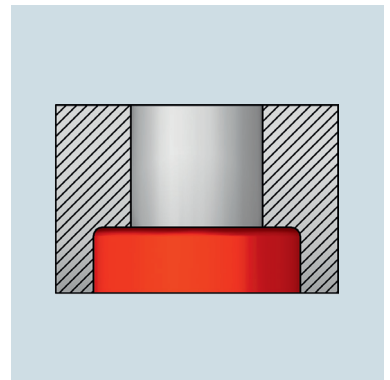
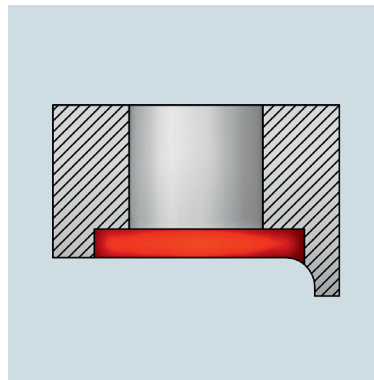
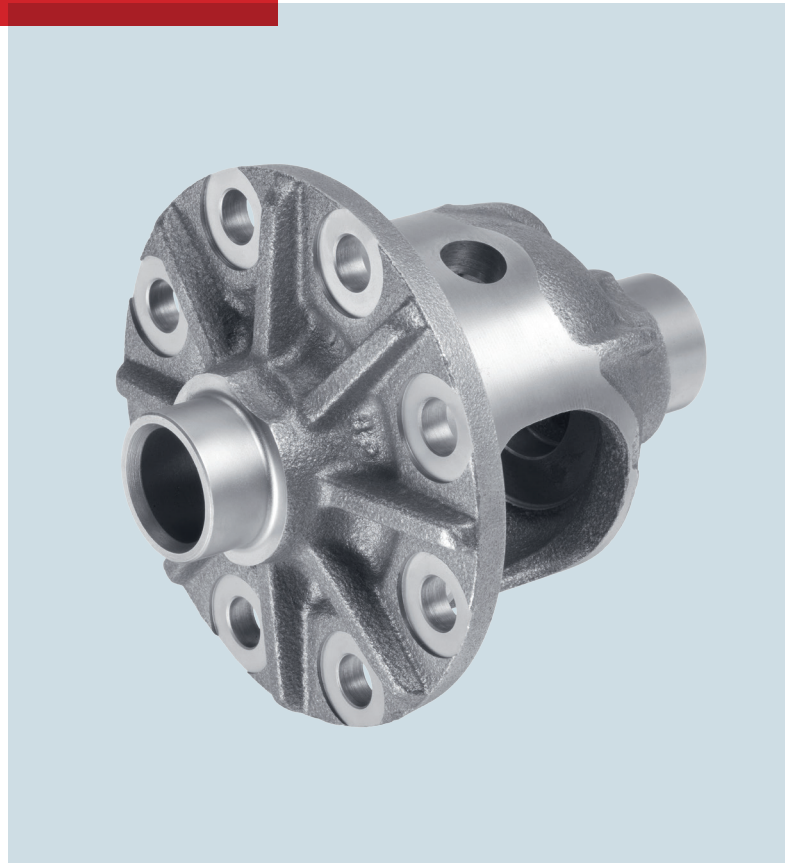
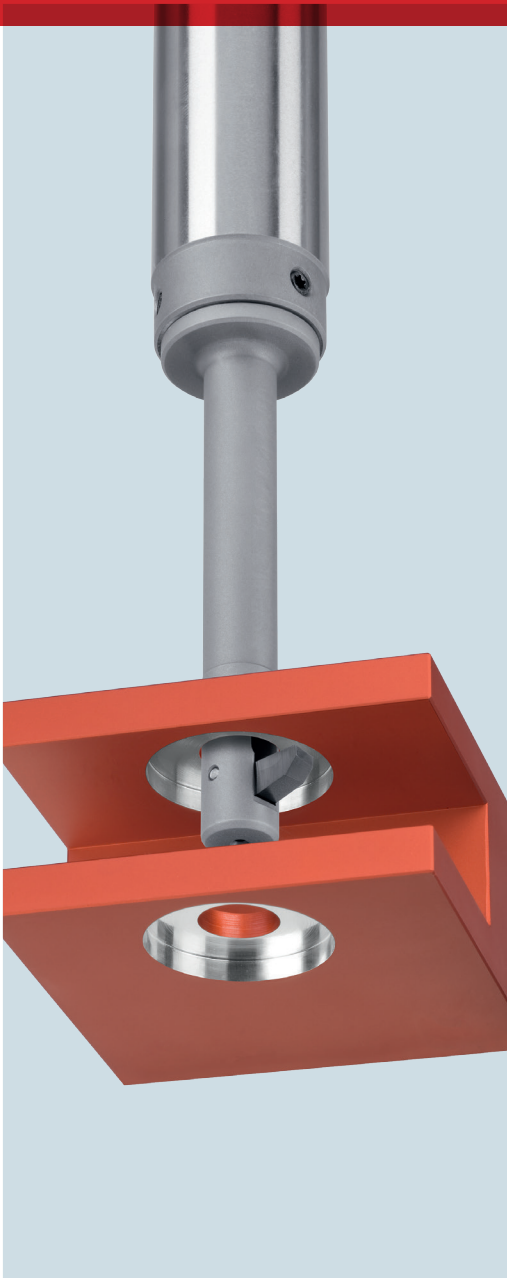


BSF

经济型反镗沉孔刀具

最大反镗沉孔直径可达过孔直径的2.3倍



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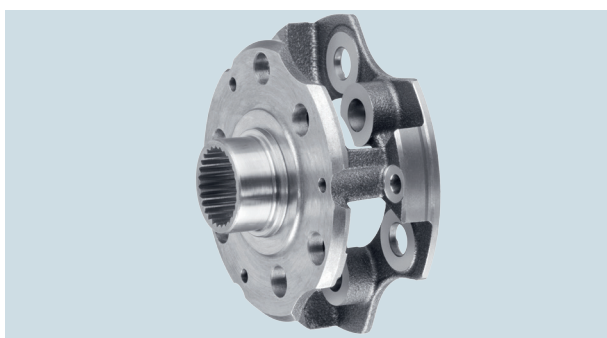
BSF - 经济型反镗沉孔刀具



最大反镗沉孔直径可达过孔直径的2.3倍

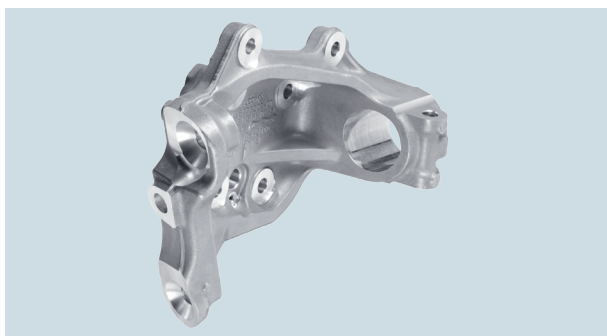
BSF刀具结构简单，设计巧妙，使得反镗沉孔工序不需要翻转工件一次装夹就可完成。其极高的生产效率和它简单可靠的结构形成了鲜明的对比。

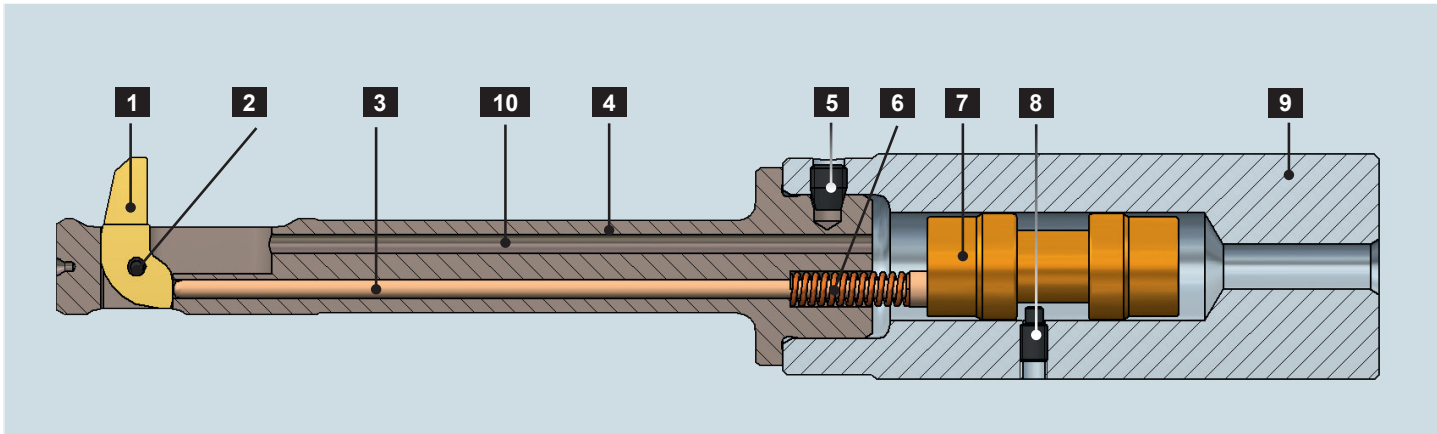
当主轴转速达到推荐的速度时，刀片打开至工作位置。通过机床的内冷压力我们可以控制刀片的收回。



性能及优点：

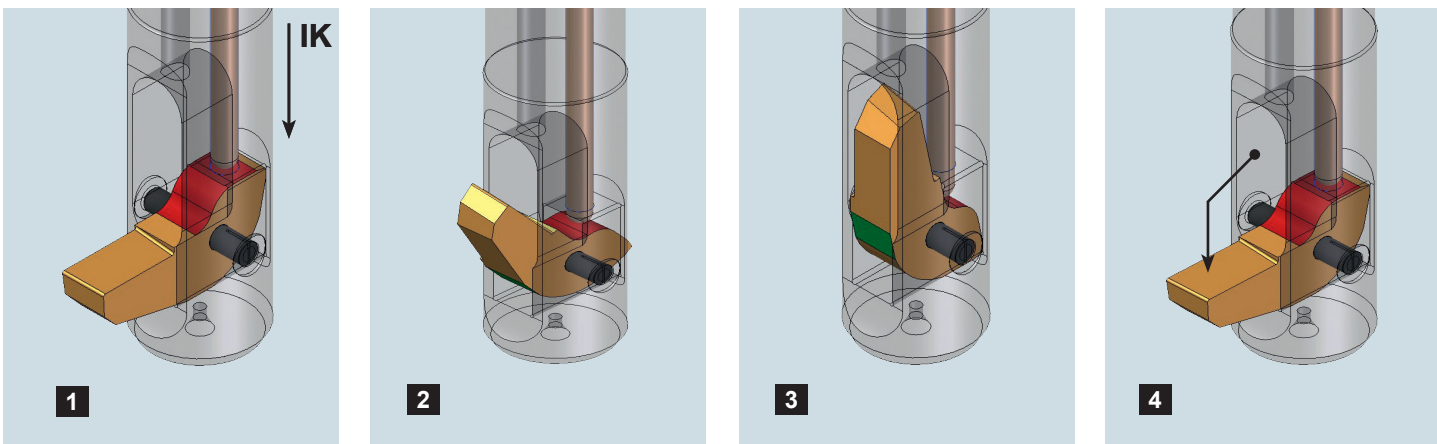
- BSF刀具是为实现反镗沉孔的自动化加工而设计的，其工作不需要止动装置，不需反转及其他任何机床辅助装置。
- 刀片摆动式的收回机构，配合机床内冷压力（最小20bar、最大50bar）驱动的原理保证的刀片不会因为铁屑及粉尘而无法收回。
- 所有的刀具部件更换都很简便。
- 立式机床和卧式机床都可以使用。
- 直径6.5mm-21mm为标准产品，以0.5mm为一档。
- 刀片覆盖各类尺寸，刀片材质有涂层硬质合金及高速钢供选择。
- 刀具独特的内冷排屑设计使得铁屑及粉尘能及时排除刀片窗口内，保证了刀片收回的可靠性。





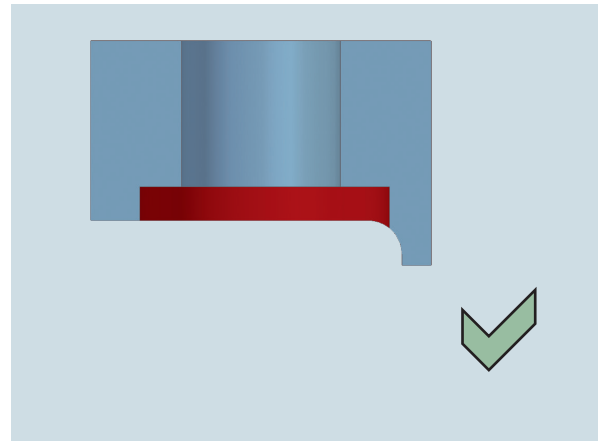
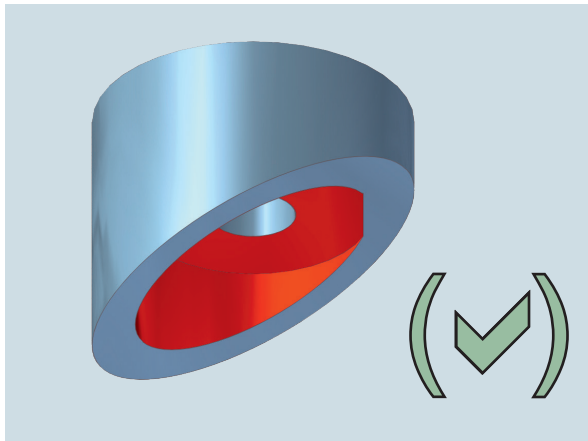
- | | |
|--------------------|----------|
| 1 刀片 | 6 弹簧 |
| 2 刀片销 (销轴随着刀片一起更换) | 7 活塞 |
| 3 控制销 | 8 活塞限位螺钉 |
| 4 刀杆 | 9 刀柄 |
| 5 锁紧螺钉 | 10 冷却孔 |

刀片工作原理

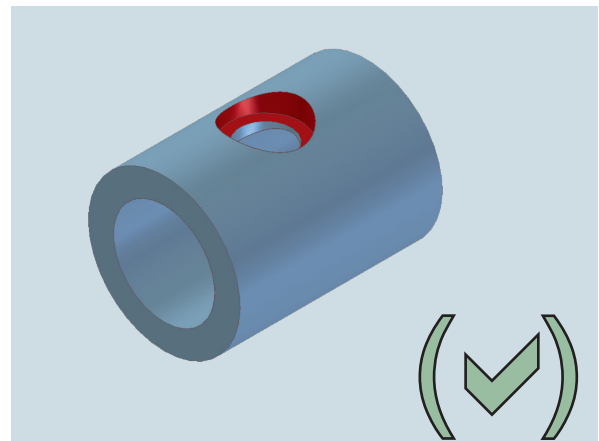
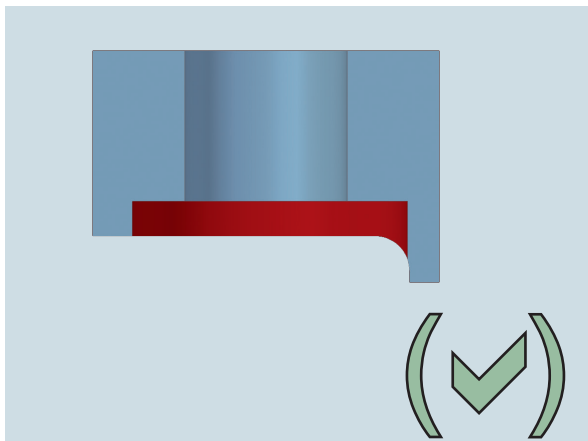


- 1 在冷却液压力作用下，活塞推动控制销，控制销推动刀片开始收回刀体。
- 2 在刀片收回刀体过程中，压力面产生翻转，控制销（此时控制销还在压力的持续作用下）顺着刀片尾部的弧面继续推动刀片直至将刀片完全推入刀体中。
- 3 当刀片在控制销的作用下完全收入刀体之后，刀具可以轴向（Z向）运动通过工件过孔。
- 4 关闭机床内冷，主轴开始旋转（达到推荐转速），刀片展开至工作位置。内冷可以通过冷却孔到达刀片切削刃。当反镗沉孔完成后，刀具退回加工起始位置。此时打开机床内冷，驱动刀片再次收回到刀体内。

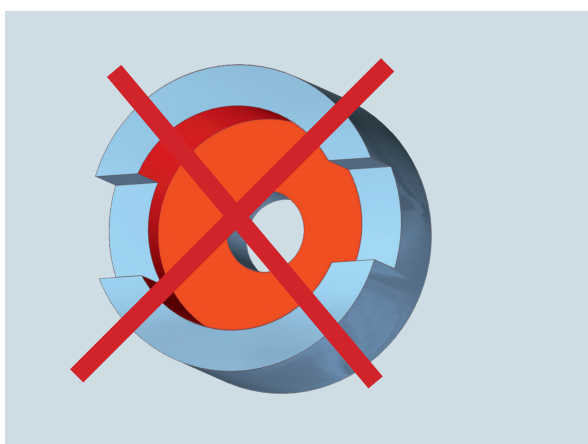
可用于在小于30° 度的斜面上铰沉孔。如果反铰沉孔靠近带有圆弧的区域，请不要开启内冷。



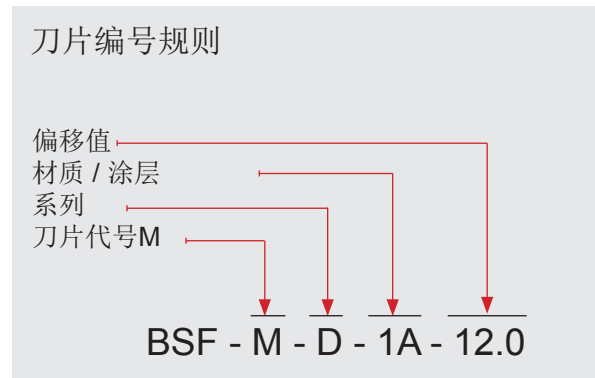
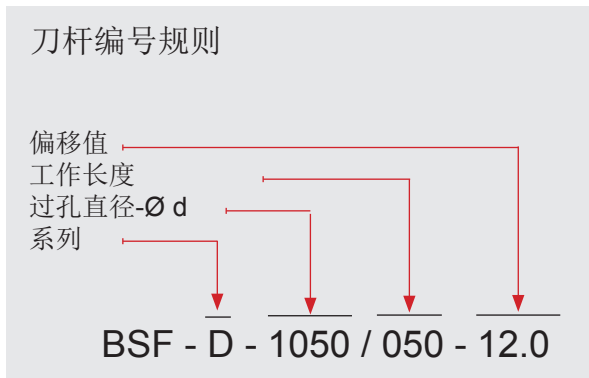
如遇以下加工情况，请向我们进行技术咨询。



不能用于完全断续切削的场合（如凸台、沟槽等）。



所有的BSF刀具刀体和刀片需分别订货。刀片编号需定义刀刃宽度及使用的刀杆系列。



系列

BSF标准刀具分为7个系列(A-G)，系列的划分使得刀具的选择更简单，同时在定义刀片的时候可以避免出错。

过孔直径 d

过孔直径d是BSF刀具关键参数。BSF刀具就是以过孔直径来进行系列划分的。

反镗孔直径 D

反镗孔直径值等于刀杆偏移值加上对应刀片偏移值。

夹持系统

BSF刀具默认的刀柄为圆柱刀柄。如有需要，我们也可以提供侧固及斜侧固刀柄。例如需要侧固刀柄，我们需在刀杆编号后面加“-HB”；需要斜侧固刀柄则在刀杆编号后面加“-HE”。

空白= 圆柱刀柄(标准)

HB = 侧固刀柄

HE = 斜侧固刀柄

如下为侧固刀柄的刀杆编号:

BSF-D-1050/050-12.0 - HB

刀片选择/描述

刀片的型号可以从下面列表中选择也可以在我们的官网www.heule.com中BSF选择器中自动选择。

系列

刀片的系列号和刀杆的系列号需一致。如：“E”系列的刀片只能装在“E”系列的刀杆上使用。

偏移值

反镗孔直径值等于刀杆偏移值加上对应刀片偏移值。例如：12.0+12.0=反镗孔直径=Ø 24.0 (请参照第38页例子)。

刀片材料 / 涂层

根据应用的实际情况来选择刀片的材质及涂层。

材料:

1 = 硬质合金

涂层:

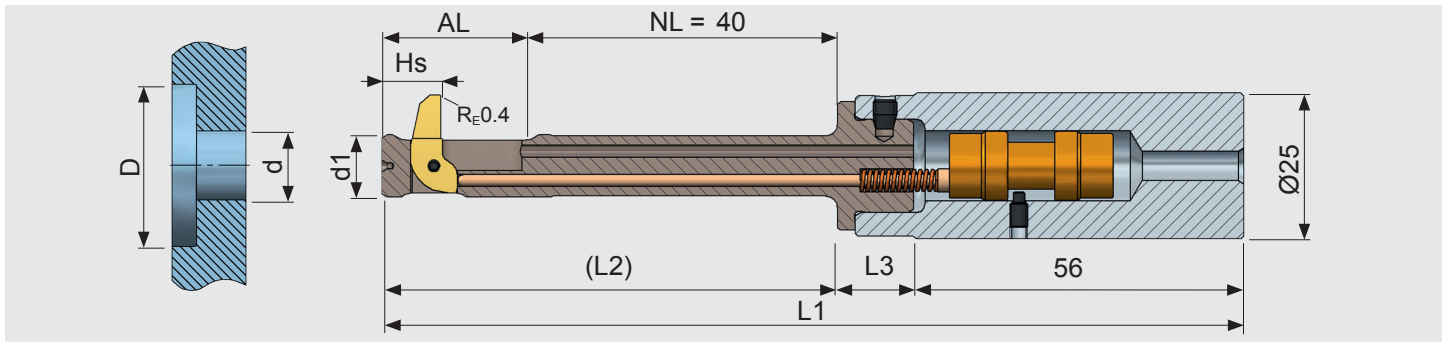
A = 通用涂层 (如铸铁、钢件等)

D = 铝合金

如何选择刀杆和刀片

请从第7页开始的表格中选择你的刀杆及刀片订货号。首先在表格中找到你所需要刀具的过孔直径，然后再根据反镗孔直径确定刀杆及刀片。

BSF刀杆和刀片-过孔直径Ø6.5至7.0 mm



刀具型号表

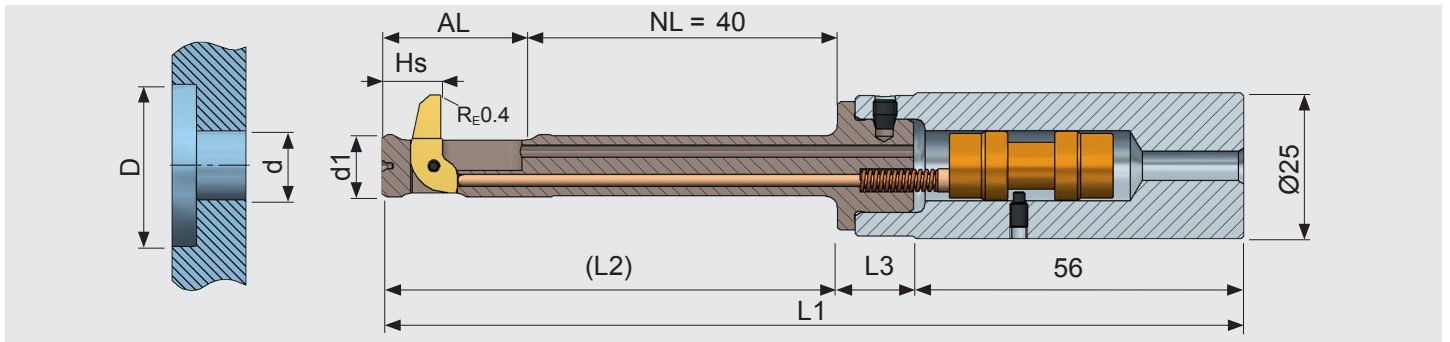
| 最小过孔直径-Ø d | 刀杆直径-Ø d1 | 反镗孔直径-Ø D | AL | HS | L1 | L2 | L3 | 不含刀片刀杆订货号 | 刀片订货号 ¹⁾ | | | |
|------------|-----------|-----------|-------|------|--------|-------|-------|--------------------|---------------------|--------------------|----------------|--------------------|
| 6.50 | 6.40 | 9.50 | 14.25 | 6.15 | 127.75 | 58.25 | 13.50 | BSF-A-0650/040-6.5 | BSF-M-A-1A-3.0 | | | |
| | | 10.00 | | | | | | BSF-A-0650/040-7.0 | | | | |
| | | 10.50 | | | | | | BSF-A-0650/040-7.5 | | | | |
| | | 11.00 | | | | | | BSF-A-0650/040-6.5 | BSF-M-A-1A-4.5 | | | |
| | | | | | | | | 11.50 | | BSF-A-0650/040-7.0 | | |
| | | | | | | | | 12.00 | | BSF-A-0650/040-7.5 | | |
| | | | | | | | | 12.50 | | BSF-A-0650/040-6.5 | BSF-M-A-1A-6.0 | |
| | | | | | | | | | | 13.00 | | BSF-A-0650/040-7.0 |
| | | | | | | | | | | 13.50 | | BSF-A-0650/040-7.5 |
| | | 14.00 | | | | | | BSF-A-0650/040-6.5 | BSF-M-A-1A-7.5 | | | |
| | | | | | | | | 14.50 | | BSF-A-0650/040-7.0 | | |
| | | | | | | | | 15.00 | | BSF-A-0650/040-7.5 | | |
| 7.00 | 6.90 | 10.00 | 15.00 | 6.15 | 127.75 | 58.25 | 13.50 | BSF-A-0700/040-7.0 | BSF-M-A-1A-3.0 | | | |
| | | 10.50 | | | | | | BSF-A-0700/040-7.5 | | | | |
| | | 11.00 | | | | | | BSF-A-0700/040-8.0 | | | | |
| | | 11.50 | | | | | | BSF-A-0700/040-7.0 | BSF-M-A-1A-4.5 | | | |
| | | | | | | | | 12.00 | | BSF-A-0700/040-7.5 | | |
| | | | | | | | | 12.50 | | BSF-A-0700/040-8.0 | | |
| | | 13.00 | | | | | | BSF-A-0700/040-7.0 | BSF-M-A-1A-6.0 | | | |
| | | | | | | | | 13.50 | | BSF-A-0700/040-7.5 | | |
| | | | | | | | | 14.00 | | BSF-A-0700/040-8.0 | | |
| | | 14.50 | | | | | | BSF-A-0700/040-7.0 | BSF-M-A-1A-7.5 | | | |
| | | | | | | | | 15.00 | | BSF-A-0700/040-7.5 | | |
| | | | | | | | | 15.50 | | BSF-A-0700/040-8.0 | | |
| | | 16.00 | | | | | | BSF-A-0700/040-7.0 | BSF-M-A-1A-9.0 | | | |
| | | | | | | | | 16.50 | | BSF-A-0700/040-7.5 | | |

