	3,54	2,36	0,87	1,10	1,97	0,20	M12X1	TSF1588-60/HSK-A63	5053817				
0,125	3,94	2,76	0,35	0,63	0,79	0,20	M6	TSF0318-70/HSK-A63	5053818				
0,187	4,72	3,54	0,43	0,83	0,98	0,20	M6	TSF0476-90/HSK-A63	5053819				
0,250	4,72	3,54	0,47	0,83	1,42	0,20	M5	TSF0635-90/HSK-A63	5053821				
0,375	4,72	3,54	0,63	0,98	1,65	0,20	M8X1	TSF0953-90/HSK-A63	5053822				
0,500	4,72	3,54	0,79	1,14	1,85	0,20	M10X1	TSF1270-90/HSK-A63	5053823				
0,625	4,72	3,54	0,87	1,22	1,97	0,20	M12X1	TSF1588-90/HSK-A63	5053824				
0,125	5,12	3,94	0,35	0,75	0,79	0,20	M6	TSF0318-100/HSK-A63	5053825				
0,187	5,91	4,72	0,43	0,94	0,98	0,20	M6	TSF0476-120/HSK-A63	5053826				
0,250	5,91	4,72	0,47	0,94	1,42	0,20	M5	TSF0635-120/HSK-A63	5053827				
0,375	5,91	4,72	0,63	1,10	1,65	0,20	M8X1	TSF0953-120/HSK-A63	5053828				
0,500	5,91	4,72	0,79	1,26	1,85	0,20	M10X1	TSF1270-120/HSK-A63	5053829				
0,625	5,91	4,72	0,87	1,34	1,97	0,20	M12X1	TSF1588-120/HSK-A63	5053830				
 请使用TSF专用盘片, 详见附件87页 TSF discs, see accessories page 87													
 5025376		 6738421			附件请参考82页 Accessories, page 82								

T... HSK-A80, DIN69893

热胀刀柄 Shrink Chucks

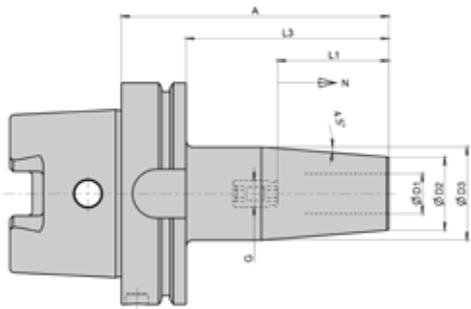


T... HSK - A80									G2,5/25.000	≤ 3µm	max. 12.000	CHIP	HSS
D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.				
6	85	59	21	27	36	10	M5	T0600/HSK-A80	6726455				
8	85	59	21	27	36	10	M6	T0800/HSK-A80	6726396				
10	90	64	24	32	42	10	M8 x 1	T1000/HSK-A80	6726985				
12	95	69	24	32	47	10	M10 x 1	T1200/HSK-A80	6726397				
14	95	69	27	34	47	10	M10 x 1	T1400/HSK-A80	6727004				
16	100	74	27	34	50	10	M12 x 1	T1600/HSK-A80	6726658				
18	100	74	33	42	50	10	M12 x 1	T1800/HSK-A80	6726874				
20	105	79	33	42	52	10	M16 x 1	T2000/HSK-A80	6726659				
25	115	89	44	53	58	10	M16 x 1	T2500/HSK-A80	6726488				
32	120	94	44	53	62	10	M16 x 1	T3200/HSK-A80	6726882				
		5028427				6738095		附件请参考82页 Accessories, page 82					

T... HSK - A80 - 英寸 Inch									G2,5/25.000	≤ 3µm	max. 12.000	CHIP	HSS
D1 [Inch]	A [Inch]	L3 [Inch]	D2 [Inch]	D3 [Inch]	L1 [Inch]	N [Inch]	G	型号 Designation	订货号 Ident No.				
0,250	3,35	2,32	0,83	1,06	1,42	0,39	M5	T0635/HSK-A80	6726687				
0,375	3,54	2,52	0,94	1,26	1,65	0,39	M8X1	T0953/HSK-A80	6726688				
0,500	3,74	2,72	1,06	1,34	1,85	0,39	M10X1	T1270/HSK-A80	6726689				
0,625	3,94	2,91	1,06	1,34	1,97	0,39	M12X1	T1588/HSK-A80	6726690				
0,750	4,13	3,11	1,30	1,65	2,05	0,39	M16X1	T1905/HSK-A80	6726691				
1,000	4,53	3,50	1,73	2,09	2,44	0,39	M16X1	T2540/HSK-A80	6726692				
1,250	4,72	3,70	1,73	2,09	2,44	0,39	M16X1	T3175/HSK-A80	6726693				
		5028427				6738095		附件请参考82页 Accessories, page 82					

T... HSK-A100, DIN 69893

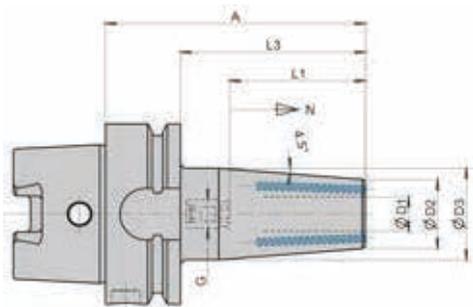
热胀刀柄 Shrink Chucks



T... HSK - A 100								G2.5/ 25.000	≤ 3µm	max. 12.000	CHIP	HSS
D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.			
6	85	56	21	27	36	10	M5	T0600/HSK-A100	6726342			
8	85	56	21	27	36	10	M6	T0800/HSK-A100	6726343			
10	90	61	24	32	42	10	M8x1	T1000/HSK-A100	6726344			
12	95	66	24	32	47	10	M10x1	T1200/HSK-A100	6726345			
14	95	66	27	34	47	10	M10x1	T1400/HSK-A100	6726346			
16	100	71	27	34	50	10	M12x1	T1600/HSK-A100	6726347			
18	100	71	33	42	50	10	M12x1	T1800/HSK-A100	6726348			
20	105	76	33	42	52	10	M16x1	T2000/HSK-A100	6726349			
25	115	86	44	53	58	10	M16x1	T2500/HSK-A100	6726350			
32	120	91	44	53	62	10	M16x1	T3200/HSK-A100	6726351			
6	120	91	21	27	36	10	M5	T0600-120/HSK-A100	6726478			
8	120	91	21	27	36	10	M6	T0800-120/HSK-A100	6726479			
10	120	91	24	32	42	10	M8x1	T1000-120/HSK-A100	6726755			
12	120	91	24	32	47	10	M10x1	T1200-120/HSK-A100	6726480			
14	120	91	27	34	47	10	M10x1	T1400-120/HSK-A100	6726833			
16	120	91	27	34	50	10	M12x1	T1600-120/HSK-A100	6726820			
18	120	91	33	42	50	10	M12x1	T1800-120/HSK-A100	6727035			
20	120	91	33	42	52	10	M16x1	T2000-120/HSK-A100	6726821			
25	120	91	44	53	58	10	M16x1	T2500-120/HSK-A100	6727037			
32	120	91	44	53	62	10	M16x1	T3200/HSK-A100	6726351			
6	160	131	21	32	36	10	M5	T0600-160/HSK-A100	6726645			
8	160	131	21	32	36	10	M6	T0800-160/HSK-A100	6726646			
10	160	131	24	34	42	10	M8x1	T1000-160/HSK-A100	6726647			
12	160	131	24	34	47	10	M10x1	T1200-160/HSK-A100	6726648			
14	160	131	27	42	47	10	M10x1	T1400-160/HSK-A100	6726649			
16	160	131	27	42	50	10	M12x1	T1600-160/HSK-A100	6726650			
18	160	131	33	51	50	10	M12x1	T1800-160/HSK-A100	6727036			
20	160	131	33	51	52	10	M16x1	T2000-160/HSK-A100	6726643			
25	160	131	44	60	58	10	M16x1	T2500-160/HSK-A100	6726644			
32	160	131	44	60	62	10	M16x1	T3200-160/HSK-A100	6727038			
6	200	171	21	32	36	10	M5	T0600-200-HSK-A100	6727176			
8	200	171	21	32	36	10	M6	T0800-200-HSK-A100	6727177			
10	200	171	24	34	42	10	M8x1	T1000-200-HSK-A100	6727178			
12	200	171	24	34	47	10	M10x1	T1200-200-HSK-A100	6727179			
14	200	171	27	42	47	10	M10x1	T1400-200-HSK-A100	6727180			
16	200	171	27	42	50	10	M12x1	T1600-200-HSK-A100	6727181			
18	200	171	33	51	50	10	M12x1	T1800-200-HSK-A100	6727182			
20	200	171	33	51	52	10	M16x1	T2000-200-HSK-A100	6727183			
25	200	171	44	60	58	10	M16x1	T2500-200-HSK-A100	6727184			
32	200	171	44	60	62	10	M16x1	T3200-200-HSK-A100	6727185			
	5028428			6738303		附件请参考82页 Accessories, page 82						

T.....-C1-...HSK-A100 / Cool Jet, DIN 69893

Cool Jet 端面冷却热胀刀柄 Shrink Chucks



T.....-C1-HSKA100									G2,5/ 25.000	≤ 3µm	max. 12.000	CHIP	HSS
D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.				
6	85	56	21	27	36	10	M5	T0600-85-C1-HSKA100	5150254				
8	85	56	21	27	36	10	M6	T0800-85-C1-HSKA100	5150255				
10	90	61	24	32	42	10	M8 x1	T1000-90-C1-HSKA100	5150257				
12	95	66	24	32	47	10	M10 x1	T1200-95-C1-HSKA100	5150266				
14	95	66	27	34	47	10	M10 x1	T1400-95-C1-HSKA100	5150267				
16	100	71	27	34	50	10	M12 x1	T1600-100-C1-HSKA100	5150268				
18	100	71	33	42	50	10	M12 x1	T1800-100-C1-HSKA100	5150269				
20	105	76	33	42	52	10	M16 x1	T2000-105-C1-HSKA100	5150270				
25	115	86	44	53	58	10	M16 x1	T2500-115-C1-HSKA100	5150271				
32	120	91	44	53	62	10	M16 x1	T3200-120-C1-HSKA100	5150272				
6	120	91	21	27	36	10	M5	T0600-120-C1-HSKA100	5150279				
8	120	91	21	27	36	10	M6	T0800-120-C1-HSKA100	5150280				
10	120	91	24	32	42	10	M8 x1	T1000-120-C1-HSKA100	5150281				
12	120	91	24	32	47	10	M10 x1	T1200-120-C1-HSKA100	5150282				
14	120	91	27	34	47	10	M10 x1	T1400-120-C1-HSKA100	5150283				
16	120	91	27	34	50	10	M12 x1	T1600-120-C1-HSKA100	5150284				
18	120	91	33	42	50	10	M12 x1	T1800-120-C1-HSKA100	5150285				
20	120	91	33	42	52	10	M16 x1	T2000-120-C1-HSKA100	5150286				
25	120	91	44	53	58	10	M16 x1	T2500-120-C1-HSKA100	5150289				
32	120	91	44	53	62	10	M16 x1	T3200-120-C1-HSKA100	5150272				
6	160	131	21	32	36	10	M5	T0600-160-C1-HSKA100	5150295				
8	160	131	21	32	36	10	M6	T0800-160-C1-HSKA100	5150293				
10	160	131	24	34	42	10	M8 x1	T1000-160-C1-HSKA100	5150299				
12	160	131	24	34	47	10	M10 x1	T1200-160-C1-HSKA100	5150300				
14	160	131	27	42	47	10	M10 x1	T1400-160-C1-HSKA100	5150301				
16	160	131	27	42	50	10	M12 x1	T1600-160-C1-HSKA100	5150302				
18	160	131	33	51	50	10	M12 x1	T1800-160-C1-HSKA100	5150303				
20	160	131	33	51	52	10	M16 x1	T2000-160-C1-HSKA100	5150304				
25	160	131	44	60	58	10	M16 x1	T2500-160-C1-HSKA100	5150306				
32	160	131	44	60	62	10	M16 x1	T3200-160-C1-HSKA100	5150307				
		5028428			6738303	附件请参考82页 Accessories, page 82							

Cool-Jet 特点

- 可转为外冷
- 两个冷却孔
- 可选四个冷却孔

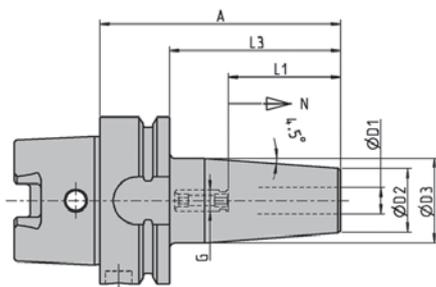
Cool-Jet execution

- for optional external cooling
- 2 closable cooling channel holes
- Optionally with 4 cooling channel holes



T... HSK-A100, DIN 69893

热胀刀柄 Shrink Chucks

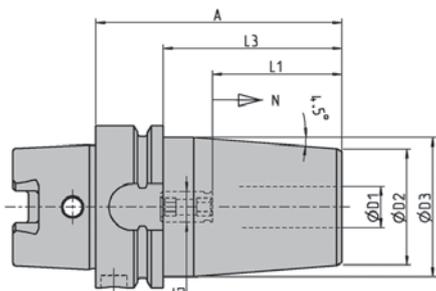


T... HSK-A100 – 英寸 Inch



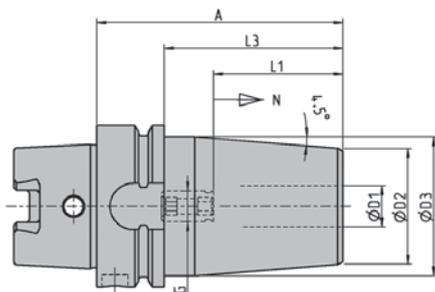
D1 [Inch]	A [Inch]	L3 [Inch]	D2 [Inch]	D3 [Inch]	L1 [Inch]	N [Inch]	G	型号 Designation	订货号 Ident No.	
0,250	3,35	2,20	0,83	1,06	1,42	0,39	M5	T0635/HSK-A100	6726432	
0,375	3,54	2,40	0,94	1,26	1,65	0,39	M8X1	T0953/HSK-A100	6726434	
0,500	3,74	2,60	1,06	1,34	1,85	0,39	M10X1	T1270/HSK-A100	6726436	
0,625	3,94	2,80	1,06	1,34	1,97	0,39	M12X1	T1588/HSK-A100	6726438	
0,750	4,13	2,99	1,30	1,65	2,05	0,39	M16X1	T1905/HSK-A100	6726497	
1,000	4,53	3,39	1,73	2,09	2,44	0,39	M16X1	T2540/HSK-A100	6726442	
0,250	4,72	3,58	0,83	1,06	1,42	0,39	M5	T0635-120/HSK-A100	5057074	
0,375	4,72	3,58	0,94	1,26	1,65	0,39	M8X1	T0953-120/HSK-A100	5057076	
0,500	4,72	3,58	1,06	1,34	1,85	0,39	M10X1	T1270-120/HSK-A100	5057079	
0,625	4,72	3,58	1,06	1,34	1,97	0,39	M12X1	T1588-120/HSK-A100	5057081	
0,750	4,72	3,58	1,30	1,65	2,05	0,39	M16X1	T1905-120/HSK-A100	5057083	
1,000	4,72	3,58	1,73	2,09	2,44	0,39	M16X1	T2540-120/HSK-A100	5057092	
1,250	4,72	3,58	1,73	2,09	2,44	0,39	M16X1	T3175/HSK-A100	6726444	
0,250	6,30	5,16	0,83	1,26	1,42	0,39	M5	T0635-160/HSK-A100	5057075	
0,375	6,30	5,16	0,94	1,34	1,65	0,39	M8X1	T0953-160/HSK-A100	5057077	
0,500	6,30	5,16	1,06	1,65	1,85	0,39	M10X1	T1270-160/HSK-A100	5057080	
0,625	6,30	5,16	1,06	1,65	1,97	0,39	M12X1	T1588-160/HSK-A100	5057082	
0,750	6,30	5,16	1,30	2,01	2,05	0,39	M16X1	T1905-160/HSK-A100	5057084	
1,000	6,30	5,16	1,73	2,36	2,44	0,39	M16X1	T2540-160/HSK-A100	5057093	
1,250	6,30	5,16	1,73	2,36	2,44	0,39	M16X1	T3175-160/HSK-A100	5057443	
	5028428			6738303			附件请参考82页 Accessories, page 82			

THD... HSK-A100, DIN 69893
 重载热胀刀柄 Heavy Duty Shrink Chucks



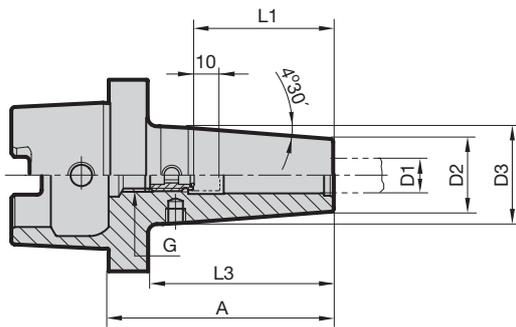
THD... HSK - A100									G2,5/ 25.000	≤ 3µm	max. 12.000	CHIP	HSS
D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.				
16	105	76	50	61	50	10	M12x1	THD1600-105/HSK-A100	5029007				
20	110	81	58	70	52	10	M16x1	THD2000-110/HSK-A100	5025872				
25	110	81	64	76	58	10	M16x1	THD2500-110/HSK-A100	5026038				
32	120	91	72	85	62	10	M16x1	THD3200-120/HSK-A100	5028982				
		5028428				6738303		附件请参考82页 Accessories, page 82					
注意事项看THD刀柄, 在第10页 Note for THD chucks, have a look at page 10													

THD... HSK - A100 – 英寸 Inch									G2,5/ 25.000	≤ 3µm	max. 12.000	CHIP	HSS
D1 [Inch]	A [Inch]	L3 [Inch]	D2 [Inch]	D3 [Inch]	L1 [Inch]	N [Inch]	G	型号 Designation	订货号 Ident No.				
0,625	4,13	2,99	1,97	2,40	1,97	0,39	M12X1	THD1588-105/HSK-A100	5054390				
0,750	4,33	3,19	2,28	2,76	2,05	0,39	M16X1	THD1905-110/HSK-A100	5054391				
1,000	4,72	3,58	2,52	2,99	2,28	0,39	M16X1	THD2540-120/HSK-A100	5054392				
1,250	4,72	3,58	2,83	3,35	2,44	0,39	M16X1	THD3175-120/HSK-A100	5054393				
		5028428				6738303		附件请参考82页 Accessories, page 82					
注意事项看THD刀柄, 在第10页 Note for THD chucks, have a look at page 10													



THD... HSK - A125									G2,5/ 25.000	≤ 3µm	max. 10.000	CHIP	HSS
D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.				
16	110	81	50	60	50	10	M12x1	THD1600-110/HSK-A125	5029874				
20	115	86	58	68	52	10	M16x1	THD2000-115/HSK-A125	5031102				
25	120	91	64	76	58	10	M16x1	THD2500-120/HSK-A125	5029870				
32	125	96	72	85	62	10	M16x1	THD3200-125/HSK-A125	5031105				
		5081044				附件请参考82页 Accessories, page 82							
注意事项看THD刀柄, 在第10页 Note for THD chucks, have a look at page 10													

THD... HSK - A125 – 英寸 Inch									G2,5/ 25.000	≤ 3µm	max. 10.000	CHIP	HSS
D1 [Inch]	A [Inch]	L3 [Inch]	D2 [Inch]	D3 [Inch]	L1 [Inch]	N [Inch]	G	型号 Designation	订货号 Ident No.				
0,625	4,33	3,19	1,97	2,36	1,97	0,39	M12X1	THD1588-110/HSK-A125	5054394				
0,750	4,53	3,39	2,28	2,68	2,05	0,39	M16X1	THD1905-115/HSK-A125	5054395				
1,000	4,92	3,78	2,52	2,99	2,28	0,39	M16X1	THD2540-125/HSK-A125	5054396				
1,250	4,92	3,78	2,83	3,35	2,44	0,39	M16X1	THD3175-125/HSK-A125	5054397				
		5081044				附件请参考82页 Accessories, page 82							
注意事项看THD刀柄, 在第10页 Note for THD chucks, have a look at page 10													



T... HSK - C32								G2,5/ 25.000	≤ 3µm	max. 25.000	HSS
D1 [mm]	A [mm]	D2 [mm]	D3 [mm]	L1 [mm]	L3 [mm]	G	型号 Designation	订货号 Ident No.			
6	65	21	26	36	55	M5	T0600-65-K1-HSKC32-S	5072296			
8	65	21	26	36	55	M6	T0800-65-K1-HSKC32-S	5072304			
10	65	24	30	41	55	M8x1	T1000-65-K1-HSKC32-S	5072305			
12	75	24	32	46	65	M10x1	T1200-75-K1-HSKC32-S	5072307			

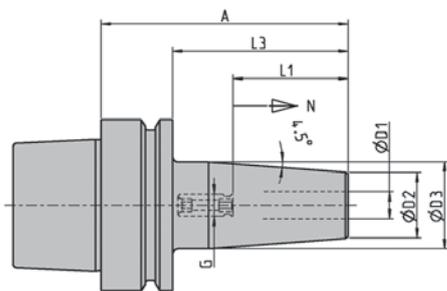
T... HSK - C40								G2,5/ 25.000	≤ 3µm	max. 25.000	HSS
D1 [mm]	A [mm]	D2 [mm]	D3 [mm]	L1 [mm]	L3 [mm]	G	型号 Designation	订货号 Ident No.			
6	70	21	30	36	60	M5	T0600-70-K1-HSKC40-S	5072308			
8	70	21	30	36	60	M6	T0800-70-K1-HSKC40-S	5072309			
10	70	24	33,5	41	60	M8x1	T1000-70-K1-HSKC40-S	5072310			
12	80	24	35	46	70	M10x1	T1200-80-K1-HSKC40-S	5072311			
14	80	27	38	46	70	M10x1	T1400-80-K1-HSKC40-S	5072318			
16	80	27	38	49	70	M12x1	T1600-80-K1-HSKC40-S	5072319			

T... HSK - C50								G2,5/ 25.000	≤ 3µm	max. 25.000	HSS
D1 [mm]	A [mm]	D2 [mm]	D3 [mm]	L1 [mm]	L3 [mm]	G	型号 Designation	订货号 Ident No.			
6	70	21	30	36	57,5	M5	T0600-70-K1-HSKC50-S	5072320			
8	70	21	30	36	57,5	M6	T0800-70-K1-HSKC50-S	5072321			
10	75	24	33	41	62,5	M8x1	T1000-75-K1-HSKC50-S	5072322			
12	80	24	34	46	67,5	M10x1	T1200-80-K1-HSKC50-S	5072325			
14	80	27	37	46	67,5	M10x1	T1400-80-K1-HSKC50-S	5072326			
16	85	27	38,5	49	72,5	M12x1	T1600-85-K1-HSKC50-S	5072327			
18	85	33	44,5	49	72,5	M12x1	T1800-85-K1-HSKC50-S	5072328			
20	90	33	45	51	77,5	M16x1	T2000-90-K1-HSKC50-S	5072329			

T... HSK - C63								G2,5/ 25.000	≤ 3µm	max. 25.000	HSS
D1 [mm]	A [mm]	D2 [mm]	D3 [mm]	L1 [mm]	L3 [mm]	G	型号 Designation	订货号 Ident No.			
6	70	21	30	36	57,5	M5	T0600-70-K1-HSKC63-S	5072330			
8	70	21	30	36	57,5	M6	T0800-70-K1-HSKC63-S	5072331			
10	75	24	34	41	62,5	M8x1	T1000-75-K1-HSKC63-S	5072332			
12	80	24	34	46	67,5	M10x1	T1200-80-K1-HSKC63-S	5072333			
14	80	27	36	46	67,5	M10x1	T1400-80-K1-HSKC63-S	5072334			
16	85	27	36	49	72,5	M12x1	T1600-85-K1-HSKC63-S	5072335			
18	85	33	44	49	72,5	M12x1	T1800-85-K1-HSKC63-S	5072336			
20	90	33	45	51	77,5	M16x1	T2000-90-K1-HSKC63-S	5072337			
25	100	44	53	57	87,5	M16x1	T2500-100-K1-HSKC63-S	5072338			
32	110	44	53	61	97,5	M16x1	T3200-110-K1-HSKC63-S	5072662			

T... HSK-E25, DIN 69893

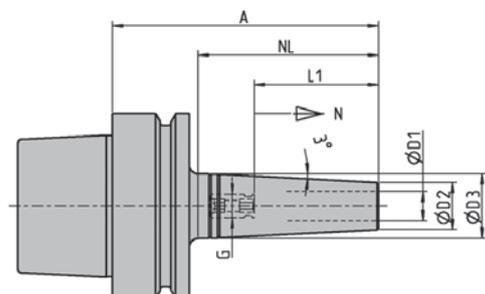
热胀刀柄 Shrink Chucks



T... HSK-E25								G2,5/ 25.000	≤ 3µm	max. 50.000	HSS
D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.		
6	50	40	15	19	36	5	M5	T0600/HSK-E25	9091169		
6	55	45	15	19	36	5	M5	T0600-55/HSK-E25	5023504		
		5100005				5100007		附件请参考82页 Accessories, page 82			

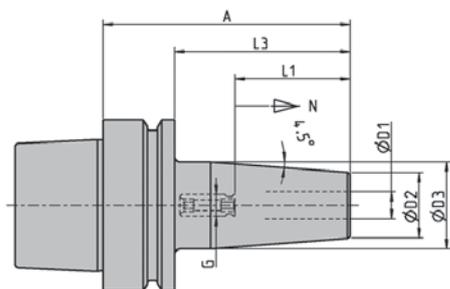
TSF... HSK-E25, DIN 69893

细长型热胀刀柄 Slim Shrink Chucks

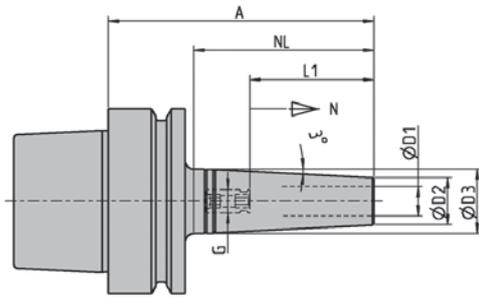


TSF... HSK-E25								G2,5/ 25.000	≤ 3µm	max. 50.000	coated	
D1 [mm]	A [mm]	NL [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.			
3	45	33	9	12,5	23	8	M6	TSF0300-33/HSK-E25	5023510			
4	45	33	10	13,5	20	4	M6	TSF0400-33/HSK-E25	5023519			
5	45	33	11	14,5	20	3	M6	TSF0500-33/HSK-E25	5023524			
6	45	33	12	15,5	36	-	-	TSF0600-33/HSK-E25	5023525			
8	50	38	14	18	36	-	-	TSF0800-38/HSK-E25	5023528			
10	50	40	16	19	42	-	-	TSF1000-40/HSK-E25	5023530			
3	55	43	9	13,5	25	10	M5	TSF0300-43/HSK-E25	5023515			
4	55	43	10	14,5	20	13	M5	TSF0400-43/HSK-E25	5023521			
3	70	58	9	15	25	10	M6	TSF0300-58/HSK-E25	5023517			
4	70	58	10	16	20	15	M6	TSF0400-58/HSK-E25	5023523			
6	70	58	12	18	36	10	M5	TSF0600-58/HSK-E25	5023527			
8	70	59	14	18	36	7	M6	TSF0800-59/HSK-E25	5023529			
10	70	60	16	19	42	5	M8	TSF1000-60/HSK-E25	5023531			
		请使用TSF专用盘片, 详见附件87页 TSF discs, see accessories page 87										
		5100005				5100007		附件请参考82页 Accessories, page 82				

T... HSK-E32, DIN 69893
 热胀刀柄 Shrink Chucks



T... HSK-E32									G2,5 _k 25.000	≤ 3µm	max. 50.000	HSS
D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.			
3	60	40	15	20	20	5	M6	T0300/HSK-E32	6726863			
4	60	40	15	20	20	5	M6	T0400/HSK-E32	6726574			
5	60	40	15	20	25	5	M6	T0500/HSK-E32	6726575			
6	70	50	20	26	36	10	M5	T0600/HSK-E32	6726289			
8	70	50	20	26	36	10	M6	T0800/HSK-E32	6726290			
10	70	50	24	29	42	10	M8x1	T1000/HSK-E32	6726291			
12	70	50	24	29	47	10	M10x1	T1200/HSK-E32	6726292			
		5064893				6738740		附件请参考82页 Accessories, page 82				

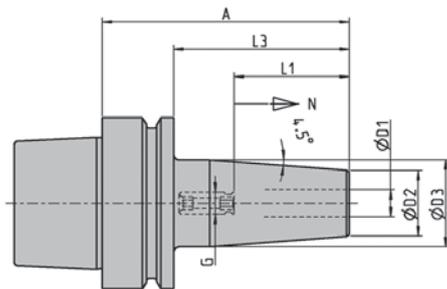


TSF... HSK - E32									G2,5/25.000	≤ 3µm	max. 50.000	coated	
D1 [mm]	A [mm]	NL [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.				
3	64	40	9	13	20	5	M6	TSF0300-40/HSK-E32	9078742				
4	64	40	10	14	20	5	M6	TSF0400-40/HSK-E32	9078744				
6	74	50	12	17	36	5	M5	TSF0600-50/HSK-E32	9078746				
8	74	50	14	19	36	5	M6	TSF0800-50/HSK-E32	9078748				
10	78	55	16	21	42	5	M8x1	TSF1000-55/HSK-E32	9078750				
3	94	70	9	16	20	5	M6	TSF0300-70/HSK-E32	9078743				
4	94	70	10	17	20	5	M6	TSF0400-70/HSK-E32	9078745				
6	104	80	12	20	36	5	M5	TSF0600-80/HSK-E32	9078747				
8	104	80	14	22	36	5	M6	TSF0800-80/HSK-E32	9078749				
10	104	80	16	22	42	5	M8x1	TSF1000-80/HSK-E32	9078751				
请使用TSF专用盘片，详见附件87页 TSF discs, see accessories page 87													
5064893			6738740			附件请参考82页 Accessories, page 82							

TSF... HSK - E32 - 英寸 Inch									G2,5/25.000	≤ 3µm	max. 50.000	coated	
D1 [Inch]	A [Inch]	NL [Inch]	D2 [Inch]	D3 [Inch]	L1 [Inch]	N [Inch]	G	型号 Designation	订货号 Ident No.				
0.125	2.52	1.57	0.39	0.55	0.79	0.20	M6	TSF0318-64/HSK-E32	5057306				
0.187	2.52	1.57	0.43	0.55	0.98	0.20	M6	TSF0476-64/HSK-E32	5057311				
0.250	2.91	1.97	0.47	0.67	1.42	0.20	M5	TSF0635-74/HSK-E32	5057313				
0.375	3.07	2.17	0.63	0.83	1.65	0.20	M8x1	TSF0953-78/HSK-E32	5057317				
0.125	3.70	2.76	0.39	0.67	0.79	0.20	M6	TSF0318-94/HSK-E32	5057309				
0.187	3.70	2.76	0.43	0.71	0.98	0.20	M6	TSF0476-94/HSK-E32	5057312				
0.250	4.09	3.15	0.47	0.79	1.42	0.20	M5	TSF0635-104/HSK-E32	5057315				
0.375	4.09	3.15	0.63	0.87	1.65	0.20	M8x1	TSF0953-104/HSK-E32	5057318				
请使用TSF专用盘片，详见附件87页 TSF discs, see accessories page 87													
5064893			6738740			附件请参考82页 Accessories, page 82							

T... HSK-E40, DIN 69893

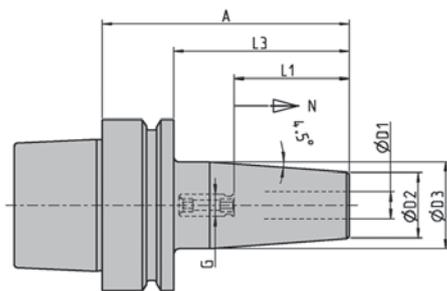
热胀刀柄 Shrink Chucks



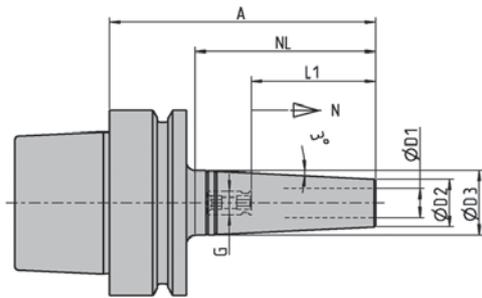
T... HSK - E40									G2.5/ 25.000	≤ 3µm	max. 42.000	coated	HSS
D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.				
3	60	40	15	20	20	5	M6	T0300/HSK-E40	6726576				
4	60	40	15	20	20	5	M6	T0400/HSK-E40	6726577				
5	60	40	15	20	25	5	M6	T0500/HSK-E40	6726578				
6	65	45	21	27	36	-	-	T0600-65/HSK-E40	6726626				
8	65	45	21	27	36	-	-	T0800-65/HSK-E40	6726627				
10	65	45	24	30	42	-	-	T1000-65/HSK-E40	9081714				
12	65	45	24	30	47	-	-	T1200-65/HSK-E40	6727546				
3	80	60	15	20	20	5	M6	T0300-80/HSK-E40	5012455				
4	80	60	15	20	20	5	M6	T0400-80/HSK-E40	9145679				
5	80	60	15	20	25	5	M6	T0500-80/HSK-E40	5031332				
6	80	60	21	27	36	10	M5	T0600/HSK-E40	6726299				
8	80	60	21	27	36	10	M6	T0800/HSK-E40	6726300				
10	80	60	24	32	42	10	M8x1	T1000/HSK-E40	6726301				
12	90	70	24	32	47	10	M10x1	T1200/HSK-E40	6726302				
16	90	70	27	34	50	10	M12x1	T1600/HSK-E40	6726304				
3	120	100	15	20	20	5	M6	T0300-120/HSK-E40	6727478				
4	120	100	15	20	20	5	M6	T0400-120/HSK-E40	6727497				
5	120	100	15	20	25	5	M6	T0500-120/HSK-E40	6727498				
6	120	100	21	27	36	10	M5	T0600-120/HSK-E40	6726989				
8	120	100	21	27	36	10	M6	T0800-120/HSK-E40	6726990				
10	120	100	24	32	42	10	M8x1	T1000-120/HSK-E40	6726991				
12	120	100	24	32	47	10	M10x1	T1200-120/HSK-E40	6726992				
		5028425				6738741		附件请参考82页 Accessories, page 82					

T... HSK-E40, DIN 69893

热胀刀柄 Shrink Chucks

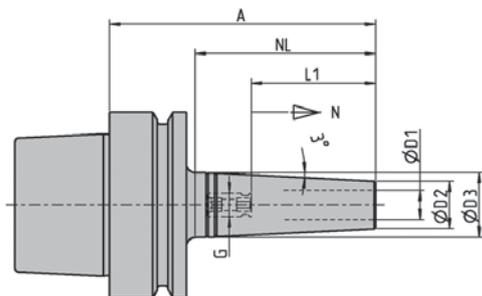


T... HSK - E40 – 英寸 Inch									G2.5/ 25.000	≤ 3µm	max. 42.000	HSS
D1 [Inch]	A [Inch]	L3 [Inch]	D2 [Inch]	D3 [Inch]	L1 [Inch]	N [Inch]	G	型号 Designation	订货号 Ident No.			
0.125	2.36	1,57	0.83	1.06	1.42	0.39	M6	T0318-60/HSK-E40	9079262			
0.187	2.36	1,57	0.83	1.06	1.42	0.39	M6	T0476-60/HSK-E40	9079269			
0.250	3.15	2,36	0.83	1.06	1.42	0.39	M5	T0635-80/HSK-E40	9079208			
0.375	3.15	2,36	0.95	1.26	1.65	0.39	M8x1	T0953-80/HSK-E40	9079215			
0.500	3.54	2,76	1.06	1.34	1.85	0.39	M10x1	T1270-90/HSK-E40	9079243			
0.625	3.54	2,76	1.06	1.34	1.97	0.39	M12x1	T1588-90/HSK-E40	9079248			
0.125	4.72	3,94	0.83	1.06	1.42	0.39	M6	T0318-120/HSK-E40	9079263			
0.187	4.72	3,94	0.83	1.06	1.42	0.39	M6	T0476-120/HSK-E40	9079270			
0.250	4.72	3,94	0.83	1.06	1.42	0.39	M5	T0635-120/HSK-E40	9079210			
0.375	4.72	3,94	0.95	1.26	1.65	0.39	M8x1	T0953-120/HSK-E40	9079216			
0.500	4.72	3,94	1.06	1.34	1.85	0.39	M10x1	T1270-120/HSK-E40	9079244			
0.625	4.72	3,94	1.06	1.34	1.97	0.39	M12x1	T1588-120/HSK-E40	9079249			
		5028425				6738741		附件请参考82页 Accessories, page 82				



TSF... HSK-E40										
D1 [mm]	A [mm]	NL [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.	
3	50	24	9	12	20	5	M6	TSF0300-24/HSK-E40	5035774	
4	50	24	10	12,5	20	5	M6	TSF0400-24/HSK-E40	5035773	
6	50	24	12	15	34	-	-	TSF0600-24/HSK-E40	5035770	
6	60	38	12	16	36	-	-	TSF0600-38/HSK-E40	9078910	
8	60	38	14	18	36	-	-	TSF0800-38/HSK-E40	9078925	
10	60	38	16	20	42	-	-	TSF1000-38/HSK-E40	9078926	
12	60	38	18	22	42	-	-	TSF1200-38/HSK-E40	9078927	
3	64	40	9	13	20	5	M6	TSF0300-40/HSK-E40	9078566	
4	64	40	10	14	20	5	M6	TSF0400-40/HSK-E40	9078570	
5	64	40	11	15	20	5	M6	TSF0500-40/HSK-E40	9122963	
6	84	60	12	18	36	5	M5	TSF0600-60/HSK-E40	9078572	
8	84	60	14	20	36	5	M6	TSF0800-60/HSK-E40	9078576	
10	84	60	16	22	42	5	M8x1	TSF1000-60/HSK-E40	9078579	
12	84	60	18	24	47	5	M10x1	TSF1200-60/HSK-E40	9078582	
3	94	70	9	16	20	5	M6	TSF0300-70/HSK-E40	9078569	
4	94	70	10	17	20	5	M6	TSF0400-70/HSK-E40	9078571	
5	94	70	11	18	20	5	M6	TSF0500-70/HSK-E40	9142898	
6	114	90	12	21	36	5	M5	TSF0600-90/HSK-E40	9078573	
8	114	90	14	23	36	5	M6	TSF0800-90/HSK-E40	9078577	
10	114	90	16	25	42	5	M8x1	TSF1000-90/HSK-E40	9078580	
12	114	90	18	27	47	5	M10x1	TSF1200-90/HSK-E40	9078583	
6	144	120	12	24	36	5	M5	TSF0600-120/HSK-E40	9078574	
8	144	120	14	26	36	5	M6	TSF0800-120/HSK-E40	9078578	
10	144	120	16	28	42	5	M8x1	TSF1000-120/HSK-E40	9078581	
12	144	120	18	30	47	5	M10x1	TSF1200-120/HSK-E40	9078584	
请使用TSF专用盘片, 详见附件87页 TSF discs, see accessories page 87										
5028425 6738741 附件请参考82页 Accessories, page 82										

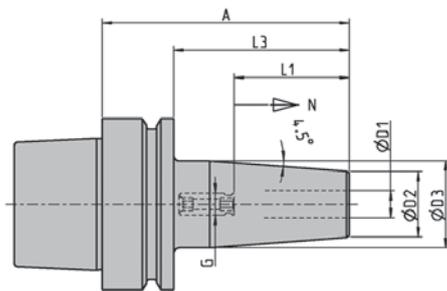
TSF... HSK-E40, DIN 69893
细长型热胀刀柄 Slim Shrink Chucks



TSF... HSK - E40 – 英寸 Inch									G2.5/ 25.000	≤ 3µm	max. 42.000	coated	
D1 [Inch]	A [Inch]	NL [Inch]	D2 [Inch]	D3 [Inch]	L1 [Inch]	N [Inch]	G	型号 Designation	订货号 Ident No.				
0.125	2.52	1.65	0.39	0.55	0.79	0.20	M6	TSF0318-64/HSK-E40	5054359				
0.187	2.52	1.57	0.39	0.55	0.98	0.20	M6	TSF0476-64/HSK-E40	5054361				
0.250	2.56	1.50	0.47	0.63	1.42	-	-	TSF0635-65/HSK-E40	-				
0.375	2.56	1.50	0.63	0.79	1.65	-	-	TSF0953-65/HSK-E40	-				
0.500	2.56	1.50	0.71	0.87	1.65	-	-	TSF1270-65/HSK-E40	-				
0.125	3.70	2.76	0.39	0.67	0.79	0.20	M6	TSF0318-94/HSK-E40	5054360				
0.187	3.70	2.76	0.43	0.71	0.98	0.20	M6	TSF0476-94/HSK-E40	5054362				
0.250	3.31	2.36	0.47	0.71	1.42	0.20	M5	TSF0635-90/HSK-E40	5054363				
0.375	3.31	2.36	0.63	0.87	1.65	0.20	M8x1	TSF0953-84/HSK-E40	5054367				
0.500	3.54	2.36	0.71	0.94	1.85	0.20	M10x1	TSF1270-90/HSK-E40	-				
0.125	4.72	2.76	0.35	0.63	0.79	0.20	M6	TSF0318-120/HSK-E40	-				
0.187	4.72	2.76	0.39	0.67	0.79	0.20	M6	TSF0476-120/HSK-E40	-				
0.250	4.49	3.54	0.47	0.83	1.42	0.20	M5	TSF0635-114/HSK-E40	5054364				
0.375	4.49	3.54	0.63	0.98	1.65	0.20	M8x1	TSF0953-114/HSK-E40	5054368				
0.500	4.72	3.54	0.71	1.06	1.85	0.20	M10x1	TSF1270-120/HSK-E40	-				
0.250	5.67	4.72	0.47	0.94	1.42	0.20	M5	TSF0635-144/HSK-E40	5054365				
0.375	5.67	4.72	0.63	1.10	1.65	0.20	M8x1	TSF0965-144/HSK-E40	5054369				
0.500	6.30	4.72	0.71	1.18	1.85	0.20	M12x1	TSF1270-160/HSK-E40	-				
请使用TSF专用盘片, 详见附件87页 TSF discs, see accessories page 87													
5028425					6738741		附件请参考82页 Accessories, page 82						

T... HSK-E50, DIN 69893

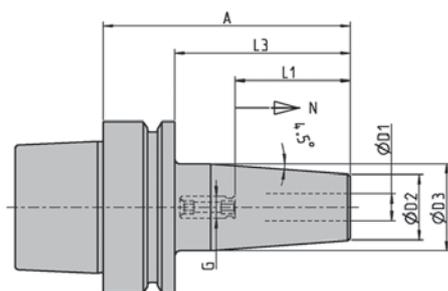
热胀刀柄 Shrink Chucks



T... HSK - E50									G2,5/ 25.000	≤ 3 μm	max. 36.000	HSS
D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.			
3	80	54	15	20	20	5	M6	T0300/HSK-E50	6726654			
4	80	54	15	20	20	5	M6	T0400/HSK-E50	6726655			
5	80	54	15	20	20	5	M6	T0500/HSK-E50	6726656			
6	80	54	21	27	36	10	M5	T0600/HSK-E50	6726309			
8	80	54	21	27	36	10	M6	T0800/HSK-E50	6726310			
10	85	59	24	32	42	10	M8x1	T1000/HSK-E50	6726311			
12	90	64	24	32	47	10	M10x1	T1200/HSK-E50	6726312			
14	90	64	27	34	47	10	M10x1	T1400/HSK-E50	6726313			
16	95	69	27	34	50	10	M12x1	T1600/HSK-E50	6726314			
18	95	69	33	42	50	10	M12x1	T1800/HSK-E50	6726315			
20	100	74	33	42	52	10	M16x1	T2000/HSK-E50	6726316			
3	120	94	15	20	20	5	M6	T0300-120/HSK-E50	6773345			
4	120	94	15	20	20	5	M6	T0400-120/HSK-E50	6727172			
5	120	94	15	20	20	5	M6	T0500-120/HSK-E50	9080804			
6	120	94	21	27	36	10	M5	T0600-120/HSK-E50	6726888			
8	120	94	21	27	36	10	M6	T0800-120/HSK-E50	6726891			
10	120	94	24	32	42	10	M8x1	T1000-120/HSK-E50	6726756			
12	120	94	24	32	47	10	M10x1	T1200-120/HSK-E50	6726896			
16	120	94	27	34	50	10	M12x1	T1600-120/HSK-E50	6726964			
		5028426				6738442		附件请参考82页 Accessories, page 82				

T... HSK-E50, DIN 69893

热胀刀柄 Shrink Chucks



T... HSK-E50 – 英寸 Inch

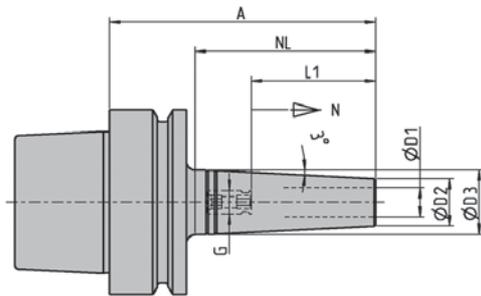
G2,5/
25.000

≤ 3µm

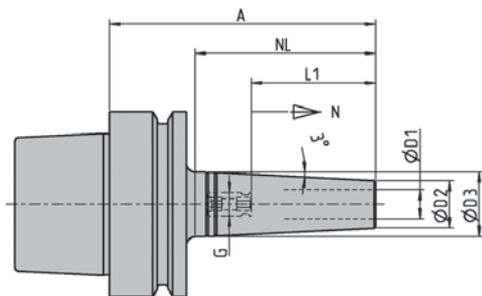
max.
36.000

HSS

D1 [Inch]	A [Inch]	L3 [Inch]	D2 [Inch]	D3 [Inch]	L1 [Inch]	N [Inch]	G	型号 Designation	订货号 Ident No.
0.125	3.15	2,13	0.83	1.06	1.42	0.39	M6	T0318-80/HSK-E50	9079264
0.187	3.15	2,13	0.83	1.06	1.42	0.39	M6	T0476-80/HSK-E50	9079271
0.250	3.15	2,13	0.83	1.06	1.42	0.39	M5	T0635-80/HSK-E50	6727386
0.375	3.35	2,32	0.95	1.26	1.65	0.39	M8x1	T0953-85/HSK-E50	6727388
0.500	3.54	2,52	1.06	1.34	1.85	0.39	M10x1	T1270-90/HSK-E50	6727390
0.625	3.74	2,72	1.06	1.34	1.97	0.39	M12x1	T1588-95/HSK-E50	9079250
0.750	3.94	2,91	1.30	1.65	2.05	0.39	M16x1	T1905-100/HSK-E50	9079256
0.125	6.30	5,28	0.83	1.26	1.42	0.39	M6	T0318-160/HSK-E50	9079265
0.187	6.30	5,28	0.83	1.26	1.42	0.39	M6	T0476-160/HSK-E50	9079272
0.250	6.30	5,28	0.83	1.26	1.42	0.39	M5	T0635-160/HSK-E50	9079211
0.375	6.30	5,28	0.95	1.34	1.65	0.39	M8x1	T0953-160/HSK-E50	9079218
0.500	6.30	5,28	1.06	1.65	1.85	0.39	M10x1	T1270-160/HSK-E50	9079245
0.625	6.30	5,28	1.06	1.65	1.97	0.39	M12x1	T1588-160/HSK-E50	9079252
0.750	6.30	5,28	1.30	2.01	2.05	0.39	M16x1	T1905-160/HSK-E50	9079257
		5028426				6738442		附件请参考82页 Accessories, page 82	



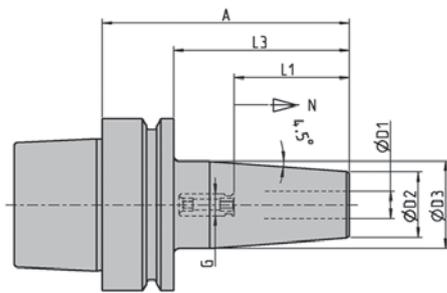
TSF... HSK-E50									G2,5/ 25.000	≤ 3µm	max. 36.000	coated	
D1 [mm]	A [mm]	NL [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.				
3	70	42	9	13	20	5	M6	TSF0300-42/HSK-E50	9078885				
4	70	42	10	14	20	5	M6	TSF0400-42/HSK-E50	9078888				
6	70	42	12	16	36	5	M5	TSF0600-42/HSK-E50	9078929				
8	70	42	14	18	36	5	M6	TSF0800-42/HSK-E50	9078931				
10	70	42	16	20	42	-	-	TSF1000-42/HSK-E50	9078932				
12	70	42	18	22	47	-	-	TSF1200-42/HSK-E50	9078933				
16	70	41	22	26	47	-	-	TSF1600-41/HSK-E50	5038979				
6	90	60	12	18	36	5	M5	TSF0600-60/HSK-E50	9078892				
8	90	60	14	20	36	5	M6	TSF0800-60/HSK-E50	9078895				
10	90	60	16	22	42	5	M8x1	TSF1000-60/HSK-E50	9078898				
12	90	60	18	24	47	5	M10x1	TSF1200-60/HSK-E50	9078901				
16	90	60	22	28	50	5	M16x1	TSF1600-60/HSK-E50	9078906				
3	100	70	9	16	20	5	M6	TSF0300-70/HSK-E50	9078887				
4	100	70	10	17	20	5	M6	TSF0400-70/HSK-E50	9078889				
6	120	90	12	21	36	5	M5	TSF0600-90/HSK-E50	9078893				
8	120	90	14	23	36	5	M6	TSF0800-90/HSK-E50	9078896				
10	120	90	16	25	42	5	M8x1	TSF1000-90/HSK-E50	9078899				
12	120	90	18	27	47	5	M10x1	TSF1200-90/HSK-E50	9078902				
16	120	90	22	31	50	5	M16x1	TSF1600-90/HSK-E50	9078908				
6	150	120	12	24	36	5	M5	TSF0600-120/HSK-E50	9078894				
8	150	120	14	26	36	5	M6	TSF0800-120/HSK-E50	9078897				
10	150	120	16	28	42	5	M8x1	TSF1000-120/HSK-E50	9078900				
12	150	120	18	30	47	5	M10x1	TSF1200-120/HSK-E50	9078903				
16	150	120	22	34	50	5	M16x1	TSF1600-120/HSK-E50	9078909				
请使用TSF专用盘片，详见附件87页 TSF discs, see accessories page 87													
5028426		6738442		附件请参考82页 Accessories, page 82									



TSF... HSK-E50 – 英寸 Inch									G2.5/ 25.000	≤ 3µm	max. 36.000	coated	
D1 [Inch]	A [Inch]	NL [Inch]	D2 [Inch]	D3 [Inch]	L1 [Inch]	N [Inch]	G	型号 Designation	订货号 Ident No.				
0.125	2.76	1.65	0.39	0.55	0.79	0.20	M6	TSF0318-70/HSK-E50	5054183				
0.187	2.76	1.65	0.39	0.55	0.98	0.20	M6	TSF0476-70/HSK-E50	5054185				
0.250	2.76	1.65	0.47	0.63	1.42	0.20	M5	TSF0635-70/HSK-E50	5054196				
0.375	2.76	1.65	0.63	0.79	1.65	0.20	–	TSF0953-70/HSK-E50	5054200				
0.500	2.76	1.65	0.71	0.87	1.85	–	–	TSF1270-70/HSK-E50	–				
0.625	2.76	1.65	0.87	1.02	1.85	–	–	TSF1588-70/HSK-E50	–				
0.250	3.54	2.36	0.47	0.71	1.42	0.20	M5	TSF0635-90/HSK-E50	5054197				
0.375	3.54	2.36	0.63	0.87	1.65	0.20	M8x1	TSF0953-90/HSK-E50	5054201				
0.500	3.54	2.36	0.79	1.02	1.85	0.20	M10x1	TSF1270-90/HSK-E50	5054205				
0.625	3.54	2.36	0.87	1.10	1.97	0.20	M10x1	TSF1588-90/HSK-E50	5054208				
0.125	3.94	2.76	0.39	0.67	0.79	0.20	M6	TSF0318-100/HSK-E50	5054184				
0.187	3.94	2.76	0.43	0.71	0.98	0.20	M6	TSF0476-100/HSK-E50	5054186				
0.250	4.72	3.54	0.47	0.83	1.42	0.20	M5	TSF0635-120/HSK-E50	5054198				
0.375	4.72	3.54	0.63	0.98	1.65	0.20	M8x1	TSF0953-120/HSK-E50	5054202				
0.500	4.72	3.54	0.79	1.14	1.85	0.20	M10x1	TSF1270-120/HSK-E50	5054206				
0.625	4.72	3.54	0.87	1.22	1.97	0.20	M10x1	TSF1588-120/HSK-E50	5054209				
0.250	5.91	4.88	0.47	0.94	1.42	0.20	M5	TSF0635-150/HSK-E50	5054199				
0.375	5.91	4.72	0.63	1.10	1.65	0.20	M8x1	TSF0953-150/HSK-E50	5054203				
0.500	5.91	4.72	0.79	1.26	1.85	0.20	M10x1	TSF1270-150/HSK-E50	5054207				
0.625	5.91	4.72	0.87	1.34	1.97	0.20	M10x1	TSF1588-150/HSK-E50	5054210				
	请使用TSF专用盘片, 详见附件87页 TSF discs, see accessories page 87												
	5028426		6738442	附件请参考82页 Accessories, page 82									

T... HSK-E63, DIN 69893

热胀刀柄 Shrink Chucks



T... HSK - E63									G2,5/25.000	≤ 3µm	max. 30.000	HSS
D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.			
6	80	54	21	27	36	10	M5	T0600/HSK-E63	6726319			
8	80	54	21	27	36	10	M6	T0800/HSK-E63	6726320			
10	85	59	24	32	42	10	M8x1	T1000/HSK-E63	6726321			
12	90	64	24	32	47	10	M10x1	T1200/HSK-E63	6726322			
14	90	64	27	34	47	10	M10x1	T1400/HSK-E63	6726323			
16	95	69	27	34	50	10	M12x1	T1600/HSK-E63	6726324			
18	95	69	33	42	50	10	M12x1	T1800/HSK-E63	6726325			
20	100	74	33	42	52	10	M16x1	T2000/HSK-E63	6726326			
25	115	89	44	53	58	10	M16x1	T2500/HSK-E63	6726327			
		5025376				6738421		附件请参考82页 Accessories, page 82				