¹⁾A=用于铸铁、钢件、不锈钢等材料的涂层 / D = 用于铝合金等材料的涂层 (请见第6页)

注

- 在刀杆订货号没特别标明的情况下刀柄为：圆柱柄
加标注 "-HB" = 侧固柄, "-HE" =斜侧固柄 (请见第6页)
- 注意：刀杆订货号不含刀片，刀片需单独采购。

BSF刀杆和刀片-过孔直径 \varnothing 7.5至8.5 mm



刀具型号表

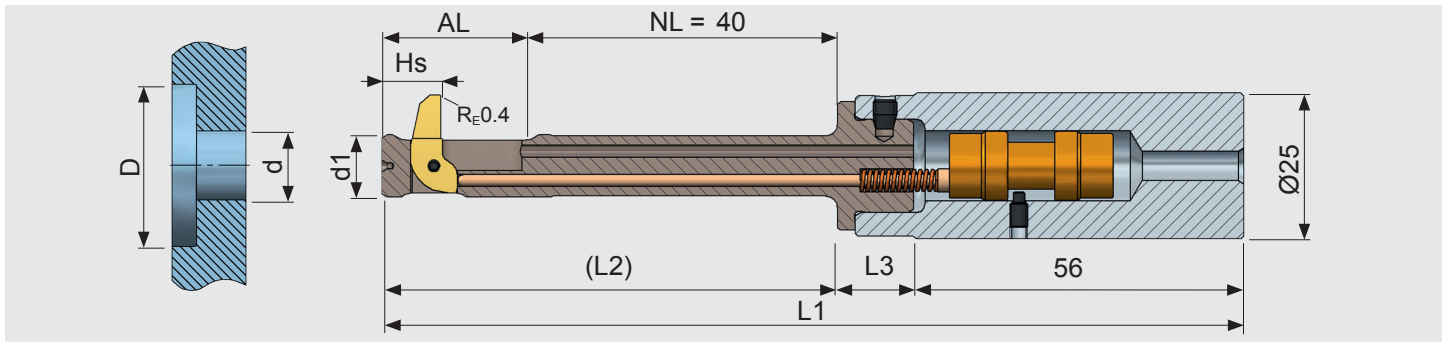
| 最小过孔直径- \varnothing d | 刀杆直径- \varnothing d1 | 反镗孔直径- \varnothing D | AL | HS | L1 | L2 | L3 | 不含刀片刀体订货号 | 刀片订货号 ¹⁾ | | | | | |
|-------------------------|------------------------|------------------------|-------|------|--------|-------|-------|--------------------|---------------------|--------|-------|-------|--------------------|----------------|
| 7.50 | 7.40 | 11.00 | 17.00 | 7.55 | 130.50 | 61.00 | 13.50 | BSF-B-0750/040-7.5 | BSF-M-B-1A-3.5 | | | | | |
| | | 11.50 | | | | | | BSF-B-0750/040-8.0 | | | | | | |
| | | 12.00 | | | | | | BSF-B-0750/040-8.5 | | | | | | |
| | | 12.50 | | | | | | BSF-B-0750/040-7.5 | BSF-M-B-1A-5.0 | | | | | |
| | | 13.00 | | | | | | BSF-B-0750/040-8.0 | | | | | | |
| | | 13.50 | | | | | | BSF-B-0750/040-8.5 | | | | | | |
| | | 14.00 | | | | | | BSF-B-0750/040-7.5 | BSF-M-B-1A-6.5 | | | | | |
| | | 14.50 | | | | | | BSF-B-0750/040-8.0 | | | | | | |
| | | 15.00 | | | | | | BSF-B-0750/040-8.5 | | | | | | |
| | | 15.50 | | | | | | BSF-B-0750/040-7.5 | BSF-M-B-1A-8.0 | | | | | |
| 16.00 | BSF-B-0750/040-8.0 | | | | | | | | | | | | | |
| 16.50 | BSF-B-0750/040-8.5 | | | | | | | | | | | | | |
| 8.00 | 7.90 | 17.00 | 17.00 | 7.55 | 130.50 | 61.00 | 13.50 | BSF-B-0750/040-7.5 | BSF-M-B-1A-9.5 | | | | | |
| | | 17.50 | | | | | | BSF-B-0750/040-8.0 | | | | | | |
| | | 11.50 | | | | | | 17.00 | 7.55 | 130.50 | 61.00 | 13.50 | BSF-B-0800/040-8.0 | BSF-M-B-1A-3.5 |
| | | 12.00 | | | | | | | | | | | BSF-B-0800/040-8.5 | |
| | | 12.50 | | | | | | | | | | | BSF-B-0800/040-9.0 | |
| | | 13.00 | | | | | | | | | | | BSF-B-0800/040-8.0 | BSF-M-B-1A-5.0 |
| | | 13.50 | | | | | | | | | | | BSF-B-0800/040-8.5 | |
| | | 14.00 | | | | | | | | | | | BSF-B-0800/040-9.0 | |
| | | 14.50 | | | | | | | | | | | BSF-B-0800/040-8.0 | BSF-M-B-1A-6.5 |
| | | 15.00 | | | | | | | | | | | BSF-B-0800/040-8.5 | |
| 15.50 | BSF-B-0800/040-9.0 | | | | | | | | | | | | | |
| 16.00 | BSF-B-0800/040-8.0 | BSF-M-B-1A-8.0 | | | | | | | | | | | | |
| 16.50 | BSF-B-0800/040-8.5 | | | | | | | | | | | | | |
| 17.00 | BSF-B-0800/040-9.0 | | | | | | | | | | | | | |
| 17.50 | BSF-B-0800/040-8.0 | BSF-M-B-1A-9.5 | | | | | | | | | | | | |
| 18.00 | BSF-B-0800/040-8.5 | | | | | | | | | | | | | |
| 18.50 | BSF-B-0800/040-9.0 | | | | | | | | | | | | | |

¹⁾A=用于铸铁、钢件、不锈钢等材料的涂层 / D = 用于铝合金等材料的涂层 (请见第6页)

注

- 在刀杆订货号没特别标明的情况下刀柄为：圆柱柄
- 加标注 "-HB" = 侧固柄, "-HE" = 斜侧固柄 (请见第6页)
- 注意：刀杆订货号不含刀片，刀片需单独采购。

BSF刀杆和刀片-过孔直径 \varnothing 7.5至8.5 mm



刀具型号表

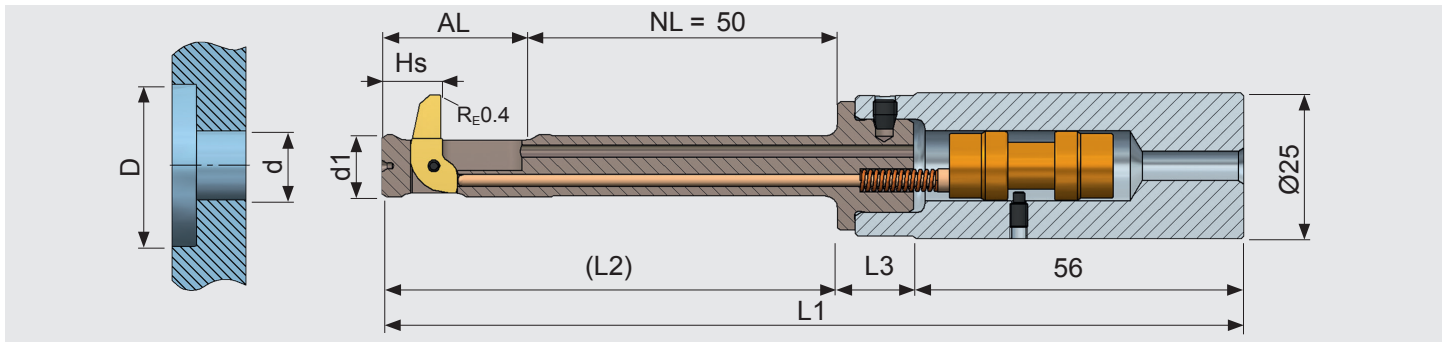
| 最小过孔直径- \varnothing d | 刀杆直径- \varnothing d1 | 反镗孔直径- \varnothing D | AL | HS | L1 | L2 | L3 | 不含刀片刀杆订货号 | 刀片订货号 ¹⁾ |
|-------------------------|------------------------|------------------------|-------|------|--------|-------|-------|--------------------|---------------------|
| 8.50 | 8.40 | 12.00 | 17.75 | 7.55 | 131.25 | 61.75 | 13.50 | BSF-B-0850/040-8.5 | BSF-M-B-1A-3.5 |
| | | 12.50 | | | | | | BSF-B-0850/040-9.0 | |
| | | 13.00 | | | | | | BSF-B-0850/040-9.5 | |
| | | 13.50 | | | | | | BSF-B-0850/040-8.5 | BSF-M-B-1A-5.0 |
| | | 14.00 | | | | | | BSF-B-0850/040-9.0 | |
| | | 14.50 | | | | | | BSF-B-0850/040-9.5 | |
| | | 15.00 | | | | | | BSF-B-0850/040-8.5 | BSF-M-B-1A-6.5 |
| | | 15.50 | | | | | | BSF-B-0850/040-9.0 | |
| | | 16.00 | | | | | | BSF-B-0850/040-9.5 | |
| | | 16.50 | | | | | | BSF-B-0850/040-8.5 | BSF-M-B-1A-8.0 |
| | | 17.00 | | | | | | BSF-B-0850/040-9.0 | |
| | | 17.50 | | | | | | BSF-B-0850/040-9.5 | |
| | | 18.00 | | | | | | BSF-B-0850/040-8.5 | BSF-M-B-1A-9.5 |
| | | 18.50 | | | | | | BSF-B-0850/040-9.0 | |
| | | 19.00 | | | | | | BSF-B-0850/040-9.5 | |
| | | 19.50 | | | | | | BSF-B-0850/040-8.5 | BSF-M-B-1A-11.0 |
| | | 20.00 | | | | | | BSF-B-0850/040-9.0 | |

¹⁾A=用于铸铁、钢件、不锈钢等材料的涂层 / D = 用于铝合金等材料的涂层 (请见第6页)

注

- 在刀杆订货号没特别标明的情况下刀柄为：圆柱柄
加标注 "-HB" = 侧固柄, "-HE" = 斜侧固柄 (请见第6页)
- 注意：刀杆订货号不含刀片，刀片需单独采购。

BSF刀杆和刀片-过孔直径 \varnothing 9.0至10.0 mm



刀具型号表

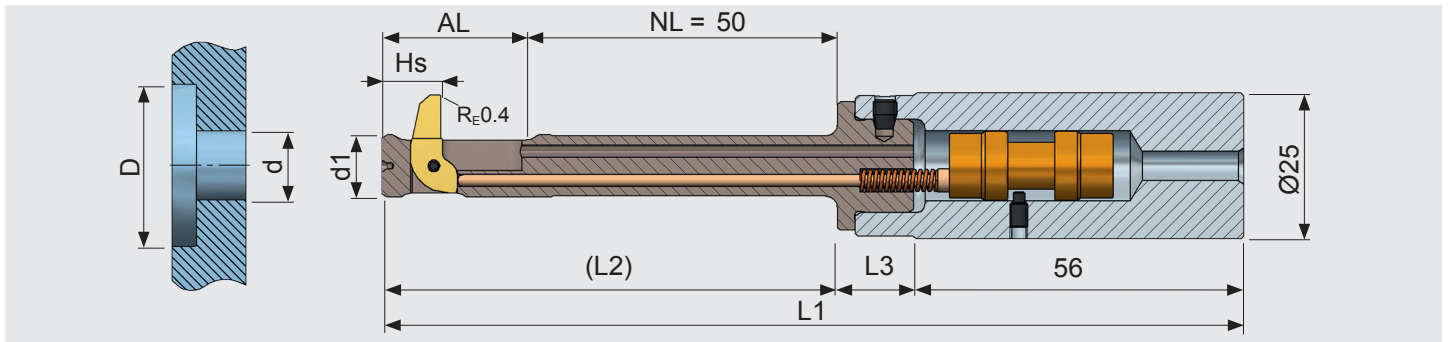
| 最小过孔直径- \varnothing d | 刀杆直径- \varnothing d1 | 反镗孔直径- \varnothing D | AL | HS | L1 | L2 | L3 | 不含刀片刀体订货号 | 刀片订货号 ¹ | | |
|-------------------------|------------------------|------------------------|-------|-------|--------|---------------------|-------|---------------------|--------------------|---------------------|----------------|
| 9.00 | 8.90 | 13.50 | 20.25 | 8.65 | 143.75 | 74.25 | 13.50 | BSF-C-0900/050-9.5 | BSF-M-C-1A-4.0 | | |
| | | 14.00 | | | | | | BSF-C-0900/050-10.0 | | | |
| | | 14.50 | | | | | | BSF-C-0900/050-10.5 | | | |
| | | | | 15.00 | | | | | | BSF-C-0900/050-9.5 | BSF-M-C-1A-5.5 |
| | | | | 15.50 | | | | | | BSF-C-0900/050-10.0 | |
| | | | | 16.00 | | | | | | BSF-C-0900/050-10.5 | |
| | | | | 16.50 | | | | | | BSF-C-0900/050-9.5 | BSF-M-C-1A-7.0 |
| | | | | 17.00 | | | | | | BSF-C-0900/050-10.0 | |
| | | | | 17.50 | | | | | | BSF-C-0900/050-10.5 | BSF-M-C-1A-8.5 |
| | | | | 18.00 | | | | | | BSF-C-0900/050-9.5 | |
| 18.50 | | | | | | | | BSF-C-0900/050-10.0 | | | |
| 19.00 | | | | | | | | BSF-C-0900/050-10.5 | | | |
| 19.50 | | | | | | | | BSF-C-0900/050-9.5 | BSF-M-C-1A-10.0 | | |
| 20.00 | | | | | | BSF-C-0900/050-10.0 | | | | | |
| 9.50 | 9.40 | 20.50 | | | | | | BSF-C-0900/050-10.5 | BSF-M-C-1A-11.5 | | |
| | | 21.00 | | | | | | BSF-C-0900/050-9.5 | | | |
| | | 14.00 | | | | | | BSF-C-0950/050-10.0 | BSF-M-C-1A-4.0 | | |
| | | 14.50 | | | | | | BSF-C-0950/050-10.5 | | | |
| | | 15.00 | | | | | | BSF-C-0950/050-11.0 | | | |
| | | | | 15.50 | | | | | | BSF-C-0950/050-10.0 | BSF-M-C-1A-5.5 |
| | | | | 16.00 | | | | | | BSF-C-0950/050-10.5 | |
| | | | | 16.50 | | | | | | BSF-C-0950/050-11.0 | |
| | | | | 17.00 | | | | | | BSF-C-0950/050-10.0 | BSF-M-C-1A-7.0 |
| | | | | 17.50 | | | | | | BSF-C-0950/050-10.5 | |
| | | 18.00 | | | | | | BSF-C-0950/050-11.0 | BSF-M-C-1A-8.5 | | |
| | | 18.50 | | | | | | BSF-C-0950/050-10.0 | | | |
| | | 19.00 | | | | | | BSF-C-0950/050-10.5 | | | |
| | | 19.50 | | | | | | BSF-C-0950/050-11.0 | | | |
| | | 20.00 | | | | | | BSF-C-0950/050-10.0 | BSF-M-C-1A-10.0 | | |
| 20.50 | | | | | | BSF-C-0950/050-10.5 | | | | | |
| | | 21.00 | | | | | | BSF-C-0950/050-11.0 | BSF-M-C-1A-11.5 | | |
| | | 21.50 | | | | | | BSF-C-0950/050-10.0 | | | |
| | | 22.00 | | | | | | BSF-C-0950/050-10.5 | | | |

¹A=用于铸铁、钢件、不锈钢等材料的涂层 / D = 用于铝合金等材料的涂层 (请见第6页)

注

- 在刀杆订货号没特别标明的情况下刀柄为：圆柱柄
加标注 "-HB" = 侧固柄, "-HE" = 斜侧固柄 (请见第6页)
- 注意：刀杆订货号不含刀片，刀片需单独采购。

BSF刀杆和刀片-过孔直径 \varnothing 9.0至10.0 mm



刀具型号表

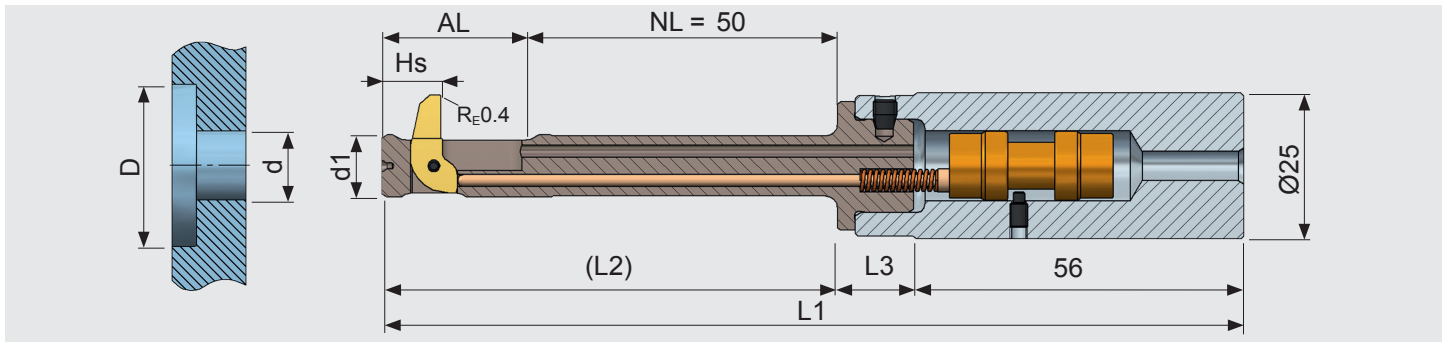
| 最小过孔直径- \varnothing d | 刀杆直径- \varnothing d1 | 反镗孔直径- \varnothing D | AL | HS | L1 | L2 | L3 | 不含刀片刀体订货号 | 刀片订货号 ¹⁾ |
|-------------------------|------------------------|------------------------|-------|------|--------|-------|-------|---------------------|---------------------|
| 10.00 | 9.90 | 14.50 | 20.25 | 8.65 | 143.75 | 74.25 | 13.50 | BSF-C-1000/050-10.5 | BSF-M-C-1A-4.0 |
| | | 15.00 | | | | | | BSF-C-1000/050-11.0 | |
| | | 15.50 | | | | | | BSF-C-1000/050-11.5 | |
| | | 16.00 | | | | | | BSF-C-1000/050-10.5 | BSF-M-C-1A-5.5 |
| | | 16.50 | | | | | | BSF-C-1000/050-11.0 | |
| | | 17.00 | | | | | | BSF-C-1000/050-11.5 | |
| | | 17.50 | | | | | | BSF-C-1000/050-10.5 | |
| | | 18.00 | | | | | | BSF-C-1000/050-11.0 | BSF-M-C-1A-7.0 |
| | | 18.50 | | | | | | BSF-C-1000/050-11.5 | |
| | | 19.00 | | | | | | BSF-C-1000/050-10.5 | |
| | | 19.50 | | | | | | BSF-C-1000/050-11.0 | BSF-M-C-1A-8.5 |
| | | 20.00 | | | | | | BSF-C-1000/050-11.5 | |
| | | 20.50 | | | | | | BSF-C-1000/050-10.5 | |
| | | 21.00 | | | | | | BSF-C-1000/050-11.0 | BSF-M-C-1A-10.0 |
| | | 21.50 | | | | | | BSF-C-1000/050-11.5 | |
| | | 22.00 | | | | | | BSF-C-1000/050-10.5 | |
| | | 22.50 | | | | | | BSF-C-1000/050-11.0 | BSF-M-C-1A-11.5 |
| | | 23.00 | | | | | | BSF-C-1000/050-11.5 | |

¹⁾A=用于铸铁、钢件、不锈钢等材料的涂层 / D = 用于铝合金等材料的涂层 (请见第6页)

注

- 在刀杆订货号没特别标明的情况下刀柄为：圆柱柄
- 加标注 "-HB" = 侧固柄, "-HE" = 斜侧固柄 (请见第6页)
- 注意：刀杆订货号不含刀片，刀片需单独采购。

BSF刀杆和刀片-过孔直径 \varnothing 10.5至11.5 mm



刀具型号表

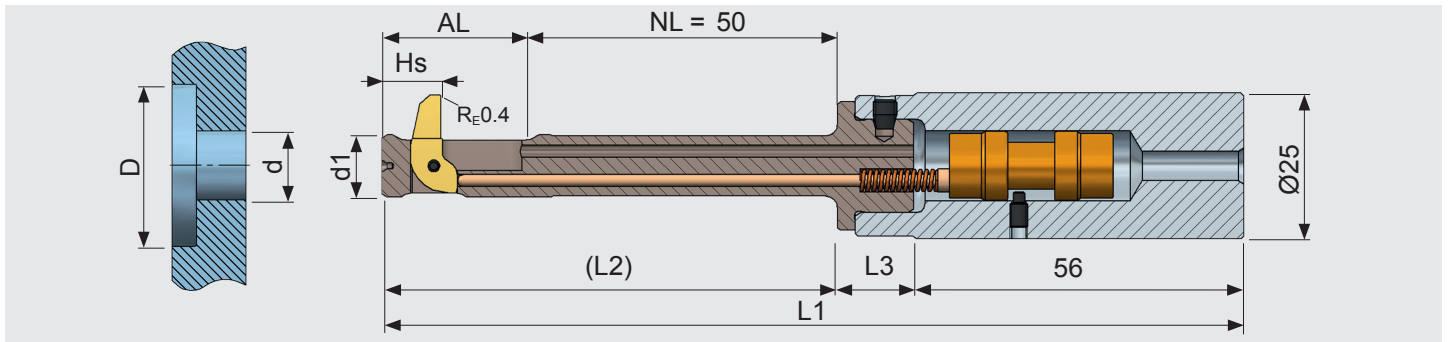
| 最小过孔直径- \varnothing d | 刀杆直径- \varnothing d1 | 反镗孔直径- \varnothing D | AL | HS | L1 | L2 | L3 | 不含刀片刀体订货号 | 刀片订货号 ¹ | | |
|-------------------------|------------------------|------------------------|-------|-------|--------|-------|-------|---------------------|--------------------|---------------------|----------------|
| 10.50 | 10.40 | 15.50 | 22.50 | 9.73 | 146.00 | 76.50 | 13.50 | BSF-D-1050/050-11.0 | BSF-M-D-1A-4.5 | | |
| | | 16.00 | | | | | | BSF-D-1050/050-11.5 | | | |
| | | 16.50 | | | | | | BSF-D-1050/050-12.0 | | | |
| | | 17.00 | | | | | | BSF-D-1050/050-12.5 | | | |
| | | 17.50 | | | | | | BSF-D-1050/050-13.0 | | | |
| 18.00 | 18.50 | 19.00 | 19.50 | 20.00 | 20.50 | 21.00 | 21.50 | 22.00 | 22.50 | BSF-D-1050/050-11.0 | BSF-M-D-1A-7.0 |
| | | | | | | | | | | BSF-D-1050/050-11.5 | |
| | | | | | | | | | | BSF-D-1050/050-12.0 | |
| | | | | | | | | | | BSF-D-1050/050-12.5 | |
| | | | | | | | | | | BSF-D-1050/050-13.0 | |
| 23.00 | 23.50 | 24.00 | 24.50 | 23.00 | 23.50 | 24.00 | 24.50 | BSF-D-1050/050-11.0 | BSF-M-D-1A-12.0 | | |
| | | | | | | | | | | BSF-D-1050/050-11.5 | |
| | | | | | | | | | | BSF-D-1050/050-12.0 | |
| | | | | | | | | | | BSF-D-1050/050-12.5 | |
| | | | | | | | | | | BSF-D-1050/050-13.0 | |

¹A=用于铸铁、钢件、不锈钢等材料的涂层 / D = 用于铝合金等材料的涂层 (请见第6页)

注

- 在刀杆订货号没特别标明的情况下刀柄为：圆柱柄
加标注 "-HB" = 侧固柄, "-HE" =斜侧固柄 (请见第6页)
- 注意：刀杆订货号不含刀片，刀片需单独采购。