HSK

CAT

AD/ADF

JD/JDF/BT

TSFV

LNE

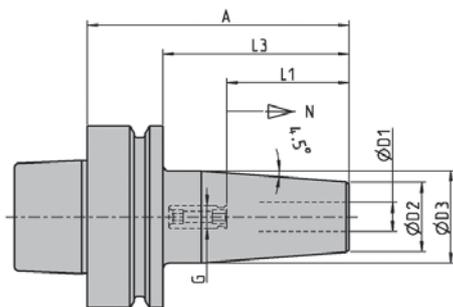
TER

MMS/MQL

Appendix

T... HSK-F40, DIN 69893

热胀刀柄 Shrink Chucks



T... HSK-F40

G2,5/
25.000

≤ 3µm

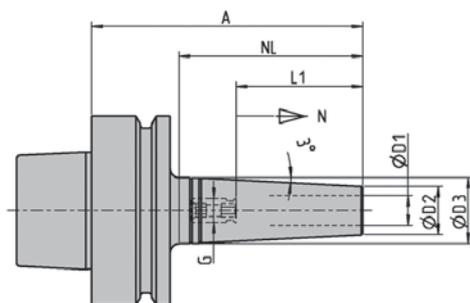
max.
50.000

HSS

D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.
3	60	40	15	20	20	5	M6	T0300-60/HSK-F40	5036785
4	60	40	15	20	20	5	M6	T0400-60/HSK-F40	5036786
5	60	40	15	20	20	5	M6	T0500-60/HSK-F40	5036788
6	65	45	21	27	36	5	M5	T0600-65/HSK-F40	5026620
8	65	45	21	27	36	5	M6	T0800-65/HSK-F40	5036791
10	65	45	24	31	42	5	M8x1	T1000-65/HSK-F40	5036792
12	65	45	24	31	42	5	M10x1	T1200-65/HSK-F40	5036793
6	80	60	21	27	36	10	M5	T0600-80/HSK-F40	5036794
8	80	60	21	27	36	10	M6	T0800-80/HSK-F40	5036795
10	80	60	24	32	42	10	M8x1	T1000-80/HSK-F40	5036797
12	90	70	24	32	47	10	M10x1	T1200-90/HSK-F40	5036798
16	90	70	27	34	50	10	M12x1	T1600-90/HSK-F40	5036799

TSF... HSK-F40, DIN 69893

细长型热胀刀柄 Slim Shrink Chucks



TSF... HSK-F40

G2,5/
25.000

≤ 3µm

max.
50.000

coated



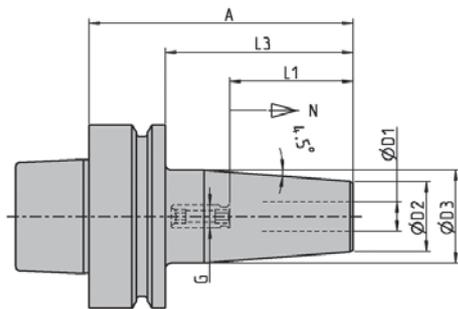
D1 [mm]	A [mm]	NL [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.
6	70	48	12	17	36	10	M5	TSF0600-48/HSK-F40	5083004
8	70	48	14	19	36	10	M6	TSF0800-48/HSK-F40	5083009
10	80	58	16	22	42	10	M8x1	TSF1000-58/HSK-F40	-
12	80	58	18	24	42	10	M10x1	TSF1200-58/HSK-F40	-



请使用TSF专用盘片，详见附件87页 TSF discs, see accessories page 87

T... HSK-F63, DIN 69893

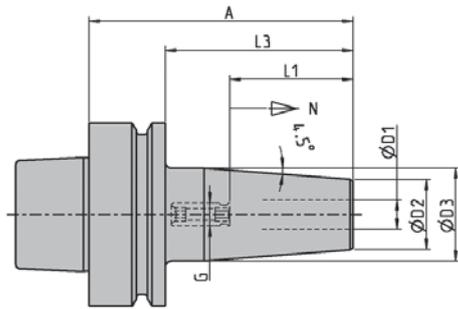
热胀刀柄 Shrink Chucks



T... HSK - F63									G2,5/ 25.000	≤ 3µm	max. 36.000	HSS
D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.			
3	90	54	15	20	20	5	M6	T0300/HSK-F63	9107682			
4	90	54	15	20	20	5	M6	T0400/HSK-F63	6773733			
5	90	54	15	20	25	5	M6	T0500/HSK-F63	9091580			
6	90	64	21	27	36	10	M5	T0600-90/HSK-F63	9122311			
8	90	64	21	27	36	10	M6	T0800-90/HSK-F63	9122312			
10	90	64	24	32	42	10	M8x1	T1000/HSK-F63	6726373			
12	90	64	24	32	47	10	M10x1	T1200/HSK-F63	6726374			
14	95	69	27	34	47	10	M10x1	T1400/HSK-F63	6726393			
16	95	69	27	34	50	10	M12x1	T1600/HSK-F63	6726414			
18	95	69	33	42	50	10	M12x1	T1800/HSK-F63	6726415			
20	100	74	33	42	52	10	M16x1	T2000/HSK-F63	6726375			
25	115	89	36	42	58	10	M16x1	T2500/HSK-F63	6727436			
3	120	94	15	20	20	5	M6	T0300-120/HSK-F63	9115118			
4	120	94	15	20	20	5	M6	T0400-120/HSK-F63	9115149			
5	120	94	15	20	25	5	M6	T0500-120/HSK-F63	9115150			
6	120	94	21	27	36	10	M5	T0600-120/HSK-F63	9075284			
8	120	94	21	27	36	10	M6	T0800-120/HSK-F63	6726841			
10	120	94	24	32	42	10	M8x1	T1000-120/HSK-F63	6727435			
12	120	94	24	32	47	10	M10x1	T1200-120/HSK-F63	6726810			
14	120	94	27	34	47	10	M10x1	T1400-120/HSK-F63	9115151			
16	120	94	27	34	50	10	M12x1	T1600-120/HSK-F63	9077033			
18	120	94	33	42	50	10	M12x1	T1800-120/HSK-F63	9115152			
20	120	94	33	42	52	10	M16x1	T2000-120/HSK-F63	9115153			
3	160	134	15	27	20	5	M6	T0300-160/HSK-F63	9115154			
4	160	134	15	27	20	5	M6	T0400-160/HSK-F63	9115155			
5	160	134	15	27	25	5	M6	T0500-160/HSK-F63	9115156			
6	160	134	21	32	36	10	M5	T0600-160/HSK-F63	9115158			
8	160	134	21	32	36	10	M6	T0800-160/HSK-F63	9080135			
10	160	134	24	34	42	10	M8x1	T1000-160/HSK-F63	9080136			
12	160	134	24	34	47	10	M10x1	T1200-160/HSK-F63	6727465			
14	160	134	27	42	47	10	M10x1	T1400-160/HSK-F63	9115160			
16	160	134	27	42	50	10	M12x1	T1600-160/HSK-F63	9097804			
18	160	134	33	51	50	10	M12x1	T1800-160/HSK-F63	9115162			
20	160	134	33	51	52	10	M16x1	T2000-160/HSK-F63	9075282			

T... HSK-F63, DIN 69893

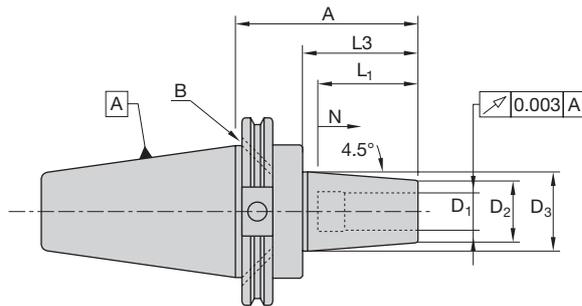
热胀刀柄 Shrink Chucks



T... HSK - F63 – 英寸 Inch									G2,5/ 25.000	≤ 3µm	max. 36.000	HSS
D1 [Inch]	A [Inch]	L3 [Inch]	D2 [Inch]	D3 [Inch]	L1 [Inch]	N [Inch]	G	型号 Designation	订货号 Ident No.			
0,250	3,54	2,52	0,83	1,06	1,42	0,39	M5	T0635-90/HSK-F63	5057126			
0,312	3,54	2,52	0,83	1,06	1,42	0,39	M6	T0794-90/HSK-F63	5061847			
0,375	3,54	2,52	0,94	1,26	1,65	0,39	M8X1	T0953-90/HSK-F63	5057131			
0,500	3,54	2,52	1,06	1,34	1,85	0,39	M10X1	T1270-95/HSK-F63	5057133			
0,625	3,74	2,72	1,06	1,34	1,97	0,39	M12X1	T1588-95/HSK-F63	5057140			
0,750	3,94	2,91	1,30	1,65	2,05	0,39	M16X1	T1905-100/HSK-F63	5057142			
1,000	4,53	3,50	1,73	2,09	2,44	0,39	M16X1	T2540-115/HSK-F63	5057148			

T... CAT 40, ANSI B5.50

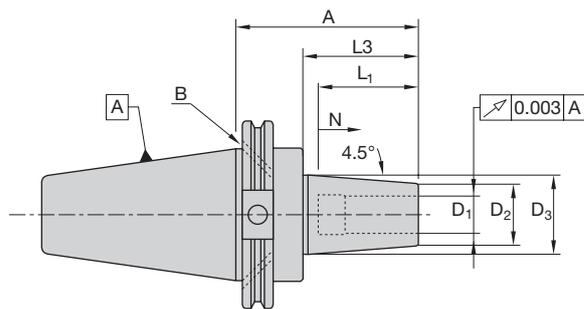
热胀刀柄 Shrink Chucks



T... CAT 40 – 英寸 Inch								G2,5/25.000	≤ 3 μm	max. 18.000	HSS
D1 [Inch]	A [Inch]	L3 [Inch]	D2 [Inch]	D3 [Inch]	L1 [Inch]	N [Inch]	G	型号 Designation	订货号 Ident No.		
0,125	3,74	2,36	0,59	0,79	0,79	0,20	M6	T0318-95/CAT40ADB-UNC	9087264		
0,187	3,74	2,36	0,59	0,79	0,98	0,20	M6	T0476-95/CAT40ADB-UNC	9087265		
0,250	3,74	2,36	0,83	1,06	1,42	0,39	M5	T0635/CAT40ADB-UNC	9075136		
0,312	3,74	2,36	0,83	1,06	1,42	0,39	M6	T0794-95/CAT40ADB-UNC	9087266		
0,375	3,74	2,36	0,94	1,26	1,65	0,39	M8X1	T0953/CAT40ADB-UNC	9074678		
0,500	3,74	2,36	1,06	1,34	1,85	0,39	M10X1	T1270/CAT40ADB-UNC	9074679		
0,625	3,74	2,36	1,06	1,34	1,97	0,39	M12X1	T1588/CAT40ADB-UNC	9074680		
0,750	3,74	2,36	1,30	1,65	2,05	0,39	M16X1	T1905/CAT40ADB-UNC	9074681		
1,000	3,94	2,56	1,73	2,09	2,44	0,39	M16X1	T2540-100/CAT40ADB-UNC	9074675		
1,250	3,94	2,56	1,73	2,09	2,44	0,39	M16X1	T3175-100/CAT40ADB-UNC	9074647		
0,125	4,72	3,34	0,59	0,79	0,79	0,20	M6	T0318-120/CAT40ADB-UNC	9087267		
0,187	4,72	3,34	0,59	0,79	0,98	0,20	M6	T0476-120/CAT40ADB-UNC	9087268		
0,250	4,72	3,34	0,83	1,06	1,42	0,39	M5	T0635-120/CAT40ADB-UNC	9074633		
0,312	4,72	3,34	0,83	1,06	1,42	0,39	M6	T0794-120/CAT40ADB-UNC	9087269		
0,375	4,72	3,34	0,94	1,26	1,65	0,39	M8X1	T0953-120/CAT40ADB-UNC	9074635		
0,500	4,72	3,34	1,06	1,34	1,85	0,39	M10X1	T1270-120/CAT40ADB-UNC	9074637		
0,625	4,72	3,34	1,06	1,34	1,97	0,39	M12X1	T1588-120/CAT40ADB-UNC	9074639		
0,750	4,72	3,34	1,30	1,65	2,05	0,39	M16X1	T1905-120/CAT40ADB-UNC	9074641		
1,000	4,72	3,34	1,73	2,09	2,44	0,39	M16X1	T2540-120/CAT40ADB-UNC	9074645		
1,250	4,72	3,34	1,73	2,09	2,44	0,39	M16X1	T3175-120/CAT40ADB-UNC	9074648		
0,125	6,30	4,92	0,59	0,79	0,79	0,20	M6	T0318-160/CAT40ADB-UNC	9087270		
0,187	6,30	4,92	0,59	0,79	0,98	0,20	M6	T0476-160/CAT40ADB-UNC	9087271		
0,250	6,30	4,92	0,83	1,26	1,42	0,39	M5	T0635-160/CAT40ADB-UNC	9074634		
0,312	6,30	4,92	0,83	1,26	1,42	0,39	M6	T0794-160/CAT40ADB-UNC	9087272		
0,375	6,30	4,92	0,94	1,34	1,65	0,39	M8X1	T0953-160/CAT40ADB-UNC	9074636		
0,500	6,30	4,92	1,06	1,65	1,85	0,39	M10X1	T1270-160/CAT40ADB-UNC	9074638		
0,625	6,30	4,92	1,06	1,65	1,97	0,39	M12X1	T1588-160/CAT40ADB-UNC	9074640		
0,750	6,30	4,92	1,30	1,75	2,05	0,39	M16X1	T1905-160/CAT40ADB-UNC	9074642		
1,000	6,30	4,92	1,73	2,09	2,44	0,39	M16X1	T2540-160/CAT40ADB-UNC	9074646		
1,250	6,30	4,92	1,73	2,09	2,44	0,39	M16X1	T3175-160/CAT40ADB-UNC	9074649		

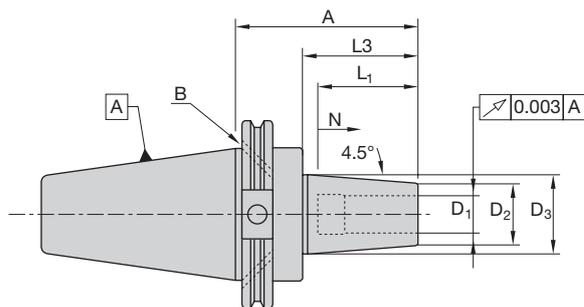
T... CAT 40, ANSI B5.50

热胀刀柄 Shrink Chucks

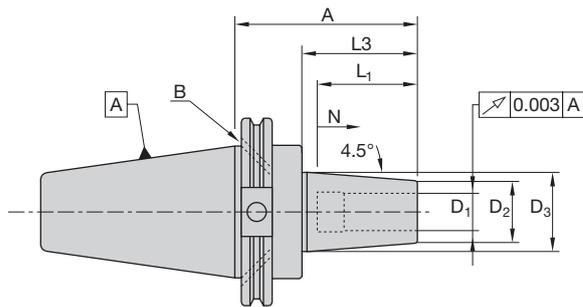


T... CAT 40								G2,5/ 25.000	≤ 3µm	max. 18.000	HSS
D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.		
3	95	60	15	20	20	5	M6	T0300-95/CAT40ADB-UNC	9087273		
4	95	60	15	20	20	5	M6	T0400-95/CAT40ADB-UNC	9087286		
5	95	60	15	20	25	5	M6	T0500-95/CAT40ADB-UNC	9087287		
6	95	60	21	27	36	10	M5	T0600-95/CAT40ADB-UNC	9074627		
8	95	60	21	27	36	10	M6	T0800-95/CAT40ADB-UNC	9074628		
10	95	60	24	32	42	10	M8x1	T1000-95/CAT40ADB-UNC	9074629		
12	95	60	24	32	47	10	M10x1	T1200-95/CAT40ADB-UNC	9074630		
14	95	60	27	34	47	10	M10x1	T1400-95/CAT40ADB-UNC	9074658		
16	95	60	27	34	50	10	M12x1	T1600-95/CAT40ADB-UNC	9074631		
18	95	60	33	42	50	10	M12x1	T1800-95/CAT40ADB-UNC	9074664		
20	95	60	33	42	52	10	M16x1	T2000-95/CAT40ADB-UNC	9074632		
25	100	65	44	53	58	10	M16x1	T2500-100/CAT40ADB-UNC	9074760		
32	100	65	44	53	62	10	M16x1	T3200-100/CAT40ADB-UNC	9074672		
6	120	85	21	27	36	10	M5	T0600-120/CAT40ADB-UNC	9074650		
8	120	85	21	27	36	10	M6	T0800-120/CAT40ADB-UNC	9074652		
10	120	85	24	32	42	10	M8x1	T1000-120/CAT40ADB-UNC	9074654		
12	120	85	24	32	47	10	M10x1	T1200-120/CAT40ADB-UNC	9074656		
14	120	85	27	34	47	10	M10x1	T1400-120/CAT40ADB-UNC	9074659		
16	120	85	27	34	50	10	M12x1	T1600-120/CAT40ADB-UNC	9074662		
18	120	85	33	42	50	10	M12x1	T1800-120/CAT40ADB-UNC	9074665		
20	120	85	33	42	52	10	M16x1	T2000-120/CAT40ADB-UNC	9074667		
25	120	85	44	53	58	10	M16x1	T2500-120/CAT40ADB-UNC	9074669		
32	120	85	44	53	62	10	M16x1	T3200-120/CAT40ADB-UNC	9074673		
6	160	125	21	32	36	10	M5	T0600-160/CAT40ADB-UNC	9074651		
8	160	125	21	32	36	10	M6	T0800-160/CAT40ADB-UNC	9074653		
10	160	125	24	34	42	10	M8x1	T1000-160/CAT40ADB-UNC	9074655		
12	160	125	24	34	47	10	M10x1	T1200-160/CAT40ADB-UNC	9074657		
14	160	125	27	42	47	10	M10x1	T1400-160/CAT40ADB-UNC	9074661		
16	160	125	27	42	50	10	M12x1	T1600-160/CAT40ADB-UNC	9074663		
18	160	125	33	44	50	10	M12x1	T1800-160/CAT40ADB-UNC	9074666		
20	160	125	44	53	52	10	M16x1	T2000-160/CAT40ADB-UNC	9074668		
25	160	125	44	53	58	10	M16x1	T2500-160/CAT40ADB-UNC	9074671		
32	160	125	44	53	62	10	M16x1	T3200-160/CAT40ADB-UNC	9074674		

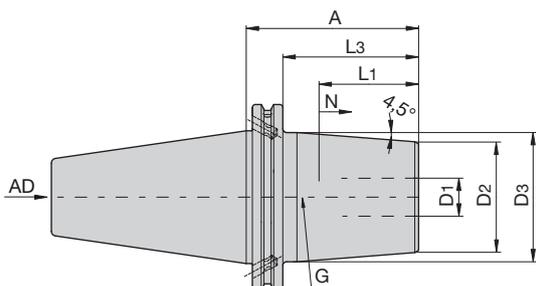
T... CAT 50, ANSI B5.50
热胀刀柄 Shrink Chucks



T... CAT 50 – 英寸 Inch								G2,5/ 25.000	≤ 3µm	max. 12.000	HSS
D1 [Inch]	A [Inch]	L3 [Inch]	D2 [Inch]	D3 [Inch]	L1 [Inch]	N [Inch]	G	型号 Designation	订货号 Ident No.		
0,250	3,74	2,36	0,83	1,06	1,42	0,39	M5	T0635/CAT50ADB-UNC	9074085		
0,375	3,74	2,36	0,94	1,26	1,65	0,39	M8X1	T0953/CAT50ADB-UNC	9074102		
0,500	3,74	2,36	1,06	1,34	1,85	0,39	M10X1	T1270/CAT50ADB-UNC	9074105		
0,625	3,74	2,36	1,06	1,34	1,97	0,39	M12X1	T1588/CAT50ADB-UNC	9074108		
0,750	3,74	2,36	1,30	1,65	2,05	0,39	M16X1	T1905/CAT50ADB-UNC	9074111		
1,000	4,13	2,75	1,73	2,09	2,44	0,39	M16X1	T2540/CAT50ADB-UNC	9074115		
1,250	4,13	2,75	1,73	2,09	2,44	0,39	M16X1	T3175/CAT50ADB-UNC	9074118		
0,250	4,72	3,35	0,83	1,06	1,42	0,39	M5	T0635-120/CAT50ADB-UNC	9074098		
0,375	4,72	3,35	0,94	1,26	1,65	0,39	M8X1	T0953-120/CAT50ADB-UNC	9074103		
0,500	4,72	3,35	1,06	1,34	1,85	0,39	M10X1	T1270-120/CAT50ADB-UNC	9074106		
0,625	4,72	3,35	1,06	1,34	1,97	0,39	M12X1	T1588-120/CAT50ADB-UNC	9074109		
0,750	4,72	3,35	1,30	1,65	2,05	0,39	M16X1	T1905-120/CAT50ADB-UNC	9074112		
1,250	4,72	3,35	1,73	2,09	2,44	0,39	M16X1	T3175-120/CAT50ADB-UNC	9074119		
0,250	6,30	4,92	0,83	1,26	1,42	0,39	M5	T0635-160/CAT50ADB-UNC	9074101		
0,375	6,30	4,92	0,94	1,34	1,65	0,39	M8X1	T0953-160/CAT50ADB-UNC	9074104		
0,500	6,30	4,92	1,06	1,65	1,85	0,39	M10X1	T1270-160/CAT50ADB-UNC	9074107		
0,625	6,30	4,92	1,06	1,65	1,97	0,39	M12X1	T1588-160/CAT50ADB-UNC	9074110		
0,750	6,30	4,92	1,30	2,01	2,05	0,39	M16X1	T1905-160/CAT50ADB-UNC	9074113		
1,000	6,30	4,92	1,73	2,36	2,44	0,39	M16X1	T2540-160/CAT50ADB-UNC	9074117		
1,250	6,30	4,92	1,73	2,36	2,44	0,39	M16X1	T3175-160/CAT50ADB-UNC	9074120		



T... CAT 50								G2,5/ 25.000	≤ 3µm	max. 12.000	HSS
D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.		
6	95	60	21	27	36	10	M5	T0600-95/CAT50ADB-UNC	9074144		
8	95	60	21	27	36	10	M6	T0800-95/CAT50ADB-UNC	9074147		
10	95	60	24	32	42	10	M8x1	T1000-95/CAT50ADB-UNC	9074150		
12	95	60	24	32	47	10	M10x1	T1200-95/CAT50ADB-UNC	9074153		
14	95	60	27	34	47	10	M10x1	T1400-95/CAT50ADB-UNC	9074156		
16	95	60	27	34	50	10	M12x1	T1600-95/CAT50ADB-UNC	9074160		
18	95	60	33	42	50	10	M12x1	T1800-95/CAT50ADB-UNC	9074163		
20	95	60	33	42	52	10	M16x1	T2000-95/CAT50ADB-UNC	9074166		
25	105	70	44	53	58	10	M16x1	T2500-105/CAT50ADB-UNC	9074170		
32	105	70	44	53	62	10	M16x1	T3200-105/CAT50ADB-UNC	9074173		
6	160	125	21	32	36	10	M5	T0600-160/CAT50ADB-UNC	9074146		
8	160	125	21	32	36	10	M6	T0800-160/CAT50ADB-UNC	9074149		
10	160	125	24	34	42	10	M8x1	T1000-160/CAT50ADB-UNC	9074152		
12	160	125	24	34	47	10	M10x1	T1200-160/CAT50ADB-UNC	9074155		
14	160	125	27	42	47	10	M10x1	T1400-160/CAT50ADB-UNC	9074159		
16	160	125	27	42	50	10	M12x1	T1600-160/CAT50ADB-UNC	9074162		
18	160	125	33	51	50	10	M12x1	T1800-160/CAT50ADB-UNC	9074165		
20	160	125	33	51	52	10	M16x1	T2000-160/CAT50ADB-UNC	9074168		
25	160	125	44	60	58	10	M16x1	T2500-160/CAT50ADB-UNC	9074172		
32	160	125	44	60	62	10	M16x1	T3200-160/CAT50ADB-UNC	9074175		

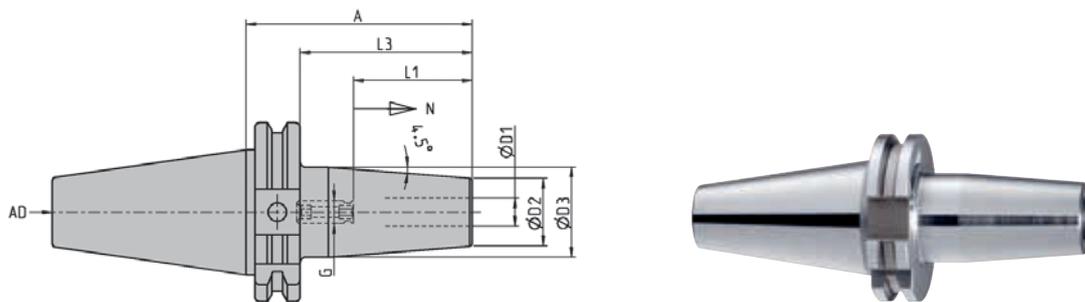


THD... CAT40 – 英寸 Inch									G2.5/ 25.000	≤ 3µm	max. 12.000	HSS
D1 [Inch]	A [Inch]	L3 [Inch]	D2 [Inch]	D3 [Inch]	L1 [Inch]	N [Inch]	G	型号 Designation	订货号 Ident No.			
0.625	4.33	3.58	1.97	2.36	1.97	0.39	M12x1	THD1588-110/CAT40ADB-UNC	5057676			
0.750	4.33	3.58	2.28	2.68	2.05	0.39	M16x1	THD1905-110/CAT40ADB-UNC	5057677			

注意事项看THD刀柄，在第10页 Note for THD chucks, have a look at page 10

THD... CAT50 – 英寸 Inch									G2.5/ 25.000	≤ 3µm	max. 12.000	HSS
D1 [Inch]	A [Inch]	L3 [Inch]	D2 [Inch]	D3 [Inch]	L1 [Inch]	N [Inch]	G	型号 Designation	订货号 Ident No.			
0.625	4.33	3.58	1.97	2.36	1.97	0.39	M12x1	THD1588-110/CAT50ADB-UNC	-			
0.750	4.33	3.58	2.28	2.68	2.05	0.39	M12x1	THD1905-110/CAT50ADB-UNC	-			
1.000	4.33	3.58	2.52	2.99	2.44	0.39	M16x1	THD2540-110/CAT50ADB-UNC	5057678			
1.250	4.33	3.58	2.83	3.35	2.44	0.39	M16x1	THD3175-110/CAT50ADB-UNC	5057679			

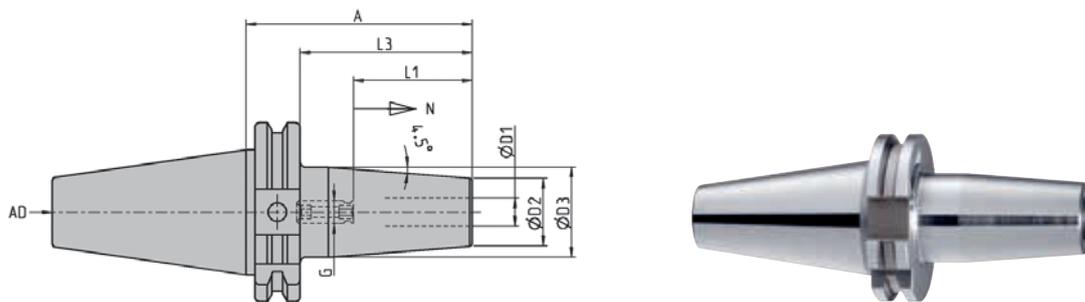
注意事项看THD刀柄，在第10页 Note for THD chucks, have a look at page 10



T... AD30 (Alt/Old: DIN 69871)								G2,5/ 25.000	≤ 3µm	max. 20.000	HSS
D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.		
6	71	52	21	27	36	10	M5	T0600-71/AD30	5038916		
8	71	52	21	27	36	10	M6	T0800-71/AD30	5038934		
10	71	52	24	32	42	10	M8x1	T1000-71/AD30	5038935		
12	71	52	24	32	47	10	M10x1	T1200-71/AD30	5038936		
16	71	52	27	34	50	10	M12x1	T1600-71/AD30	5038938		
3	80	61	15	20	20	5	M6	T0300-80/AD30	9076052		
4	80	61	15	20	20	5	M6	T0400-80/AD30	9076053		
5	80	61	15	20	25	5	M6	T0500-80/AD30	9101810		
6	80	61	21	27	36	10	M5	T0600/AD30	6727264		
8	80	61	21	27	36	10	M6	T0800/AD30	6727265		
10	80	61	24	32	42	10	M8x1	T1000/AD30	6727266		
12	80	61	24	32	47	10	M10x1	T1200/AD30	6727272		
14	80	61	27	34	47	10	M10x1	T1400/AD30	6727261		
16	80	61	27	34	50	10	M12x1	T1600/AD30	9118789		
18	80	61	33	42	50	10	M12x1	T1800/AD30	9118792		
20	80	61	33	42	52	10	M16x1	T2000/AD30	9118795		
3	120	101	15	20	20	5	M6	T0300-120/AD30	-		
4	120	101	15	20	20	5	M6	T0400-120/AD30	5038939		
5	120	101	15	20	25	5	M6	T0500-120/AD30	-		
6	120	101	21	27	36	10	M5	T0600-120/AD30	9118796		
8	120	101	21	27	36	10	M6	T0800-120/AD30	9118801		
10	120	101	24	32	42	10	M8x1	T1000-120/AD30	9118803		
12	120	101	24	32	47	10	M10x1	T1200-120/AD30	9118813		
16	120	101	27	34	50	10	M12x1	T1600-120/AD30	9118814		

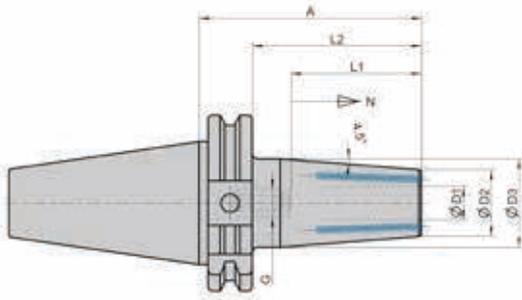
拉钉参阅80页 Pull stud see page 80

T... AD40, DIN ISO7388-1
SK40 热胀刀柄 Shrink Chucks



T... AD40 (Alt/Old: DIN 69871)									G2,5, 25.000	≤ 3µm	max. 18.000	HSS
D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.			
3	80	61	15	20	20	5	M6	T0300/AD40	6726852			
4	80	61	15	20	20	5	M6	T0400/AD40	6726537			
5	80	61	15	20	25	5	M6	T0500/AD40	6726538			
6	80	61	21	27	36	10	M5	T0600/AD40	6726193			
8	80	61	21	27	36	10	M6	T0800/AD40	6726194			
10	80	61	24	32	42	10	M8x1	T1000/AD40	6726195			
12	80	61	24	32	47	10	M10x1	T1200/AD40	6726196			
14	80	61	27	34	47	10	M10x1	T1400/AD40	6726276			
16	80	61	27	34	50	10	M12x1	T1600/AD40	6726197			
18	80	61	33	42	50	10	M12x1	T1800/AD40	6726277			
20	80	61	33	42	52	10	M16x1	T2000/AD40	6726198			
25	100	81	44	50	58	10	M16x1	T2500/AD40	6726199			
32	100	81	44	50	62	10	M16x1	T3200/AD40	6726278			
6	120	101	21	27	36	10	M5	T0600-120/AD40	6726832			
8	120	101	21	27	36	10	M6	T0800-120/AD40	9073978			
10	120	101	24	32	42	10	M8x1	T1000-120/AD40	9074612			
12	120	101	24	32	47	10	M10x1	T1200-120/AD40	9074772			
14	120	101	27	34	47	10	M10x1	T1400-120/AD40	9074773			
16	120	101	27	34	50	10	M12x1	T1600-120/AD40	9074775			
18	120	101	33	42	50	10	M12x1	T1800-120/AD40	6727044			
20	120	101	33	42	52	10	M16x1	T2000-120/AD40	9074778			
6	160	141	21	32	36	10	M5	T0600-160/AD40	6726829			
8	160	141	21	32	36	10	M6	T0800-160/AD40	9074611			
10	160	141	24	34	42	10	M8x1	T1000-160/AD40	6726830			
12	160	141	24	34	47	10	M10x1	T1200-160/AD40	6726831			
14	160	141	27	42	47	10	M10x1	T1400-160/AD40	9074774			
16	160	141	27	42	50	10	M12x1	T1600-160/AD40	9074776			
18	160	141	33	50	50	10	M12x1	T1800-160/AD40	9074777			
20	160	141	33	50	52	10	M16x1	T2000-160/AD40	9074779			

拉钉参阅80页 Pull stud see page 80



T....-...-C1-AD40									G2,5/ 25.000	≤ 3µm	max. 18.000	HSS
D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.			
3	80	61	15	20	20	5	M6	T0300-80-C1-AD40	5150243			
4	80	61	15	20	20	5	M6	T0400-80-C1-AD40	5150348			
5	80	61	15	20	25	5	M6	T0500-80-C1-AD40	5150349			
6	80	61	21	27	36	10	M5	T0600-80-C1-AD40	5150350			
8	80	61	21	27	36	10	M6	T0800-80-C1-AD40	5150351			
10	80	61	24	32	42	10	M8 x1	T1000-80-C1-AD40	5150352			
12	80	61	24	32	47	10	M10 x1	T1200-80-C1-AD40	5150353			
14	80	61	27	34	47	10	M10 x1	T1400-80-C1-AD40	5150354			
16	80	61	27	34	50	10	M12 x1	T1600-80-C1-AD40	5150356			
18	80	61	33	42	50	10	M12 x1	T1800-80-C1-AD40	5150357			
20	80	61	33	42	52	10	M16 x1	T2000-80-C1-AD40	5150358			
25	100	81	44	50	58	10	M16 x1	T2500-100-C1-AD40	5150359			
32	100	81	44	50	62	10	M16 x1	T3200-100-C1-AD40	5150360			
6	120	101	21	27	36	10	M5	T0600-120-C1-AD40	5150365			
8	120	101	21	27	36	10	M6	T0800-120-C1-AD40	5150367			
10	120	101	24	32	42	10	M8 x1	T1000-120-C1-AD40	5150368			
12	120	101	24	32	47	10	M10 x1	T1200-120-C1-AD40	5150369			
14	120	101	27	34	47	10	M10 x1	T1400-120-C1-AD40	5150370			
16	120	101	27	34	50	10	M12 x1	T1600-120-C1-AD40	5150371			
18	120	101	33	42	50	10	M12 x1	T1800-120-C1-AD40	5150373			
20	120	101	33	42	52	10	M16 x1	T2000-120-C1-AD40	5150374			
6	160	141	21	32	36	10	M5	T0600-160-C1-AD40	5150375			
8	160	141	21	32	36	10	M6	T0800-160-C1-AD40	5150376			
10	160	141	24	34	42	10	M8 x1	T1000-160-C1-AD40	5150378			
12	160	141	24	34	47	10	M10 x1	T1200-160-C1-AD40	5150380			
14	160	141	27	42	47	10	M10 x1	T1400-160-C1-AD40	5150383			
16	160	141	27	42	50	10	M12 x1	T1600-160-C1-AD40	5150385			
18	160	141	33	50	50	10	M12 x1	T1800-160-C1-AD40	5150387			
20	160	141	33	50	52	10	M16 x1	T2000-160-C1-AD40	5150389			

拉钉参阅80页 Pull stud see page 80

Cool-Jet 特点

- 可转为外冷
- 两个冷却孔
- 可选四个冷却孔

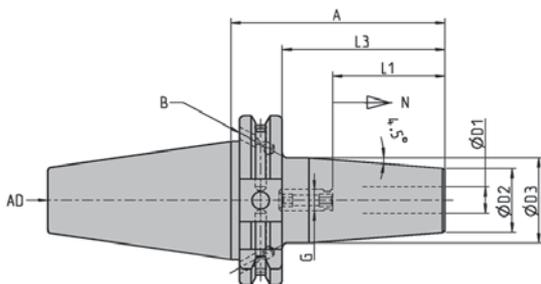
Cool-Jet execution

- for optional external cooling
- 2 closable cooling channel holes
- Optionally with 4 cooling channel holes



T... ADF40, DIN ISO7388-1

SK40 热胀刀柄 Shrink Chucks 带法兰冷却及中心冷却



T... ADF40 (Alt/Old: ADB40 DIN 69871)

G2,5/
25.000

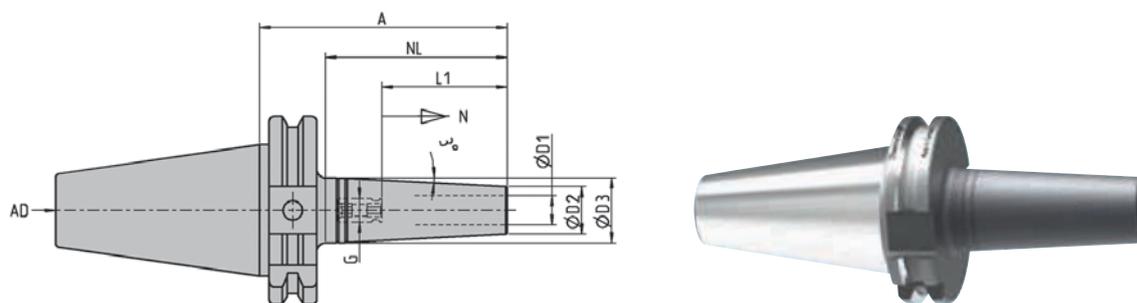
≤ 3µm

max.
18.000

HSS

D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.
3	80	61	15	20	20	5	M6	T0300/ADB40	6727758
4	80	61	15	20	20	5	M6	T0400/ADB40	6727760
5	80	61	15	20	25	5	M6	T0500/ADB40	6727759
6	80	61	21	27	36	10	M5	T0600/ADB40	6727671
8	80	61	21	27	36	10	M6	T0800/ADB40	6727677
10	80	61	24	32	42	10	M8x1	T1000/ADB40	6727683
12	80	61	24	32	47	10	M10x1	T1200/ADB40	6727688
14	80	61	27	34	47	10	M10x1	T1400/ADB40	6727696
16	80	61	27	34	50	10	M12x1	T1600/ADB40	6727702
18	80	61	33	42	50	10	M12x1	T1800/ADB40	6727708
20	80	61	33	42	52	10	M16x1	T2000/ADB40	6727711
25	100	81	44	50	58	10	M16x1	T2500/ADB40	6727717

拉钉参阅80页 Pull stud see page 80



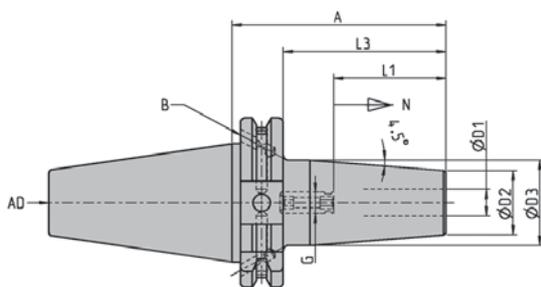
TSF-AD40 (Alt/Old: DIN 69871)								G2.5/ 25.000	≤ 3 μm	max. 18.000	coated	
D1 [mm]	A [mm]	NL [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.			
3	83	60	9	13	20	5	M6	TSF0300-60/AD40	9101227			
4	83	60	10	14	20	5	M6	TSF0400-60/AD40	9101238			
6	83	60	12	18	36	5	M5	TSF0600-60/AD40	9079018			
8	83	60	14	20	36	5	M6	TSF0800-60/AD40	9079023			
10	83	60	16	22	42	5	M8x1	TSF1000-60/AD40	9079026			
12	83	60	18	24	47	5	M10x1	TSF1200-60/AD40	9079029			
16	83	60	22	28	50	5	M12x1	TSF1600-60/AD40	9079032			
3	123	100	9	16	20	5	M6	TSF0300-100/AD40	9108372			
4	123	100	10	17	20	5	M6	TSF0400-100/AD40	9108373			
6	123	100	12	22	36	5	M5	TSF0600-100/AD40	9079021			
8	123	100	14	24	36	5	M6	TSF0800-100/AD40	9079024			
10	123	100	16	26	42	5	M8x1	TSF1000-100/AD40	9079027			
12	123	100	18	28	47	5	M10x1	TSF1200-100/AD40	9079030			
16	123	100	22	32	50	5	M12x1	TSF1600-100/AD40	9079033			
6	163	140	12	26	36	5	M5	TSF0600-140/AD40	9079022			
8	163	140	14	28	36	5	M6	TSF0800-140/AD40	9079025			
10	163	140	16	30	42	5	M8x1	TSF1000-140/AD40	9079028			
12	163	140	18	32	47	5	M10x1	TSF1200-140/AD40	9079031			
16	163	140	22	36	50	5	M12x1	TSF1600-140/AD40	9079034			

请使用TSF专用盘片，详见附件87页 TSF discs, see accessories page 87

拉钉参阅80页 Pull stud see page 80

T... ADF50, DIN ISO7388-1

SK50 热胀刀柄 Shrink Chucks 带法兰冷却及中心冷却



T... ADF50 (Alt/Old: ADB 50 DIN 69871)

G2,5/
25.000

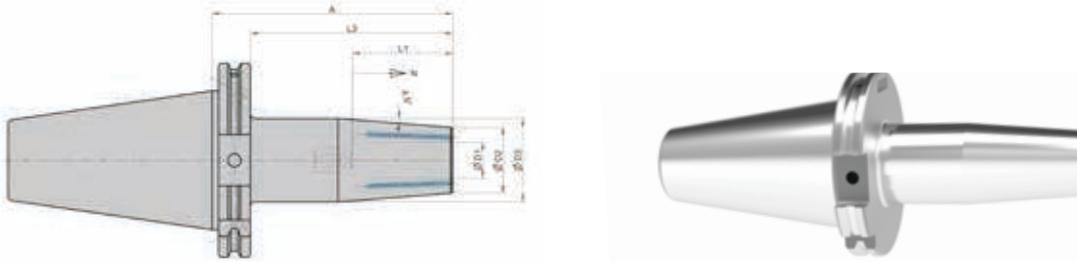
≤ 3µm

max.
12.000

HSS

D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.
6	80	61	21	27	36	10	M5	T0600/ADB50	6727617
8	80	61	21	27	36	10	M6	T0800/ADB50	6727615
10	80	61	24	32	42	10	M8x1	T1000/ADB50	6727624
12	80	61	24	32	47	10	M10x1	T1200/ADB50	6727630
14	80	61	27	34	47	10	M10x1	T1400/ADB50	6727639
16	80	61	27	34	50	10	M12x1	T1600/ADB50	6727645
18	80	61	33	42	50	10	M12x1	T1800/ADB50	6727649
20	80	61	33	42	52	10	M16x1	T2000/ADB50	6727653
25	90	71	44	53	58	10	M16x1	T2500/ADB50	6727658
32	90	71	44	53	62	10	M16x1	T3200/ADB50	6727665
6	120	101	21	27	36	10	M5	T0600-120/ADB50	6727618
8	120	101	21	27	36	10	M6	T0800-120/ADB50	6727616
10	120	101	24	32	42	10	M8x1	T1000-120/ADB50	6727625
12	120	101	24	32	47	10	M10x1	T1200-120/ADB50	6727631
14	120	101	27	34	47	10	M10x1	T1400-120/ADB50	6727640
16	120	101	27	34	50	10	M12x1	T1600-120/ADB50	6727603
18	120	101	33	42	50	10	M12x1	T1800-120/ADB50	6727650
20	120	101	33	42	52	10	M16x1	T2000-120/ADB50	6727654
25	120	101	44	53	58	10	M16x1	T2500-120/ADB50	6727661
32	120	101	44	53	62	10	M16x1	T3200-120/ADB50	6727667
6	160	141	21	32	36	10	M5	T0600-160/ADB50	6727612
8	160	141	21	32	36	10	M6	T0800-160/ADB50	6727621
10	160	141	24	34	42	10	M8x1	T1000-160/ADB50	6727627
12	160	141	24	34	47	10	M10x1	T1200-160/ADB50	6727633
14	160	141	27	42	47	10	M10x1	T1400-160/ADB50	6727642
16	160	141	27	42	50	10	M12x1	T1600-160/ADB50	6727647
18	160	141	33	51	50	10	M12x1	T1800-160/ADB50	6727651
20	160	141	33	51	52	10	M16x1	T2000-160/ADB50	6727656
25	160	141	44	60	58	10	M16x1	T2500-160/ADB50	6727663
32	160	141	44	60	62	10	M16x1	T3200-160/ADB50	6727669
6	200	171	21	32	36	10	M5	T0600-200-K1-ADF50	5017434
8	200	171	21	32	36	10	M6	T0800-200-K1-ADF50	5134248
10	200	171	24	34	42	10	M8x1	T1000-200-K1-ADF50	5134249
12	200	171	24	34	47	10	M10x1	T1200-200-K1-ADF50	5134250
14	200	171	27	42	47	10	M10x1	T1400-200-K1-ADF50	5134251
16	200	171	27	42	50	10	M12x1	T1600-200-K1-ADF50	5017436
18	200	171	33	51	50	10	M12x1	T1800-200-K1-ADF50	5017439
20	200	171	33	51	52	10	M16x1	T2000-200-K1-ADF50	5134252
25	200	171	44	60	58	10	M16x1	T2500-200-K1-ADF50	5134253
32	200	171	44	60	62	10	M16x1	T3200-200-K1-ADF50	5134254

拉钉参阅80页 Pull stud see page 80



T.....-C1-ADF50									G2,5/25.000	≤ 3µm	max. 12.000	HSS
D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.			
6	80	61	21	27	36	10	M5	T0600-80-C1-ADF50	5150418			
8	80	61	21	27	36	10	M6	T0800-80-C1-ADF50	5150419			
10	80	61	24	32	42	10	M8 x1	T1000-80-C1-ADF50	5150420			
12	80	61	24	32	47	10	M10 x1	T1200-80-C1-ADF50	5150421			
14	80	61	27	34	47	10	M10 x1	T1400-80-C1-ADF50	5150422			
16	80	61	27	34	50	10	M12 x1	T1600-80-C1-ADF50	5150423			
18	80	61	33	42	50	10	M12 x1	T1800-80-C1-ADF50	5150424			
20	80	61	33	42	52	10	M16 x1	T2000-80-C1-ADF50	5150425			
25	90	71	44	53	58	10	M16 x1	T2500-90-C1-ADF50	5150426			
32	90	71	44	53	62	10	M16 x1	T3200-90-C1-ADF50	5150427			
6	120	101	21	27	36	10	M5	T0600-120-C1-ADF50	5150428			
8	120	101	21	27	36	10	M6	T0800-120-C1-ADF50	5150432			
10	120	101	24	32	42	10	M8 x1	T1000-120-C1-ADF50	5150434			
12	120	101	24	32	47	10	M10 x1	T1200-120-C1-ADF50	5150435			
14	120	101	27	34	47	10	M10 x1	T1400-120-C1-ADF50	5150437			
16	120	101	27	34	50	10	M12 x1	T1600-120-C1-ADF50	5150438			
18	120	101	33	42	50	10	M12 x1	T1800-120-C1-ADF50	5150439			
20	120	101	33	42	52	10	M16 x1	T2000-120-C1-ADF50	5150440			
25	120	101	44	53	58	10	M16 x1	T2500-120-C1-ADF50	5150441			
32	120	101	44	53	62	10	M16 x1	T3200-120-C1-ADF50	5150442			
6	160	141	21	32	36	10	M5	T0600-160-C1-ADF50	5150444			
8	160	141	21	32	36	10	M6	T0800-160-C1-ADF50	5150445			
10	160	141	24	34	42	10	M8 x1	T1000-160-C1-ADF50	5150447			
12	160	141	24	34	47	10	M10 x1	T1200-160-C1-ADF50	5150448			
14	160	141	27	42	47	10	M10 x1	T1400-160-C1-ADF50	5150450			
16	160	141	27	42	50	10	M12 x1	T1600-160-C1-ADF50	5150451			
18	160	141	33	51	50	10	M12 x1	T1800-160-C1-ADF50	5150453			
20	160	141	33	51	52	10	M16 x1	T2000-160-C1-ADF50	5150454			
25	160	141	44	60	58	10	M16 x1	T2500-160-C1-ADF50	5150455			
32	160	141	44	60	62	10	M16 x1	T3200-160-C1-ADF50	5150457			

拉钉参阅80页 Pull stud see page 80

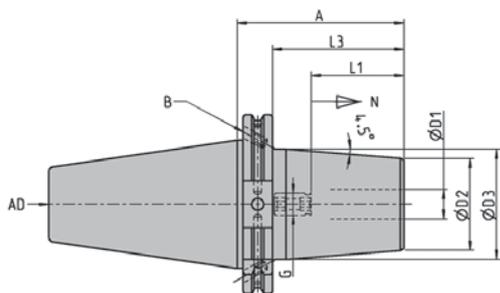
Cool-Jet 特点

- 可转为外冷
- 两个冷却孔
- 可选四个冷却孔

Cool-Jet execution

- for optional external cooling
- 2 closable cooling channel holes
- Optionally with 4 cooling channel holes

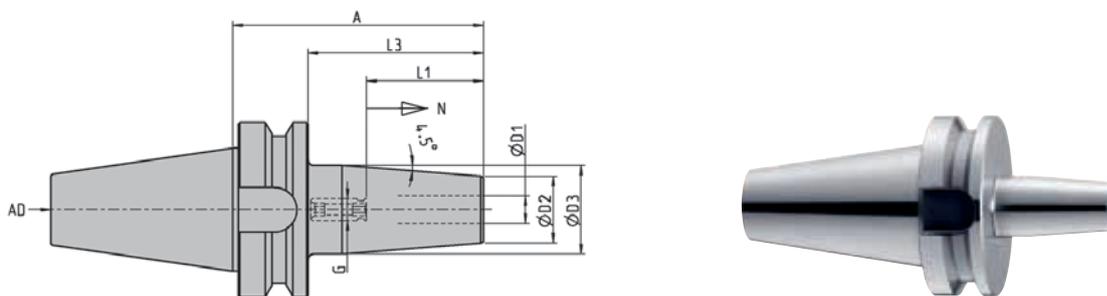




THD-ADF50 (Alt/Old: ADB50 DIN 69871)									G2,5/ 25.000	≤ 3µm	max. 12.000	HSS
D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.			
16	90	70,9	50	60	50	10	M12x1	THD1600-90/ADB50	5031169			
20	90	70,9	58	68	52	10	M16x1	THD2000-90/ADB50	5031171			
25	90	70,9	64	74	58	10	M16x1	THD2500-90/ADB50	5031173			
32	110	90,9	72	85	62	10	M16x1	THD3200-110/ADB50	5031174			

拉钉参阅80页 Pull stud see page 80

注意事项看THD刀柄，在第10页 Note for THD chucks, have a look at page 10



T... JD 30 (Alt/Old: BT30, MAS403)

G2.5/25.000 ≤ 3µm max. 15.000 HSS

D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.
3	80	58	15	20	20	5	M6	T0300-80/BT30	5020062
4	80	58	15	20	20	5	M6	T0400-80/BT30	5020063
5	80	58	15	20	25	5	M6	T0500-80/BT30	5020064
6	80	58	21	27	36	10	M5	T0600-80/BT30	5020065
8	80	58	21	27	36	10	M6	T0800-80/BT30	5020066
10	80	58	24	32	42	10	M8x1	T1000-80/BT30	5020067
12	80	58	24	32	47	10	M10x1	T1200-80/BT30	5020068
14	80	58	27	34	47	10	M10x1	T1400-80/BT30	5061825
16	80	58	27	34	50	10	M12x1	T1600-80/BT30	5020069
18	80	58	33	42	50	10	M12x1	T1800-80/BT30	5092553
20	80	58	33	42	52	10	M16x1	T2000-80/BT30	5020070

拉钉参阅81页 Pull stud see page 81

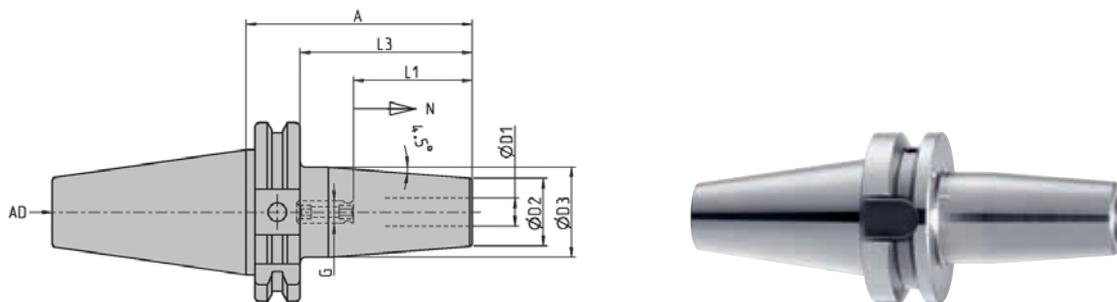
T... JD 30 (Alt/Old: BT30, MAS403) – 英寸 Inch

G2.5/25.000 ≤ 3µm max. 15.000 HSS

D1 [Inch]	A [Inch]	L3 [Inch]	D2 [Inch]	D3 [Inch]	L1 [Inch]	N [Inch]	G	型号 Designation	订货号 Ident No.
0.125	3.15	2.28	0.59	0.79	0.79	0.20	M6	T0318/BT30	5057109
0.187	3.15	2.28	0.59	0.79	0.98	0.20	M6	T0476/BT30	5057110
0.250	3.15	2.28	0.83	1.06	1.42	0.39	M5	T0635/BT30	5057111
0.375	3.15	2.28	0.95	1.26	1.65	0.39	M8x1	T0953/BT30	5057112
0.500	3.15	2.28	1.06	1.34	1.85	0.39	M10x1	T1270/BT30	5057113
0.625	3.15	2.28	1.06	1.34	1.97	0.39	M12x1	T1588/BT30	5057114