BSF刀杆和刀片-过孔直径 \varnothing 10.5至11.5 mm



刀具型号表

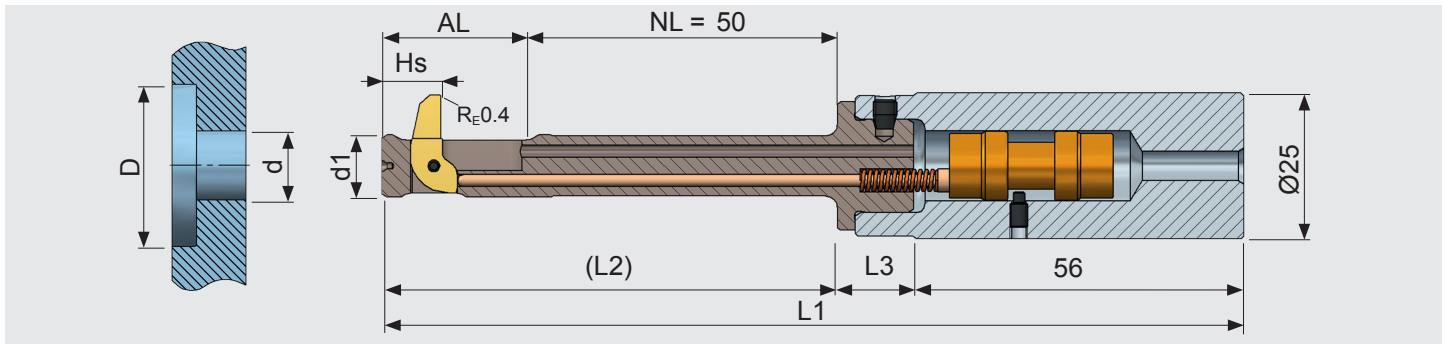
| 最小过孔直径- \varnothing d | 刀杆直径- \varnothing d1 | 反镗孔直径- \varnothing D | AL | HS | L1 | L2 | L3 | 不含刀片刀体订货号 | 刀片订货号 ¹⁾ |
|-------------------------|------------------------|------------------------|-------|------|--------|-------|-------|---------------------|---------------------|
| 11.00 | 10.90 | 16.00 | 22.50 | 9.73 | 146.00 | 76.50 | 13.50 | BSF-D-1100/050-11.5 | BSF-M-D-1A-4.5 |
| | | 16.50 | | | | | | BSF-D-1100/050-12.0 | |
| | | 17.00 | | | | | | BSF-D-1100/050-12.5 | |
| | | 17.50 | | | | | | BSF-D-1100/050-13.0 | |
| | | 18.00 | | | | | | BSF-D-1100/050-13.5 | |
| | | 18.50 | | | | | | BSF-D-1100/050-11.5 | BSF-M-D-1A-7.0 |
| | | 19.00 | | | | | | BSF-D-1100/050-12.0 | |
| | | 19.50 | | | | | | BSF-D-1100/050-12.5 | |
| | | 20.00 | | | | | | BSF-D-1100/050-13.0 | |
| | | 20.50 | | | | | | BSF-D-1100/050-13.5 | |
| | | 21.00 | | | | | | BSF-D-1100/050-11.5 | BSF-M-D-1A-9.5 |
| | | 21.50 | | | | | | BSF-D-1100/050-12.0 | |
| | | 22.00 | | | | | | BSF-D-1100/050-12.5 | |
| | | 22.50 | | | | | | BSF-D-1100/050-13.0 | |
| | | 23.00 | | | | | | BSF-D-1100/050-13.5 | |
| | | 23.50 | | | | | | BSF-D-1100/050-11.5 | BSF-M-D-1A-12.0 |
| | | 24.00 | | | | | | BSF-D-1100/050-12.0 | |
| | | 24.50 | | | | | | BSF-D-1100/050-12.5 | |
| | | 25.00 | | | | | | BSF-D-1100/050-13.0 | |
| | | 25.50 | | | | | | BSF-D-1100/050-13.5 | |

¹⁾A=用于铸铁、钢件、不锈钢等材料的涂层 / D = 用于铝合金等材料的涂层 (请见第6页)

注

- 在刀杆订货号没特别标明的情况下刀柄为: 圆柱柄
加标注 "-HB" = 侧固柄, "-HE" = 斜侧固柄 (请见第6页)
- 注意: 刀杆订货号不含刀片, 刀片需单独采购。

BSF刀杆和刀片-过孔直径 \varnothing 10.5至11.5 mm



刀具型号表

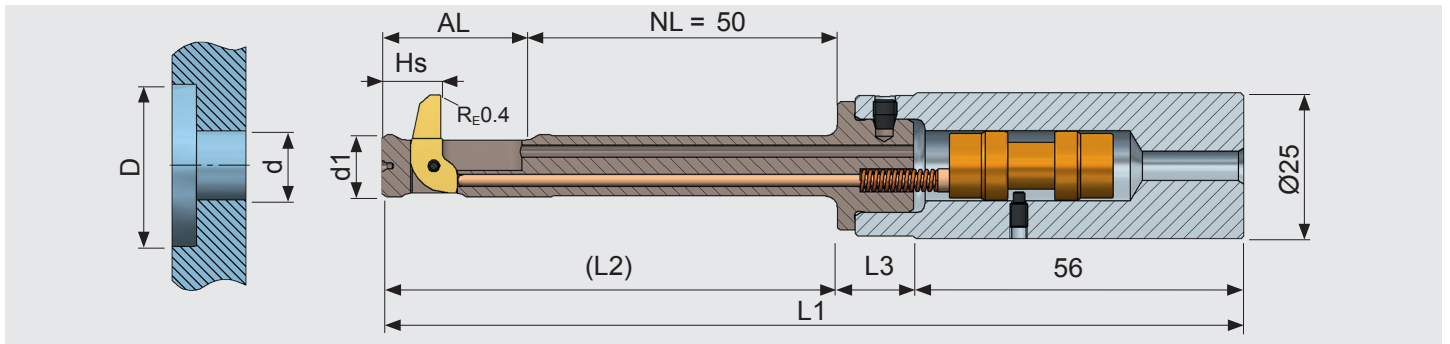
| 最小过孔直径- \varnothing d | 刀杆直径- \varnothing d1 | 反镗孔直径- \varnothing D | AL | HS | L1 | L2 | L3 | 不含刀片刀体订货号 | 刀片订货号 ¹ |
|-------------------------|------------------------|------------------------|-------|------|--------|-------|-------|---------------------|--------------------|
| 11.50 | 11.40 | 16.50 | 23.75 | 9.73 | 147.25 | 77.75 | 13.50 | BSF-D-1150/050-12.0 | BSF-M-D-1A-4.5 |
| | | 17.00 | | | | | | BSF-D-1150/050-12.5 | |
| | | 17.50 | | | | | | BSF-D-1150/050-13.0 | |
| | | 18.00 | | | | | | BSF-D-1150/050-13.5 | |
| | | 18.50 | | | | | | BSF-D-1150/050-14.0 | |
| | | 19.00 | | | | | | BSF-D-1150/050-12.0 | BSF-M-D-1A-7.0 |
| | | 19.50 | | | | | | BSF-D-1150/050-12.5 | |
| | | 20.00 | | | | | | BSF-D-1150/050-13.0 | |
| | | 20.50 | | | | | | BSF-D-1150/050-13.5 | |
| | | 21.00 | | | | | | BSF-D-1150/050-14.0 | |
| | | 21.50 | | | | | | BSF-D-1150/050-12.0 | BSF-M-D-1A-9.5 |
| | | 22.00 | | | | | | BSF-D-1150/050-12.5 | |
| | | 22.50 | | | | | | BSF-D-1150/050-13.0 | |
| | | 23.00 | | | | | | BSF-D-1150/050-13.5 | |
| | | 23.50 | | | | | | BSF-D-1150/050-14.0 | |
| | | 24.00 | | | | | | BSF-D-1150/050-12.0 | BSF-M-D-1A-12.0 |
| | | 24.50 | | | | | | BSF-D-1150/050-12.5 | |
| | | 25.00 | | | | | | BSF-D-1150/050-13.0 | |
| | | 25.50 | | | | | | BSF-D-1150/050-13.5 | |
| | | 26.00 | | | | | | BSF-D-1150/050-14.0 | |
| | | 26.50 | | | | | | BSF-D-1150/050-12.0 | BSF-M-D-1A-14.5 |

¹A=用于铸铁、钢件、不锈钢等材料的涂层 / D = 用于铝合金等材料的涂层 (请见第6页)

注

- 在刀杆订货号没特别标明的情况下刀柄为：圆柱柄
加标注 "-HB" = 侧固柄, "-HE" = 斜侧固柄 (请见第6页)
- 注意：刀杆订货号不含刀片，刀片需单独采购。

BSF刀杆和刀片-过孔直径 \varnothing 12.0至14.0 mm



刀具型号表

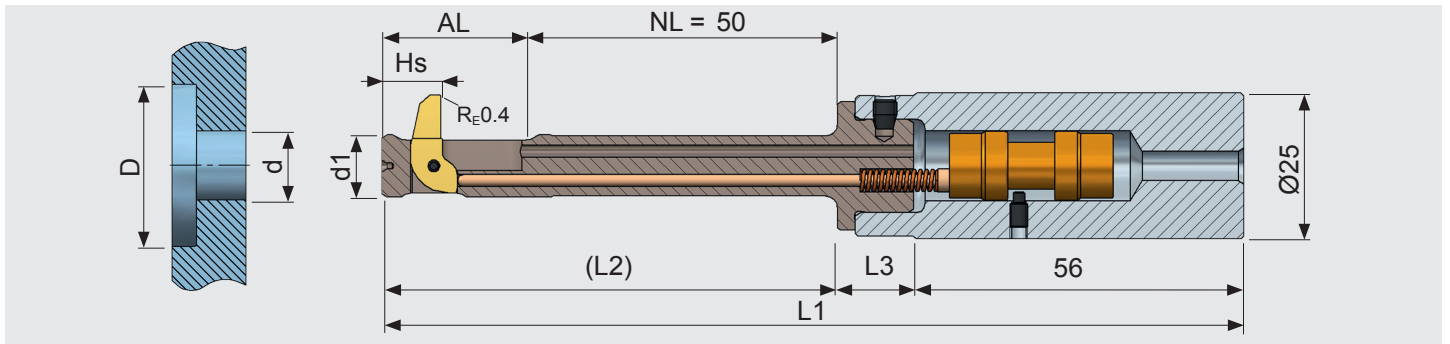
| 最小过孔直径- \varnothing d | 刀杆直径- \varnothing d1 | 反镗孔直径- \varnothing D | AL | HS | L1 | L2 | L3 | 不含刀片刀体订货号 | 刀片订货号 ¹ |
|-------------------------|------------------------|------------------------|-------|-------|--------|-------|-------|---------------------|--------------------|
| 12.00 | 11.90 | 18.00 | 26.75 | 11.40 | 150.25 | 80.75 | 13.50 | BSF-E-1200/050-13.0 | BSF-M-E-1A-5.0 |
| | | 18.50 | | | | | | BSF-E-1200/050-13.5 | |
| | | 19.00 | | | | | | BSF-E-1200/050-14.0 | |
| | | 19.50 | | | | | | BSF-E-1200/050-14.5 | |
| | | 20.00 | | | | | | BSF-E-1200/050-15.0 | |
| | | 20.50 | | | | | | BSF-E-1200/050-13.0 | BSF-M-E-1A-7.5 |
| | | 21.00 | | | | | | BSF-E-1200/050-13.5 | |
| | | 21.50 | | | | | | BSF-E-1200/050-14.0 | |
| | | 22.00 | | | | | | BSF-E-1200/050-14.5 | |
| | | 22.50 | | | | | | BSF-E-1200/050-15.0 | |
| | | 23.00 | | | | | | BSF-E-1200/050-13.0 | BSF-M-E-1A-10.0 |
| | | 23.50 | | | | | | BSF-E-1200/050-13.5 | |
| | | 24.00 | | | | | | BSF-E-1200/050-14.0 | |
| | | 24.50 | | | | | | BSF-E-1200/050-14.5 | |
| | | 25.00 | | | | | | BSF-E-1200/050-15.0 | |
| | | 25.50 | | | | | | BSF-E-1200/050-13.0 | BSF-M-E-1A-12.5 |
| | | 26.00 | | | | | | BSF-E-1200/050-13.5 | |
| | | 26.50 | | | | | | BSF-E-1200/050-14.0 | |
| | | 27.00 | | | | | | BSF-E-1200/050-14.5 | |
| | | 27.50 | | | | | | BSF-E-1200/050-15.0 | |
| | | 28.00 | | | | | | BSF-E-1200/050-13.0 | BSF-M-E-1A-15.0 |

¹⁾A=用于铸铁、钢件、不锈钢等材料的涂层 / D = 用于铝合金等材料的涂层 (请见第6页)

注

- 在刀杆订货号没特别标明的情况下刀柄为：圆柱柄
- 加标注 "-HB" = 侧固柄, "-HE" = 斜侧固柄 (请见第6页)
- 注意：刀杆订货号不含刀片，刀片需单独采购。

BSF刀杆和刀片-过孔直径 \varnothing 12.0至14.0 mm



刀具型号表

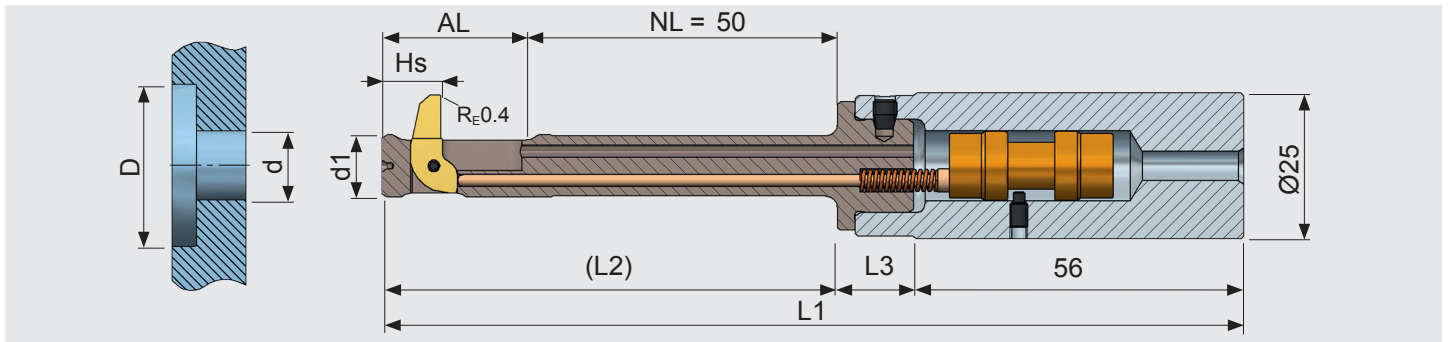
| 最小过孔直径- \varnothing d | 刀杆直径- \varnothing d1 | 反镗孔直径- \varnothing D | AL | HS | L1 | L2 | L3 | 不含刀片刀体订货号 | 刀片订货号 ¹ |
|-------------------------|------------------------|------------------------|-------|-------|--------|-------|-------|---------------------|--------------------|
| 12.50 | 12.40 | 18.50 | 26.75 | 11.40 | 150.25 | 80.75 | 13.50 | BSF-E-1250/050-13.5 | BSF-M-E-1A-5.0 |
| | | 19.00 | | | | | | BSF-E-1250/050-14.0 | |
| | | 19.50 | | | | | | BSF-E-1250/050-14.5 | |
| | | 20.00 | | | | | | BSF-E-1250/050-15.0 | |
| | | 20.50 | | | | | | BSF-E-1250/050-15.5 | |
| | | 21.00 | | | | | | BSF-E-1250/050-13.5 | BSF-M-E-1A-7.5 |
| | | 21.50 | | | | | | BSF-E-1250/050-14.0 | |
| | | 22.00 | | | | | | BSF-E-1250/050-14.5 | |
| | | 22.50 | | | | | | BSF-E-1250/050-15.0 | |
| | | 23.00 | | | | | | BSF-E-1250/050-15.5 | |
| | | 23.50 | | | | | | BSF-E-1250/050-13.5 | BSF-M-E-1A-10.0 |
| | | 24.00 | | | | | | BSF-E-1250/050-14.0 | |
| | | 24.50 | | | | | | BSF-E-1250/050-14.5 | |
| | | 25.00 | | | | | | BSF-E-1250/050-15.0 | |
| | | 25.50 | | | | | | BSF-E-1250/050-15.5 | |
| | | 26.00 | | | | | | BSF-E-1250/050-13.5 | BSF-M-E-1A-12.5 |
| | | 26.50 | | | | | | BSF-E-1250/050-14.0 | |
| | | 27.00 | | | | | | BSF-E-1250/050-14.5 | |
| | | 27.50 | | | | | | BSF-E-1250/050-15.0 | |
| | | 28.00 | | | | | | BSF-E-1250/050-15.5 | |
| | | 28.50 | | | | | | BSF-E-1250/050-13.5 | BSF-M-E-1A-15.0 |
| | | 29.00 | | | | | | BSF-E-1250/050-14.0 | |

¹A=用于铸铁、钢件、不锈钢等材料的涂层 / D = 用于铝合金等材料的涂层 (请见第6页)

注

- 在刀杆订货号没特别标明的情况下刀柄为：圆柱柄
加标注 "-HB" = 侧固柄, "-HE" = 斜侧固柄 (请见第6页)
- 注意：刀杆订货号不含刀片，刀片需单独采购。

BSF刀杆和刀片-过孔直径 \varnothing 12.0至14.0 mm



刀具型号表

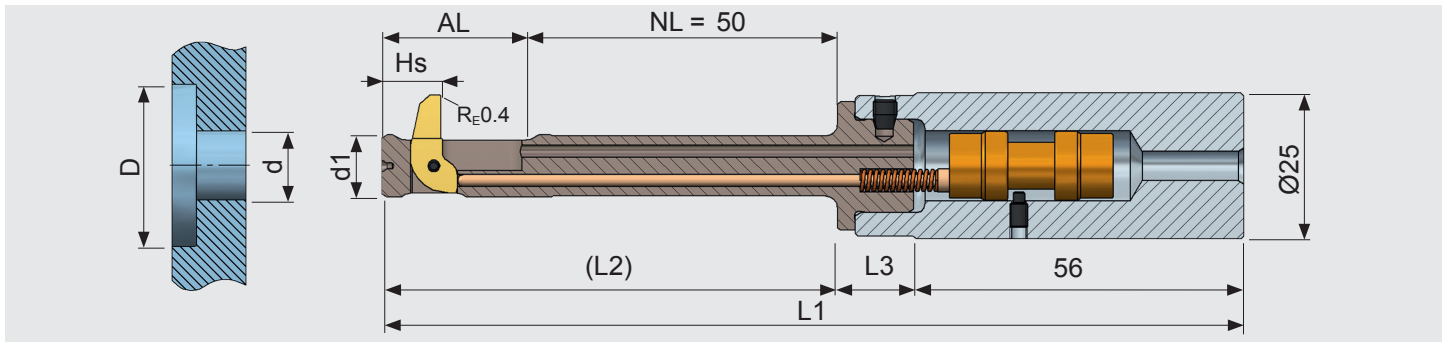
| 最小过孔直径- \varnothing d | 刀杆直径- \varnothing d1 | 反镗孔直径- \varnothing D | AL | HS | L1 | L2 | L3 | 不含刀片刀体订货号 | 刀片订货号 ¹⁾ |
|-------------------------|------------------------|------------------------|-------|-------|--------|-------|-------|---------------------|---------------------|
| 13.00 | 12.90 | 19.00 | 26.75 | 11.40 | 150.25 | 80.75 | 13.50 | BSF-E-1300/050-14.0 | BSF-M-E-1A-5.0 |
| | | 19.50 | | | | | | BSF-E-1300/050-14.5 | |
| | | 20.00 | | | | | | BSF-E-1300/050-15.0 | |
| | | 20.50 | | | | | | BSF-E-1300/050-15.5 | |
| | | 21.00 | | | | | | BSF-E-1300/050-16.0 | |
| | | 21.50 | | | | | | BSF-E-1300/050-14.0 | BSF-M-E-1A-7.5 |
| | | 22.00 | | | | | | BSF-E-1300/050-14.5 | |
| | | 22.50 | | | | | | BSF-E-1300/050-15.0 | |
| | | 23.00 | | | | | | BSF-E-1300/050-15.5 | |
| | | 23.50 | | | | | | BSF-E-1300/050-16.0 | |
| | | 24.00 | | | | | | BSF-E-1300/050-14.0 | BSF-M-E-1A-10.0 |
| | | 24.50 | | | | | | BSF-E-1300/050-14.5 | |
| | | 25.00 | | | | | | BSF-E-1300/050-15.0 | |
| | | 25.50 | | | | | | BSF-E-1300/050-15.5 | |
| | | 26.00 | | | | | | BSF-E-1300/050-16.0 | |
| | | 26.50 | | | | | | BSF-E-1300/050-14.0 | BSF-M-E-1A-12.5 |
| | | 27.00 | | | | | | BSF-E-1300/050-14.5 | |
| | | 27.50 | | | | | | BSF-E-1300/050-15.0 | |
| | | 28.00 | | | | | | BSF-E-1300/050-15.5 | |
| | | 28.50 | | | | | | BSF-E-1300/050-16.0 | |
| | | 29.00 | | | | | | BSF-E-1300/050-14.0 | BSF-M-E-1A-15.0 |
| | | 29.50 | | | | | | BSF-E-1300/050-14.5 | |
| | | 30.00 | | | | | | BSF-E-1300/050-15.0 | |

¹⁾A=用于铸铁、钢件、不锈钢等材料的涂层 / D = 用于铝合金等材料的涂层 (请见第6页)

注

- 在刀杆订货号没特别标明的情况下刀柄为：圆柱柄
加标注 "-HB" = 侧固柄, "-HE" = 斜侧固柄 (请见第6页)
- 注意：刀杆订货号不含刀片，刀片需单独采购。

BSF刀杆和刀片-过孔直径 \varnothing 12.0至14.0 mm



刀具型号表

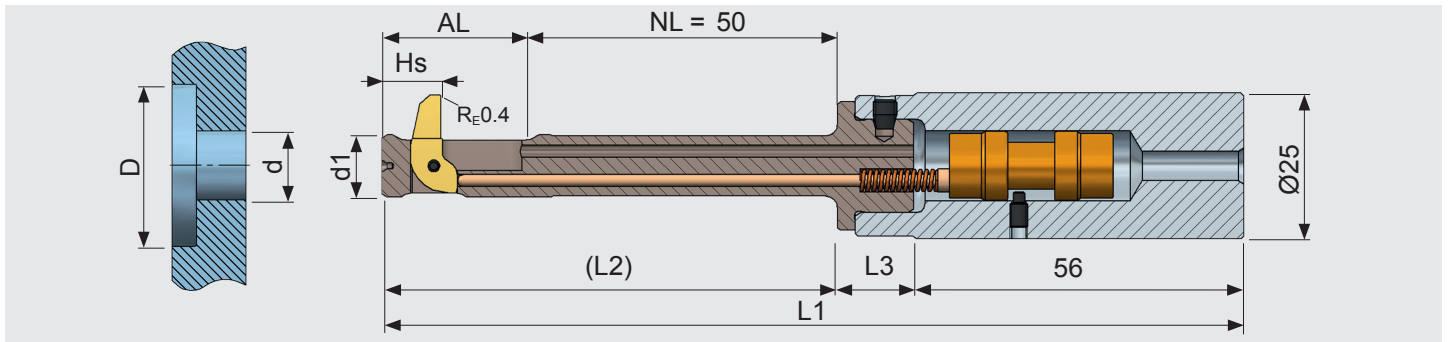
| 最小过孔直径- \varnothing d | 刀杆直径- \varnothing d1 | 反镗孔直径- \varnothing D | AL | HS | L1 | L2 | L3 | 不含刀片刀体订货号 | 刀片订货号 ¹ |
|-------------------------|------------------------|------------------------|-------|-------|--------|-------|-------|---------------------|--------------------|
| 13.50 | 13.40 | 19.50 | 26.75 | 11.40 | 150.25 | 80.75 | 13.50 | BSF-E-1350/050-14.5 | BSF-M-E-1A-5.0 |
| | | 20.00 | | | | | | BSF-E-1350/050-15.0 | |
| | | 20.50 | | | | | | BSF-E-1350/050-15.5 | |
| | | 21.00 | | | | | | BSF-E-1350/050-16.0 | |
| | | 21.50 | | | | | | BSF-E-1350/050-16.5 | |
| | | 22.00 | | | | | | BSF-E-1350/050-14.5 | BSF-M-E-1A-7.5 |
| | | 22.50 | | | | | | BSF-E-1350/050-15.0 | |
| | | 23.00 | | | | | | BSF-E-1350/050-15.5 | |
| | | 23.50 | | | | | | BSF-E-1350/050-16.0 | |
| | | 24.00 | | | | | | BSF-E-1350/050-16.5 | |
| | | 24.50 | | | | | | BSF-E-1350/050-14.5 | BSF-M-E-1A-10.0 |
| | | 25.00 | | | | | | BSF-E-1350/050-15.0 | |
| | | 25.50 | | | | | | BSF-E-1350/050-15.5 | |
| | | 26.00 | | | | | | BSF-E-1350/050-16.0 | |
| | | 26.50 | | | | | | BSF-E-1350/050-16.5 | |
| | | 27.00 | | | | | | BSF-E-1350/050-14.5 | BSF-M-E-1A-12.5 |
| | | 27.50 | | | | | | BSF-E-1350/050-15.0 | |
| | | 28.00 | | | | | | BSF-E-1350/050-15.5 | |
| | | 28.50 | | | | | | BSF-E-1350/050-16.0 | |
| | | 29.00 | | | | | | BSF-E-1350/050-16.5 | |
| | | 29.50 | | | | | | BSF-E-1350/050-14.5 | BSF-M-E-1A-15.0 |
| | | 30.00 | | | | | | BSF-E-1350/050-15.0 | |
| | | 30.50 | | | | | | BSF-E-1350/050-15.5 | |
| | | 31.00 | | | | | | BSF-E-1350/050-16.0 | |
| | | 31.50 | | | | | | BSF-E-1350/050-16.5 | |