拉钉参阅81页 Pull stud see page 81

T... JDF 40, DIN ISO7388-2
BT40热胀刀柄 Shrink Chucks



T... JDF 40 (Alt/Old: BT40, MAS403) G2,5/25.000 $\leq 3\mu m$ max. 15.000 HSS

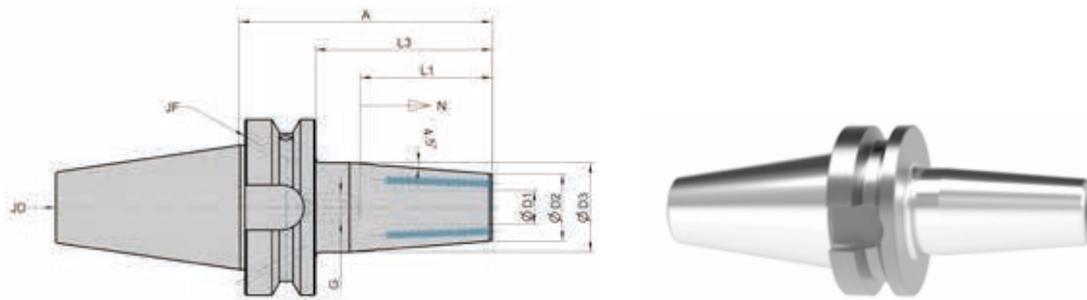
D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.
3	90	63	15	20	20	5	M6	T0300/BT40	6726807
4	90	63	15	20	20	5	M6	T0400/BT40	6726621
5	90	63	15	20	25	5	M6	T0500/BT40	6726622
6	90	63	21	27	36	10	M5	T0600/BT40	6726499
8	90	63	21	27	36	10	M6	T0800/BT40	6726484
10	90	63	24	32	42	10	M8x1	T1000/BT40	6726485
12	90	63	24	32	47	10	M10x1	T1200/BT40	6726486
14	90	63	27	34	47	10	M10x1	T1400/BT40	6726500
16	90	63	27	34	50	10	M12x1	T1600/BT40	6726470
18	90	63	33	42	50	10	M12x1	T1800/BT40	6726501
20	90	63	33	42	52	10	M16x1	T2000/BT40	6726469
25	100	73	44	53	58	10	M16x1	T2500/BT40	6726502
32	100	73	44	53	62	10	M16x1	T3200/BT40	9117365
6	120	93	21	27	36	10	M5	T0600-120/BT40	6727101
8	120	93	21	27	36	10	M6	T0800-120/BT40	6727102
10	120	93	24	32	42	10	M8x1	T1000-120/BT40	6727103
12	120	93	24	32	47	10	M10x1	T1200-120/BT40	6727104
14	120	93	27	34	47	10	M10x1	T1400-120/BT40	6727105
16	120	93	27	34	50	10	M12x1	T1600-120/BT40	6727106
18	120	93	33	42	50	10	M12x1	T1800-120/BT40	6727107
20	120	93	33	42	52	10	M16x1	T2000-120/BT40	6727108
25	120	93	44	53	58	10	M16x1	T2500-120/BT40	6727109
32	120	93	44	53	62	10	M16x1	T3200-120/BT40	9126834
6	160	133	21	32	36	10	M5	T0600-160/BT40	6726811
8	160	133	21	32	36	10	M6	T0800-160/BT40	6726812
10	160	133	24	34	42	10	M8x1	T1000-160/BT40	6726813
12	160	133	24	34	47	10	M10x1	T1200-160/BT40	6726814
14	160	133	27	42	47	10	M10x1	T1400-160/BT40	6726815
16	160	133	27	42	50	10	M12x1	T1600-160/BT40	6726816
18	160	133	33	51	50	10	M12x1	T1800-160/BT40	6726817
20	160	133	33	51	52	10	M16x1	T2000-160/BT40	6726818
25	160	133	44	53	58	10	M16x1	T2500-160/BT40	6726819

拉钉参阅81页 Pull stud see page 81

HSK
 CAT
 AD/ADF
 JD/JDF/BT
 TSFV
 LNE
 TER
 MMS/MQL
 Appendix

T....-C1-...JDF40/ Cool Jet

BT40 Cool Jet 端面冷却热胀刀柄 Shrink Chucks



T....-C1-JDF40								G2.5/25.000	≤ 3 μm	max. 15.000	coated	
D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.			
3	90	63	15	20	20	5	M6	T0300-90-C1-JDF40	5150234			
4	90	63	15	20	20	5	M6	T0400-90-C1-JDF40	5150941			
5	90	63	15	20	25	5	M6	T0500-90-C1-JDF40	5150518			
6	90	63	21	27	36	10	M5	T0600-90-C1-JDF40	5150519			
8	90	63	21	27	36	10	M6	T0800-90-C1-JDF40	5150521			
10	90	63	24	32	42	10	M8 x1	T1000-90-C1-JDF40	5150942			
12	90	63	24	32	47	10	M10 x1	T1200-90-C1-JDF40	5150511			
14	90	63	27	34	47	10	M10 x1	T1400-90-C1-JDF40	5150531			
16	90	63	27	34	50	10	M12 x1	T1600-90-C1-JDF40	5150534			
18	90	63	33	42	50	10	M12 x1	T1800-90-C1-JDF40	5150535			
20	90	63	33	42	52	10	M16 x1	T2000-90-C1-JDF40	5150537			
25	100	73	44	53	58	10	M16 x1	T2500-100-C1-JDF40	5150539			
32	100	73	44	53	62	10	M16 x1	T3200-100-C1-JDF40	5150542			
6	120	93	21	27	36	10	M5	T0600-120-C1-JDF40	5150543			
8	120	93	21	27	36	10	M6	T0800-120-C1-JDF40	5150553			
10	120	93	24	32	42	10	M8 x1	T1000-120-C1-JDF40	5150554			
12	120	93	24	32	47	10	M10 x1	T1200-120-C1-JDF40	5150555			
14	120	93	27	34	47	10	M10 x1	T1400-120-C1-JDF40	5150556			
16	120	93	27	34	50	10	M12 x1	T1600-120-C1-JDF40	5150557			
18	120	93	33	42	50	10	M12 x1	T1800-120-C1-JDF40	5150899			
20	120	93	33	42	52	10	M16 x1	T2000-120-C1-JDF40	5150900			
25	120	93	44	53	58	10	M16 x1	T2500-120-C1-JDF40	5150901			
32	120	93	44	53	62	10	M16 x1	T3200-120-C1-JDF40	5150902			
6	160	133	21	32	36	10	M5	T0600-160-C1-JDF40	5150904			
8	160	133	21	32	36	10	M6	T0800-160-C1-JDF40	5150905			
10	160	133	24	34	42	10	M8 x1	T1000-160-C1-JDF40	5150906			
12	160	133	24	34	47	10	M10 x1	T1200-160-C1-JDF40	5150907			
14	160	133	27	42	47	10	M10 x1	T1400-160-C1-JDF40	5150908			
16	160	133	27	42	50	10	M12 x1	T1600-160-C1-JDF40	5150910			
18	160	133	33	51	50	10	M12 x1	T1800-160-C1-JDF40	5150911			
20	160	133	33	51	52	10	M16 x1	T2000-160-C1-JDF40	5150912			
25	160	133	44	53	58	10	M16 x1	T2500-160-C1-JDF40	5150913			

拉钉参阅80页 Pull stud see page 80

Cool-Jet 特点

- 可转为外冷
- 两个冷却孔
- 可选四个冷却孔

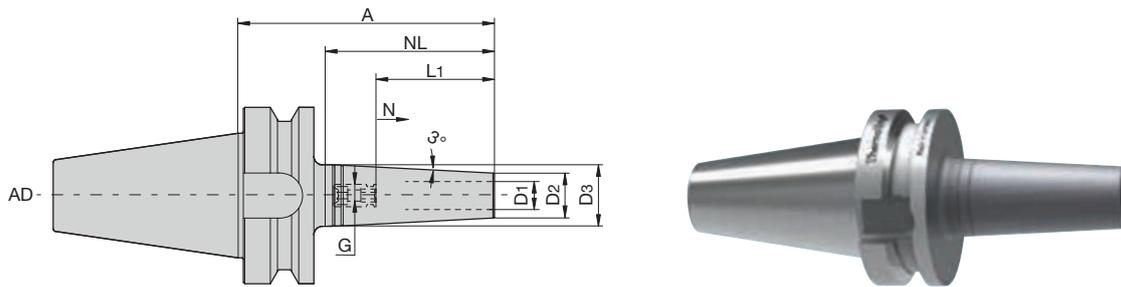
Cool-Jet execution

- for optional external cooling
- 2 closable cooling channel holes
- Optionally with 4 cooling channel holes



TSF... JD40, DIN ISO7388-2

BT40细长型热胀刀柄 Slim Shrink Chucks



TSF-JD40 (Alt/Old: BT40, MAS403)



D1 [mm]	A [mm]	NL [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.
3	99	60	9	13	20	5	M6	TSF0300-60/BT40	9101105
4	99	60	10	14	20	5	M6	TSF0400-60/BT40	9088462
6	91	60	12	18	36	5	M5	TSF0600-60/BT40	9088457
8	91	60	14	20	36	5	M6	TSF0800-60/BT40	9101100
10	91	60	16	22	42	5	M8	TSF1000-60/BT40	9101101
12	91	60	18	24	47	5	M10	TSF1200-60/BT40	9101102
16	91	60	22	28	50	5	M12	TSF1600-60/BT40	9101103
20	91	60	27	33	52	5	M16	TSF2000-60/BT40	9101104

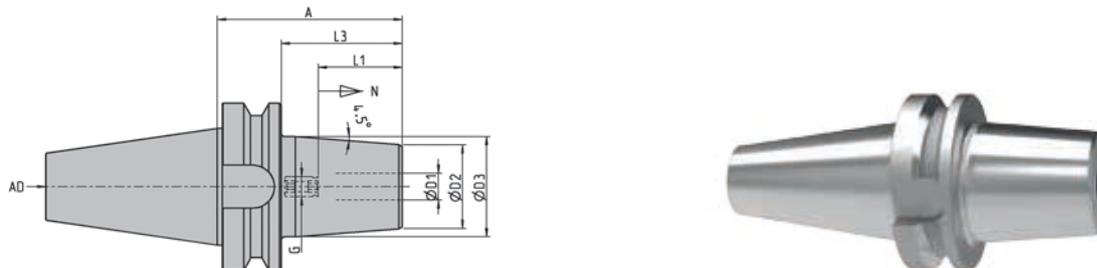


请使用TSF专用盘片, 详见附件87页 TSF discs, see accessories page 87

拉钉参阅80页 Pull stud see page 80

THD... JD50, DIN ISO7388-2

BT50重载热胀刀柄 Heavy Duty Shrink Chucks



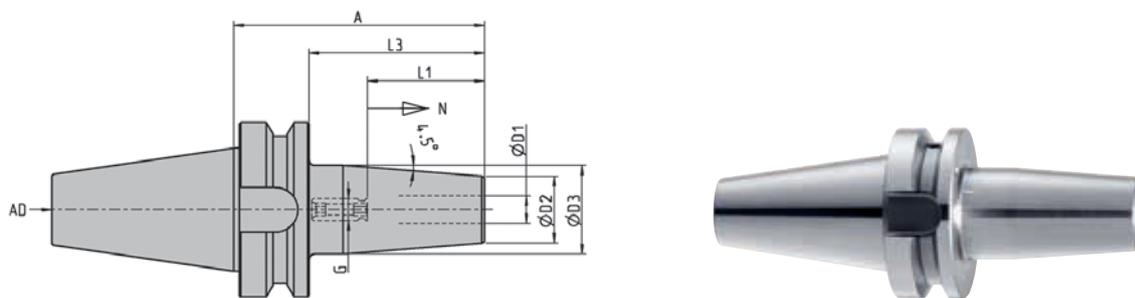
THD-JD50 (Alt/Old: BT50, MAS403)



D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.
16	110	72	50	60	50	10	M12x1	THD1600-110/BT50	5031175
20	110	72	58	68	52	10	M16x1	THD2000-110/BT50	5031176
25	110	72	64	74	58	10	M16x1	THD2500-110/BT50	5031177
32	130	92	72	85	62	10	M16x1	THD3200-130/BT50	5031178

拉钉参阅81页 Pull stud see page 81

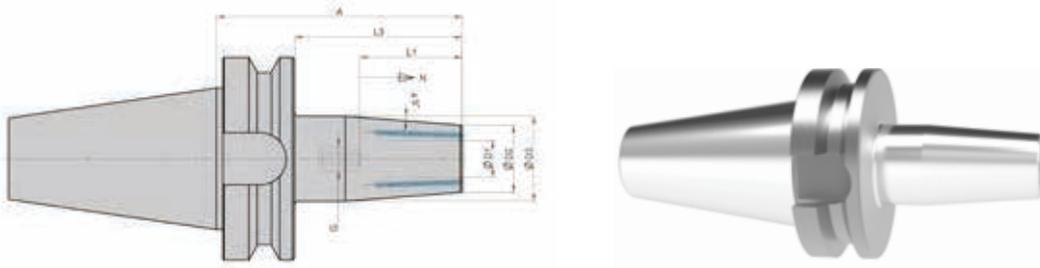
注意事项看THD刀柄, 在第10页 Note for THD chucks, have a look at page 10



T... JD 50 (Alt/Old: BT50, MAS403)									G2,5/ 25.000	≤ 3µm	max. 12.000	HSS
D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.			
6	100	62	21	27	36	10	M5	T0600/BT50	6726503			
8	100	62	21	27	36	10	M6	T0800/BT50	6726504			
10	100	62	24	32	42	10	M8x1	T1000/BT50	6726505			
12	100	62	24	32	47	10	M10x1	T1200/BT50	6726506			
14	100	62	27	34	47	10	M10x1	T1400/BT50	6726507			
16	100	62	27	34	50	10	M12x1	T1600/BT50	6726378			
18	100	62	33	42	50	10	M12x1	T1800/BT50	6726508			
20	100	62	33	42	52	10	M16x1	T2000/BT50	6726509			
25	110	72	44	53	58	10	M16x1	T2500/BT50	6726510			
32	110	72	44	53	62	10	M16x1	T3200/BT50	6726511			
6	120	82	21	27	36	10	M5	T0600-120/BT50	6727110			
8	120	82	21	27	36	10	M6	T0800-120/BT50	6727112			
10	120	82	24	32	42	10	M8x1	T1000-120/BT50	6727114			
12	120	82	24	32	47	10	M10x1	T1200-120/BT50	6727116			
14	120	82	27	34	47	10	M10x1	T1400-120/BT50	6727118			
16	120	82	27	34	50	10	M12x1	T1600-120/BT50	6727120			
18	120	82	33	42	50	10	M12x1	T1800-120/BT50	6727122			
20	120	82	33	42	52	10	M16x1	T2000-120/BT50	6727124			
25	120	82	44	53	58	10	M16x1	T2500-120/BT50	6727126			
32	120	82	44	53	62	10	M16x1	T3200-120/BT50	6727128			
6	160	122	21	32	36	10	M5	T0600-160/BT50	6726953			
8	160	122	21	32	36	10	M6	T0800-160/BT50	6727113			
10	160	122	24	34	42	10	M8x1	T1000-160/BT50	6727115			
12	160	122	24	34	47	10	M10x1	T1200-160/BT50	6727117			
14	160	122	27	42	47	10	M10x1	T1400-160/BT50	6727119			
16	160	122	27	42	50	10	M12x1	T1600-160/BT50	6727121			
18	160	122	33	51	50	10	M12x1	T1800-160/BT50	6727123			
20	160	122	33	51	52	10	M16x1	T2000-160/BT50	6726952			
25	160	122	44	60	58	10	M16x1	T2500-160/BT50	6727127			
32	160	122	44	60	62	10	M16x1	T3200-160/BT50	6727129			

拉钉参阅81页 Pull stud see page 81

T....-C1-...JD50/ Cool Jet
BT50 Cool Jet 端面冷却热胀刀柄 Shrink Chucks



T....-C1-JD50									G2,5/ 25.000	≤ 3µm	max. 12.000	HSS
D1 [mm]	A [mm]	L3 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	G	型号 Designation	订货号 Ident No.			
6	100	62	21	27	36	10	M5	T0600-100-C1-JD50	5150928			
8	100	62	21	27	36	10	M6	T0800-100-C1-JD50	5150929			
10	100	62	24	32	42	10	M8 x1	T1000-100-C1-JD50	5150930			
12	100	62	24	32	47	10	M10 x1	T1200-100-C1-JD50	5150931			
14	100	62	27	34	47	10	M10 x1	T1400-100-C1-JD50	5150932			
16	100	62	27	34	50	10	M12 x1	T1600-100-C1-JD50	5150933			
18	100	62	33	42	50	10	M12 x1	T1800-100-C1-JD50	5150935			
20	100	62	33	42	52	10	M16 x1	T2000-100-C1-JD50	5150936			
25	110	72	44	53	58	10	M16 x1	T2500-110-C1-JD50	5150937			
32	110	72	44	53	62	10	M16 x1	T3200-110-C1-JD50	5150938			
6	120	82	21	27	36	10	M5	T0600-120-C1-JD50	5150945			
8	120	82	21	27	36	10	M6	T0800-120-C1-JD50	5150946			
10	120	82	24	32	42	10	M8 x1	T1000-120-C1-JD50	5150947			
12	120	82	24	32	47	10	M10 x1	T1200-120-C1-JD50	5150948			
14	120	82	27	34	47	10	M10 x1	T1400-120-C1-JD50	5150949			
16	120	82	27	34	50	10	M12 x1	T1600-120-C1-JD50	5150950			
18	120	82	33	42	50	10	M12 x1	T1800-120-C1-JD50	5150951			
20	120	82	33	42	52	10	M16 x1	T2000-120-C1-JD50	5150953			
25	120	82	44	53	58	10	M16 x1	T2500-120-C1-JD50	5150954			
32	120	82	44	53	62	10	M16 x1	T3200-120-C1-JD50	5150955			
6	160	122	21	32	36	10	M5	T0600-160-C1-JD50	5150959			
8	160	122	21	32	36	10	M6	T0800-160-C1-JD50	5150960			
10	160	122	24	34	42	10	M8 x1	T1000-160-C1-JD50	5150961			
12	160	122	24	34	47	10	M10 x1	T1200-160-C1-JD50	5150962			
14	160	122	27	42	47	10	M10 x1	T1400-160-C1-JD50	5150963			
16	160	122	27	42	50	10	M12 x1	T1600-160-C1-JD50	5150964			
18	160	122	33	51	50	10	M12 x1	T1800-160-C1-JD50	5150966			
20	160	122	33	51	52	10	M16 x1	T2000-160-C1-JD50	5150967			
25	160	122	44	60	58	10	M16 x1	T2500-160-C1-JD50	5150968			
32	160	122	44	60	62	10	M16 x1	T3200-160-C1-JD50	5150969			

拉钉参阅80页 Pull stud see page 80

Cool-Jet 特点

- 可转为外冷
- 两个冷却孔
- 可选四个冷却孔

Cool-Jet execution

- for optional external cooling
- 2 closable cooling channel holes
- Optionally with 4 cooling channel holes



TSFV

细长形热胀延长杆 Slim Shrink Chucks Extensions

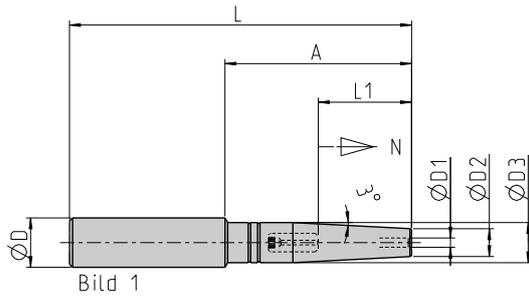


Bild 1



Bild 2



Bild 3



TSFV													
D1 [mm]	A [mm]	D [mm]	L [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	Bild Picture	型号 Designation	订货号 Ident No.			
3	63	12	110	9	11,8	15	5	1	TSFV0300-110-K1-Z1200	5118180			
4	63	12	110	10	11,8	15	5	1	TSFV0400-110-K1-Z1200	5118185			
5	63	12	110	11	11,8	20	5	1	TSFV0500-110-K1-Z1200	5118191			
6	63	12	110	12	17	36	10	3	TSFV0600-110-K1-Z1200	5118091			
8	63	12	110	14	19	36	10	3	TSFV0800-110-K1-Z1200	5118104			
3	60	16	110	9	13	15	5	1	TSFV0300-110-K1-Z1600	5118181			
4	60	16	110	10	14	15	5	1	TSFV0400-110-K1-Z1600	5118186			
5	60	16	110	11	15	20	5	1	TSFV0500-110-K1-Z1600	5118192			
6	60	16	110	12	15,8	36	10	2	TSFV0600-110-K1-Z1600	5118092			
8	60	16	110	14	19	36	10	3	TSFV0800-110-K1-Z1600	5118159			
3	58	20	110	9	13	15	5	1	TSFV0300-110-K1-Z2000	5118182			
4	58	20	110	10	14	15	5	1	TSFV0400-110-K1-Z2000	5118187			
5	58	20	110	11	15	20	5	1	TSFV0500-110-K1-Z2000	5118194			
6	58	20	110	12	16	36	10	1	TSFV0600-110-K1-Z2000	5118093			
8	58	20	110	14	19	36	10	1	TSFV0800-110-K1-Z2000	5118160			
10	58	20	110	16	19,8	42	10	1	TSFV1000-110-K1-Z2000	5118168			
12	58	20	110	18	19,8	47	10	1	TSFV1200-110-K1-Z2000	5118173			
TSFV													
3	113	12	160	9	11,8	20	5	1	TSFV0300-160-K1-Z1200	5146279			
4	113	12	160	10	11,8	20	5	1	TSFV0400-160-K1-Z1200	5146281			
3	110	16	160	9	13	20	5	1	TSFV0300-160-K1-Z1600	5146282			
4	110	16	160	10	14	20	5	1	TSFV0400-160-K1-Z1600	5146283			
5	110	16	160	11	15	25	5	1	TSFV0500-160-K1-Z1600	5146284			
5	110	20	160	11	15	25	5	1	TSFV0500-160-K1-Z2000	5146286			
8	108	20	160	14	19	36	10	1	TSFV0800-160-K1-Z2000	5146291			
8	108	25	160	14	19	36	10	1	TSFV0800-160-K1-Z2500	5146292			
10	108	25	160	16	21	42	10	1	TSFV1000-160-K1-Z2500	5146294			
12	108	25	160	18	23	47	10	1	TSFV1200-160-K1-Z2500	5146296			
14	108	25	160	20	24,8	47	10	1	TSFV1400-160-K1-Z2500	5146298			
16	108	25	160	22	24,8	50	10	1	TSFV1600-160-K1-Z2500	5146299			
10	98	32	160	16	21	42	10	1	TSFV1000-160-K1-Z3200	5146300			
12	98	32	160	18	23	47	10	1	TSFV1200-160-K1-Z3200	5146301			
14	98	32	160	20	25	47	10	1	TSFV1400-160-K1-Z3200	5146302			
16	98	32	160	22	28	50	10	1	TSFV1600-160-K1-Z3200	5146304			
18	98	32	160	25	30	50	10	1	TSFV1800-160-K1-Z3200	5146305			
20	98	32	160	26	31,8	52	10	1	TSFV2000-160-K1-Z3200	5146306			



请使用TSF专用盘片, 详见附件87页 TSF discs, see accessories page 87

TSFV

细长形热胀延长杆 Slim Shrink Chucks Extensions

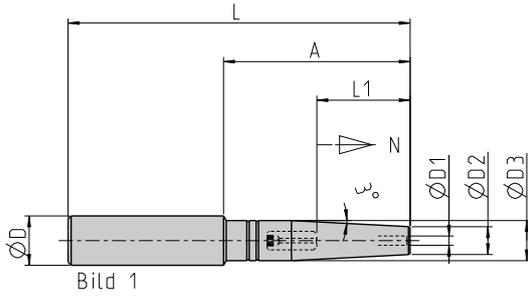


Bild 1



Bild 2

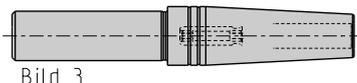


Bild 3



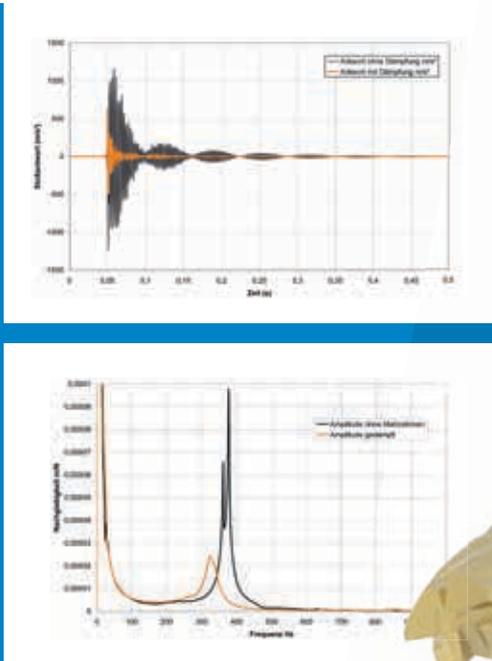
TSFV										≤ 10µm	50	max. 30.000	
D1 [mm]	A [mm]	D [mm]	L [mm]	D2 [mm]	D3 [mm]	L1 [mm]	N [mm]	Bild Picture	型号 Designation	订货号 Ident No.			
3	150	16	200	9	13	15	5	1	TSFV0300-200-K1-Z1600	5118183			
4	150	16	200	10	14	15	5	1	TSFV0400-200-K1-Z1600	5118188			
5	150	16	200	11	15	20	5	1	TSFV0500-200-K1-Z1600	5118195			
6	150	16	200	12	15,8	36	10	1	TSFV0600-200-K1-Z1600	5118096			
8	150	16	200	14	19	36	10	3	TSFV0800-200-K1-Z1600	5118163			
6	198	20	250	12	16	36	10	1	TSFV0600-250-K1-Z2000	5118098			
8	198	20	250	14	19	36	10	1	TSFV0800-250-K1-Z2000	5118165			
10	198	20	250	16	19,8	42	10	1	TSFV1000-250-K1-Z2000	5118171			
12	192	25	250	18	23	47	10	1	TSFV1200-250-K1-Z2500	5118175			
16	192	25	250	22	28	50	10	1	TSFV1600-250-K1-Z2500	5118178			

请使用TSF专用盘片, 详见附件87页 TSF discs, see accessories page 87

TSFV - 英寸 Inch										≤ 3µm	50	max. 30.000	
D1 [Inch]	A [Inch]	D [Inch]	L [Inch]	D2 [Inch]	D3 [Inch]	L1 [Inch]	N [Inch]	Bild Picture	型号 Designation	订货号 Ident No.			
0.125	2.48	0.50	4.33	0.39	0.50	0.79	0.20	2	TSFV0318-110-K1-Z1270	5118200			
0.125	2.28	0.75	4.33	0.39	0.75	0.98	0.20	1	TSFV0318-110-K1-Z1905	5118201			
0.187	2.48	0.50	4.33	0.43	0.50	0.98	0.20	2	TSFV0476-110-K1-Z1270	5118203			
0.187	2.28	0.75	4.33	0.43	0.75	0.98	0.20	1	TSFV0476-110-K1-Z1905	5118204			
0.250	2.48	0.50	4.33	0.47	0.50	1.42	0.39	3	TSFV0635-110-K1-Z1270	5118206			
0.250	2.28	0.75	4.33	0.47	0.75	1.42	0.39	1	TSFV0635-110-K1-Z1905	5118207			
0.375	2.28	0.75	4.33	0.63	0.75	1.65	0.39	2	TSFV0953-110-K1-Z1905	5118209			

TSFV										≤ 10µm	50	max. 18.000	
D1 [Inch]	A [Inch]	D [Inch]	L [Inch]	D2 [Inch]	D3 [Inch]	L1 [Inch]	N [Inch]	Bild Picture	型号 Designation	订货号 Ident No.			
0.125	7.79	0.75	9.84	0.39	0.75	0.79	0.20	1	TSFV0318-250-K1-Z1905	5118202			
0.187	7.79	0.75	9.84	0.43	0.75	0.98	0.20	1	TSFV0476-250-K1-Z1905	5118205			
0.250	7.79	0.75	9.84	0.47	0.75	1.42	0.39	1	TSFV0635-250-K1-Z1905	5118208			
0.375	7.79	0.75	9.84	0.63	0.75	1.65	0.39	2	TSFV0953-250-K1-Z1905	5118210			
0.500	7.59	0.75	9.84	0.79	1.00	1.85	0.39	1	TSFV1270-250-K1-Z1905	5118211			
0.500	7.59	1.00	9.84	0.87	1.00	1.85	0.39	1	TSFV1270-250-K1-Z2540	5118212			
0.625	7.59	1.00	9.84	0.87	1.00	1.97	0.39	2	TSFV1588-250-K1-Z2540	5118213			

请使用TSF专用盘片, 详见附件87页 TSF discs, see accessories page 87



使用Vidat能明显改善阻尼性能

Significantly improved damping properties with Vidat

ThermoGrip® VIDAT来自Bilz的抗振技术，最开始由于延长杆挠度产生的振动被整合的吸振部件吸收。相比普通延长杆，VIDAT抗振延长杆至少可以达到4DB 振动率。

热胀过程中非常高的刚性的特性意味着细长的延长杆特别会有让刀和振动的趋势。VIDAT抗振延长杆减少了这个效应，因此相当的增加了应用的区域。

通过使用BILZ VIDAT热胀延长杆，你可以

- 减少夹持系统中的振动
- 提高工件表面质量
- 提高刀具寿命

ThermoGrip® VIDAT stands for **V**ibrations **D**amping **T**echnology from **Bilz**. Vibrations caused during the first extension deflection are effectively absorbed by integrated dampers. VIDAT extensions achieve damping rates of at least 4dB in comparison to normal extensions.

The very rigid nature of the shrinking process means that long, slim extensions in particular have a tendency to chatter and vibrate. VIDAT extensions reduce this effect, thus considerably increasing the area of application.

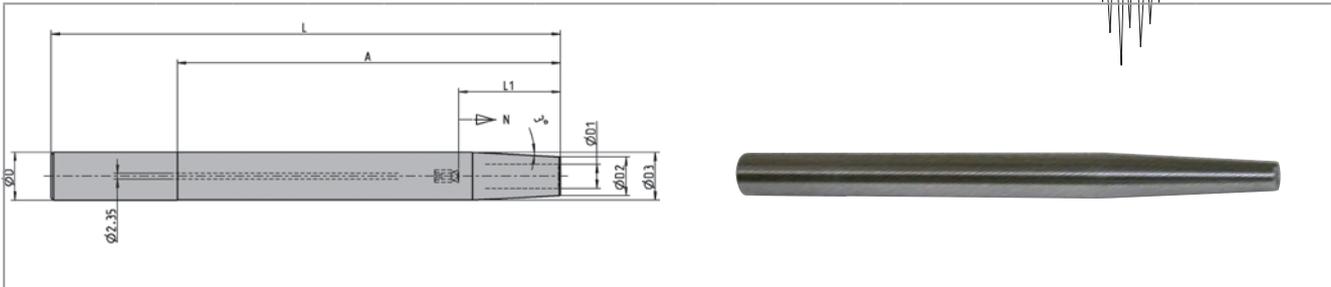
By using Bilz VIDAT extensions you can

- reduce the vibrations in the clamping system
- improve the surface quality of the workpiece
- increase tool life

VIDAT

细长型抗振热胀延长杆

Slim Shrink Chuck Extensions with Vibration Damping



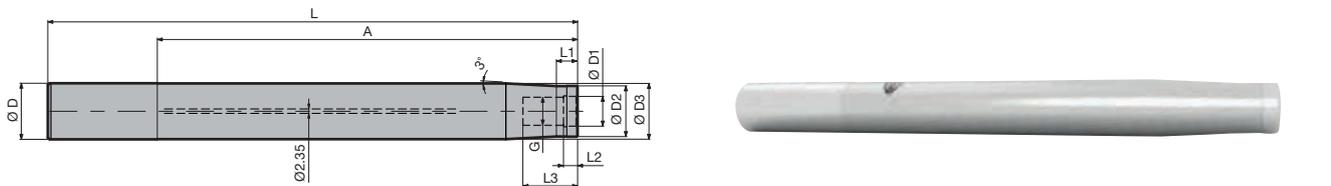
缩径型VIDAT延长杆 VIDAT extensions with shrink geometry



D1 [mm]	A [mm]	D [mm]	L [mm]	D2 [mm]	D3 [mm]	N [mm]	组合后最高转速 max. rpm in combination with		型号 Designation	订货号 Ident No.
							HSK63-HSK100/ ISO40-ISO50	HSK50/ ISO30		
6	158	20	210	12	19,8	5	10000 1/min	7000 1/min	LNE-T0600-210-K1-Z2000	5109763
8	158	20	210	14	19,8	5	10000 1/min	7000 1/min	LNE-T0800-210-K1-Z2000	5110224
10	158	20	210	16	19,8	5	10000 1/min	7000 1/min	LNE-T1000-210-K1-Z2000	5110226
12	158	20	210	18	19,8	5	10000 1/min	7000 1/min	LNE-T1200-210-K1-Z2000	5110227
10	242	25	300	16	24,8	5	8000 1/min	-	LNE-T1000-300-K1-Z2500	5110287
12	242	25	300	18	24,8	5	8000 1/min	-	LNE-T1200-300-K1-Z2500	5109988
14	242	25	300	20	24,8	5	8000 1/min	-	LNE-T1400-300-K1-Z2500	5109994
16	242	25	300	22	24,8	5	8000 1/min	-	LNE-T1600-300-K1-Z2500	5110303
12	238	32	300	18	31,8	5	8000 1/min	-	LNE-T1200-300-K1-Z3200	5110428
14	238	32	300	20	31,8	5	8000 1/min	-	LNE-T1400-300-K1-Z3200	5110429
16	238	32	300	22	31,8	5	8000 1/min	-	LNE-T1600-300-K1-Z3200	5110430
18	238	32	300	25	31,8	5	8000 1/min	-	LNE-T1800-300-K1-Z3200	5110433
20	238	32	300	27	31,8	5	8000 1/min	-	LNE-T2000-300-K1-Z3200	5110436

内冷最大50bar Internal coolant supply up to max. 50 bar

请使用TSF专用盘片, 详见附件87页 TSF discs, see accessories page 87



适用方肩铣刀的VIDAT延长杆 VIDAT extensions for shell milling cutters



M	G	A [mm]	D [mm]	L [mm]	D1 [mm]	D2 [mm]	D3 [mm]	组合后最高转速 max. rpm in combination with		型号 Designation	订货号 Ident No.
								HSK63-HSK100/ ISO40-ISO50	HSK50/ ISO30		
12	M12x1,75	192	25	250	12,5	21	24,8	8000 1/min	-	LNE-MH12-250-K1-Z2500	5110692
12	M12x1,75	242	25	300	12,5	21	24,8	8000 1/min	-	LNE-MH12-300-K1-Z2500	5110690
16	M16x2	188	32	250	17	29	31,8	8000 1/min	-	LNE-MH16-250-K1-Z3200	5110698
16	M16x2	238	32	300	17	29	31,8	8000 1/min	-	LNE-MH16-300-K1-Z3200	5110696

内冷最大50bar Internal coolant supply up to max. 50 bar

请使用TSF专用盘片, 详见附件87页 TSF discs, see accessories page 87



应用领域: 筒夹刀柄, 动力头, 机床主轴直接夹持。

配合完美

如果刀具夹持不顺畅, 刀具和刀柄在旋转时将受到很大的作用力, 刀具将开始晃动, 结果将导致负荷变大, 因此加剧刀柄和刀具的磨损, 造成制造的产品质量异常。

使用TER可以消除刀具不平衡造成的负荷, 刀具精确地夹持在夹持孔的中心, 并且当夹紧时能与TER刀柄形成一个稳定的整体。夹持距离短、夹持牢固, 保证在高速切削下具有高精度, 并能显著降低切削刀具的磨损。

使用TER夹头进行夹持具有下述主要优点:

- 跳动 < 3 μm
 - 最大的夹持力
 - 刚性好
 - 磨损少, 整体性能优越
- 不需要更换现有的筒夹刀柄或主轴

切削速度大大提高

TER的最大优点是切削的潜在速度大大提高。
TER夹头可以在任何ThermoGrip®感应式热胀系统中加热。

Areas of application: collet chucks, driven tool holders, direct clamping in the machine spindle

Perfect Fit

If the tool is not clamped securely, high forces are exerted on the tool and chuck through rotation. The tool will begin to wobble. The result: a higher load, therefore increased wear on the chuck and tool, leading to impaired quality of the manufacturing result. Using TER means that the load on the tool due to imbalance is practically eliminated. The tool is clamped precisely in the centre of the clamping bore, meaning that it runs true and when shrunk in, it forms a stable unit with the TER collet. The short and rigid clamping enables high precision at higher cutting speeds and reduces the wear on the cutting tool dramatically.

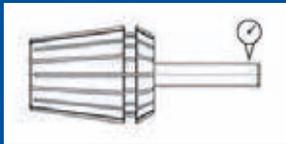
Using TER means profiting from the main advantages of collet shrinking,

- Run-out < 3 μm
 - maximum holding forces
 - rigidity
 - low-wear monoblock properties
- without the need to replace existing collet chucks or spindles.

Much higher cutting speeds

The biggest advantage of TER is the potential of machining with much higher cutting speeds. The TER shrink fit collet can be heated on all ThermoGrip® induction units.

最高的圆跳动和重复定位精度
Highest possible run-out and repeatability accuracy



> 10 μm



< 3 μm

当夹紧时, 切削刀具和热胀筒夹形成一个整体 (整块)

效果:
能够传递极大的扭矩, 最佳可能的圆跳动和稳定性

When shrunk in, cutting tool and shrink fit collet form a unit (monoblock)

Result:
A very high transmittable torque, best possible run-out properties and highest possible stability



延长刀具寿命可达300%
由于TER热胀筒夹夹持刀具的高精度, 所有刀具同时进入工件, 避免切削刃“碰撞”。

效果:
更好的工件表面和提高了精度

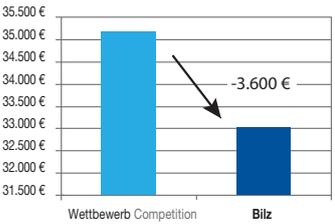
Increase of tool life for cutting tools up to 300 %
Due to the precise clamping of the tool with the TER shrink collets, all cutters enter the workpiece simultaneously, avoiding “hitting” the cutting edge.

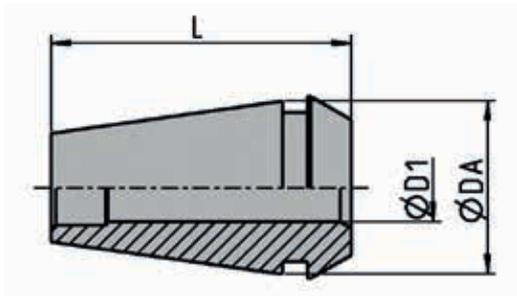
Result:
Better surface finishes & improved accuracy

使用高性能工具可以降低生产成本 —— TER使之成为可能!
Using high efficiency to reduce production costs – TER makes it possible!

在短时间内提高生产力	Increase productivity in a short period of time
高速加工 <ul style="list-style-type: none"> 传递扭矩高 夹持稳定 最大的夹持力 超精密、快速换刀 (< 30s) 	High-speed machining <ul style="list-style-type: none"> High transmittable torque Stable clamping Maximum holding forces Ultra-precise, quick tool changes (< 30s)
由于损耗少, 更长时间的加工	Longer machining due to less wear
刀具寿命延长至300% <ul style="list-style-type: none"> 系统高度稳定 轴向负载最小化 夹持精确, 损伤小 防尘系统 (密封的整块系统) 	Increase of tool life for cutting tools up to 300 % <ul style="list-style-type: none"> High stability of the system Minimum load from axial forces Precise clamping means less damage Resistant to dirt (sealed monoblock system)
让高性能切削达到最佳效果	High quality machining for top results
高精度和过程安全 <ul style="list-style-type: none"> 完美的跳动性能 (< 3 µm) 精确夹持带来的高度可重复性 	High precision and process-secure <ul style="list-style-type: none"> Excellent run-out properties (< 3 µm) High repeatability due to precise clamping
无需改变生产流程就能提高制造性能	Improve manufacturing without changing production processes
不需要更换工具... <ul style="list-style-type: none"> 现有的筒夹刀柄仍然可以使用 通用刀适合所有尺寸 密封垫片不再需要 — 省去费用和物流成本 	No need to retool ... <ul style="list-style-type: none"> Existing collet chucks can still be used Universal toolholder for all sizes Sealing disc is no longer required – cost and logistics saving

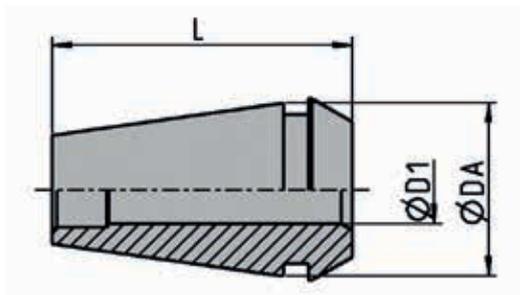
成功案例 Success Story

状态 Situation	解决方案 Solution	客户收益 Customer benefit
支撑元件 Spinal Support Element 机床: Machine: INDEX G 200 工件: Parts: 1500 材料: Material: TiAl6V4 竞争者: Competition: 筒夹 Collets DIN 6499-25 Ø 6mm (精加工) (Finishing) Ø 10mm (粗加工) (Roughing) 切削数据: Cutting data: 精加工: Finishing: Vc = 75,36 fz = 0,05 粗加工: Roughing: Vc = 50,24 fz = 0,08 精加工: Finishing: 加工时间: Cutting time: 20 s 刀具寿命: Tool life: 500 件 pieces 粗加工: Roughing: 切削时间: Cutting time: 75 s 刀具寿命: Tool life: 500 件 pieces	 工具: Tool: TER0600/25 (精加工) (Finishing) TER1000/25 (粗加工) (Roughing) 切削数据: Cutting data: 精加工: Finishing: Vc = 84,78 fz = 0,06 粗加工: Roughing Vc = 50,24 fz = 0,2 精加工: Finishing: 加工时间: Cutting time: 17 s 刀具寿命: Tool life: 1500 件 pieces 粗加工: Roughing: 加工时间: Cutting time: 30 s 刀具寿命: Tool life: 1500 件 pieces	加工时间降低: Reduction of the cutting time: 48 s 7,82 min → 7,02 min → 11,39 % 刀具寿命提高: Increase tool life: 300 % 成本计算: Cost calculation: 每个工件节约切削时间: Reduction of the cutting time: 48s / 工件 work piece 工件: Parts: 1500 件 pieces 机床花费: Machine cost: 每分钟3欧元 3 €/min 降成本: Cost reduction: 



TER ↗ ≤ 3µm				
D1 [mm]	DA [mm]	L [mm]	型号 Designation	订货号 Ident No.
TER.../11 ER11/4008E				
3	11	18	TER0300/11	5076671
4			TER0400/11	5076673
6			TER0600/11	5076674
TER.../16 ER16/426E				
3	16	27,5	TER0300/16	5004694
4			TER0400/16	5004696
6			TER0600/16	5004697
8			TER0800/16	5004698
TER.../20 ER20/428E				
6	20	31,5	TER0600/20	5004699
8			TER0800/20	5004700
10			TER1000/20	5004701
TER.../25 ER25/430E				
3	25	34	TER0300/25	5004702
4			TER0400/25	5004703
6			TER0600/25	5004705
8			TER0800/25	5004706
10			TER1000/25	5004707
12			TER1200/25	5004708
14			TER1400/25	5004709
16			TER1600/25	5004710
TER.../32 ER32/470E				
6	32	40	TER0600/32	5004711
8			TER0800/32	5004712
10			TER1000/32	5004713
12			TER1200/32	5004714
14			TER1400/32	5004715
16			TER1600/32	5004717
18			TER1800/32	5004718
20			TER2000/32	5004719

需要的附件详见88页 Required Accessories see page 88



TER – 英寸 Inch ↗ ≤ 3µm				
D1 [Inch]	DA [Inch]	L [Inch]	型号 Designation	订货号 Ident No.
TER.../16 ER16/426E				
0.125	0,67	1,22	TER0318/16	5059311
0.156			TER0397/16	5089047
0.187			TER0476/16	5068405
0.250			TER0635/16	5059313
0.312			TER0794/16	5089048
TER.../20 ER20/428E				
0.125	0,83	1,22	TER0318/20	5068413
0.156			TER0397/20	5089049
0.250			TER0635/20	5059315
0.312			TER0794/20	5089050
0.375			TER0953/20	5059316
TER.../25 ER25/430E				
0.125	1,02	1,38	TER0318/25	5068416
0.187			TER0476/25	5068417
0.250			TER0635/25	5068419
0.312			TER0794/25	5089052
0.375			TER0953/25	5068420
0.437			TER1111/25	5089055
0.500			TER1270/25	5060472
0.625			TER1588/25	5068421
TER.../32 ER32/470E				
0.250	1.30	1.57	TER0635/32	5059317
0.375			TER0953/32	5059318
0.500			TER1270/32	5059319
0.625			TER1588/32	5060473
0.750			TER1905/32	5068422

需要的附件详见88页 Required Accessories see page 88



在提供高质量标准产品的同时，我们也重点致力于应用支持、客户关系及有效的解决方案，根据客户需求单独设计产品来完善产品范围，可持续的BILZ解决方案能够提供全世界范围的，无与伦比的收益。

While providing the highest quality standards in production, we strongly emphasize application support, customer relations, and competency for solutions. Separate from our standard range are individually designed chucks for the needs of our customers. Sustainable solutions from Bilz offer unequalled benefits worldwide

独一无二的可持续性

UNIQUE SUSTAINABILITY

 个人安全 我们的解决方案，向员工提供安全保护和无风险的工作环境，保护操作者。	 环境 我们的解决方案，立足于减少资源和维护成本，同时减少清理问题，增加刀具寿命。	 节约 我们的解决方案，减少19%的成本，减少冷却液使用量。无需处理冷却液的花费。
---	---	---

Personnel safety Our solutions deliver employee protection and safety at work by maintaining a hazard-free working environment and minimizing skin problems.	Environment Our solutions stand for reduced sourcing and maintenance cost as well as reduced disposal issues and increased tool life.	Economy Our solutions reduce costs up to 19%, reduce the usage dramatically, and the expensive disposal of coolant is not needed.
--	---	---



MMS MQL

由于使用了微量冷却技术，因此冷却液被精确喷向目标，并且将精确的流量直接喷在刃口冷却点上。
 Due to the extremely low volume of lubricant with Minimal Quality Lubricant (MQL) technology, it's very important to deliver the lubricant precisely on target and with the exact quantity needed directly to the point of the tool.

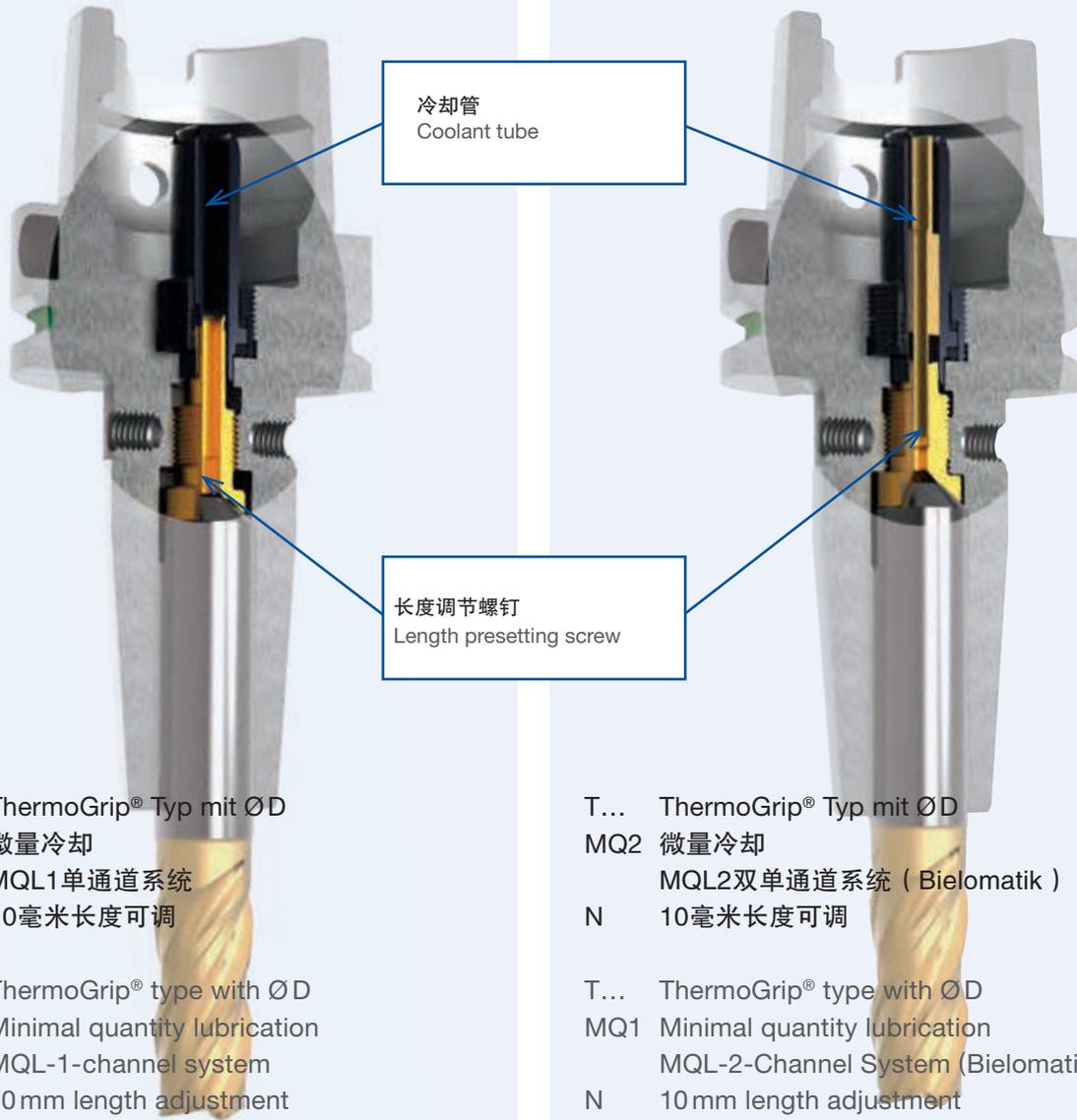
新一代的Bilz MQL刀柄作为刀柄可以完全克服这些挑战：
 The new generation of Bilz MQL synchro chucks can completely overcome both of these challenges as a toolholder:

- **最优的密封**
 设计支持冷却液无损耗，刀柄的设计保证冷却液充分使用，不会因泄露而引起损耗。
- **Optimized sealed design**
 provides loss-free lubricant delivery.
 The design of the toolholder guarantees that all lubricant is applied immediately, no lubricant loss due to flow problems.
- **即时冷却**
 冷却液以雾状喷向刃口时无任何延迟和压力损失。
- **Immediate lubricant**
 delivery for delay-free flow of the aerosol without any loss in pressure up to the tool tip

客户获益：最优的渗漏设计使我们在使用冷却液时避免了二次损耗！
 Your advantage: with optimal leak prevention, we deliver lubricant from the very first second – loss-free.

1 单通道系统 (Horkos公司专利)
1-Channel system licence of Horkos Corp.