¹A=用于铸铁、钢件、不锈钢等材料的涂层 / D = 用于铝合金等材料的涂层 (请见第6页)

注

- 在刀杆订货号没特别标明的情况下刀柄为：圆柱柄
加标注 "-HB" = 侧固柄, "-HE" =斜侧固柄 (请见第6页)
- 注意：刀杆订货号不含刀片，刀片需单独采购。

BSF刀杆和刀片-过孔直径 \varnothing 12.0至14.0 mm



刀具型号表

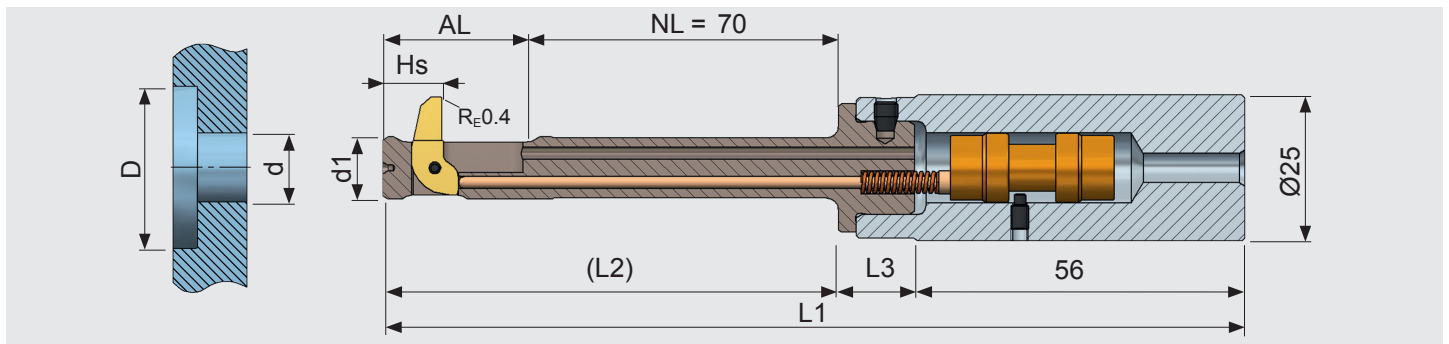
| 最小过孔直径- \varnothing d | 刀杆直径- \varnothing d1 | 反镗孔直径- \varnothing D | AL | HS | L1 | L2 | L3 | 不含刀片刀体订货号 | 刀片订货号 ¹ |
|-------------------------|------------------------|------------------------|-------|-------|--------|-------|-------|---------------------|--------------------|
| 14.00 | 13.90 | 20.00 | 28.00 | 11.40 | 151.50 | 82.00 | 13.50 | BSF-E-1400/050-15.0 | BSF-M-E-1A-5.0 |
| | | 20.50 | | | | | | BSF-E-1400/050-15.5 | |
| | | 21.00 | | | | | | BSF-E-1400/050-16.0 | |
| | | 21.50 | | | | | | BSF-E-1400/050-16.5 | |
| | | 22.00 | | | | | | BSF-E-1400/050-17.0 | |
| 22.50 | 22.50 | 23.00 | 28.00 | 11.40 | 151.50 | 82.00 | 13.50 | BSF-E-1400/050-15.0 | BSF-M-E-1A-7.5 |
| | | 23.50 | | | | | | BSF-E-1400/050-15.5 | |
| | | 24.00 | | | | | | BSF-E-1400/050-16.0 | |
| | | 24.50 | | | | | | BSF-E-1400/050-16.5 | |
| | | 25.00 | | | | | | BSF-E-1400/050-17.0 | |
| 25.00 | 25.00 | 25.50 | 28.00 | 11.40 | 151.50 | 82.00 | 13.50 | BSF-E-1400/050-15.0 | BSF-M-E-1A-10.0 |
| | | 26.00 | | | | | | BSF-E-1400/050-15.5 | |
| | | 26.50 | | | | | | BSF-E-1400/050-16.0 | |
| | | 27.00 | | | | | | BSF-E-1400/050-16.5 | |
| | | 27.50 | | | | | | BSF-E-1400/050-17.0 | |
| 27.50 | 27.50 | 28.00 | 28.00 | 11.40 | 151.50 | 82.00 | 13.50 | BSF-E-1400/050-15.0 | BSF-M-E-1A-12.5 |
| | | 28.50 | | | | | | BSF-E-1400/050-15.5 | |
| | | 29.00 | | | | | | BSF-E-1400/050-16.0 | |
| | | 29.50 | | | | | | BSF-E-1400/050-16.5 | |
| | | 30.00 | | | | | | BSF-E-1400/050-17.0 | |
| 30.00 | 30.00 | 30.50 | 28.00 | 11.40 | 151.50 | 82.00 | 13.50 | BSF-E-1400/050-15.0 | BSF-M-E-1A-15.0 |
| | | 31.00 | | | | | | BSF-E-1400/050-15.5 | |
| | | 31.50 | | | | | | BSF-E-1400/050-16.0 | |
| | | 32.00 | | | | | | BSF-E-1400/050-16.5 | |
| | | 32.50 | | | | | | BSF-E-1400/050-17.0 | |
| 32.00 | 32.00 | 32.00 | 28.00 | 11.40 | 151.50 | 82.00 | 13.50 | BSF-E-1400/050-15.0 | BSF-M-E-1A-17.5 |
| 32.50 | BSF-E-1400/050-15.0 | | | | | | | | |

¹⁾A=用于铸铁、钢件、不锈钢等材料的涂层 / D = 用于铝合金等材料的涂层 (请见第6页)

注

- 在刀杆订货号没特别标明的情况下刀柄为：圆柱柄
- 加标注 "-HB" = 侧固柄, "-HE" = 斜侧固柄 (请见第6页)
- 注意：刀杆订货号不含刀片，刀片需单独采购。

BSF刀杆和刀片-过孔直径 \varnothing 14.5至17.0 mm



刀具型号表

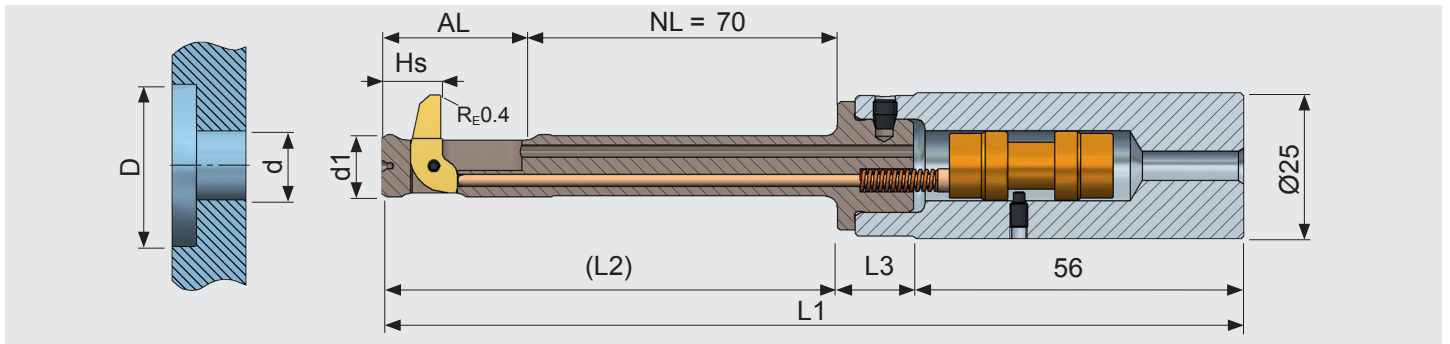
| 最小过孔直径- \varnothing d | 刀杆直径- \varnothing d1 | 反镗孔直径- \varnothing D | AL | HS | L1 | L2 | L3 | 不含刀片刀体订货号 | 刀片订货号 ¹ |
|-------------------------|------------------------|------------------------|-------|-------|--------|--------|-------|---------------------|--------------------|
| 14.50 | 14.40 | 21.50 | 30.75 | 13.40 | 193.75 | 104.75 | 33.00 | BSF-F-1450/070-16.0 | BSF-M-F-1A-5.5 |
| | | 22.00 | | | | | | BSF-F-1450/070-16.5 | |
| | | 22.50 | | | | | | BSF-F-1450/070-17.0 | |
| | | 23.00 | | | | | | BSF-F-1450/070-17.5 | |
| | | 23.50 | | | | | | BSF-F-1450/070-18.0 | |
| | | 24.00 | | | | | | BSF-F-1450/070-18.5 | |
| | | 24.50 | | | | | | BSF-F-1450/070-19.0 | |
| | | 25.00 | | | | | | BSF-F-1450/070-16.0 | BSF-M-F-1A-9.0 |
| | | 25.50 | | | | | | BSF-F-1450/070-16.5 | |
| | | 26.00 | | | | | | BSF-F-1450/070-17.0 | |
| | | 26.50 | | | | | | BSF-F-1450/070-17.5 | |
| | | 27.00 | | | | | | BSF-F-1450/070-18.0 | |
| | | 27.50 | | | | | | BSF-F-1450/070-18.5 | |
| | | 28.00 | | | | | | BSF-F-1450/070-19.0 | |
| | | 28.50 | | | | | | BSF-F-1450/070-16.0 | BSF-M-F-1A-12.5 |
| | | 29.00 | | | | | | BSF-F-1450/070-16.5 | |
| | | 29.50 | | | | | | BSF-F-1450/070-17.0 | |
| | | 30.00 | | | | | | BSF-F-1450/070-17.5 | |
| | | 30.50 | | | | | | BSF-F-1450/070-18.0 | |
| | | 31.00 | | | | | | BSF-F-1450/070-18.5 | |
| | | 31.50 | | | | | | BSF-F-1450/070-19.0 | |
| | | 32.00 | | | | | | BSF-F-1450/070-16.0 | BSF-M-F-1A-16.0 |
| | | 32.50 | | | | | | BSF-F-1450/070-16.5 | |
| | | 33.00 | | | | | | BSF-F-1450/070-17.0 | |
| | | 33.50 | | | | | | BSF-F-1450/070-17.5 | |

¹A=用于铸铁、钢件、不锈钢等材料的涂层 / D = 用于铝合金等材料的涂层 (请见第6页)

注

- 在刀杆订货号没特别标明的情况下刀柄为：圆柱柄
加标注 "-HB" = 侧固柄, "-HE" =斜侧固柄 (请见第6页)
- 注意：刀杆订货号不含刀片，刀片需单独采购。

BSF刀杆和刀片-过孔直径 \varnothing 14.5至17.0 mm



刀具型号表

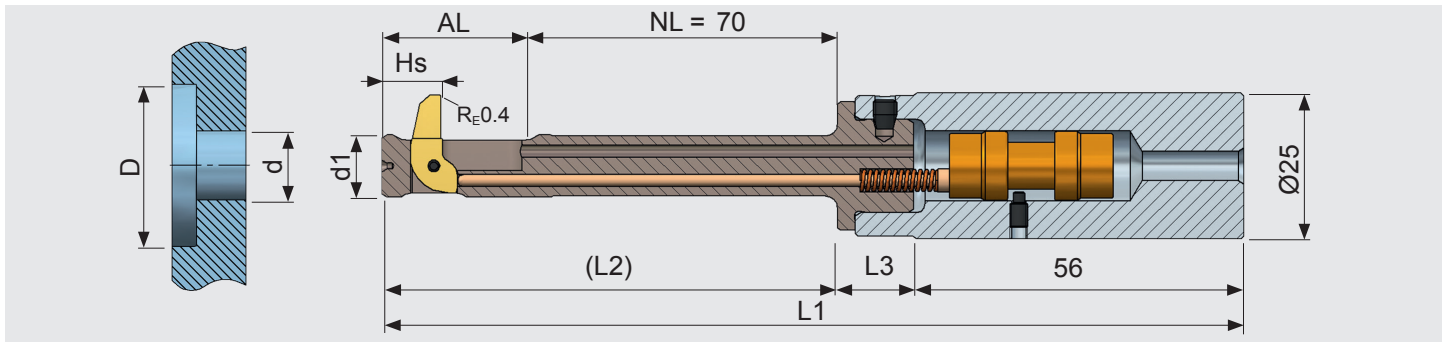
| 最小过孔直径- \varnothing d | 刀杆直径- \varnothing d1 | 反镗孔直径- \varnothing D | AL | HS | L1 | L2 | L3 | 不含刀片刀体订货号 | 刀片订货号 ¹ | |
|-------------------------|------------------------|------------------------|-------|-------|--------|--------|-------|---------------------|--------------------|-----------------|
| 15.00 | 14.90 | 22.00 | 30.75 | 13.40 | 193.75 | 104.75 | 33.00 | BSF-F-1500/070-16.5 | BSF-M-F-1A-5.5 | |
| | | 22.50 | | | | | | BSF-F-1500/070-17.0 | | |
| | | 23.00 | | | | | | BSF-F-1500/070-17.5 | | |
| | | 23.50 | | | | | | BSF-F-1500/070-18.0 | | |
| | | 24.00 | | | | | | BSF-F-1500/070-18.5 | | |
| | | 24.50 | | | | | | BSF-F-1500/070-19.0 | | |
| | | 25.00 | | | | | | BSF-F-1500/070-19.5 | | |
| | | 25.50 | | | | | | BSF-F-1500/070-16.5 | | BSF-M-F-1A-9.0 |
| 26.00 | 14.90 | 26.00 | 30.75 | 13.40 | 193.75 | 104.75 | 33.00 | BSF-F-1500/070-17.0 | BSF-M-F-1A-9.0 | |
| | | 26.50 | | | | | | BSF-F-1500/070-17.5 | | |
| | | 27.00 | | | | | | BSF-F-1500/070-18.0 | | |
| | | 27.50 | | | | | | BSF-F-1500/070-18.5 | | |
| | | 28.00 | | | | | | BSF-F-1500/070-19.0 | | |
| | | 28.50 | | | | | | BSF-F-1500/070-19.5 | | |
| | | 29.00 | | | | | | BSF-F-1500/070-16.5 | | BSF-M-F-1A-12.5 |
| | | 29.50 | | | | | | BSF-F-1500/070-17.0 | | |
| 30.00 | 14.90 | 30.00 | 30.75 | 13.40 | 193.75 | 104.75 | 33.00 | BSF-F-1500/070-17.5 | BSF-M-F-1A-12.5 | |
| | | 30.50 | | | | | | BSF-F-1500/070-18.0 | | |
| | | 31.00 | | | | | | BSF-F-1500/070-18.5 | | |
| | | 31.50 | | | | | | BSF-F-1500/070-19.0 | | |
| | | 32.00 | | | | | | BSF-F-1500/070-19.5 | | |
| | | 32.50 | | | | | | BSF-F-1500/070-16.5 | | BSF-M-F-1A-16.0 |
| | | 33.00 | | | | | | BSF-F-1500/070-17.0 | | |
| | | 33.50 | | | | | | BSF-F-1500/070-17.5 | | |
| 34.00 | 14.90 | 34.00 | 30.75 | 13.40 | 193.75 | 104.75 | 33.00 | BSF-F-1500/070-18.0 | BSF-M-F-1A-16.0 | |
| | | 34.50 | | | | | | BSF-F-1500/070-18.5 | | |
| | | 34.50 | | | | | | BSF-F-1500/070-18.5 | | |

¹⁾A=用于铸铁、钢件、不锈钢等材料的涂层 / D = 用于铝合金等材料的涂层 (请见第6页)

注

- 在刀杆订货号没特别标明的情况下刀柄为：圆柱柄
- 加标注 "-HB" = 侧固柄, "-HE" = 斜侧固柄 (请见第6页)
- 注意：刀杆订货号不含刀片，刀片需单独采购。

BSF刀杆和刀片-过孔直径 \varnothing 14.5至17.0 mm



刀具型号表

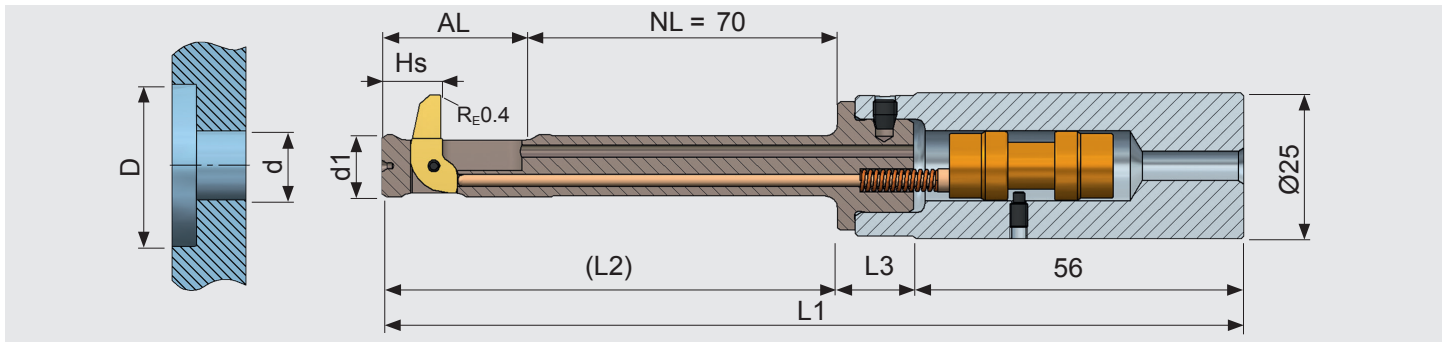
| 最小过孔直径- \varnothing d | 刀杆直径- \varnothing d1 | 反镗孔直径- \varnothing D | AL | HS | L1 | L2 | L3 | 不含刀片刀体订货号 | 刀片订货号 ¹ |
|-------------------------|------------------------|------------------------|-------|-------|--------|--------|-------|---------------------|--------------------|
| 15.50 | 15.40 | 22.50 | 30.75 | 13.40 | 193.75 | 104.75 | 33.00 | BSF-F-1550/070-17.0 | BSF-M-F-1A-5.5 |
| | | 23.00 | | | | | | BSF-F-1550/070-17.5 | |
| | | 23.50 | | | | | | BSF-F-1550/070-18.0 | |
| | | 24.00 | | | | | | BSF-F-1550/070-18.5 | |
| | | 24.50 | | | | | | BSF-F-1550/070-19.0 | |
| | | 25.00 | | | | | | BSF-F-1550/070-19.5 | |
| | | 25.50 | | | | | | BSF-F-1550/070-20.0 | |
| 26.00 | 26.50 | 26.00 | 30.75 | 13.40 | 193.75 | 104.75 | 33.00 | BSF-F-1550/070-17.0 | BSF-M-F-1A-9.0 |
| | | 26.50 | | | | | | BSF-F-1550/070-17.5 | |
| | | 27.00 | | | | | | BSF-F-1550/070-18.0 | |
| | | 27.50 | | | | | | BSF-F-1550/070-18.5 | |
| | | 28.00 | | | | | | BSF-F-1550/070-19.0 | |
| | | 28.50 | | | | | | BSF-F-1550/070-19.5 | |
| | | 29.00 | | | | | | BSF-F-1550/070-20.0 | |
| 29.50 | 30.00 | 29.50 | 30.75 | 13.40 | 193.75 | 104.75 | 33.00 | BSF-F-1550/070-17.0 | BSF-M-F-1A-12.5 |
| | | 30.00 | | | | | | BSF-F-1550/070-17.5 | |
| | | 30.50 | | | | | | BSF-F-1550/070-18.0 | |
| | | 31.00 | | | | | | BSF-F-1550/070-18.5 | |
| | | 31.50 | | | | | | BSF-F-1550/070-19.0 | |
| | | 32.00 | | | | | | BSF-F-1550/070-19.5 | |
| | | 32.50 | | | | | | BSF-F-1550/070-20.0 | |
| 33.00 | 33.50 | 33.00 | 30.75 | 13.40 | 193.75 | 104.75 | 33.00 | BSF-F-1550/070-17.0 | BSF-M-F-1A-16.0 |
| | | 33.50 | | | | | | BSF-F-1550/070-17.5 | |
| | | 34.00 | | | | | | BSF-F-1550/070-18.0 | |
| | | 34.50 | | | | | | BSF-F-1550/070-18.5 | |
| | | 35.00 | | | | | | BSF-F-1550/070-19.0 | |
| | | 35.50 | | | | | | BSF-F-1550/070-19.5 | |
| | | 36.00 | | | | | | BSF-F-1550/070-20.0 | |

¹A=用于铸铁、钢件、不锈钢等材料的涂层 / D = 用于铝合金等材料的涂层 (请见第6页)

注

- 在刀杆订货号没特别标明的情况下刀柄为：圆柱柄
- 加标注 "-HB" = 侧固柄, "-HE" =斜侧固柄 (请见第6页)
- 注意：刀杆订货号不含刀片，刀片需单独采购。

BSF刀杆和刀片-过孔直径 \varnothing 14.5至17.0 mm



刀具型号表

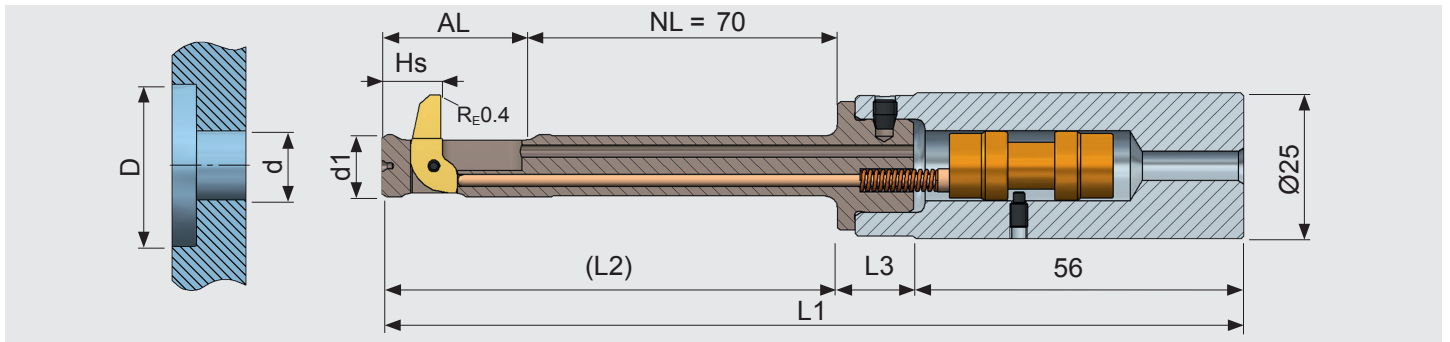
| 最小过孔直径- \varnothing d | 刀杆直径- \varnothing d1 | 反镗孔直径- \varnothing D | AL | HS | L1 | L2 | L3 | 不含刀片刀体订货号 | 刀片订货号 ¹ |
|-------------------------|------------------------|------------------------|-------|-------|--------|--------|-------|---------------------|--------------------|
| 16.00 | 15.90 | 23.00 | 32.50 | 13.40 | 195.50 | 106.50 | 33.00 | BSF-F-1600/070-17.5 | BSF-M-F-1A-5.5 |
| | | 23.50 | | | | | | BSF-F-1600/070-18.0 | |
| | | 24.00 | | | | | | BSF-F-1600/070-18.5 | |
| | | 24.50 | | | | | | BSF-F-1600/070-19.0 | |
| | | 25.00 | | | | | | BSF-F-1600/070-19.5 | |
| | | 25.50 | | | | | | BSF-F-1600/070-20.0 | |
| | | 26.00 | | | | | | BSF-F-1600/070-20.5 | |
| 26.50 | 26.50 | 26.50 | 32.50 | 13.40 | 195.50 | 106.50 | 33.00 | BSF-F-1600/070-17.5 | BSF-M-F-1A-9.0 |
| | | 27.00 | | | | | | BSF-F-1600/070-18.0 | |
| | | 27.50 | | | | | | BSF-F-1600/070-18.5 | |
| | | 28.00 | | | | | | BSF-F-1600/070-19.0 | |
| | | 28.50 | | | | | | BSF-F-1600/070-19.5 | |
| | | 29.00 | | | | | | BSF-F-1600/070-20.0 | |
| | | 29.50 | | | | | | BSF-F-1600/070-20.5 | |
| 30.00 | 30.00 | 30.00 | 32.50 | 13.40 | 195.50 | 106.50 | 33.00 | BSF-F-1600/070-17.5 | BSF-M-F-1A-12.5 |
| | | 30.50 | | | | | | BSF-F-1600/070-18.0 | |
| | | 31.00 | | | | | | BSF-F-1600/070-18.5 | |
| | | 31.50 | | | | | | BSF-F-1600/070-19.0 | |
| | | 32.00 | | | | | | BSF-F-1600/070-19.5 | |
| | | 32.50 | | | | | | BSF-F-1600/070-20.0 | |
| | | 33.00 | | | | | | BSF-F-1600/070-20.5 | |
| 33.50 | 33.50 | 33.50 | 32.50 | 13.40 | 195.50 | 106.50 | 33.00 | BSF-F-1600/070-17.5 | BSF-M-F-1A-16.0 |
| | | 34.00 | | | | | | BSF-F-1600/070-18.0 | |
| | | 34.50 | | | | | | BSF-F-1600/070-18.5 | |
| | | 35.00 | | | | | | BSF-F-1600/070-19.0 | |
| | | 35.50 | | | | | | BSF-F-1600/070-19.5 | |
| | | 36.00 | | | | | | BSF-F-1600/070-20.0 | |
| | | 36.50 | | | | | | BSF-F-1600/070-20.5 | |
| 37.00 | BSF-F-1600/070-17.5 | BSF-M-F-1A-19.5 | | | | | | | |

¹⁾A=用于铸铁、钢件、不锈钢等材料的涂层 / D = 用于铝合金等材料的涂层 (请见第6页)

注

- 在刀杆订货号没特别标明的情况下刀柄为：圆柱柄
- 加标注 "-HB" = 侧固柄, "-HE" = 斜侧固柄 (请见第6页)
- 注意：刀杆订货号不含刀片，刀片需单独采购。