2 双通道系统
2-Channel System



T... ThermoGrip® Typ mit ØD
MQ1 微量冷却
MQL1单通道系统
N 10毫米长度可调

T... ThermoGrip® Typ mit ØD
MQ2 微量冷却
MQL2双单通道系统 (Bielomatik)
N 10毫米长度可调

T... ThermoGrip® type with ØD
MQ1 Minimal quantity lubrication
MQL-1-channel system
N 10 mm length adjustment

T... ThermoGrip® type with ØD
MQ1 Minimal quantity lubrication
MQL-2-Channel System (Bielomatik)
N 10 mm length adjustment

关于MQL更多信息请访问比尔兹网站:
Check list for MQL at www.bilz.de or direct via QR Code:

DE



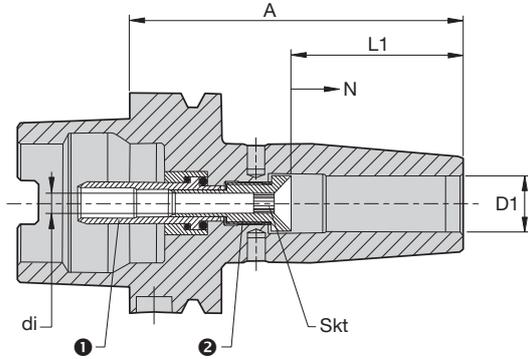
EN





MMS 1单通道系统 热胀刀柄

MQ1 1-Channel-System Shrink Chucks



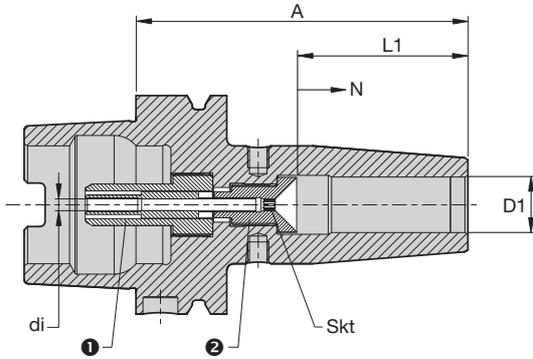
热胀刀柄 Shrink Chucks					冷却供应单元 Supply unit ①			调节螺钉 Setting screw ②									
D1 [mm]	A [mm]	L1 [mm]	型号 Designation	订货号 Ident No.	di	UE-Type BILZ	订货号 Ident No.	Skt	AES-Type BILZ	订货号 Ident No.							
6	80	36	T0600-MQ1-80/HSK-A63/0001	5056416	4,6	UE6-HSK63	5050204	4	T0600-3B-63	5056199							
8	80	36	T0800-MQ1-80/HSK-A63/0001	5050219					T0800-3B-63	5050206							
10	85	40	T1000-MQ1-85/HSK-A63/0001	5050220					T1000-3B-63	5049429							
12	90	45	T1200-MQ1-90/HSK-A63/0001	5058016				5,8	UE6-HSK63	5	T1200-3B-63	5056207					
14	90	45	T1400-MQ1-90/HSK-A63/0001	5050221							T1400-3B-63	5050207					
16	95	48	T1600-MQ1-95/HSK-A63/0001	5058017							T1600-3B-63	5056213					
18	95	48	T1800-MQ1-95/HSK-A63/0001	5058018							T1800-3B-63	5056219					
20	100	50	T2000-MQ1-100/HSK-A63/0001	5058019							T2000-3B-63	5049430					
25	115	56	T2500-MQ1-115/HSK-A63/0001	5058020							T2500-3B-63	5056216					
32	120	60	T3200-MQ1-120/HSK-A63/0001	5058021							T3200-3B-63	5057000					
6	120	36	T0600-MQ1-120/HSK-A63/0001	5074641	2,3	UE6-HSK63	5050204	2	T0600-3B-32	5056966							
8		36	T0800-MQ1-120/HSK-A63/0001	5051301	3,45			3	T0800-3B-40	5051305							
10		40	T1000-MQ1-120/HSK-A63/0001	5076833	4,6			4	T1000-3B-50	5050209							
12		45	T1200-MQ1-120/HSK-A63/0001	5076835	5,8			UE6-HSK63	5050204	5	T1200-3B-63	5056207					
14		45	T1400-MQ1-120/HSK-A63/0001	5076836							T1400-3B-63	5050207					
16		48	T1600-MQ1-120/HSK-A63/0001	5076837							T1600-3B-63	5056213					
18		48	T1800-MQ1-120/HSK-A63/0001	5076838							T1800-3B-63	5056219					
20		50	T2000-MQ1-120/HSK-A63/0001	5076840							T2000-3B-63	5049430					
6		160	36	T0600-MQ1-160/HSK-A63/0001							5054945	2,3	UE6-HSK63	5050204	2	T0600-3B-32	5056966
8			36	T0800-MQ1-160/HSK-A63/0001							5054946	3,45			3	T0800-3B-40	5051305
10	40		T1000-MQ1-160/HSK-A63/0001	5050222	4,6	4	T1000-3B-50	5050209									
12	45		T1200-MQ1-160/HSK-A63/0001	5054947	5,8	UE6-HSK63	5050204	5	T1200-3B-63	5056207							
14	45		T1400-MQ1-160/HSK-A63/0001	5054948					T1400-3B-63	5050207							
16	48		T1600-MQ1-160/HSK-A63/0001	5054949					T1600-3B-63	5056213							
18	48		T1800-MQ1-160/HSK-A63/0001	5054950					T1800-3B-63	5056219							
20	50		T2000-MQ1-160/HSK-A63/0001	5054951					T2000-3B-63	5049430							
25	56		T2500-MQ1-160/HSK-A63/0001	5054952					T2500-3B-63	5056216							
32	60		T3200-MQ1-160/HSK-A63/0001	5054953					T3200-3B-63	5057000							

交付包装: 包含冷却管系统及调节螺钉
Delivery package: supply unit & setting screw



MQL 2双通道系统 热胀刀柄

MQL 2-Channel-System Shrink Chucks



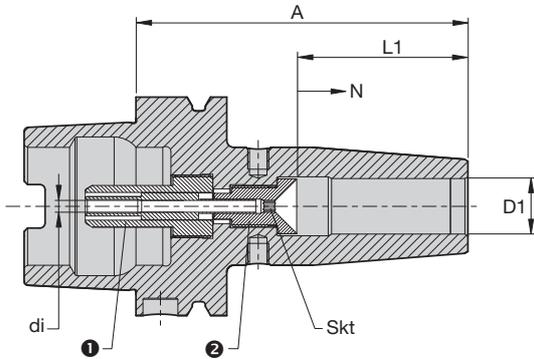
热胀刀柄 Shrink Chucks					冷却供应单元 Supply unit			调节螺钉 Setting screw		
D1 [mm]	A [mm]	L1 [mm]	型号 Designation	订货号 Ident No.	di	UE-Type BILZ	订货号 Ident No.	Skt	AES-Type BILZ	订货号 Ident No.
6	80	36	T0600-MQ2-80/HSK-A 63/0001	5043587	1,6	UE5-HSK63-50/1	5037176	1,5	T0600-2B-63/1	5037179
			T0600-MQ2-80/HSK-A 63/0002	5043590	2,3	UE5-HSK63-50/2	5037289	2,0	T0600-2B-63/2	5041227
8	80	36	T0800-MQ2-80/HSK-A 63/0001	5043818	1,6	UE5-HSK63-50/1	5037176	1,5	T0800-2B-63/1	5037263
			T0800-M Q2-80/HSK-A 63/0002	5043819	2,3	UE5-HSK63-50/2	5037289	2,0	T0800-2B-63/2	5041243
10	85	40	T1000-MQ2-85/HSK-A 63/0001	5043820	1,6	UE5-HSK63-50/1	5037176	1,5	T1000-2B-63/1	5041380
			T1000-MQ2-85/HSK-A 63/0002	5043821	2,3	UE5-HSK63-50/2	5037289	2,0	T1000-2B-63/2	5037285
12	90	45	T1200-MQ2-90/HSK-A 63/0001	5043823	1,6	UE5-HSK63-49/1	5043830	1,5	T1200-2B-63/1	5041379
			T1200-MQ2-90/HSK-A 63/0002	5043824	2,3	UE5-HSK63-49/2	5039864	2,0	T1200-2B-63/2	5037301
			T1200-MQ2-90/HSK-A 63/0003	5043825	3,4	UE5-HSK63-49/3	5038801	3,0	T1200-2B-63/3	5041250
14	90	45	T1400-MQ2-90/HSK-A 63/0001	5043826	1,6	UE5-HSK63-49/1	5043830	1,5	T1400-2B-63/1	5041377
			T1400-MQ2-90/HSK-A 63/0002	5043827	2,3	UE5-HSK63-49/2	5039864	2,0	T1400-2B-63/2	5041378
			T1400-MQ2-90/HSK-A 63/0003	5043828	3,4	UE5-HSK63-49/3	5038801	3,0	T1400-2B-63/3	5037323
16	95	48	T1600-MQ2-95/HSK-A 63/0001	5043934	1,6	UE5-HSK63-49/1	5043830	1,5	T1600-2B-63/1	5041376
			T1600-MQ2-95/HSK-A 63/0002	5043935	2,3	UE5-HSK63-49/2	5039864	2,0	T1600-2B-63/2	5037356
			T1600-MQ2-95/HSK-A 63/0003	5043936	3,4	UE5-HSK63-49/3	5038801	3,0	T1600-2B-63/3	5037325
18	95	48	T1800-MQ2-95/HSK-A 63/0001	5043937	1,6	UE5-HSK63-49/1	5043830	1,5	T1800-2B-63/1	5041375
			T1800-MQ2-95/HSK-A 63/0002	5043939	2,3	UE5-HSK63-49/2	5039864	2,0	T1800-2B-63/2	5041236
			T1800-MQ2-95/HSK-A 63/0003	5043940	3,4	UE5-HSK63-49/3	5038801	3,0	T1800-2B-63/3	5037329
20	100	50	T2000-MQ2-100/HSK-A 63/0002	5043953	2,3	UE5-HSK63-49/2	5039864	2,0	T2000-2B-63/2	5041382
			T2000-MQ2-100/HSK-A 63/0003	5043954	3,4	UE5-HSK63-49/3	5038801	3,0	T2000-2B-63/3	5041400
			T2000-MQ2-100/HSK-A 63/0004	5043955	4,6	UE5-HSK63-50/4	5037339	4,0	T2000-2B-63/4	5037338
25	115	56	T2500-MQ2-115/HSK-A 63/0002	5043956	2,3	UE5-HSK63-54/2	5043968	2,0	T2500-2B-63/2	5041384
			T2500-MQ2-115/HSK-A 63/0003	5043957	3,4	UE5-HSK63-54/3	5043969	3,0	T2500-2B-63/3	5041385
			T2500-MQ2-115/HSK-A 63/0004	5043958	4,6	UE5-HSK63-54/4	5039132	4,0	T2500-2B-63/4	5037344
32	120	60	T3200-MQ2-120/HSK-A 63/0002	5043965	2,3	UE5-HSK63-54/2	5043968	2,0	T3200-2B-63/2	5041386
			T3200-MQ2-120/HSK-A 63/0003	5043966	3,4	UE5-HSK63-54/3	5043969	3,0	T3200-2B-63/3	5041387
			T3200-MQ2-120/HSK-A 63/0004	5043967	4,6	UE5-HSK63-54/4	5039132	4,0	T3200-2B-63/4	5041388

交付包装: 包含冷却管系统及调节螺钉
Delivery package: supply unit & setting screw

MQL 2双通道系统 MQL 2-channel system	
管道孔径 Ø Tube bore Ø	圆圈区域 Circle area
di, mm	Ae, mm ²
1,6	2,01
2,3	4,15
3,4	9,08
4,6	16,62



MQL 2双通道系统 热胀刀柄
MQL 2-Channel-System Shrink Chucks

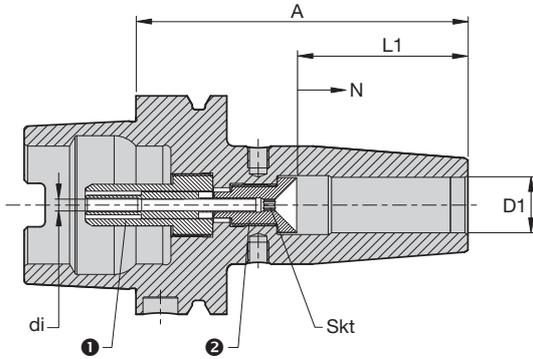


热胀刀柄 Shrink Chucks					冷却供应单元 Supply unit			调节螺钉 Setting screw		
D1 [mm]	A [mm]	L1 [mm]	型号 Designation	订货号 Ident No.	di	UE-Type BILZ	订货号 Ident No.	Skt	AES-Type BILZ	订货号 Ident No.
6	120	36	T0600-MQ2-120/HSK-A 63/0001	-	1,6	UE5-HSK63-90/1	5037264	1,5	T0600-2B-32/1	5037207
			T0600-MQ2-120/HSK-A 63/0002	-	2,3	UE5-HSK63-90/2	5039009	2,0	T0600-2B-32/2	5041398
8	120	36	T0800-MQ2-120/HSK-A 63/0001	5072972	1,6	UE5-HSK63-90/1	5037264	1,5	T0800-2B-40/1	5037266
			T0800-MQ2-120/HSK-A 63/0002	-	2,3	UE5-HSK63-90/2	5039009	2,0	T0800-2B-40/2	5038976
10	120	40	T1000-MQ2-120/HSK-A 63/0001	-	1,6	UE5-HSK63-85/1	5044847	1,5	T1000-2B-50/1	5041389
			T1000-MQ2-120/HSK-A 63/0002	-	2,3	UE5-HSK63-85/2	5037300	2,0	T1000-2B-50/2	5037290
12	120	45	T1200-MQ2-120/HSK-A 63/0001	-	1,6	UE5-HSK63-79/1	5045174	1,5	T1200-2B-63/1	5041379
			T1200-MQ2-120/HSK-A 63/0002	5072397	2,3	UE5-HSK63-79/2	5039011	2,0	T1200-2B-63/2	5037301
			T1200-MQ2-120/HSK-A 63/0003	-	3,4	UE5-HSK63-79/3	5037303	3,0	T1200-2B-63/3	5041250
14	120	45	T1400-MQ2-120/HSK-A 63/0001	-	1,6	UE5-HSK63-79/1	5045174	1,5	T1400-2B-63/1	5041377
			T1400-MQ2-120/HSK-A 63/0002	-	2,3	UE5-HSK63-79/2	5039011	2,0	T1400-2B-63/2	5041378
			T1400-MQ2-120/HSK-A 63/0003	5132223	3,4	UE5-HSK63-79/3	5037303	3,0	T1400-2B-63/3	5037323
16	120	48	T1600-MQ2-120/HSK-A 63/0001	-	1,6	UE5-HSK63-74/1	5069074	1,5	T1600-2B-63/1	5041376
			T1600-MQ2-120/HSK-A 63/0002	5080820	2,3	UE5-HSK63-74/2	5039010	2,0	T1600-2B-63/2	5037356
			T1600-MQ2-120/HSK-A 63/0003	-	3,4	UE5-HSK63-74/3	5037327	3,0	T1600-2B-63/3	5037325
18	120	48	T1800-MQ2-120/HSK-A 63/0001	5069152	1,6	UE5-HSK63-74/1	5069074	1,5	T1800-2B-63/1	5041375
			T1800-MQ2-120/HSK-A 63/0002	-	2,3	UE5-HSK63-74/2	5039010	2,0	T1800-2B-63/2	5041236
			T1800-MQ2-120/HSK-A 63/0003	-	3,4	UE5-HSK63-74/3	5037327	3,0	T1800-2B-63/3	5037329
20	120	50	T2000-MQ2-120/HSK-A 63/0002	-	2,3	UE5-HSK63-70/2	-	2,0	T2000-2B-63/2	5041382
			T2000-MQ2-120/HSK-A 63/0003	-	3,4	UE5-HSK63-70/3	-	3,0	T2000-2B-63/3	5041400
			T2000-MQ2-120/HSK-A 63/0004	-	4,6	UE5-HSK63-70/4	5043481	4,0	T2000-2B-63/4	5037338

交付包装：包含冷却管系统及调节螺钉
Delivery package: supply unit & setting screw

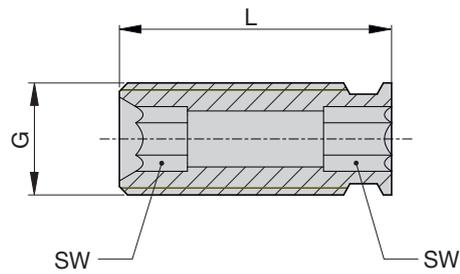


MQL 2双通道系统 热胀刀柄
MQL 2-Channel-System Shrink Chucks



热胀刀柄 Shrink Chucks				冷却供应单元 Supply unit ①				调节螺钉 Setting screw ②		
D1 [mm]	A [mm]	L1 [mm]	型号 Designation	订货号 Ident No.	di	UE-Type BILZ	订货号 Ident No.	Skt	AES-Type BILZ	订货号 Ident No.
6	160	36	T0600-MQ2-160/HSK-A63/0001	5069141	1,6	UE5-HSK63-130/1	5037370	1,5	T0600-2B-32/1	5037207
			T0600-MQ2-160/HSK-A63/0002	-	2,3	UE5-HSK63-130/2	5039133	2,0	T0600-2B-32/2	5041398
8	160	36	T0800-MQ2-160/HSK-A63/0001	5072395	1,6	UE5-HSK63-130/1	5037370	1,5	T0800-2B-40/1	5037266
			T0800-MQ2-160/HSK-A63/0002	-	2,3	UE5-HSK63-130/2	5039133	2,0	T0800-2B-40/2	5038976
10	160	40	T1000-MQ2-160/HSK-A63/0001	5069142	1,6	UE5-HSK63-125/1	-	1,5	T1000-2B-50/1	5041389
			T1000-MQ2-160/HSK-A63/0002	-	2,3	UE5-HSK63-125/2	5041254	2,0	T1000-2B-50/2	5037290
12	160	45	T1200-MQ2-160/HSK-A63/0001	5072399	1,6	UE5-HSK63-119/1	5072402	1,5	T1200-2B-63/1	5041379
			T1200-MQ2-160/HSK-A63/0002	-	2,3	UE5-HSK63-119/2	5041246	2,0	T1200-2B-63/2	5037301
			T1200-MQ2-160/HSK-A63/0003	-	3,4	UE5-HSK63-119/3	5041251	3,0	T1200-2B-63/3	5041250
14	160	45	T1400-MQ2-160/HSK-A63/0001	-	1,6	UE5-HSK63-119/1	5072402	1,5	T1400-2B-63/1	5041377
			T1400-MQ2-160/HSK-A63/0002	-	2,3	UE5-HSK63-119/2	5041246	2,0	T1400-2B-63/2	5041378
			T1400-MQ2-160/HSK-A63/0003	-	3,4	UE5-HSK63-119/3	5041251	3,0	T1400-2B-63/3	5037323
16	160	48	T1600-MQ2-160/HSK-A63/0001	5069149	1,6	UE5-HSK63-114/1	5069071	1,5	T1600-2B-63/1	5041376
			T1600-MQ2-160/HSK-A63/0002	-	2,3	UE5-HSK63-114/2	-	2,0	T1600-2B-63/2	5037356
			T1600-MQ2-160/HSK-A63/0003	-	3,4	UE5-HSK63-114/3	5102531	3,0	T1600-2B-63/3	5037325
18	160	48	T1800-MQ2-160/HSK-A63/0001	5069153	1,6	UE5-HSK63-114/1	5069071	1,5	T1800-2B-63/1	5041375
			T1800-MQ2-160/HSK-A63/0002	-	2,3	UE5-HSK63-114/2	-	2,0	T1800-2B-63/2	5041236
			T1800-MQ2-160/HSK-A63/0003	-	3,4	UE5-HSK63-114/3	5102531	3,0	T1800-2B-63/3	5037329
20	160	50	T2000-MQ2-160/HSK-A63/0002	5069154	2,3	UE5-HSK63-110/2	5069072	2,0	T2000-2B-63/2	5041382
			T2000-MQ2-160/HSK-A63/0003	-	3,4	UE5-HSK63-110/3	-	3,0	T2000-2B-63/3	5041400
			T2000-MQ2-160/HSK-A63/0004	-	4,6	UE5-HSK63-110/4	5101838	4,0	T2000-2B-63/4	5037338
25	160	56	T2500-MQ2-160/HSK-A63/0002	-	2,3	UE5-HSK63-99/2	-	2,0	T2500-2B-63/2	5041384
			T2500-MQ2-160/HSK-A63/0003	-	3,4	UE5-HSK63-99/3	-	3,0	T2500-2B-63/3	5041385
			T2500-MQ2-160/HSK-A63/0004	-	4,6	UE5-HSK63-99/4	5037346	4,0	T2500-2B-63/4	5037344
32	160	60	T3200-MQ2-160/HSK-A63/0002	-	2,3	UE5-HSK63-94/2	5069073	2,0	T3200-2B-63/2	5041386
			T3200-MQ2-160/HSK-A63/0003	5069156	3,4	UE5-HSK63-94/3	-	3,0	T3200-2B-63/3	5041387
			T3200-MQ2-160/HSK-A63/0004	-	4,6	UE5-HSK63-94/4	-	4,0	T3200-2B-63/4	5041388

交付包装: 包含冷却管系统及调节螺钉
Delivery package: supply unit & setting screw



T... 调节螺钉 T... Adjusting screws					
Ø D [mm]	G	L	SW	型号 Designation	订货号 Ident No.
3	M6	16	3	BN158-0616-1.5	6954747
4	M6	10	3	BN158-0610	6946782
5	M6	10	3	BN158-0610	6946782
6	M5	18	2,5	T0600-2-M5x18	6947302
8	M6	20	3	T0800-2-M6x20	6947303
10	M8x1	20	4	T1000-2-M8x1x20	6952015
11	M8x1	20	5	T1000-2-M8x1x20	6952015
12	M10x1	15	5	T1200-2-M10x1x15	6952444
14	M10x1	15	5	T1200-2-M10x1x15	6952444
15	M12x1	20	6	T1600-2-M12x1x20	6952017
16	M12x1	20	6	T1600-2-M12x1x20	6952017
18	M12x1	20	6	T1600-2-M12x1x20	6952017
20	M16x1	20	8	T2000-2-M16x1x20	6952018
22	M16x1	20	8	T2000-2-M16x1x20	6952018
25	M16x1	20	8	T2000-2-M16X1x20	6952018
28	M16x1	20	8	T2000-2-M16X1x20	6952018
32	M16x1	20	8	T2000-2-M16X1x20	6952018

TSF... 调节螺钉 TSF... Adjusting screws					
Ø D [mm]	G	L	SW	型号 Designation	订货号 Ident No.
3	M6	16	3	BN158-0616-1.5	6954747
4	M6	10	3	BN158-0610	6946782
5	M6	10	3	BN158-0610	6946782
6	M5	15	2,5	T0600-2-M5x18	6952890
8	M6	16	3	T0800-2-M6x16	6950028
10	M8x1	15	4	T1000-2-M8x1x15	6952442
12	M10x1	15	5	T1200-2-M10x1x15	6952444
14	M10x1	15	5	T1200-2-M10x1x15	6952444
16	M12x1	15	6	T1600-2-M12x1x15	6952445
18	M12x1	20	6	T1600-2-M12x1x20	6952017
20	M16x1	15	8	T2000-2-M16x1x15	6952529
25	M16x1	15	8	T2000-2-M16x1x15	6952529

THD... 调节螺钉 THD... Adjusting screws					
Ø D [mm]	G	L	SW	型号 Designation	订货号 Ident No.
16	M12x1	20	6	T1600-2-M12x1x20	6952017
20	M16x1	20	8	T2000-2-M16x1x20	6952018
25	M16x1	20	8	T2000-2-M16x1x20	6952018
32	M16x1	20	8	T2000-2-M16x1x20	6952018

装刀长度预调棒

Measuring Adaptor for Length Presetting



T3-M...				
d1 [mm]	SW	L [mm]	型号 Designation	订货号 Ident No.
6	2,5	80	T3-M0600	6725959
8	3,0	80	T3-M0800	6725962
10	4,0	80	T3-M1000	6725963
12	5,0	80	T3-M1200-SW5	6726111
14	5,0	80	T3-M1400-SW5	6726112
16	6,0	80	T3-M1600	6725967
18	6,0	80	T3-M1800	6725968
20	8,0	80	T3-M2000	6725969
25	8,0	80	T3-M2500	6725970
32	8,0	80	T3-M3200	6725971

使用方法:

预调棒 (B) 放入刀柄 (A) 里并将六方插入长度调节螺丝。
刀具 (C) 放入预调棒 (B) 里面。

在对刀仪上通过旋转预调棒调节长度、调节螺丝，获得所需的尺寸。
取出装刀长度预调棒。

调节中需考虑差异尺寸 (L = 80 mm)，要从总长中减去，最终获得实际刀具长度。

注意: 取出预调棒 (B) 时请勿旋转，否则会影响尺寸。

最后，将刀具 (C) 从预调棒 (B) 中拿出，再热装入刀柄 (A)。

低价—高效

这种预调装置由于设计简单，用途广泛因而预调成本极为低廉。刀柄的装刀长度可以单独的预调。

应用广泛

这种预调装置适用于所有标准的长度预调仪。

节省成本

由于使用简单，因此可节省操作时间，而且还可以在高精度装刀尺寸要求时保证工艺安全。

Low Price – Big Effect

The ThermoGrip® Measuring Adaptor is the low cost entry into pre-setting and is characterized by its simple handling and versatility. The length of the tool holder can be preset independently by the clamping device.

One for all

The ThermoGrip® Measuring Adaptor works on all standard length presetting machines.

Cost reduction

Due to simple handling, time can be saved. The ThermoGrip® Measuring Adaptor guarantees process security in production due to higher dimensional accuracy at the length presetting.

Measurement Process

The measuring adaptor (B) is put into the ThermoGrip® shrink chuck (A) and locks into the hexagon of the length presetting screw.

The tool (C) is inserted into the measuring adaptor (B).

By turning the measuring adaptor (B) the tool length is determined via the adjusting screw with the help of a presetting device.

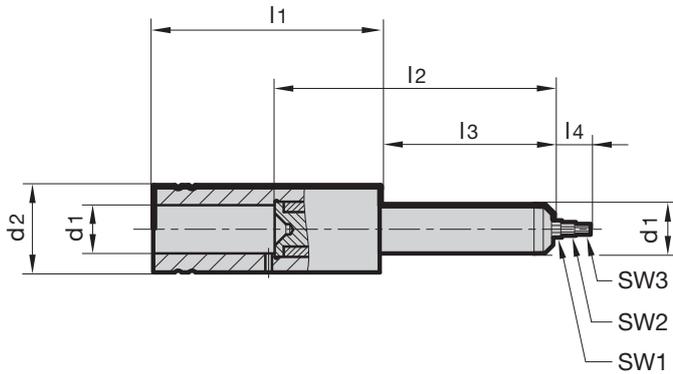
The measuring adaptor (B) is then taken out of the ThermoGrip® shrink chuck.

The differential dimension (L) (L = 80mm) has to be considered during adjustment. This stored value has to be deducted from the total length.

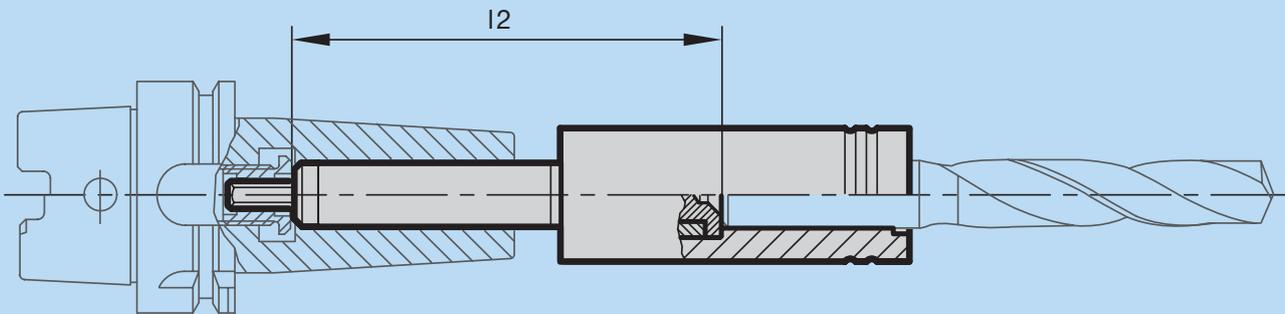
Tip: Make sure not to turn the measuring adaptor (B) when taking it out. Otherwise the length adjusting screw is displaced and the total length is readjusted.

As a last step, you put the tool (C) without measuring adaptor into the counterbore of the ThermoGrip® shrink chuck (A) and shrink it on the ISG machine of your own choice.

万用装刀长度预调棒 (MQL 1 + 2 通道) Universal Measuring Adaptor (MQL 1 + 2 Channel)



T3-M...										
型号 Designation	d1 [mm]	d2 [mm]	l1 [mm]	l2 [mm]	l3 [mm]	l4 [mm]	SW1	SW2	SW3	订货号 Ident No.
T3-M0600/0001	6	25	115	80	50	10	2,0	1,5	-	5046404
T3-M0600/0002	6	25	115	80	50	10	3,0	2,5	-	5046406
T3-M0600/0003	6	25	115	80	50	10	4,0	-	-	5046407
T3-M0800/0001	8	25	115	80	50	10	2,0	1,5	-	5046461
T3-M0800/0002	8	25	115	80	50	10	3,0	-	-	5046462
T3-M0800/0003	8	25	115	80	50	10	4,0	-	-	5046463
T3-M1000/0001	10	25	115	80	50	10	2,0	1,5	-	5046464
T3-M1000/0002	10	25	115	80	50	10	4,0	3,0	-	5046466
T3-M1200/0001	12	25	115	80	50	10	3,0	2,0	1,5	5046468
T3-M1200/0002	12	25	115	80	50	10	5,0	4,0	-	5046469
T3-M1400/0001	14	25	115	80	50	10	3,0	2,0	1,5	5046470
T3-M1400/0002	14	25	115	80	50	10	5,0	4,0	-	5046471
T3-M1600/0001	16	25	120	85	55	10	3,0	2,0	1,5	5046472
T3-M1600/0002	16	25	120	85	55	10	6,0	5,0	4,0	5046473
T3-M1800/0001	18	30	120	85	55	10	3,0	2,0	1,5	5046474
T3-M1800/0002	18	30	120	85	55	10	6,0	5,0	4,0	5046475
T3-M2000/0001	20	30	135	90	65	10	4,0	3,0	2,0	5046476
T3-M2000/0002	20	30	135	90	65	10	8,0	5,0	-	5046477
T3-M2500/0001	25	35	140	100	70	10	4,0	3,0	2,0	5046478
T3-M2500/0002	25	35	140	100	70	10	8,0	5,0	-	5046479
T3-M3200/0001	32	45	150	100	70	10	4,0	3,0	2,0	5046480
T3-M3200/0002	32	45	150	100	70	10	8,0	5,0	-	5046482



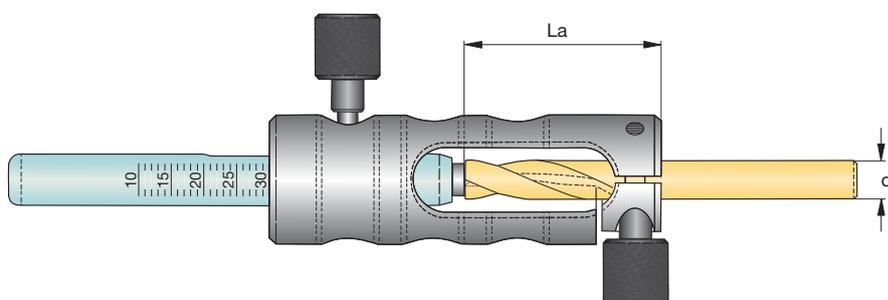
装刀长度调节器 Length Adjusting Sleeve



长度调节管用于准确测定刀具伸出刀柄的长度。将推杆移至要求的尺寸并锁紧，然后把刀具柄部放入热胀刀柄的沉孔，下压至塑料止推片，顶住刀具并锁紧，然后加热刀柄，刀具下落停止即装刀完成。

The length adjusting sleeve makes it possible to determine exactly how far the cutting tools come out of the shrink chuck. The slide is adjusted to the required length and clamped in.