BSF刀杆和刀片-过孔直径 \varnothing 14.5至17.0 mm



刀具型号表

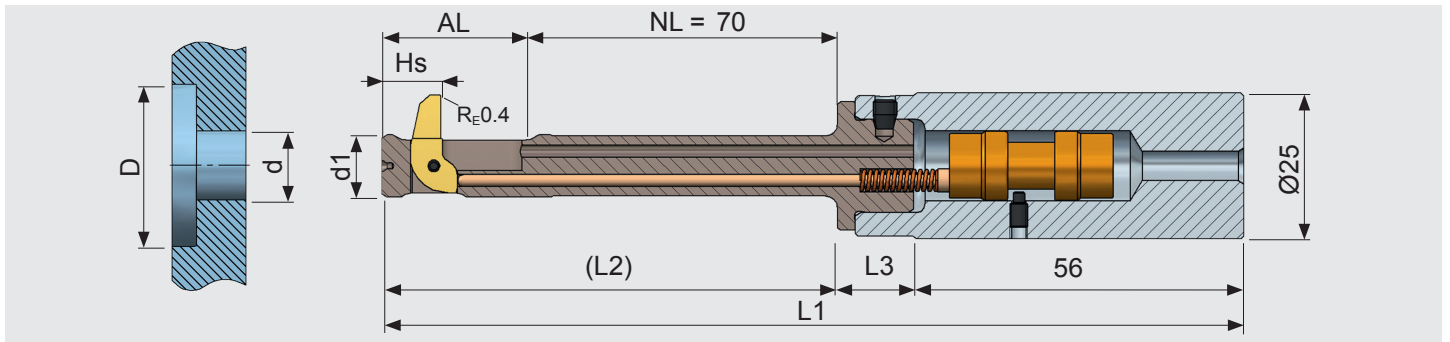
| 最小过孔直径- \varnothing d | 刀杆直径- \varnothing d1 | 反镗孔直径- \varnothing D | AL | HS | L1 | L2 | L3 | 不含刀片刀体订货号 | 刀片订货号 ¹⁾ |
|-------------------------|------------------------|------------------------|-------|-------|--------|--------|-------|---------------------|---------------------|
| 16.50 | 16.40 | 23.50 | 32.50 | 13.40 | 195.50 | 106.50 | 33.00 | BSF-F-1650/070-18.0 | BSF-M-F-1A-5.5 |
| | | 24.00 | | | | | | BSF-F-1650/070-18.5 | |
| | | 24.50 | | | | | | BSF-F-1650/070-19.0 | |
| | | 25.00 | | | | | | BSF-F-1650/070-19.5 | |
| | | 25.50 | | | | | | BSF-F-1650/070-20.0 | |
| | | 26.00 | | | | | | BSF-F-1650/070-20.5 | |
| | | 26.50 | | | | | | BSF-F-1650/070-21.0 | |
| 27.00 | 26.90 | 27.00 | 32.50 | 13.40 | 195.50 | 106.50 | 33.00 | BSF-F-1650/070-18.0 | BSF-M-F-1A-9.0 |
| | | 27.50 | | | | | | BSF-F-1650/070-18.5 | |
| | | 28.00 | | | | | | BSF-F-1650/070-19.0 | |
| | | 28.50 | | | | | | BSF-F-1650/070-19.5 | |
| | | 29.00 | | | | | | BSF-F-1650/070-20.0 | |
| | | 29.50 | | | | | | BSF-F-1650/070-20.5 | |
| | | 30.00 | | | | | | BSF-F-1650/070-21.0 | |
| 30.50 | 30.40 | 30.50 | 32.50 | 13.40 | 195.50 | 106.50 | 33.00 | BSF-F-1650/070-18.0 | BSF-M-F-1A-12.5 |
| | | 31.00 | | | | | | BSF-F-1650/070-18.5 | |
| | | 31.50 | | | | | | BSF-F-1650/070-19.0 | |
| | | 32.00 | | | | | | BSF-F-1650/070-19.5 | |
| | | 32.50 | | | | | | BSF-F-1650/070-20.0 | |
| | | 33.00 | | | | | | BSF-F-1650/070-20.5 | |
| | | 33.50 | | | | | | BSF-F-1650/070-21.0 | |
| 34.00 | 33.90 | 34.00 | 32.50 | 13.40 | 195.50 | 106.50 | 33.00 | BSF-F-1650/070-18.0 | BSF-M-F-1A-16.0 |
| | | 34.50 | | | | | | BSF-F-1650/070-18.5 | |
| | | 35.00 | | | | | | BSF-F-1650/070-19.0 | |
| | | 35.50 | | | | | | BSF-F-1650/070-19.5 | |
| | | 36.00 | | | | | | BSF-F-1650/070-20.0 | |
| | | 36.50 | | | | | | BSF-F-1650/070-20.5 | |
| | | 37.00 | | | | | | BSF-F-1650/070-21.0 | |
| 37.50 | 37.40 | 37.50 | 32.50 | 13.40 | 195.50 | 106.50 | 33.00 | BSF-F-1650/070-18.0 | BSF-M-F-1A-19.5 |
| | | 38.00 | | | | | | BSF-F-1650/070-18.5 | |

¹⁾A=用于铸铁、钢件、不锈钢等材料的涂层 / D = 用于铝合金等材料的涂层 (请见第6页)

注

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加标注 "-HB" = 侧固柄, "-HE" = 斜侧固柄 (请见第6页)
- 注意：刀杆订货号不含刀片，刀片需单独采购。

BSF刀杆和刀片-过孔直径 \varnothing 14.5至17.0 mm



刀具型号表

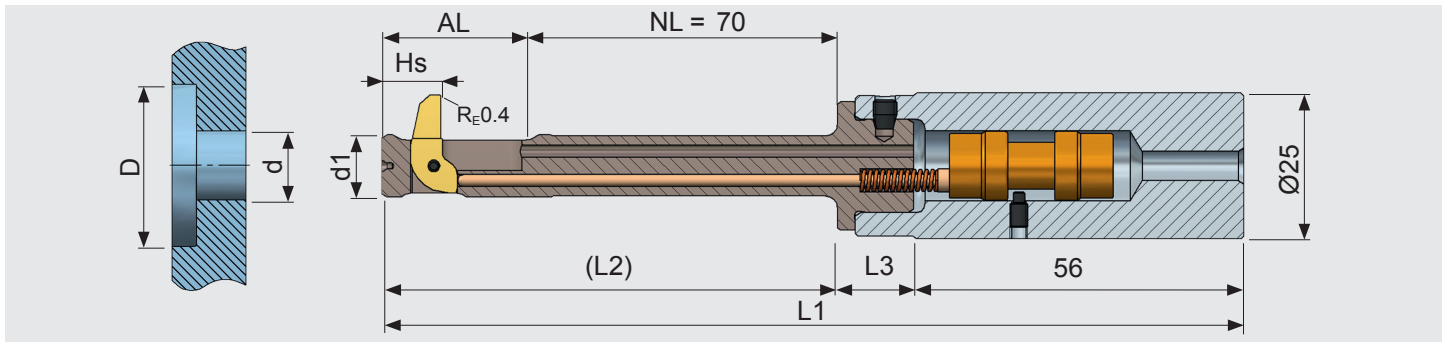
| 最小过孔直径- \varnothing d | 刀杆直径- \varnothing d1 | 反镗孔直径- \varnothing D | AL | HS | L1 | L2 | L3 | 不含刀片刀体订货号 | 刀片订货号 ¹ |
|-------------------------|------------------------|------------------------|-------|-------|--------|--------|-------|---------------------|--------------------|
| 17.00 | 16.90 | 24.00 | 32.50 | 13.40 | 195.50 | 106.50 | 33.00 | BSF-F-1700/070-18.5 | BSF-M-F-1A-5.5 |
| | | 24.50 | | | | | | BSF-F-1700/070-19.0 | |
| | | 25.00 | | | | | | BSF-F-1700/070-19.5 | |
| | | 25.50 | | | | | | BSF-F-1700/070-20.0 | |
| | | 26.00 | | | | | | BSF-F-1700/070-20.5 | |
| | | 26.50 | | | | | | BSF-F-1700/070-21.0 | |
| | | 27.00 | | | | | | BSF-F-1700/070-21.5 | |
| | | 27.50 | | | | | | BSF-F-1700/070-18.5 | BSF-M-F-1A-9.0 |
| | | 28.00 | | | | | | BSF-F-1700/070-19.0 | |
| | | 28.50 | | | | | | BSF-F-1700/070-19.5 | |
| | | 29.00 | | | | | | BSF-F-1700/070-20.0 | |
| | | 29.50 | | | | | | BSF-F-1700/070-20.5 | |
| | | 30.00 | | | | | | BSF-F-1700/070-21.0 | |
| | | 30.50 | | | | | | BSF-F-1700/070-21.5 | |
| | | 31.00 | | | | | | BSF-F-1700/070-18.5 | BSF-M-F-1A-12.5 |
| | | 31.50 | | | | | | BSF-F-1700/070-19.0 | |
| | | 32.00 | | | | | | BSF-F-1700/070-19.5 | |
| | | 32.50 | | | | | | BSF-F-1700/070-20.0 | |
| | | 33.00 | | | | | | BSF-F-1700/070-20.5 | |
| | | 33.50 | | | | | | BSF-F-1700/070-21.0 | |
| | | 34.00 | | | | | | BSF-F-1700/070-21.5 | |
| | | 34.50 | | | | | | BSF-F-1700/070-18.5 | BSF-M-F-1A-16.0 |
| | | 35.00 | | | | | | BSF-F-1700/070-19.0 | |
| | | 35.50 | | | | | | BSF-F-1700/070-19.5 | |
| | | 36.00 | | | | | | BSF-F-1700/070-20.0 | |
| | | 36.50 | | | | | | BSF-F-1700/070-20.5 | |
| | | 37.00 | | | | | | BSF-F-1700/070-21.0 | |
| | | 37.50 | | | | | | BSF-F-1700/070-21.5 | |
| | | 38.00 | | | | | | BSF-F-1700/070-18.5 | BSF-M-F-1A-19.5 |
| | | 38.50 | | | | | | BSF-F-1700/070-19.0 | |
| | | 39.00 | | | | | | BSF-F-1700/070-19.5 | |
| | | 39.50 | | | | | | BSF-F-1700/070-20.0 | |

¹⁾A=用于铸铁、钢件、不锈钢等材料的涂层 / D = 用于铝合金等材料的涂层 (请见第6页)

注

- 在刀杆订货号没特别标明的情况下刀柄为: 圆柱柄
加标注 "-HB" = 侧固柄, "-HE" = 斜侧固柄 (请见第6页)

BSF刀杆和刀片-过孔直径 \varnothing 17.5至21.0 mm



刀具型号表

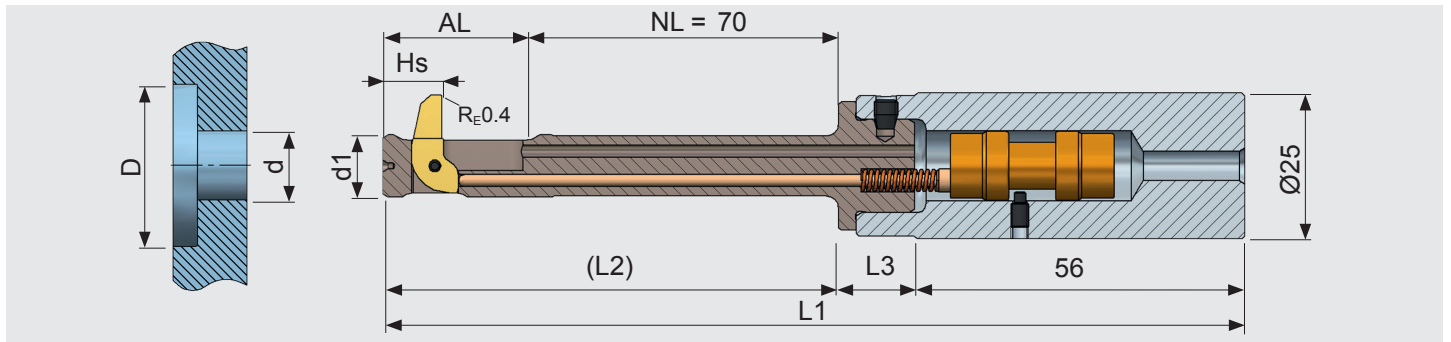
| 最小过孔直径- \varnothing d | 刀杆直径- \varnothing d1 | 反镗孔直径- \varnothing D | AL | HS | L1 | L2 | L3 | 不含刀片刀体订货号 | 刀片订货号 ¹ |
|-------------------------|------------------------|------------------------|-------|-------|--------|--------|-------|---------------------|--------------------|
| 17.50 | 17.40 | 26.00 | 37.25 | 16.30 | 200.25 | 111.25 | 33.00 | BSF-G-1750/070-20.0 | BSF-M-G-1A-6.0 |
| | | 26.50 | | | | | | BSF-G-1750/070-20.5 | |
| | | 27.00 | | | | | | BSF-G-1750/070-21.0 | |
| | | 27.50 | | | | | | BSF-G-1750/070-21.5 | |
| | | 28.00 | | | | | | BSF-G-1750/070-22.0 | |
| | | 28.50 | | | | | | BSF-G-1750/070-22.5 | |
| | | 29.00 | | | | | | BSF-G-1750/070-23.0 | |
| | | 29.50 | | | | | | BSF-G-1750/070-23.5 | |
| | | 30.00 | | | | | | BSF-G-1750/070-24.0 | |
| 30.50 | 30.40 | 30.50 | 37.25 | 16.30 | 200.25 | 111.25 | 33.00 | BSF-G-1750/070-20.0 | BSF-M-G-1A-10.5 |
| | | 31.00 | | | | | | BSF-G-1750/070-20.5 | |
| | | 31.50 | | | | | | BSF-G-1750/070-21.0 | |
| | | 32.00 | | | | | | BSF-G-1750/070-21.5 | |
| | | 32.50 | | | | | | BSF-G-1750/070-22.0 | |
| | | 33.00 | | | | | | BSF-G-1750/070-22.5 | |
| | | 33.50 | | | | | | BSF-G-1750/070-23.0 | |
| | | 34.00 | | | | | | BSF-G-1750/070-23.5 | |
| | | 34.50 | | | | | | BSF-G-1750/070-24.0 | |
| 35.00 | 34.90 | 35.00 | 37.25 | 16.30 | 200.25 | 111.25 | 33.00 | BSF-G-1750/070-20.0 | BSF-M-G-1A-15.0 |
| | | 35.50 | | | | | | BSF-G-1750/070-20.5 | |
| | | 36.00 | | | | | | BSF-G-1750/070-21.0 | |
| | | 36.50 | | | | | | BSF-G-1750/070-21.5 | |
| | | 37.00 | | | | | | BSF-G-1750/070-22.0 | |
| | | 37.50 | | | | | | BSF-G-1750/070-22.5 | |
| | | 38.00 | | | | | | BSF-G-1750/070-23.0 | |
| | | 38.50 | | | | | | BSF-G-1750/070-23.5 | |
| | | 39.00 | | | | | | BSF-G-1750/070-24.0 | |
| 39.50 | 39.40 | 39.50 | 37.25 | 16.30 | 200.25 | 111.25 | 33.00 | BSF-G-1750/070-20.0 | BSF-M-G-1A-19.5 |
| | | 40.00 | | | | | | BSF-G-1750/070-20.5 | |
| | | 40.50 | | | | | | BSF-G-1750/070-21.0 | |

¹A=用于铸铁、钢件、不锈钢等材料的涂层 / D = 用于铝合金等材料的涂层 (请见第6页)

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BSF刀杆和刀片-过孔直径 \varnothing 17.5至21.0 mm



刀具型号表

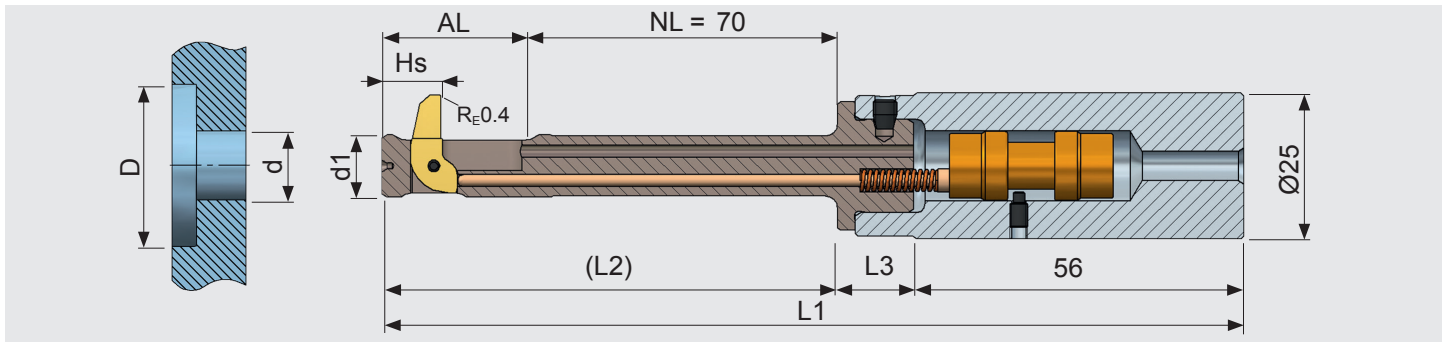
| 最小过孔直径- \varnothing d | 刀杆直径- \varnothing d1 | 反镗孔直径- \varnothing D | AL | HS | L1 | L2 | L3 | 不含刀片刀体订货号 | 刀片订货号 ¹ |
|-------------------------|------------------------|------------------------|---------------------|-------|--------|--------|-------|---------------------|--------------------|
| 18.00 | 17.90 | 26.50 | 37.25 | 16.30 | 200.25 | 111.25 | 33.00 | BSF-G-1800/070-20.5 | BSF-M-G-1A-6.0 |
| | | 27.00 | | | | | | BSF-G-1800/070-21.0 | |
| | | 27.50 | | | | | | BSF-G-1800/070-21.5 | |
| | | 28.00 | | | | | | BSF-G-1800/070-22.0 | |
| | | 28.50 | | | | | | BSF-G-1800/070-22.5 | |
| | | 29.00 | | | | | | BSF-G-1800/070-23.0 | |
| | | 29.50 | | | | | | BSF-G-1800/070-23.5 | |
| | | 30.00 | | | | | | BSF-G-1800/070-24.0 | |
| | | 30.50 | | | | | | BSF-G-1800/070-24.5 | |
| | | | | | | | | | |
| 31.50 | BSF-G-1800/070-21.0 | | | | | | | | |
| 32.00 | BSF-G-1800/070-21.5 | | | | | | | | |
| 32.50 | BSF-G-1800/070-22.0 | | | | | | | | |
| 33.00 | BSF-G-1800/070-22.5 | | | | | | | | |
| 33.50 | BSF-G-1800/070-23.0 | | | | | | | | |
| 34.00 | BSF-G-1800/070-23.5 | | | | | | | | |
| 34.50 | BSF-G-1800/070-24.0 | | | | | | | | |
| 35.00 | BSF-G-1800/070-24.5 | | | | | | | | |
| | | | 35.50 | | | | | | |
| | | 36.00 | BSF-G-1800/070-21.0 | | | | | | |
| | | 36.50 | BSF-G-1800/070-21.5 | | | | | | |
| | | 37.00 | BSF-G-1800/070-22.0 | | | | | | |
| | | 37.50 | BSF-G-1800/070-22.5 | | | | | | |
| | | 38.00 | BSF-G-1800/070-23.0 | | | | | | |
| | | 38.50 | BSF-G-1800/070-23.5 | | | | | | |
| | | 39.00 | BSF-G-1800/070-24.0 | | | | | | |
| | | 39.50 | BSF-G-1800/070-24.5 | | | | | | |
| | | | | | | | | 40.00 | |
| 40.50 | BSF-G-1800/070-21.0 | | | | | | | | |
| 41.00 | BSF-G-1800/070-21.5 | | | | | | | | |
| 41.50 | BSF-G-1800/070-22.0 | | | | | | | | |

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BSF刀杆和刀片-过孔直径 \varnothing 17.5至21.0 mm



刀具型号表

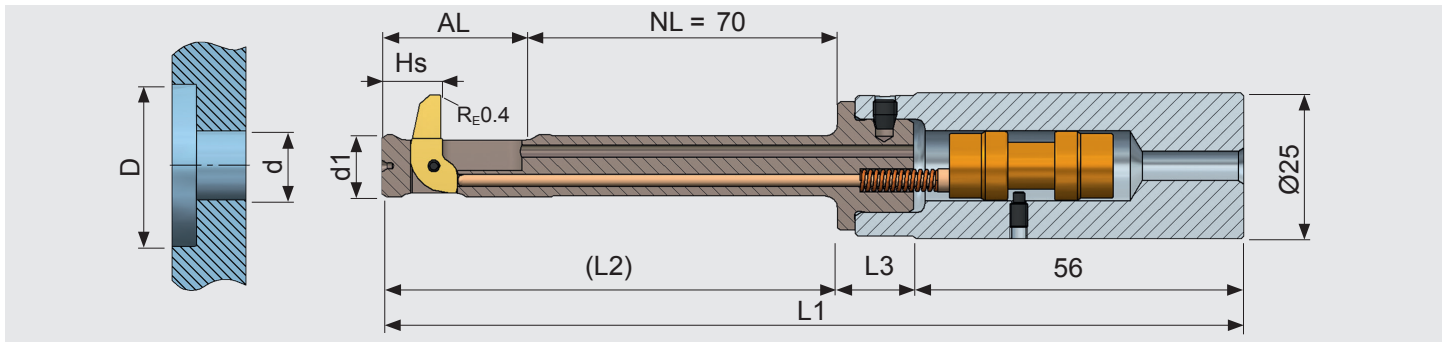
| 最小过孔直径- \varnothing d | 刀杆直径- \varnothing d1 | 反镗孔直径- \varnothing D | AL | HS | L1 | L2 | L3 | 不含刀片刀体订货号 | 刀片订货号 ¹ |
|-------------------------|------------------------|------------------------|---------------------|-------|--------|--------|--------|---------------------|--------------------|
| 18.50 | 18.40 | 27.00 | 37.25 | 16.30 | 200.25 | 111.25 | 33.00 | BSF-G-1850/070-21.0 | BSF-M-G-1A-6.0 |
| | | 27.50 | | | | | | BSF-G-1850/070-21.5 | |
| | | 28.00 | | | | | | BSF-G-1850/070-22.0 | |
| | | 28.50 | | | | | | BSF-G-1850/070-22.5 | |
| | | 29.00 | | | | | | BSF-G-1850/070-23.0 | |
| | | 29.50 | | | | | | BSF-G-1850/070-23.5 | |
| | | 30.00 | | | | | | BSF-G-1850/070-24.0 | |
| | | 30.50 | | | | | | BSF-G-1850/070-24.5 | |
| | | 31.00 | | | | | | BSF-G-1850/070-25.0 | |
| | | 31.50 | | | | | | 31.40 | |
| 32.00 | BSF-G-1850/070-21.5 | | | | | | | | |
| 32.50 | BSF-G-1850/070-22.0 | | | | | | | | |
| 33.00 | BSF-G-1850/070-22.5 | | | | | | | | |
| 33.50 | BSF-G-1850/070-23.0 | | | | | | | | |
| 34.00 | BSF-G-1850/070-23.5 | | | | | | | | |
| 34.50 | BSF-G-1850/070-24.0 | | | | | | | | |
| 35.00 | BSF-G-1850/070-24.5 | | | | | | | | |
| 35.50 | BSF-G-1850/070-25.0 | | | | | | | | |
| 36.00 | 35.90 | | 36.00 | 37.25 | 16.30 | 200.25 | 111.25 | | 33.00 |
| | | 36.50 | BSF-G-1850/070-21.5 | | | | | | |
| | | 37.00 | BSF-G-1850/070-22.0 | | | | | | |
| | | 37.50 | BSF-G-1850/070-22.5 | | | | | | |
| | | 38.00 | BSF-G-1850/070-23.0 | | | | | | |
| | | 38.50 | BSF-G-1850/070-23.5 | | | | | | |
| | | 39.00 | BSF-G-1850/070-24.0 | | | | | | |
| | | 39.50 | BSF-G-1850/070-24.5 | | | | | | |
| | | 40.00 | BSF-G-1850/070-25.0 | | | | | | |
| | | 40.50 | 40.40 | | | | | 40.50 | |
| 41.00 | BSF-G-1850/070-21.5 | | | | | | | | |
| 41.50 | BSF-G-1850/070-22.0 | | | | | | | | |
| 42.00 | BSF-G-1850/070-22.5 | | | | | | | | |
| 42.50 | BSF-G-1850/070-23.0 | | | | | | | | |
| 43.00 | BSF-G-1850/070-23.5 | | | | | | | | |

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BSF刀杆和刀片-过孔直径 \varnothing 17.5至21.0 mm



刀具型号表

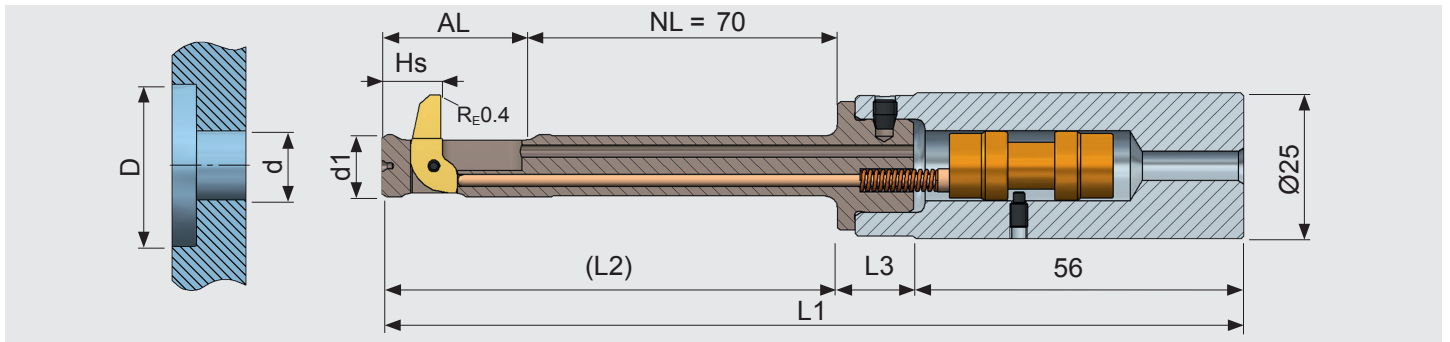
| 最小过孔直径- \varnothing d | 刀杆直径- \varnothing d1 | 反镗孔直径- \varnothing D | AL | HS | L1 | L2 | L3 | 不含刀片刀体订货号 | 刀片订货号 ¹ |
|-------------------------|------------------------|------------------------|---------------------|-------|--------|--------|--------|---------------------|--------------------|
| 19.00 | 18.90 | 27.50 | 37.25 | 16.30 | 200.25 | 111.25 | 33.00 | BSF-G-1900/070-21.5 | BSF-M-G-1A-6.0 |
| | | 28.00 | | | | | | BSF-G-1900/070-22.0 | |
| | | 28.50 | | | | | | BSF-G-1900/070-22.5 | |
| | | 29.00 | | | | | | BSF-G-1900/070-23.0 | |
| | | 29.50 | | | | | | BSF-G-1900/070-23.5 | |
| | | 30.00 | | | | | | BSF-G-1900/070-24.0 | |
| | | 30.50 | | | | | | BSF-G-1900/070-24.5 | |
| | | 31.00 | | | | | | BSF-G-1900/070-25.0 | |
| | | 31.50 | | | | | | BSF-G-1900/070-25.5 | |
| | | 32.00 | | | | | | 31.90 | |
| 32.50 | BSF-G-1900/070-22.0 | | | | | | | | |
| 33.00 | BSF-G-1900/070-22.5 | | | | | | | | |
| 33.50 | BSF-G-1900/070-23.0 | | | | | | | | |
| 34.00 | BSF-G-1900/070-23.5 | | | | | | | | |
| 34.50 | BSF-G-1900/070-24.0 | | | | | | | | |
| 35.00 | BSF-G-1900/070-24.5 | | | | | | | | |
| 35.50 | BSF-G-1900/070-25.0 | | | | | | | | |
| 36.00 | BSF-G-1900/070-25.5 | | | | | | | | |
| 36.50 | 36.50 | | 36.50 | 37.25 | 16.30 | 200.25 | 111.25 | | 33.00 |
| | | 37.00 | BSF-G-1900/070-22.0 | | | | | | |
| | | 37.50 | BSF-G-1900/070-22.5 | | | | | | |
| | | 38.00 | BSF-G-1900/070-23.0 | | | | | | |
| | | 38.50 | BSF-G-1900/070-23.5 | | | | | | |
| | | 39.00 | BSF-G-1900/070-24.0 | | | | | | |
| | | 39.50 | BSF-G-1900/070-24.5 | | | | | | |
| | | 40.00 | BSF-G-1900/070-25.0 | | | | | | |
| | | 40.50 | BSF-G-1900/070-25.5 | | | | | | |
| | | 41.00 | 40.90 | | | | | 41.00 | |
| 41.50 | BSF-G-1900/070-22.0 | | | | | | | | |
| 42.00 | BSF-G-1900/070-22.5 | | | | | | | | |
| 42.50 | BSF-G-1900/070-23.0 | | | | | | | | |
| 43.00 | BSF-G-1900/070-23.5 | | | | | | | | |
| 43.50 | BSF-G-1900/070-24.0 | | | | | | | | |
| 44.00 | BSF-G-1900/070-24.5 | | | | | | | | |

¹⁾ A=用于铸铁、钢件、不锈钢等材料的涂层 / D = 用于铝合金等材料的涂层 (请见第6页)

注

- 在刀杆订货号没特别标明的情况下刀柄为: 圆柱柄
- 加标注 "-HB" = 侧固柄, "-HE" = 斜侧固柄 (请见第6页)
- 注意: 刀杆订货号不含刀片, 刀片需单独采购。

BSF刀杆和刀片-过孔直径 \varnothing 17.5至21.0 mm



刀具型号表

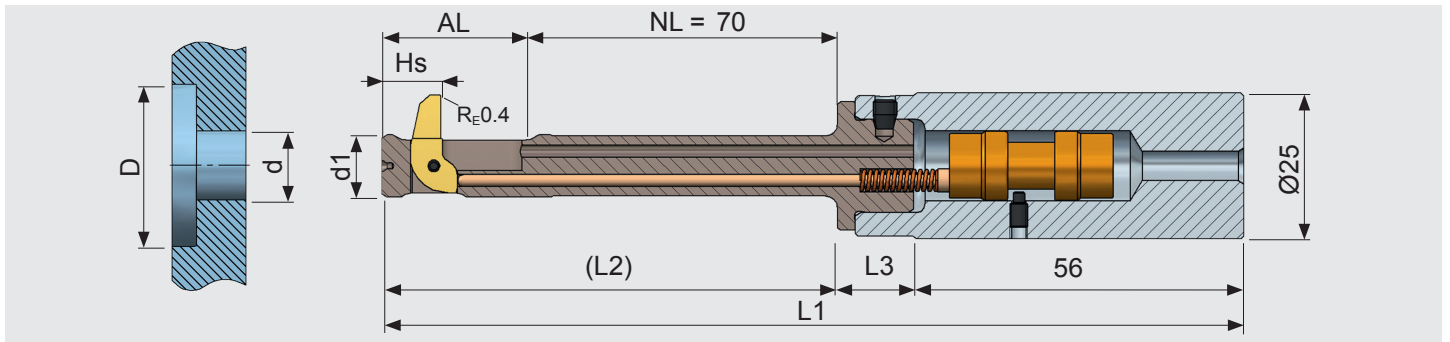
| 最小过孔直径- \varnothing d | 刀杆直径- \varnothing d1 | 反镗孔直径- \varnothing D | AL | HS | L1 | L2 | L3 | 不含刀片刀体订货号 | 刀片订货号 ¹⁾ |
|-------------------------|------------------------|------------------------|-------|-------|--------|--------|-------|---------------------|---------------------|
| 19.50 | 19.40 | 28.00 | 37.25 | 16.30 | 200.25 | 111.25 | 33.00 | BSF-G-1950/070-22.0 | BSF-M-G-1A-6.0 |
| | | 28.50 | | | | | | BSF-G-1950/070-22.5 | |
| | | 29.00 | | | | | | BSF-G-1950/070-23.0 | |
| | | 29.50 | | | | | | BSF-G-1950/070-23.5 | |
| | | 30.00 | | | | | | BSF-G-1950/070-24.0 | |
| | | 30.50 | | | | | | BSF-G-1950/070-24.5 | |
| | | 31.00 | | | | | | BSF-G-1950/070-25.0 | |
| | | 31.50 | | | | | | BSF-G-1950/070-25.5 | |
| | | 32.00 | | | | | | BSF-G-1950/070-26.0 | |
| | | 32.50 | | | | | | BSF-G-1950/070-22.0 | BSF-M-G-1A-10.5 |
| | | 33.00 | | | | | | BSF-G-1950/070-22.5 | |
| | | 33.50 | | | | | | BSF-G-1950/070-23.0 | |
| | | 34.00 | | | | | | BSF-G-1950/070-23.5 | |
| | | 34.50 | | | | | | BSF-G-1950/070-24.0 | |
| | | 35.00 | | | | | | BSF-G-1950/070-24.5 | |
| | | 35.50 | | | | | | BSF-G-1950/070-25.0 | |
| | | 36.00 | | | | | | BSF-G-1950/070-25.5 | |
| | | 36.50 | | | | | | BSF-G-1950/070-26.0 | |
| | | 37.00 | | | | | | BSF-G-1950/070-22.0 | BSF-M-G-1A-15.0 |
| | | 37.50 | | | | | | BSF-G-1950/070-22.5 | |
| | | 38.00 | | | | | | BSF-G-1950/070-23.0 | |
| | | 38.50 | | | | | | BSF-G-1950/070-23.5 | |
| | | 39.00 | | | | | | BSF-G-1950/070-24.0 | |
| | | 39.50 | | | | | | BSF-G-1950/070-24.5 | |
| | | 40.00 | | | | | | BSF-G-1950/070-25.0 | |
| | | 40.50 | | | | | | BSF-G-1950/070-25.5 | |
| | | 41.00 | | | | | | BSF-G-1950/070-26.0 | |
| | | 41.50 | | | | | | BSF-G-1950/070-22.0 | BSF-M-G-1A-19.5 |
| | | 42.00 | | | | | | BSF-G-1950/070-22.5 | |
| | | 42.50 | | | | | | BSF-G-1950/070-23.0 | |
| | | 43.00 | | | | | | BSF-G-1950/070-23.5 | |
| | | 43.50 | | | | | | BSF-G-1950/070-24.0 | |
| | | 44.00 | | | | | | BSF-G-1950/070-24.5 | |
| | | 44.50 | | | | | | BSF-G-1950/070-25.0 | |
| | | 45.00 | | | | | | BSF-G-1950/070-25.5 | |

¹⁾A=用于铸铁、钢件、不锈钢等材料的涂层 / D = 用于铝合金等材料的涂层 (请见第6页)

注

- 在刀杆订货号没特别标明的情况下刀柄为：圆柱柄
加标注 "-HB" = 侧固柄, "-HE" =斜侧固柄 (请见第6页)
- 注意：刀杆订货号不含刀片，刀片需单独采购。

BSF刀杆和刀片-过孔直径 \varnothing 17.5至21.0 mm



刀具型号表

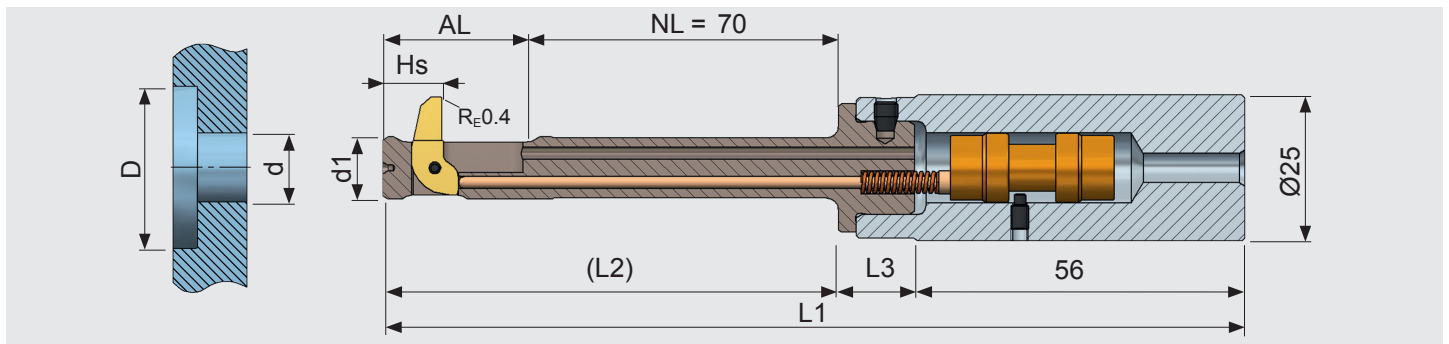
| 最小过孔直径- \varnothing d | 刀杆直径- \varnothing d1 | 反镗孔直径- \varnothing D | AL | HS | L1 | L2 | L3 | 不含刀片刀体订货号 | 刀片订货号 ¹ |
|-------------------------|------------------------|------------------------|-------|-------|--------|--------|-------|---------------------|--------------------|
| 20.00 | 19.90 | 28.50 | 37.25 | 16.30 | 200.25 | 111.25 | 33.00 | BSF-G-2000/070-22.5 | BSF-M-G-1A-6.0 |
| | | 29.00 | | | | | | BSF-G-2000/070-23.0 | |
| | | 29.50 | | | | | | BSF-G-2000/070-23.5 | |
| | | 30.00 | | | | | | BSF-G-2000/070-24.0 | |
| | | 30.50 | | | | | | BSF-G-2000/070-24.5 | |
| | | 31.00 | | | | | | BSF-G-2000/070-25.0 | |
| | | 31.50 | | | | | | BSF-G-2000/070-25.5 | |
| | | 32.00 | | | | | | BSF-G-2000/070-26.0 | |
| | | 32.50 | | | | | | BSF-G-2000/070-26.5 | |
| | | 33.00 | | | | | | BSF-G-2000/070-22.5 | BSF-M-G-1A-10.5 |
| | | 33.50 | | | | | | BSF-G-2000/070-23.0 | |
| | | 34.00 | | | | | | BSF-G-2000/070-23.5 | |
| | | 34.50 | | | | | | BSF-G-2000/070-24.0 | |
| | | 35.00 | | | | | | BSF-G-2000/070-24.5 | |
| | | 35.50 | | | | | | BSF-G-2000/070-25.0 | |
| | | 36.00 | | | | | | BSF-G-2000/070-25.5 | |
| | | 36.50 | | | | | | BSF-G-2000/070-26.0 | |
| | | 37.00 | | | | | | BSF-G-2000/070-26.5 | |
| | | 37.50 | | | | | | BSF-G-2000/070-22.5 | BSF-M-G-1A-15.0 |
| | | 38.00 | | | | | | BSF-G-2000/070-23.0 | |
| | | 38.50 | | | | | | BSF-G-2000/070-23.5 | |
| | | 39.00 | | | | | | BSF-G-2000/070-24.0 | |
| | | 39.50 | | | | | | BSF-G-2000/070-24.5 | |
| | | 40.00 | | | | | | BSF-G-2000/070-25.0 | |
| | | 40.50 | | | | | | BSF-G-2000/070-25.5 | |
| | | 41.00 | | | | | | BSF-G-2000/070-26.0 | |
| | | 41.50 | | | | | | BSF-G-2000/070-26.5 | |
| | | 42.00 | | | | | | BSF-G-2000/070-22.5 | BSF-M-G-1A-19.5 |
| | | 42.50 | | | | | | BSF-G-2000/070-23.0 | |
| | | 43.00 | | | | | | BSF-G-2000/070-23.5 | |
| | | 43.50 | | | | | | BSF-G-2000/070-24.0 | |
| | | 44.00 | | | | | | BSF-G-2000/070-24.5 | |
| | | 44.50 | | | | | | BSF-G-2000/070-25.0 | |
| | | 45.00 | | | | | | BSF-G-2000/070-25.5 | |
| | | 45.50 | | | | | | BSF-G-2000/070-26.0 | |
| | | 46.00 | | | | | | BSF-G-2000/070-26.5 | |

¹⁾A=用于铸铁、钢件、不锈钢等材料的涂层 / D = 用于铝合金等材料的涂层 (请见第6页)

注

- 在刀杆订货号没特别标明的情况下刀柄为：圆柱柄
- 加标注 "-HB" = 侧固柄, "-HE" =斜侧固柄 (请见第6页)
- 注意：刀杆订货号不含刀片，刀片需单独采购。

BSF刀杆和刀片-过孔直径 \varnothing 17.5至21.0 mm



刀具型号表

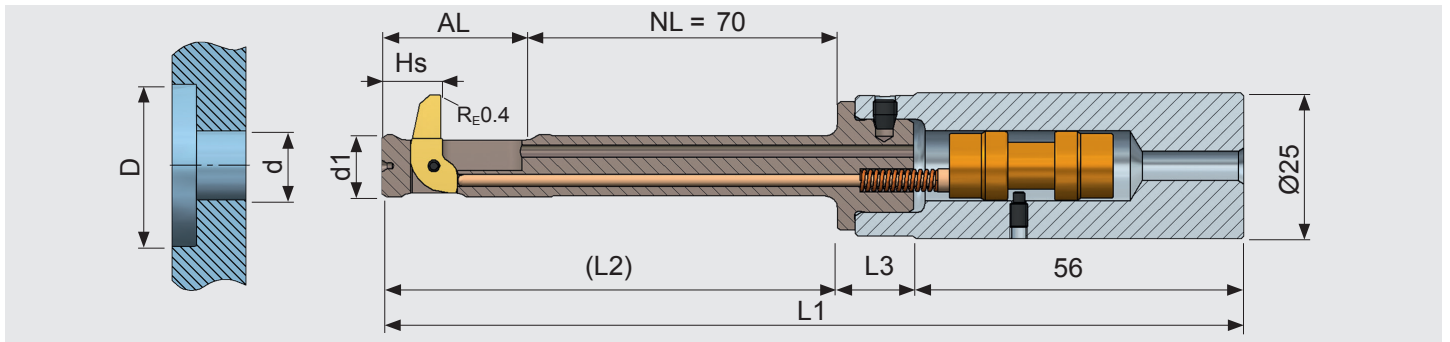
| 最小过孔直径- \varnothing d | 刀杆直径- \varnothing d1 | 反镗孔直径- \varnothing D | AL | HS | L1 | L2 | L3 | 不含刀片刀体订货号 | 刀片订货号 ¹ |
|-------------------------|------------------------|------------------------|---------------------|-------|--------|--------|--------|---------------------|--------------------|
| 20.50 | 20.40 | 29.00 | 39.50 | 16.30 | 202.50 | 113.50 | 33.00 | BSF-G-2050/070-23.0 | BSF-M-G-1A-6.0 |
| | | 29.50 | | | | | | BSF-G-2050/070-23.5 | |
| | | 30.00 | | | | | | BSF-G-2050/070-24.0 | |
| | | 30.50 | | | | | | BSF-G-2050/070-24.5 | |
| | | 31.00 | | | | | | BSF-G-2050/070-25.0 | |
| | | 31.50 | | | | | | BSF-G-2050/070-25.5 | |
| | | 32.00 | | | | | | BSF-G-2050/070-26.0 | |
| | | 32.50 | | | | | | BSF-G-2050/070-26.5 | |
| | | 33.00 | | | | | | BSF-G-2050/070-27.0 | |
| | | 33.50 | | | | | | 33.40 | |
| 34.00 | BSF-G-2050/070-23.5 | | | | | | | | |
| 34.50 | BSF-G-2050/070-24.0 | | | | | | | | |
| 35.00 | BSF-G-2050/070-24.5 | | | | | | | | |
| 35.50 | BSF-G-2050/070-25.0 | | | | | | | | |
| 36.00 | BSF-G-2050/070-25.5 | | | | | | | | |
| 36.50 | BSF-G-2050/070-26.0 | | | | | | | | |
| 37.00 | BSF-G-2050/070-26.5 | | | | | | | | |
| 37.50 | BSF-G-2050/070-27.0 | | | | | | | | |
| 38.00 | 37.90 | | 38.00 | 39.50 | 16.30 | 202.50 | 113.50 | | 33.00 |
| | | 38.50 | BSF-G-2050/070-23.5 | | | | | | |
| | | 39.00 | BSF-G-2050/070-24.0 | | | | | | |
| | | 39.50 | BSF-G-2050/070-24.5 | | | | | | |
| | | 40.00 | BSF-G-2050/070-25.0 | | | | | | |
| | | 40.50 | BSF-G-2050/070-25.5 | | | | | | |
| | | 41.00 | BSF-G-2050/070-26.0 | | | | | | |
| | | 41.50 | BSF-G-2050/070-26.5 | | | | | | |
| | | 42.00 | BSF-G-2050/070-27.0 | | | | | | |
| | | 42.50 | 42.40 | | | | | 42.50 | |
| 43.00 | BSF-G-2050/070-23.5 | | | | | | | | |
| 43.50 | BSF-G-2050/070-24.0 | | | | | | | | |
| 44.00 | BSF-G-2050/070-24.5 | | | | | | | | |
| 44.50 | BSF-G-2050/070-25.0 | | | | | | | | |
| 45.00 | BSF-G-2050/070-25.5 | | | | | | | | |
| 45.50 | BSF-G-2050/070-26.0 | | | | | | | | |
| 46.00 | BSF-G-2050/070-26.5 | | | | | | | | |
| 46.50 | BSF-G-2050/070-27.0 | | | | | | | | |

¹A=用于铸铁、钢件、不锈钢等材料的涂层 / D = 用于铝合金等材料的涂层 (请见第6页)

注

- 在刀杆订货号没特别标明的情况下刀柄为：圆柱柄
- 加标注 "-HB" = 侧固柄, "-HE" = 斜侧固柄 (请见第6页)
- 注意：刀杆订货号不含刀片，刀片需单独采购。

BSF刀杆和刀片-过孔直径 \varnothing 17.5至21.0 mm



刀具型号表

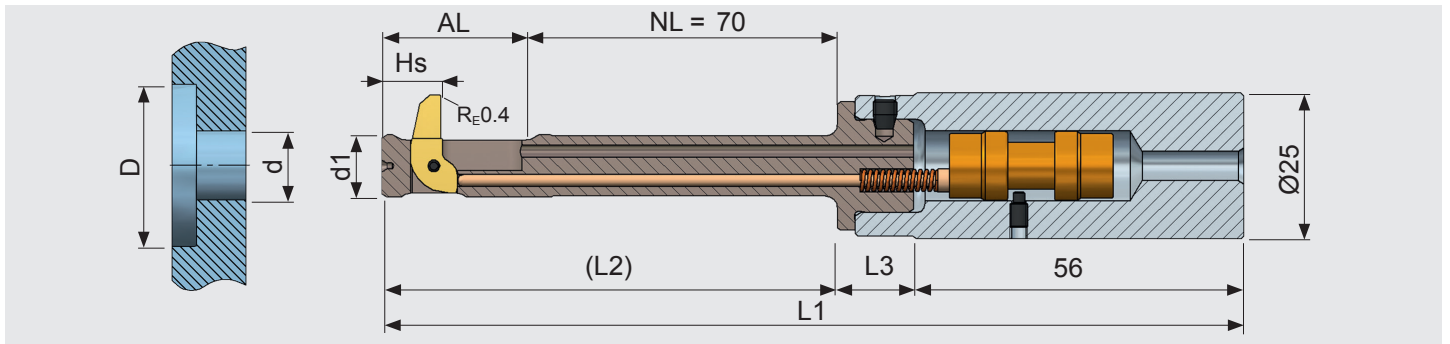
| 最小过孔直径- \varnothing d | 刀杆直径- \varnothing d1 | 反镗孔直径- \varnothing D | AL | HS | L1 | L2 | L3 | 不含刀片刀体订货号 | 刀片订货号 ¹⁾ |
|-------------------------|------------------------|------------------------|-------|-------|--------|--------|-------|---------------------|---------------------|
| 20.50 | 20.40 | 47.00 | 39.50 | 16.30 | 202.50 | 113.50 | 33.00 | BSF-G-2050/070-23.0 | BSF-M-G-1A-24.0 |
| | | 47.50 | | | | | | BSF-G-2050/070-23.5 | |

¹⁾A=用于铸铁、钢件、不锈钢等材料的涂层 / D = 用于铝合金等材料的涂层 (请见第6页)

注

- 在刀杆订货号没特别标明的情况下刀柄为：圆柱柄
- 加标注 "-HB" = 侧固柄, "-HE" = 斜侧固柄 (请见第6页)
- 注意：刀杆订货号不含刀片，刀片需单独采购。

BSF刀杆和刀片-过孔直径 \varnothing 17.5至21.0 mm



刀具型号表

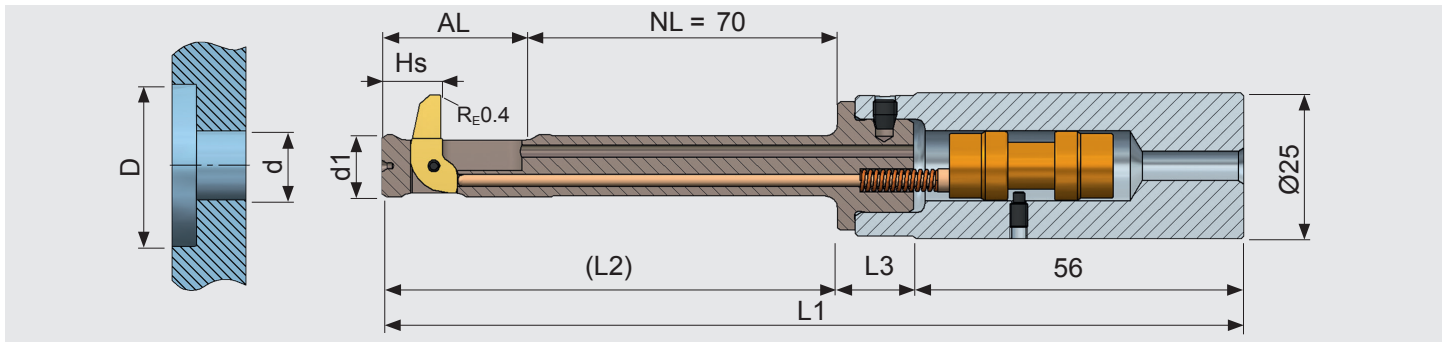
| 最小过孔直径- \varnothing d | 刀杆直径- \varnothing d1 | 反镗孔直径- \varnothing D | AL | HS | L1 | L2 | L3 | 不含刀片刀体订货号 | 刀片订货号 ¹⁾ |
|-------------------------|------------------------|------------------------|-------|-------|--------|--------|-------|---------------------|---------------------|
| 21.00 | 20.90 | 29.50 | 39.50 | 16.30 | 202.50 | 113.50 | 33.00 | BSF-G-2100/070-23.5 | BSF-M-G-1A-6.0 |
| | | 30.00 | | | | | | BSF-G-2100/070-24.0 | |
| | | 30.50 | | | | | | BSF-G-2100/070-24.5 | |
| | | 31.00 | | | | | | BSF-G-2100/070-25.0 | |
| | | 31.50 | | | | | | BSF-G-2100/070-25.5 | |
| | | 32.00 | | | | | | BSF-G-2100/070-26.0 | |
| | | 32.50 | | | | | | BSF-G-2100/070-26.5 | |
| | | 33.00 | | | | | | BSF-G-2100/070-27.0 | |
| | | 33.50 | | | | | | BSF-G-2100/070-27.5 | |
| | | 34.00 | | | | | | BSF-G-2100/070-23.5 | |
| | | 34.50 | | | | | | BSF-G-2100/070-24.0 | |
| | | 35.00 | | | | | | BSF-G-2100/070-24.5 | |
| | | 35.50 | | | | | | BSF-G-2100/070-25.0 | |
| | | 36.00 | | | | | | BSF-G-2100/070-25.5 | |
| | | 36.50 | | | | | | BSF-G-2100/070-26.0 | |
| | | 37.00 | | | | | | BSF-G-2100/070-26.5 | |
| | | 37.50 | | | | | | BSF-G-2100/070-27.0 | |
| | | 38.00 | | | | | | BSF-G-2100/070-27.5 | |
| | | 38.50 | | | | | | BSF-G-2100/070-23.5 | BSF-M-G-1A-15.0 |
| | | 39.00 | | | | | | BSF-G-2100/070-24.0 | |
| | | 39.50 | | | | | | BSF-G-2100/070-24.5 | |
| | | 40.00 | | | | | | BSF-G-2100/070-25.0 | |
| | | 40.50 | | | | | | BSF-G-2100/070-25.5 | |
| | | 41.00 | | | | | | BSF-G-2100/070-26.0 | |
| | | 41.50 | | | | | | BSF-G-2100/070-26.5 | |
| | | 42.00 | | | | | | BSF-G-2100/070-27.0 | |
| | | 42.50 | | | | | | BSF-G-2100/070-27.5 | |
| | | 43.00 | | | | | | BSF-G-2100/070-23.5 | |
| | | 43.50 | | | | | | BSF-G-2100/070-24.0 | |
| | | 44.00 | | | | | | BSF-G-2100/070-24.5 | |
| | | 44.50 | | | | | | BSF-G-2100/070-25.0 | |
| | | 45.00 | | | | | | BSF-G-2100/070-25.5 | |
| | | 45.50 | | | | | | BSF-G-2100/070-26.0 | |
| | | 46.00 | | | | | | BSF-G-2100/070-26.5 | |
| | | 46.50 | | | | | | BSF-G-2100/070-27.0 | |
| | | 47.00 | | | | | | BSF-G-2100/070-27.5 | |