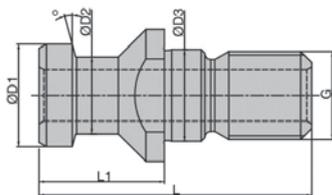
The cutting tool is then inserted into the bore hole, pressed against the plastic stop and clamped. This way the cutter is inserted into the hot shrink chuck up to the stop.



T3-LS...			
d 直径 Tool	La	型号 Designation	订货号 Ident No.
3 mm	5 – 25 mm	T3-LS0300-5-25	5021284
3 mm	30 – 50 mm	T3-LS0300-30-50	5032090
4 mm	5 – 25 mm	T3-LS0400-5-25	5021285
4 mm	30 – 50 mm	T3-LS0400-30-50	5032091
5 mm	5 – 25 mm	T3-LS0500-5-25	5021286
5 mm	30 – 50 mm	T3-LS0500-30-50	5032092
6 mm	10 – 35 mm	T3-LS0600-10-35	5021287
6 mm	35 – 60 mm	T3-LS0600-35-60	5032093
8 mm	10 – 35 mm	T3-LS0800-10-35	5021288
8 mm	35 – 60 mm	T3-LS0800-35-60	5032094
10 mm	15 – 50 mm	T3-LS1000-15-50	5021289
10 mm	35 – 60 mm	T3-LS1000-35-60	5032095
12 mm	15 – 50 mm	T3-LS1200-15-50	5021290
16 mm	30 – 65 mm	T3-LS1600-30-65	5032102

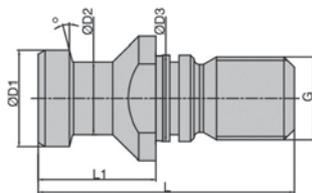
SK刀柄拉钉DIN ISO 7388-3

Pull Stud DIN ISO 7388-3



Form AD 带内冷孔，不带O形圈 With through hole, without O-ring

G	D1 [mm]	D2 [mm]	D3 [mm]	L [mm]	L1 [mm]	°	型号 Designation	订货号 Ident No.
M 12	13	9	13	44	24	15°	BN 164-SK 30	6733614
M 16	19	14	17	54	26	15°	BN 164-SK 40	6733615
M 24	28	21	25	74	34	15°	BN 164-SK 50	6733616

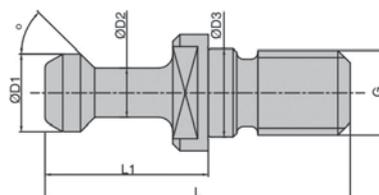


Form AF 不带内冷孔，包含O形圈 Without through hole, incl. O-ring

G	D1 [mm]	D2 [mm]	D3 [mm]	L [mm]	L1 [mm]	°	型号 Designation	订货号 Ident No.
M 16	19	14	17	54	26	15°	BN 164B-SK 40	5056290
M 24	28	21	25	74	34	15°	BN 164B-SK 50	5056292

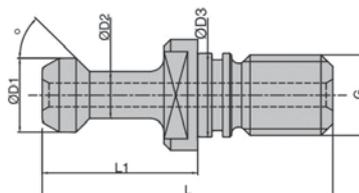
BT刀柄拉钉DIN ISO 7388-3

Pull Stud DIN ISO 7388-3



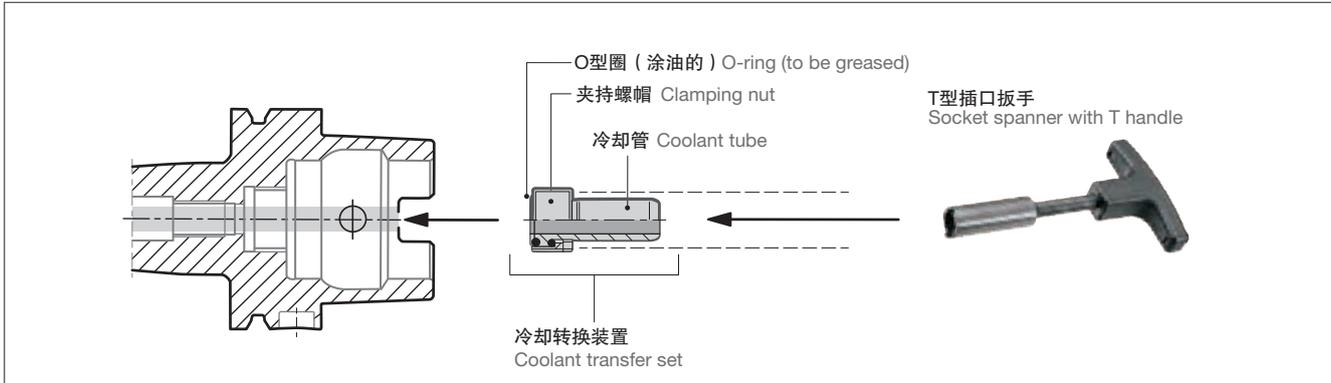
Form JD 带内冷孔，不带O形圈 With through hole, without O-ring

G	D1 [mm]	D2 [mm]	D3 [mm]	L [mm]	L1 [mm]	α	型号 Designation	订货号 Ident No.
M 12	11	7	12,5	43	23	45°	BN 164 - BT30	6733617
M 16	15	10	17	60	35	45°	BN 164 - BT40	6733618
M 24	23	17	25	85	45	45°	BN 164 - BT50	6733619
M 12	11	7	12,5	43	23	60°	BN 164 - BT30 - 60	4600614
M 16	15	10	17	60	35	60°	BN 164 - BT40 - 60	4600882
M 24	23	17	25	85	45	60°	BN 164 - BT50 - 60	4601402
M 16	15	10	17	60	35	90°	BN 164 - BT40 - 90	4600959
M 24	23	17	25	85	45	90°	BN 164 - BT50 - 90	4601404

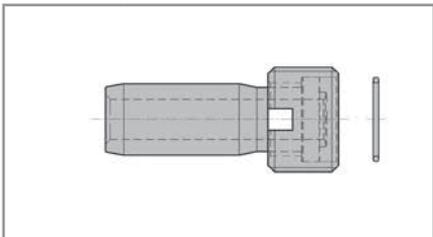


Form JD 带内冷孔，包含O形圈 With through hole, incl. O-ring

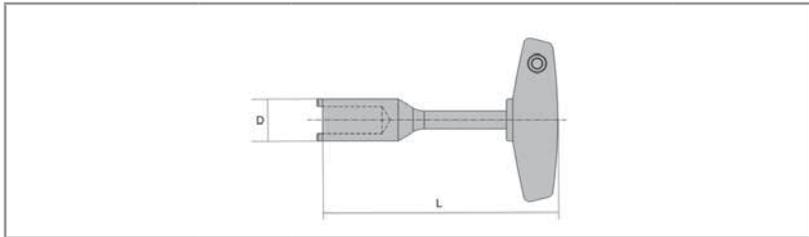
G	D1 [mm]	D2 [mm]	D3 [mm]	L [mm]	L1 [mm]	α	型号 Designation	订货号 Ident No.
M 12	11	7	12,5	43	23	45°	BN 164 - BT30	4600613
M 16	15	10	17	60	35	45°	BN 164 - BT40	4600957
M 24	23	17	25	85	45	45°	BN 164 - BT50	4601460
M 12	11	7	12,5	43	23	60°	BN 164 - BT30 - 60	5084973
M 16	15	10	17	60	35	60°	BN 164 - BT40 - 60	4600958
M 24	23	17	25	85	45	60°	BN 164 - BT50 - 60	4601461
M 16	15	10	17	60	35	90°	BN 164 - BT40 - 90	5084974
M 24	23	17	25	85	45	90°	BN 164 - BT50 - 90	4602462



1. HSK刀柄必须被清理干净, 去除铁屑残留。
The HSK shank must be clean and free from swarf and damage.
2. 装配前在O型圈上抹上油。
Grease the O-rings before assembly.
3. 完全放入冷却管组件 (冷却管锁紧螺母和2个O型圈), 对准HSK刀柄。
Completely insert the coolant transfer set (coolant tube, clamping nut and 2 O-rings) centrally into the HSK.
4. 锁紧螺母。
Screw in the coolant transfer set/unit.
5. 检查冷却管是否有径向移动。
Check the coolant tube for radial movement.



冷却管 Coolant pipe		
规格 Size	型号 Designation	订货号 Ident No.
HSK25	UE4 HSK25	5100005
HSK32	UE4 HSK32	5064893
HSK40	UE4 HSK40	5028425
HSK50	UE4 HSK50	5028426
HSK63	UE4 HSK63	5025376
HSK80	UE4 HSK80	5028427
HSK100	UE4 HSK100	5028428
HSK125	UE4 HSK125	5064893



冷却管安装扳手 Installation wrench for coolant pipe				
规格 Size	D [mm]	L [mm]	最大扭矩 Max. torque [Nm]	订货号 Ident No.
HSK25	6,8	132	3	5100007
HSK32	8,5	115	7	6738740
HSK40	10,5	115	11	6738741
HSK50	14,5	115	15	6738422
HSK63	16,5	136	20	6738421
HSK80	18,5	136	25	6738095
HSK100	22,0	136	30	6738303

用于HSK刀柄的冷却液传输, 包括圆的垫圈DIN 3770和接管螺母。
For coolant transfer for HSK tools incl. round gasket DIN 3770 and union nut.

ISG系列热胀仪 Thermogrip® ISG-Shrink Units



入门型 Starter



手动线圈导向
Manual coil guidance

ISG3400系列简洁的对话菜单
同样应用于入门型机器
Clearly structured dialog menu
ThermoGrip® ISG3400 series
now available in entry shrink
machine STARTER

符合人体工程学的存储隔热盘片、
刀具和冷却罩
Ergonomic storage for inter-
changeable pole discs,
tools and cooling adaptor



自动线圈导轨
Automatic coil guidance

ISG3400系列简洁清晰的对话菜单
Clearly structured dialog
menu ThermoGrip® ISG3400
series

4个冷却位置
4 cooling places



手动移动线圈和冷却罩，无需压缩空气
Manual coil guiding and cooling tower movement
– no compressed air required

无需移动高温的刀柄，数秒钟刀柄即被完全冷却。
Within a few seconds the shrink chuck will be cooled by „Cool Down“ technology without touching the hot part.

28升水箱
28l liquid tank

专业型 Professional

全自动程序, 解放双手

Fully automatic Shrinking „hands free“



可选装线圈快换系统
Optionally available with coil
quick change system

冷却结束后压缩空气吹干表面
Improved drying feature
after the cooling process

全自动的冷却和表面风干程序
Fully automatic cooling and
drying of the shrink chuck

重载型 Heavy Duty

全自动的加热和冷却，适合大的及重载热胀刀柄

Fully automatic Shrinking and Cooling, also suitable for large and heavy Shrink Chucks



有不同的线圈可供选择，带线圈快换功能

Different sizes of coil available with coil quick change system

用于热胀刀柄大至HSK-A125及40公斤重

For shrink chucks up to HSK-A125 and 40 kg weight

无需移动高温的刀柄，数秒钟刀柄即被完全冷却。

Within a few seconds the shrink chuck will be cooled by „Cool Down“ technology without touching the hot part.

隔热盘片 Pole discs one-piece



*) 经常和线圈2 ISG3400-2 一起发货,
订货号 5129760
always delivered with coil 2 ISGS3400-2
Ident No. 5129760

用于刀具柄部和线圈之间的最佳的磁力线防护
For optimal shielding of the magnetic field between coil and tool shank

型号 Designation	夹持范围-Ø Clamping-Ø	ISG1000	ISG 2400 系列 订货号 Ident No.	ISG 3400 系列	
				Spule 1	Spule 2
ISGS1001-2	6,0 – 16 mm	5094533	-	-	-
ISGS2201-1	3,0 – 5,9 mm	6725758	6725758	-	-
ISGS2201-2	6,0 – 12 mm	-	6725759	-	-
ISGS2201-3	12,1 – 20 mm	-	6725760	-	-
ISGS3201-0	3,0 – 5,9 mm	-	-	6726157	-
ISGS3201-1	6,0 – 12 mm	-	-	6726143	-
ISGS3201-2	12,1 – 22 mm	-	-	6726144	-
ISGS3201-3	22,1 – 32 mm	-	-	6726145	-
ISGS3401-100X27X10	盘片孔径27 mm	-	-	-	5137388
ISGS3401-72X100X35X20*)	盘片孔径35 mm	-	-	-	5137383
ISGS3401-100X54X10	盘片孔径54 mm	-	-	-	5137387

分体式隔热盘片 Pole discs two-piece



用于切削直径大于加热直径的情况下
For use when the cutting diameter is bigger than the shrinking diameter

型号 Designation	夹持范围-Ø Clamping-Ø	ISG1000	ISG 2400 系列 订货号 Ident No.	ISG 3400 系列	
				Spule 1	Spule 2
ISGS2201GT-1	3,0 – 5,9 mm	9074537	9074537	-	-
ISGS2201GT-2	6,0 – 12,0 mm	9074538	9074538	-	-
ISGS2201GT-3	12,1 – 20,0 mm	9074539	9074539	-	-
ISGS3201GT-0	3,0 – 5,9 mm	-	-	9074540	-
ISGS3201GT-1	6,0 – 12,0 mm	-	-	9074541	-
ISGS3201GT-2	12,1 – 22,0 mm	-	-	9074542	-
ISGS3201GT-3	22,1 – 32,0 mm	-	-	9074543	-
ISGS3401GT-72X100X22X20	盘片孔径22 mm	-	-	-	5137396
ISGS3401GT-72X100X35X20	盘片孔径35 mm	-	-	-	5137398
ISGS3401GT-100X54X10	盘片孔径54 mm	-	-	-	5137394

薄壁刀柄盘片 Pole discs TSF



TSF套装可允许热胀仪加热薄壁型刀柄, 同样用于刀具柄部和线圈间的磁力线防护。
这种盘片能够保证安全、可靠热装TSF刀柄。

The TSF set allows TSF shrink chucks to be shrunk using the shrink machine.
The TSF discs provide optimal shielding of the magnetic field between coil and tool shank.
This guarantees safe and reliable shrinking of the TSF shrink chucks.

型号 Designation	夹持范围-Ø Clamping-Ø	ISG1000	ISG 2400 系列 订货号 Ident No.	ISG 3400 系列
ISGS...201-TSF-SET 由以下零件组成		9102759	9102759	9102645
ISGS...201-TSF-SET consists of the following parts				
TVP-ISG-TSF 贮存盒		6955194	6955194	6955194
TVP-ISG-TSF storage box				
ISGS...201-TSF03	3 mm	9102727	9102727	9088924
ISGS...201-TSF04	4 mm	9102728	9102728	9088925
ISGS...201-TSF05	5 mm	9102749	9102749	9102646
ISGS...201-TSF06	6 mm	9102750	9102750	9088926
ISGS...201-TSF08	8 mm	9102752	9102752	9088927
ISGS...201-TSF10	10 mm	9102753	9102753	9088928
ISGS...201-TSF12	12 mm	9102754	9102754	9088980
ISGS...201-TSF14	14 mm	9102755	9102755	9102647
ISGS...201-TSF16	16 mm	9102756	9102756	9088981
ISGS...201-TSF18	18 mm	9102757	9102757	9102648
ISGS...201-TSF20	20 mm	9102758	9102758	9088982
ISGS3201-TSF25	25 mm	-	-	9088983

转换基座, TER带长度调节

Basic adaptor TER with length adjustment



长度可变, 机械式长度调节, 可精确调节至需要的刀具长度。适用于所有夹持尺寸, 配有适当的刀柄夹头。水冷式热胀仪 ISG...TWK 和 ISG...WK, 只需要夹头基座 T...-WWK/TER。对于台式热胀仪 ISG1000 和 ISG...TLK, 需要夹头基座 T...-WWK/TER 和 T...-W/TER。

Variable, mechanical length adjustment, can be precisely adjusted to the required tool length. For all clamping sizes with suitable shrink adaptor. For water cooled shrink units ISG...TWK and ISG...WK only the basic adaptor T...-WWK/TER is needed. An additional adaptor T...-W/TER in combination with the basic holder T...-WWK/TER is required for the table shrink machines ISG 1000 and ISG...TLK.

型号 Designation	订货号 Ident No.			
	ISG1000	ISG...TLK	ISG...TWK	ISG...WK
T3-WWK/TER	-	-	5020330	
T3-WWK/TER +	5020330 +	5020330 +	-	-
T3-W/55x114x70	5051118	5051118	-	-

TER热胀筒夹转换套

Adaptors for shrink fit adaptors TER



热胀筒夹转换套使用于基础转换座 T...-WWK/TER。适用于安全夹持 TER 热胀筒夹转换套。适用于基础转换座 T...-WWK/TER。

For safe holding of the TER shrink fit adaptor. Suitable for basic adaptor T...-WWK/TER.

型号 Designation	订货号 Ident No.
TER 11-2	5111889
TER 16-2	5111890
TER 20-2	5111891
TER 25-2	5111892
TER 32-2	5111893

TER热胀筒夹专用隔热盘片

Pole disc for shrink fit adaptors TER



用于刀具柄部和线圈之间的最佳的磁力线防护。用于刀具柄部和线圈之间的最佳的磁力线防护。

For optimal shielding of the magnetic field between coil and tool shank.

盘片直径-Ø Disc-Ø	夹持范围-Ø Clamping-Ø	DA	型号 Designation	订货号 Ident No.
ISG2400 Series 40 mm	03 - 06	ER11	ISGS2201-TER11-1	5065479
	03 - 04	ER16	ISGS2201-TER16-1	5065474
	06 - 08	ER16	ISGS2201-TER16-2	5065477
	06 - 10	ER20	ISGS2201-TER20-1	5065473
	03 - 04	ER25	ISGS2201-TER25-1	5065468
	06 - 08	ER25	ISGS2201-TER25-2	5065470
	10 - 16	ER25	ISGS2201-TER25-3	5065472
	06 - 14	ER32	ISGS2201-TER32-1	5065466
ISG3400 Series 54 mm	16 - 20	ER32	ISGS2201-TER32-2	5065467
	03 - 06	ER11	ISGS3201-TER11-1	5095918
	03 - 04	ER16	ISGS3201-TER16-1	5087772
	06 - 08	ER16	ISGS3201-TER16-2	5087773
	06 - 10	ER20	ISGS3201-TER20-1	5087774
	03 - 04	ER25	ISGS3201-TER25-1	5087777
	06 - 10	ER25	ISGS3201-TER25-2	5087778
	12 - 16	ER25	ISGS3201-TER25-3	5087779
	06 - 08	ER32	ISGS3201-TER32-1	5087780
	10 - 20	ER32	ISGS3201-TER32-2	5087781

数据管理系统 TDS_c System

针对全自动热胀仪 ISG3410-WK-WS

- 在几秒内完成热胀过程
- 避免错误的参数选择
- 不会让刀柄过热而损坏刀柄
- 最大的安全特性

FULLY AUTOMATIC SHRINKING with the ThermoGrip® shrink machine ISG3410- WK-WS

- Fully automatic shrinking within seconds
- No incorrect input of parameters
- No overheating and burning of the shrink holders
- Maximum security



扫描热胀仪上的二维码了解
数据管理系统

Scan the QR Code to view the TDS_c
System in combination with the
ThermoGrip® Shrink Machine

芯片中的热胀参数通过系统设置连接到热胀仪上

- 所有的相关数据，热胀流程存储在数据芯片中
- 读取装置连接到热胀仪的USB接口中

SYSTEM CONFIGURATION WITH CONNECTION to shrink machine, shrinking parameters on the data carrier

- All relevant data for the shrink process is stored on the data carrier (EPC range)
- Reading unit is connected to the shrinking machine via USB interface

TDS_c-DC ...芯片 Data Carrier



TID (12 BYTE)
EPC 数据载体 Memory (16 BYTE)



独创的芯片安装系统 (专利申请中)
Innovative Mounting System
of the Data Carrier (patent pending)



TDS_c 读取装置 Reading Unit



USB



ISG系列热胀仪的附件

Accessories for the ISG Machine Series



芯片读取装置 BIS-C Chip Reader



巴鲁夫BIS-C / BIS-M芯片读取装置，带手持读取装置和支架
* 可按需选配，需额外的澄清

Balluff BIS-C / BIS-M evaluation unit with handheld Chip Reader and holder

* Option on request, additional clarification necessary

适合以下设备

Suitable for the following machines

型号 Designation	订货号 Ident No.	ISG2410 WK1	ISG2430 TLK	ISG2430 TWK	ISG2431 TLK	ISG3410 WK1	ISG3410 WK4	ISG3430 TLK	ISG3430 TLK4	ISG3430 TWK	ISG4410 WK1	ISG4410 WK2
ISGZ3410-BIS-C	5108649	✓	—	✓	—	✓	✓	—	✓	✓	✓	✓

BILZ RFID芯片读取装置 Bilz Chip Reader



BILZ RFID芯片读取装置，带手持读取装置和支架

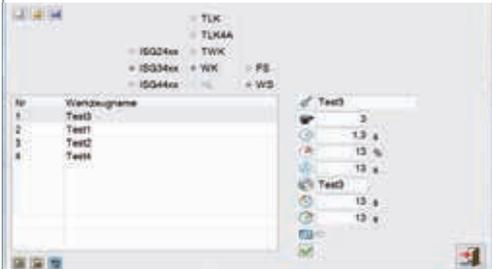
Bilz RFID evaluation unit with handheld Chip Reader and holder

适合以下设备

Suitable for the following machines

型号 Designation	订货号 Ident No.	ISG2410 WK1	ISG2430 TLK	ISG2430 TWK	ISG2431 TLK	ISG3410 WK1	ISG3410 WK4	ISG3430 TLK	ISG3430 TLK4	ISG3430 TWK	ISG4410 WK1	ISG4410 WK2
ISGZ3410-BILZ-ID	5097703	✓	—	✓	—	✓	✓	—	✓	✓	✓	✓

刀具管理编辑器 Tool Memory Editor



电脑程序设置客户的指定刀柄和相应的加热参数。

PC program with which customer-specific tool designations and the corresponding shrink parameters can be set up.

适合以下设备

Suitable for the following machines

型号 Designation	订货号 Ident No.	ISG2410 WK1	ISG2430 TLK	ISG2430 TWK	ISG2431 TLK	ISG3410 WK1	ISG3410 WK4	ISG3430 TLK	ISG3430 TLK4	ISG3430 TWK	ISG4410 WK1	ISG4410 WK2
ISGZ3410-TME	5096091	✓	✓	✓	—	✓	✓	✓	✓	✓	✓	✓

USB接口

USB Interface



USB接口在分配器主板和黑盒子上

Connection of the USB-connector on the distributor board to the plug and socket on the generator box

型号 Designation	订货号 Ident No.	ISG2410 WK1	ISG2430 TLK	ISG2430 TWK	ISG2431 TLK	ISG3410 WK1	ISG3410 WK4	ISG3430 TLK	ISG3430 TLK4	ISG3430 TWK	ISG4410 WK1	ISG4410 WK2
ISGZ3410-USB-BG	5082290	✓	✓	✓	—	✓	✓	✓	✓	✓	✓	✓

产品范围的升级

在产品范围升级的过程中，我们并不仅仅是增加新产品并且程序也会进行技术改进，但同时我们也会持续评估我们的产品范围，例外情况下，您所订购的产品会出现没有库存的现象，您将会收到技术升级后的产品或至少等价新品。

如果您还有疑虑，我们的销售团队会联系您，提供最合适的产品版本给您。我们将确保您购买的总是升级过的产品。

对于产品从样本或价格单上取消我们将不承担任何责任。

比尔兹及其业务伙伴对样本上间接的或偶然的错误不承担责任。我们欢迎您对样本上的错误进行指正。

价格

请参考当前的价格表。

最小订单价值

如果订单价值低于100欧元，会被加收20欧元的附加费用。

非标刀具最小起订量3支。

特殊设计

如果您遇到特殊的问题，我们现有的产品无法解决，我们的技术团队将非常乐意为您提供特殊解决方案。

Updating of our product range

In the course of updating our product range, we are not only constantly adding new and technically improved products to our programme, but at the same time we are also continually reassessing the product range. In exceptional cases, it is possible that we no longer have the product you order on stock.

You will then receive a technically improved product or an equivalent alternative. In any case of doubt, our sales team will contact you in order to determine the optimal version for you. We ensure that you will always get the most updated tools.

We therefore do not assume any obligation to supply tools appearing in the catalogue and/or in the price list which have already been adjusted out of the system internally.

Bilz and its partners shall have no liability for indirect, incidental or consequential errors in this catalog.

Prices

For prices, please refer to the current price list.

Minimum order value

An additional handling fee of EUR 20.00 will be charged for orders with a total value of less than EUR 100.00.

The minimum order quantity for special tools is 3 pcs.

Special designs

If you find that your specific machining problems cannot be resolved with any of our permanently stocked tools, then we can supply special designs or tools made according to drawings. Our application technicians will be glad to help you.

本样本未经许可不得全部或部分进行翻印，版权归比尔兹所有。对于样本中的图表特征和发行日期，我们保留更改的权利。产品实际外观以实物为准。

This publication may not be reprinted in whole or part without our permission. All rights reserved. No rights may be derived from any errors in content or from typographical or typesetting errors. Diagrams, features, and dimensions represent the current status of the date of issue on this catalog. We reserve the right to make technical changes. The visual appearance of the products may not necessarily correspond to the actual appearance in all cases or in every detail.



德国比尔兹工具厂有限公司中国代表处
BILZ WERKZEUGFABRIK
GmbH & Co. KG
上海瑞士中心, 富特东三路526号3号楼
A107室, 中国上海自由贸易区 200131
电话: +86 21 2076 5699
传真: +86 21 2076 5722
info@bilz.cn
www.bilz-boehlerit.com

BILZ WERKZEUGFABRIK
GmbH & Co. KG
Vogelsangstr. 8
73760 Ostfildern
Deutschland/Germany
Telefon +49 711 348 01 - 0
Telefax +49 711 348 12 56
info@bilz.de
www.bilz.de



全球生产和销售分支机构

Production and sales locations of the LEITZ Group

- Bilz
- Boehlerit
- Leitz