¹⁾A=用于铸铁、钢件、不锈钢等材料的涂层 / D = 用于铝合金等材料的涂层 (请见第6页)

注

- 在刀杆订货号没特别标明的情况下刀柄为：圆柱柄
- 加标注 "-HB" = 侧固柄, "-HE" = 斜侧固柄 (请见第6页)
- 注意：刀杆订货号不含刀片，刀片需单独采购。

BSF刀杆和刀片-过孔直径 \varnothing 17.5至21.0 mm



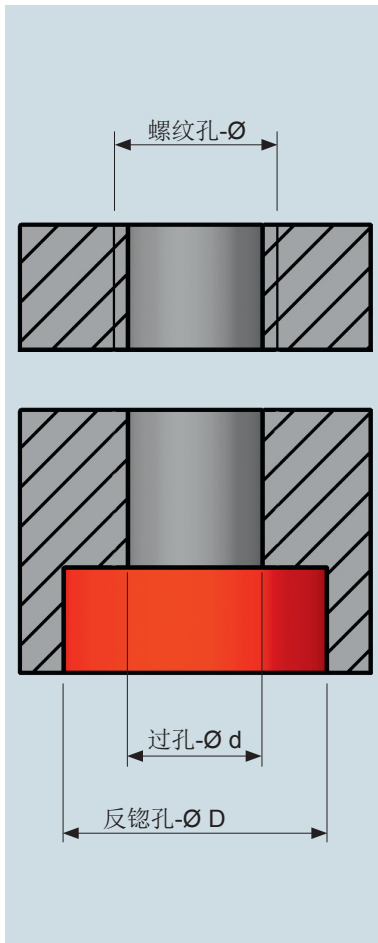
刀具型号表

| 最小过孔直径- \varnothing d | 刀杆直径- \varnothing d1 | 反镗孔直径- \varnothing D | AL | HS | L1 | L2 | L3 | 不含刀片刀体订货号 | 刀片订货号 ¹ |
|-------------------------|------------------------|------------------------|-------|-------|--------|--------|-------|---------------------|--------------------|
| 21.00 | 20.90 | 47.50 | 39.50 | 16.30 | 202.50 | 113.50 | 33.00 | BSF-G-2100/070-23.5 | BSF-M-G-1A-24.0 |
| | | 48.00 | | | | | | BSF-G-2100/070-24.0 | |
| | | 48.50 | | | | | | BSF-G-2100/070-24.5 | |
| | | 49.00 | | | | | | BSF-G-2100/070-25.0 | |

¹⁾A=用于铸铁、钢件、不锈钢等材料的涂层 / D = 用于铝合金等材料的涂层 (请见第6页)

注

- 在刀杆订货号没特别标明的情况下刀柄为：圆柱柄
加标注 "-HB" = 侧固柄, "-HE" =斜侧固柄 (请见第6页)
- 注意：刀杆订货号不含刀片，刀片需单独采购。



| 螺栓直径-Ø | 过孔直径-Ø d | 螺栓沉头孔直径 D | | |
|--------|-------------|--------------|---------------------|---------------------|
| M6 | 6.5 | 刀杆 | BSF-A-0650/040-6.5 | BSF-A-0650/040-7.5 |
| | | 刀片 | BSF-M-A-1A-4.5 | BSF-M-A-1A-7.5 |
| M8 | 8.5 | 刀杆 | BSF-B-0850/040-8.5 | BSF-B-0850/040-9.5 |
| | | 刀片 | BSF-M-B-1A-6.5 | BSF-M-B-1A-9.5 |
| M10 | 10.5 | 刀杆 | BSF-D-1050/050-11.0 | BSF-D-1050/050-13.0 |
| | | 刀片 | BSF-M-D-1A-7.0 | BSF-M-D-1A-12.0 |
| M12 | 13.0 | 刀杆 | BSF-E-1300/050-15.0 | BSF-E-1300/050-16.0 |
| | | 刀片 | BSF-M-E-1A-5.0 | BSF-M-E-1A-10.0 |
| M16 | 17.0 | 刀杆 | BSF-F-1700/070-20.5 | BSF-F-1700/070-21.0 |
| | | 刀片 | BSF-M-F-1A-5.5 | BSF-M-F-1A-12.5 |
| M20 | 21.0 | 刀杆 | BSF-G-2100/070-27.0 | BSF-G-2100/070-25.0 |
| | | 刀片 | BSF-M-G-1A-6.0 | BSF-M-G-1A-15.0 |

机床参数

| | |
|------|---|
| 机床 | 主轴带内冷 不带密封圈的侧固刀柄也可以使用 刀片展开最小启动速度: 反镗孔直径 <math> < 1.8 \times d </math>: 最小 5000 rev./min. 反镗孔直径 >math> > 1.8 \times d </math>: 最小 2000 rev./min. |
| 冷却系统 | 最小内冷压力为 20 bar 驱动压力: 20-50bar 工作压力: 20-40bar 注意: 加工软材料时, 需适当降低工作压力。 冷却可编程控制(开/关) 冷却液需带过滤系统(过滤精度 $\leq 25 \mu\text{m}$) 冷却液为乳化液 |
| 夹具 | BSF 是一款全自动的加工刀具。确保工件和夹具之间有足够的排屑空间, 及时用冷却液清理掉铁屑, 当被加工材料为长屑材料时, 要通过程序控制使其变成短屑。 |
| 夹持系统 | 当刀柄为圆柱柄时, 必须使用密封圈。 |

切削参数

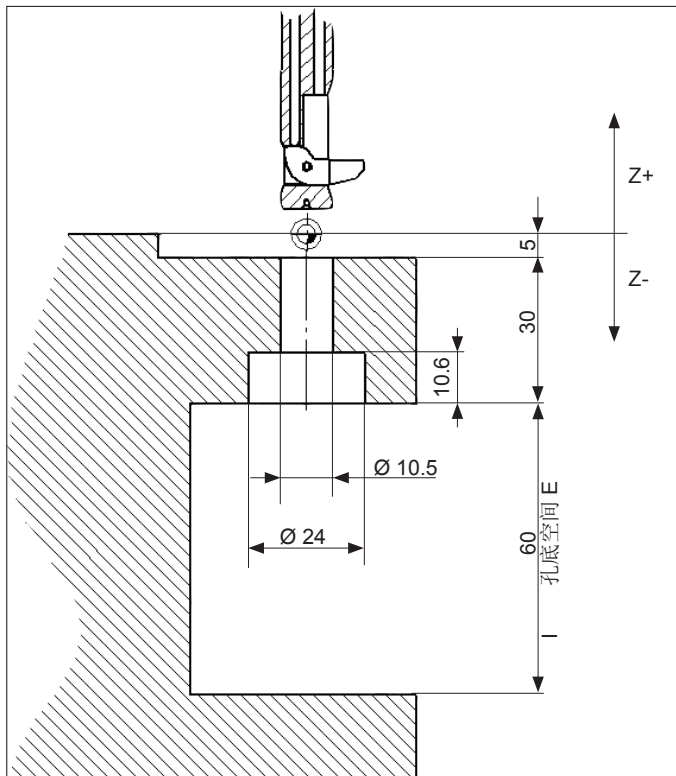
| 加工参数 | Vc (m/min) | 进给 f (mm/rev) 系列及过孔孔径 | | | | | | |
|---------------------------------|---------------|--------------------------|---------------------|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | | A 6.50 - 7.00 | B 7.50 - 8.50 | C 9.00 - 10.00 | D 10.50 - 11.50 | E 12.00 - 14.00 | F 14.50 - 17.00 | G 17.50 - 21.00 |
| 碳钢 < 700 N/mm ² | 40-80 | 0.01-0.02 | 0.01-0.03 | 0.02-0.04 | 0.03-0.06 | 0.03-0.08 | 0.03-0.08 | 0.03-0.08 |
| 碳钢 > 700 N/mm ² | 30-70 | 0.01-0.02 | 0.01-0.03 | 0.02-0.03 | 0.02-0.05 | 0.03-0.06 | 0.03-0.06 | 0.03-0.08 |
| 合金钢 < 800 N/mm ² | 30-60 | 0.01-0.02 | 0.01-0.03 | 0.02-0.04 | 0.03-0.06 | 0.03-0.08 | 0.03-0.08 | 0.03-0.08 |
| 合金钢 > 800 N/mm ² | 20-50 | 0.005-0.01 | 0.01-0.02 | 0.02-0.03 | 0.02-0.05 | 0.03-0.05 | 0.03-0.05 | 0.03-0.06 |
| 工具钢 < 1000 N/mm ² | 20-40 | 0.01-0.02 | 0.01-0.03 | 0.02-0.04 | 0.03-0.06 | 0.03-0.08 | 0.03-0.08 | 0.03-0.08 |
| 工具钢 > 1000 N/mm ² | 10-30 | 0.005-0.01 | 0.01-0.02 | 0.02-0.03 | 0.02-0.04 | 0.03-0.05 | 0.03-0.05 | 0.03-0.06 |
| 不锈钢 < 700 N/mm ² | 20-30 | 0.01-0.02 | 0.01-0.03 | 0.02-0.04 | 0.03-0.06 | 0.03-0.05 | 0.03-0.05 | 0.03-0.06 |
| 不锈钢 > 700 N/mm ² | 15-20 | 0.005-0.01 | 0.01-0.02 | 0.02-0.03 | 0.02-0.04 | 0.03-0.05 | 0.03-0.05 | 0.03-0.06 |
| 灰铁 | 20-40 | 0.005-0.01 | 0.01-0.02 | 0.02-0.03 | 0.02-0.05 | 0.03-0.05 | 0.03-0.06 | 0.05-0.08 |
| 铝合金 | 60-120 | 0.02-0.03 | 0.02-0.04 | 0.02-0.05 | 0.02-0.08 | 0.05-0.1 | 0.05-0.1 | 0.05-0.12 |
| 特殊合金 | 10-20 | 0.005-0.01 | 0.01-0.02 | 0.01-0.02 | 0.02-0.04 | 0.02-0.05 | 0.02-0.05 | 0.03-0.06 |

驱动速度

| 反镗孔直径 | 启动速度 |
|-----------|----------------|
| < 1.8 x d | 5000 rev./min. |
| > 1.8 x d | 2000 rev./min. |

注意:

- 切削参数和工件、机床及夹具情况都有很大的关系。
- 对于孔口不平的镗孔，需适当降低切削参数。
- 以上切削参数仅供参考。



应用案例
反镗M10内六角螺栓DIN 974-1沉孔。

| | |
|--------|---------|
| 图纸尺寸 | |
| 过孔直径d | 10.5 mm |
| 反镗孔直径D | 24.0 mm |
| 工作长度 | 约30 mm |
| 镗孔深度 | 10.6 mm |
| 空间距离 E | 60.0 mm |
| 工件材料 | C45 |

1. 刀杆型号选择

通过过孔直径及反镗孔直径可以确定刀杆型号 (请见第12页)

刀具：
过孔直径10.5 mm
反镗孔直径24.0 mm
系列D / 50 mm

刀具型号：**BSF - D - 1050 / 050 - 12.0**

2. 刀片型号选择

通过系列及刀片刃长可以确定刀片的型号：（请见第12页）

刀片：
系列D (过孔直径10.5 mm)
工件材料C45：
硬质合金= 1
涂层A

刀片型号：**BSF - M - D - 1A - 12.0**

FANUC 控制系统

工件材料C45

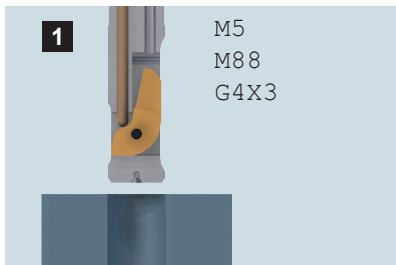
切削参数 (参见第37页)

 $V_c = 30 \text{ m/min.} = 400 \text{ rev./min.}$ $F = 0.05 \text{ mm/rev.}$

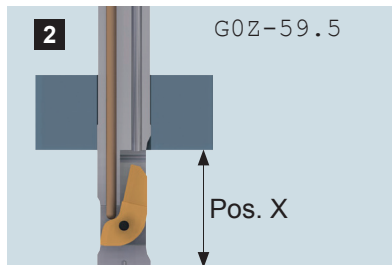
启动速度 (请参考第37页)

因为: $24.0 : 10.5 = 2.28 > 1.8$

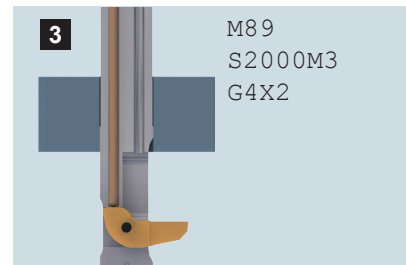
所以最小启动转速为2000 rev./min



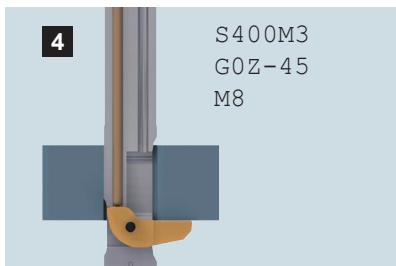
刀具移动至工件上平面, 主轴停转, 内冷开启, 等待2-5秒。(等待时间的长短基于机床冷却泵的开启速度), 刀片收入刀体内部。



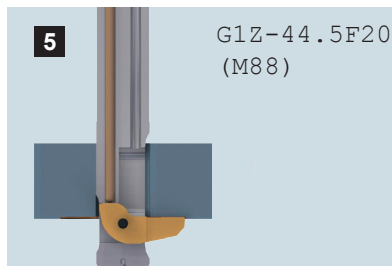
刀具快速通过工件至X位置。
($X = 5\text{mm} + 30\text{mm} + \text{刀片摆动长度}$
 $\text{'}22.5\text{mm} + \text{安全距离}2.0\text{mm}$)



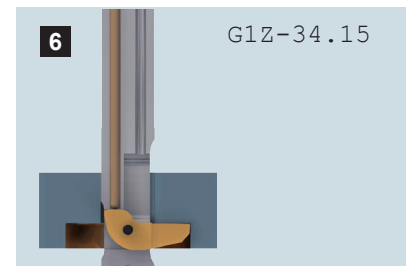
关闭内冷, 主轴以启动速度²旋转, 等待1-2秒。(注意冷却压力), 刀片展开至工作位置。
推荐冷却液压力: 20-50 bar

¹⁾ 刀片摆动长度AL请见第7页²⁾ 启动速度请见第37页

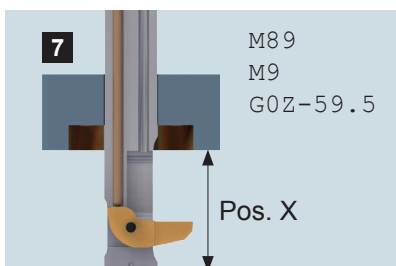
主轴转速调整至切削速度, 快速移动刀具至切削面0.25mm处。
(注意背面毛刺的尺寸, 及工件尺寸误差) 开启外冷。



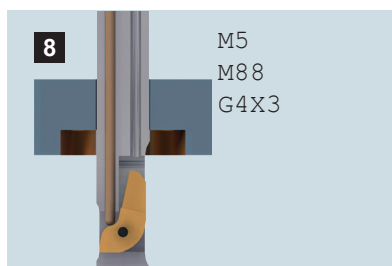
机床以切削速度运行, 当刀片完全切入工件约0.25mm后, 开启内冷。注意加工软材料时的冷却液压力。



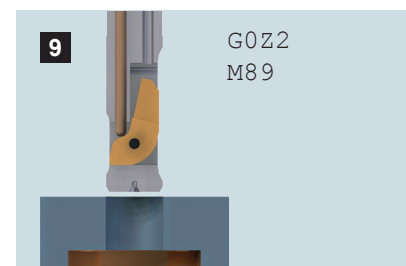
继续切削至要求的深度。

³⁾ 切削参数请参考第37页

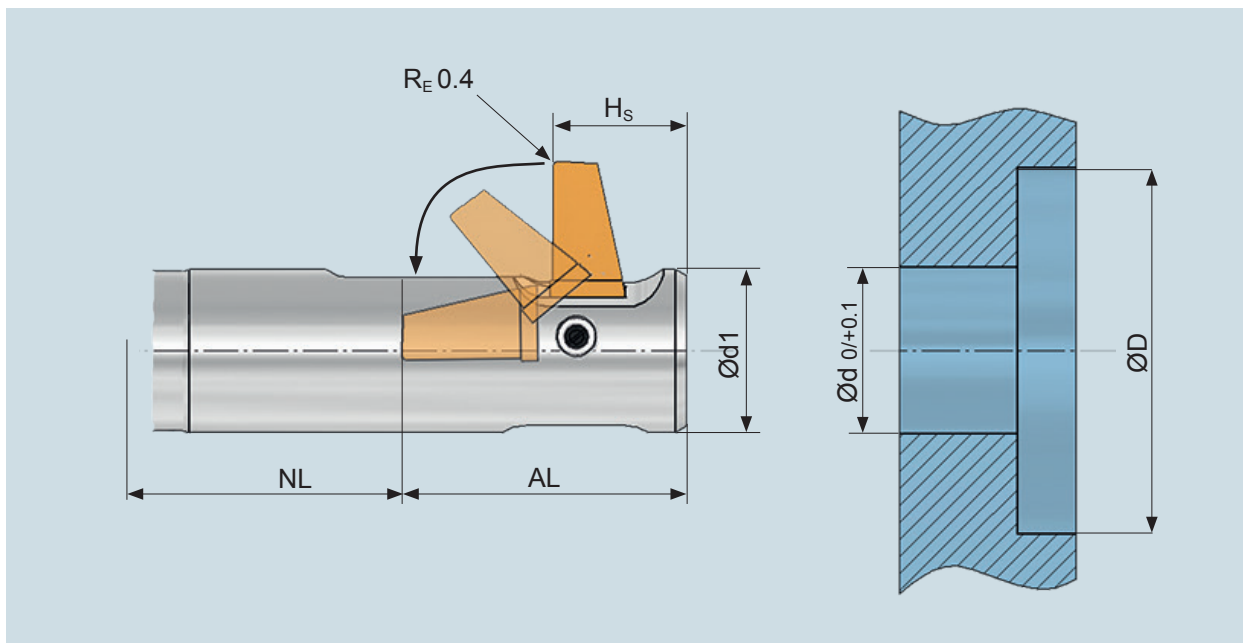
当达到切削深度后, 关闭内冷及外冷, 刀具快速退回至X位置。



主轴停转, 开启内冷, 等待2-5秒 (注意内冷压力), 刀片收入刀体。
推荐冷却液压力: 20-50 bar



刀具快速移出工件。



目录

| | |
|-----|--------------------|
| Ød | 过孔直径 (tol. 0/+0.1) |
| ØD | 反镗孔直径 |
| Ød1 | 刀杆直径 |
| RE | 标准刀片圆角为R0.4 mm |

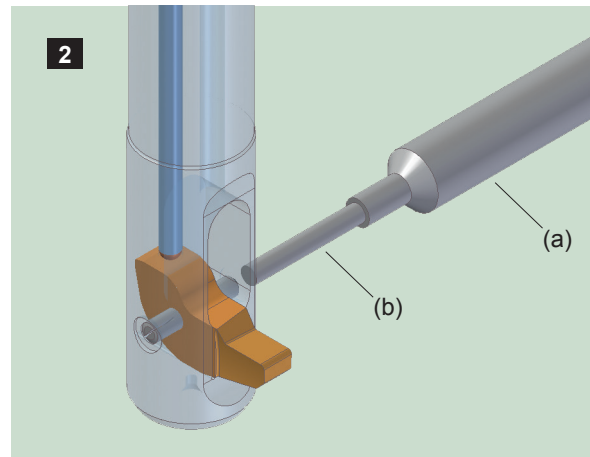
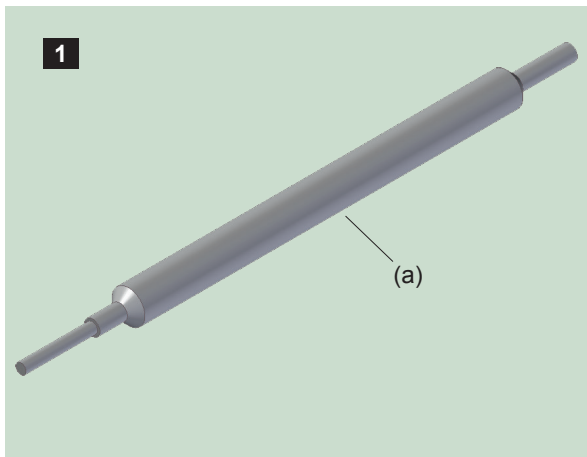
| | |
|----|----------------------|
| NL | 有效工作长度 (请参考刀具型号表) |
| AL | 摆动长度 (请参考刀具型号表) |
| Hs | 刀片高度 (请参考刀具型号表) |

注意:

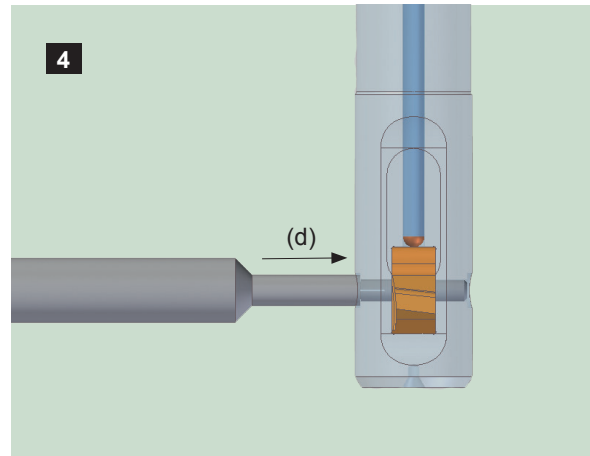
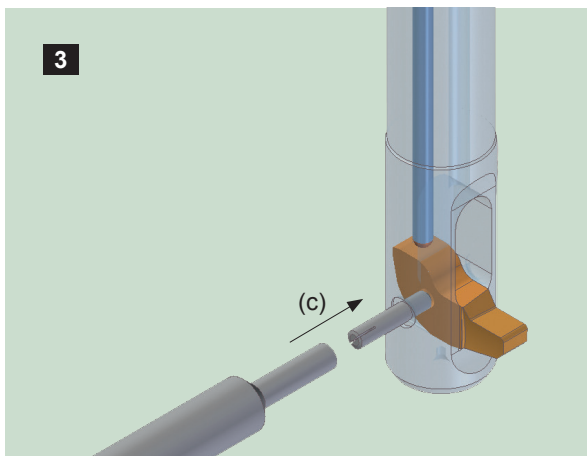
请注意过孔直径的孔径公差范围(+0.1)。超出规定的公差范围在刀具使用时有可能出问题。(孔径过小，刀杆会摩擦孔壁)。

此外，注意机床刀库内的存刀空间必须大于镗孔直径+2mm)。

刀片拆卸



刀片安装

**刀片拆卸**

为更换BSF刀片，我们提供了一支装配销(a)。将装配销的通端对准开口销轴实心端(b)，持续轻轻敲击装配销直至开口销完全露出刀体，此时刀片就可以从刀体内取出了。

刀片安装

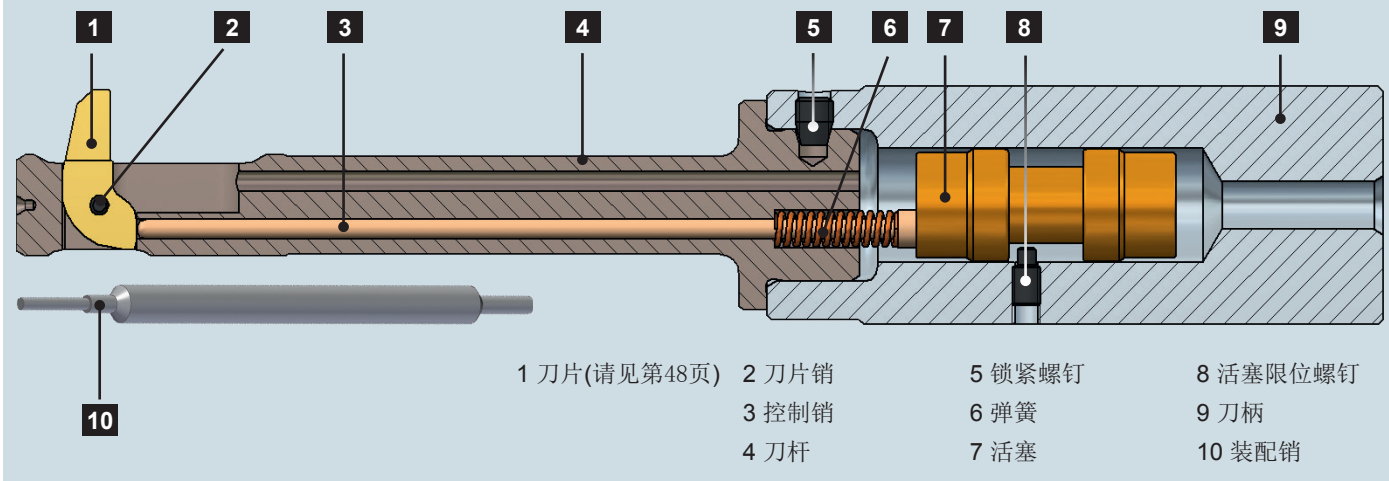
把刀片插入刀体，使用装配销通端固定刀片位置后，拔出装配销，插入开口销(c)，使用装配销的止端对准开口销，持续轻轻敲击，直至开口销完全进入刀体(d)。

注意：

刀片必须活动自如。如果出现卡滞现象，需拆卸后重新安装。在安装刀片前，刀片和刀杆必须确保清洁。

刀具在机床上闲置一段时间后，再次使用之前需检测刀片是否活动自如。因为油渍、冷却液、灰尘可能导致刀片和刀体粘连。

每更换一个刀片，刀片销也必须同时更换。（每订购一个刀片会同时附带一个刀片销），刀片销的重复使用有可能导致刀片安装出问题。

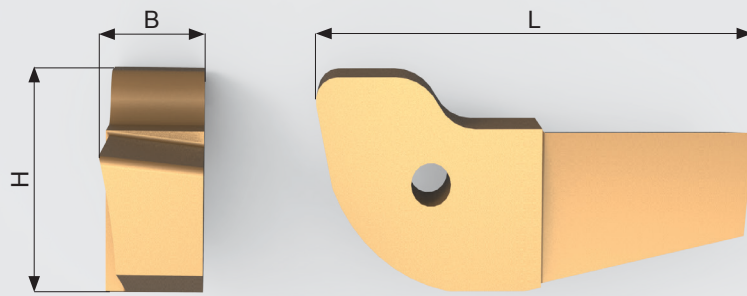


| 刀具型号 | 部件2 | 部件3 | 部件4 | 部件5 | 部件6 | 部件7 | 部件8 | 部件9 | 部件10 | 部件5扳手 |
|---------------------|------------|------------|-----------------------|-------------|-------------|------------|-------------|------------|------------|-------------|
| BSF-A-0650/040-6.5 | BSF-E-0009 | BSF-B-0001 | BSF-N-A-0650/N025/040 | GH-H-S-0201 | GH-H-F-0052 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0003 | BSF-V-0009 | GH-H-S-2023 |
| BSF-A-0650/040-7.0 | BSF-E-0009 | BSF-B-0001 | BSF-N-A-0650/0000/040 | GH-H-S-0201 | GH-H-F-0052 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0003 | BSF-V-0009 | GH-H-S-2023 |
| BSF-A-0650/040-7.5 | BSF-E-0009 | BSF-B-0001 | BSF-N-A-0650/P025/040 | GH-H-S-0201 | GH-H-F-0052 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0003 | BSF-V-0009 | GH-H-S-2023 |
| BSF-A-0700/040-7.0 | BSF-E-0009 | BSF-B-0002 | BSF-N-A-0700/0000/040 | GH-H-S-0201 | GH-H-F-0052 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0003 | BSF-V-0009 | GH-H-S-2023 |
| BSF-A-0700/040-7.5 | BSF-E-0009 | BSF-B-0002 | BSF-N-A-0700/P025/040 | GH-H-S-0201 | GH-H-F-0052 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0003 | BSF-V-0009 | GH-H-S-2023 |
| BSF-A-0700/040-8.0 | BSF-E-0009 | BSF-B-0002 | BSF-N-A-0700/P050/040 | GH-H-S-0201 | GH-H-F-0052 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0003 | BSF-V-0009 | GH-H-S-2023 |
| BSF-B-0750/040-7.5 | BSF-E-0018 | BSF-B-0003 | BSF-N-B-0750/N025/040 | GH-H-S-0201 | GH-H-F-0052 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0003 | BSF-V-0009 | GH-H-S-2023 |
| BSF-B-0750/040-8.0 | BSF-E-0018 | BSF-B-0003 | BSF-N-B-0750/0000/040 | GH-H-S-0201 | GH-H-F-0052 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0003 | BSF-V-0009 | GH-H-S-2023 |
| BSF-B-0750/040-8.5 | BSF-E-0018 | BSF-B-0003 | BSF-N-B-0750/P025/040 | GH-H-S-0201 | GH-H-F-0052 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0003 | BSF-V-0009 | GH-H-S-2023 |
| BSF-B-0800/040-8.0 | BSF-E-0018 | BSF-B-0003 | BSF-N-B-0800/0000/040 | GH-H-S-0201 | GH-H-F-0052 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0003 | BSF-V-0009 | GH-H-S-2023 |
| BSF-B-0800/040-8.5 | BSF-E-0018 | BSF-B-0003 | BSF-N-B-0800/P025/040 | GH-H-S-0201 | GH-H-F-0052 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0003 | BSF-V-0009 | GH-H-S-2023 |
| BSF-B-0800/040-9.5 | BSF-E-0018 | BSF-B-0003 | BSF-N-B-0800/P050/040 | GH-H-S-0201 | GH-H-F-0052 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0003 | BSF-V-0009 | GH-H-S-2023 |
| BSF-B-0850/040-8.5 | BSF-E-0018 | BSF-B-0004 | BSF-N-B-0850/P025/040 | GH-H-S-0201 | GH-H-F-0052 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0003 | BSF-V-0009 | GH-H-S-2023 |
| BSF-B-0850/040-9.0 | BSF-E-0018 | BSF-B-0004 | BSF-N-B-0850/P050/040 | GH-H-S-0201 | GH-H-F-0052 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0003 | BSF-V-0009 | GH-H-S-2023 |
| BSF-B-0850/040-9.5 | BSF-E-0018 | BSF-B-0004 | BSF-N-B-0850/P075/040 | GH-H-S-0201 | GH-H-F-0052 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0003 | BSF-V-0009 | GH-H-S-2023 |
| BSF-C-0900/050-10.0 | BSF-E-0010 | BSF-B-0005 | BSF-N-C-0900/0000/050 | GH-H-S-0201 | GH-H-F-0053 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0003 | BSF-V-0006 | GH-H-S-2023 |
| BSF-C-0900/050-10.5 | BSF-E-0010 | BSF-B-0005 | BSF-N-C-0900/P025/050 | GH-H-S-0201 | GH-H-F-0053 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0003 | BSF-V-0006 | GH-H-S-2023 |
| BSF-C-0900/050-9.5 | BSF-E-0010 | BSF-B-0005 | BSF-N-C-0900/N025/050 | GH-H-S-0201 | GH-H-F-0053 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0003 | BSF-V-0006 | GH-H-S-2023 |
| BSF-C-0950/050-10.0 | BSF-E-0010 | BSF-B-0005 | BSF-N-C-0950/0000/050 | GH-H-S-0201 | GH-H-F-0053 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0003 | BSF-V-0006 | GH-H-S-2023 |
| BSF-C-0950/050-10.5 | BSF-E-0010 | BSF-B-0005 | BSF-N-C-0950/P025/050 | GH-H-S-0201 | GH-H-F-0053 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0003 | BSF-V-0006 | GH-H-S-2023 |
| BSF-C-0950/050-11.0 | BSF-E-0010 | BSF-B-0005 | BSF-N-C-0950/P050/050 | GH-H-S-0201 | GH-H-F-0053 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0003 | BSF-V-0006 | GH-H-S-2023 |
| BSF-C-1000/050-10.5 | BSF-E-0010 | BSF-B-0005 | BSF-N-C-1000/P025/050 | GH-H-S-0201 | GH-H-F-0053 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0003 | BSF-V-0006 | GH-H-S-2023 |
| BSF-C-1000/050-11.0 | BSF-E-0010 | BSF-B-0005 | BSF-N-C-1000/P050/050 | GH-H-S-0201 | GH-H-F-0053 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0003 | BSF-V-0006 | GH-H-S-2023 |
| BSF-C-1000/050-11.5 | BSF-E-0010 | BSF-B-0005 | BSF-N-C-1000/P075/050 | GH-H-S-0201 | GH-H-F-0053 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0003 | BSF-V-0006 | GH-H-S-2023 |

备件

| 刀具型号 | 部件2 | 部件3 | 部件4 | 部件5 | 部件6 | 部件7 | 部件8 | 部件9 | 部件10 | 部件5扳手 |
|---------------------|------------|------------|-----------------------|-------------|-------------|------------|-------------|------------|------------|-------------|
| BSF-G-2000/070-22.5 | BSF-E-0013 | BSF-B-0012 | BSF-N-G-2000/P025/070 | GH-H-S-0202 | GH-H-F-0051 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0004 | BSF-V-0008 | GH-H-S-2100 |
| BSF-G-2000/070-23.0 | BSF-E-0013 | BSF-B-0012 | BSF-N-G-2000/P050/070 | GH-H-S-0202 | GH-H-F-0051 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0004 | BSF-V-0008 | GH-H-S-2100 |
| BSF-G-2000/070-23.5 | BSF-E-0013 | BSF-B-0012 | BSF-N-G-2000/P075/070 | GH-H-S-0202 | GH-H-F-0051 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0004 | BSF-V-0008 | GH-H-S-2100 |
| BSF-G-2000/070-24.0 | BSF-E-0013 | BSF-B-0012 | BSF-N-G-2000/P100/070 | GH-H-S-0202 | GH-H-F-0051 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0004 | BSF-V-0008 | GH-H-S-2100 |
| BSF-G-2000/070-24.5 | BSF-E-0013 | BSF-B-0012 | BSF-N-G-2000/P125/070 | GH-H-S-0202 | GH-H-F-0051 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0004 | BSF-V-0008 | GH-H-S-2100 |
| BSF-G-2000/070-25.0 | BSF-E-0013 | BSF-B-0012 | BSF-N-G-2000/P150/070 | GH-H-S-0202 | GH-H-F-0051 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0004 | BSF-V-0008 | GH-H-S-2100 |
| BSF-G-2000/070-25.5 | BSF-E-0013 | BSF-B-0012 | BSF-N-G-2000/P175/070 | GH-H-S-0202 | GH-H-F-0051 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0004 | BSF-V-0008 | GH-H-S-2100 |
| BSF-G-2000/070-26.0 | BSF-E-0013 | BSF-B-0012 | BSF-N-G-2000/P020/070 | GH-H-S-0202 | GH-H-F-0051 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0004 | BSF-V-0008 | GH-H-S-2100 |
| BSF-G-2000/070-26.5 | BSF-E-0013 | BSF-B-0012 | BSF-N-G-2000/P225/070 | GH-H-S-0202 | GH-H-F-0051 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0004 | BSF-V-0008 | GH-H-S-2100 |
| BSF-G-2050/070-23.0 | BSF-E-0013 | BSF-B-0012 | BSF-N-G-2050/P050/070 | GH-H-S-0202 | GH-H-F-0051 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0004 | BSF-V-0008 | GH-H-S-2100 |
| BSF-G-2050/070-23.5 | BSF-E-0013 | BSF-B-0012 | BSF-N-G-2050/P075/070 | GH-H-S-0202 | GH-H-F-0051 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0004 | BSF-V-0008 | GH-H-S-2100 |
| BSF-G-2050/070-24.0 | BSF-E-0013 | BSF-B-0012 | BSF-N-G-2050/P100/070 | GH-H-S-0202 | GH-H-F-0051 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0004 | BSF-V-0008 | GH-H-S-2100 |
| BSF-G-2050/070-24.5 | BSF-E-0013 | BSF-B-0012 | BSF-N-G-2050/P125/070 | GH-H-S-0202 | GH-H-F-0051 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0004 | BSF-V-0008 | GH-H-S-2100 |
| BSF-G-2050/070-25.0 | BSF-E-0013 | BSF-B-0012 | BSF-N-G-2050/P150/070 | GH-H-S-0202 | GH-H-F-0051 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0004 | BSF-V-0008 | GH-H-S-2100 |
| BSF-G-2050/070-25.5 | BSF-E-0013 | BSF-B-0012 | BSF-N-G-2050/P175/070 | GH-H-S-0202 | GH-H-F-0051 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0004 | BSF-V-0008 | GH-H-S-2100 |
| BSF-G-2050/070-26.0 | BSF-E-0013 | BSF-B-0012 | BSF-N-G-2050/P200/070 | GH-H-S-0202 | GH-H-F-0051 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0004 | BSF-V-0008 | GH-H-S-2100 |
| BSF-G-2050/070-26.5 | BSF-E-0013 | BSF-B-0012 | BSF-N-G-2050/P225/070 | GH-H-S-0202 | GH-H-F-0051 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0004 | BSF-V-0008 | GH-H-S-2100 |
| BSF-G-2050/070-27.0 | BSF-E-0013 | BSF-B-0012 | BSF-N-G-2050/P250/070 | GH-H-S-0202 | GH-H-F-0051 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0004 | BSF-V-0008 | GH-H-S-2100 |
| BSF-G-2100/070-23.5 | BSF-E-0013 | BSF-B-0013 | BSF-N-G-2100/P075/070 | GH-H-S-0202 | GH-H-F-0051 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0004 | BSF-V-0008 | GH-H-S-2100 |
| BSF-G-2100/070-24.0 | BSF-E-0013 | BSF-B-0013 | BSF-N-G-2100/P100/070 | GH-H-S-0202 | GH-H-F-0051 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0004 | BSF-V-0008 | GH-H-S-2100 |
| BSF-G-2100/070-24.5 | BSF-E-0013 | BSF-B-0013 | BSF-N-G-2100/P125/070 | GH-H-S-0202 | GH-H-F-0051 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0004 | BSF-V-0008 | GH-H-S-2100 |
| BSF-G-2100/070-25.0 | BSF-E-0013 | BSF-B-0013 | BSF-N-G-2100/P150/070 | GH-H-S-0202 | GH-H-F-0051 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0004 | BSF-V-0008 | GH-H-S-2100 |
| BSF-G-2100/070-25.5 | BSF-E-0013 | BSF-B-0013 | BSF-N-G-2100/P175/070 | GH-H-S-0202 | GH-H-F-0051 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0004 | BSF-V-0008 | GH-H-S-2100 |
| BSF-G-2100/070-26.0 | BSF-E-0013 | BSF-B-0013 | BSF-N-G-2100/P200/070 | GH-H-S-0202 | GH-H-F-0051 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0004 | BSF-V-0008 | GH-H-S-2100 |
| BSF-G-2100/070-26.5 | BSF-E-0013 | BSF-B-0013 | BSF-N-G-2100/P225/070 | GH-H-S-0202 | GH-H-F-0051 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0004 | BSF-V-0008 | GH-H-S-2100 |
| BSF-G-2100/070-27.0 | BSF-E-0013 | BSF-B-0013 | BSF-N-G-2100/P250/070 | GH-H-S-0202 | GH-H-F-0051 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0004 | BSF-V-0008 | GH-H-S-2100 |
| BSF-G-2100/070-27.5 | BSF-E-0013 | BSF-B-0013 | BSF-N-G-2100/P275/070 | GH-H-S-0202 | GH-H-F-0051 | BSF-E-0014 | GH-H-S-0302 | BSF-S-0004 | BSF-V-0008 | GH-H-S-2100 |

建议:
 登录www.heule.com使用BSF刀具选择软件可以帮助你更快更准确的选择刀具。



| 刀片型号 | 长度L | 宽度B | 高度H |
|-----------------|-------|------|-------|
| BSF-M-A-1A-3.0 | 7.70 | 2.00 | 4.50 |
| BSF-M-A-1A-4.5 | 8.40 | 2.00 | 4.50 |
| BSF-M-A-1A-6.0 | 9.20 | 2.00 | 4.50 |
| BSF-M-A-1A-7.5 | 9.90 | 2.00 | 4.50 |
| BSF-M-A-1A-9.0 | 10.70 | 2.00 | 4.50 |
| BSF-M-B-1A-3.5 | 8.90 | 2.50 | 5.50 |
| BSF-M-B-1A-5.0 | 9.60 | 2.50 | 5.50 |
| BSF-M-B-1A-6.5 | 10.40 | 2.50 | 5.50 |
| BSF-M-B-1A-8.0 | 11.10 | 2.50 | 5.50 |
| BSF-M-B-1A-9.5 | 11.90 | 2.50 | 5.50 |
| BSF-M-B-1A-11.0 | 12.70 | 2.50 | 5.50 |
| BSF-M-C-1A-4.0 | 10.80 | 3.00 | 6.50 |
| BSF-M-C-1A-5.5 | 11.60 | 3.00 | 6.50 |
| BSF-M-C-1A-7.0 | 12.30 | 3.00 | 6.50 |
| BSF-M-C-1A-8.5 | 13.10 | 3.00 | 6.50 |
| BSF-M-C-1A-10.0 | 13.80 | 3.00 | 6.50 |
| BSF-M-C-1A-11.5 | 14.60 | 3.00 | 6.50 |
| BSF-M-C-1A-13.0 | 15.30 | 3.00 | 6.50 |
| BSF-M-D-1A-4.5 | 12.50 | 3.50 | 7.25 |
| BSF-M-D-1A-7.0 | 13.80 | 3.50 | 7.25 |
| BSF-M-D-1A-9.5 | 15.00 | 3.50 | 7.25 |
| BSF-M-D-1A-12.0 | 16.30 | 3.50 | 7.25 |
| BSF-M-D-1A-14.5 | 17.50 | 3.50 | 7.25 |
| BSF-M-E-1A-5.0 | 14.30 | 4.50 | 8.50 |
| BSF-M-E-1A-7.5 | 15.50 | 4.50 | 8.50 |
| BSF-M-E-1A-10.0 | 16.80 | 4.50 | 8.50 |
| BSF-M-E-1A-12.5 | 18.10 | 4.50 | 8.50 |
| BSF-M-E-1A-15.0 | 19.30 | 4.50 | 8.50 |
| BSF-M-E-1A-17.5 | 20.60 | 4.50 | 8.50 |
| BSF-M-F-1A-5.5 | 17.20 | 5.00 | 10.00 |
| BSF-M-F-1A-9.0 | 19.00 | 5.00 | 10.00 |
| BSF-M-F-1A-12.5 | 20.80 | 5.00 | 10.00 |
| BSF-M-F-1A-16.0 | 22.60 | 5.00 | 10.00 |
| BSF-M-F-1A-19.5 | 24.30 | 5.00 | 10.00 |
| BSF-M-G-1A-6.0 | 20.80 | 6.00 | 12.00 |
| BSF-M-G-1A-10.5 | 23.10 | 6.00 | 12.00 |
| BSF-M-G-1A-15.0 | 25.40 | 6.00 | 12.00 |
| BSF-M-G-1A-19.5 | 27.70 | 6.00 | 12.00 |
| BSF-M-G-1A-24.0 | 29.90 | 6.00 | 12.00 |

当主轴停转后，刀片处于打开状态，该状态正常吗？

正常，为了使得刀片能够自动打开，BSF的刀片采用了偏心设计。当然，加工时为了工艺安全，机床转速必须达到样本推荐的刀片展开的最小启动速度。

运行结束后，发现沉孔没有加工出来。

检测机床的转速是否达到刀具展开所需的最小启动转速？检查刀片是否依然缩在刀体内。如果刀片还在刀体内，拆下刀片清洁刀杆及刀片。

开口销安装时是否有方向性？

没有

如果过孔的孔径公差为H7，BSF刀具会破坏过孔精度吗？

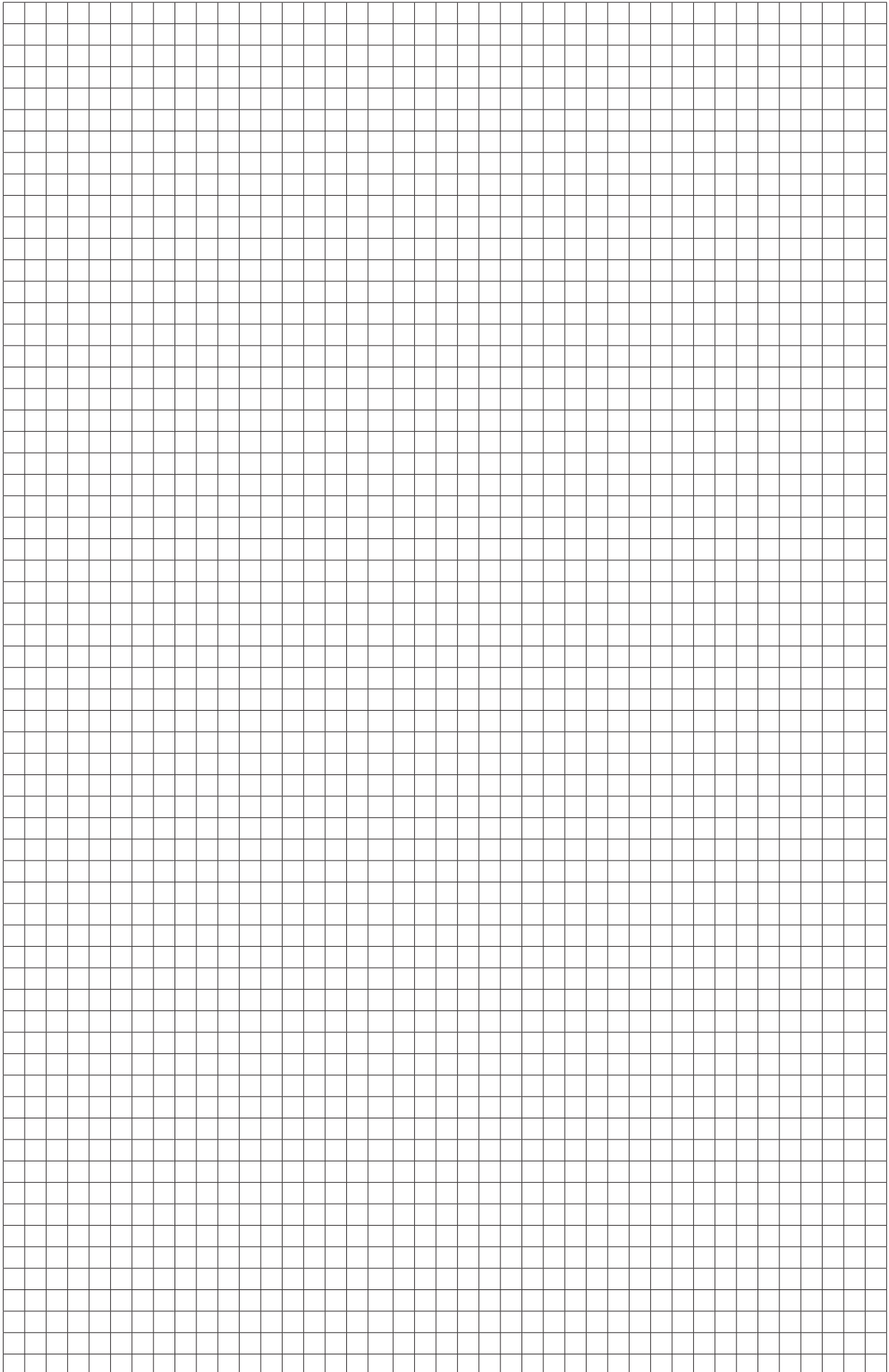
会，因为BSF为单刀片刀具，切削力不平衡。我们推荐在精加工过孔前反镗沉孔。

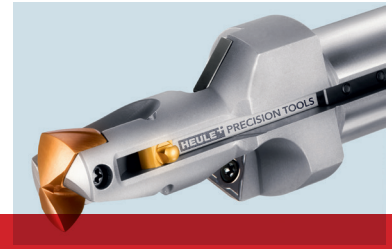
BSF刀具可以用热胀刀柄夹持吗？

不行，由于BSF刀柄的材料是钢件。热装刀柄系统的前提是刀具柄部材料和刀柄材料的热膨胀系数不一样。如硬质合金刀柄可以使用热胀系统来夹持。

刀杆由三个锁紧螺钉固定在刀柄上，在安装时有方向要求吗？

没有，在安装时没有方向要求。



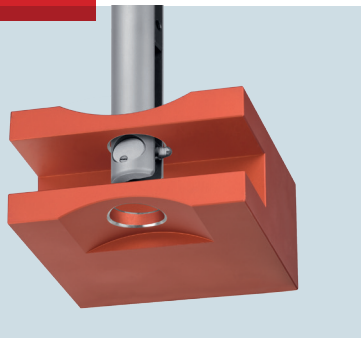


单次工序

好优利刀具能在单次工序中就可完成孔口正反两面去毛刺、倒角、反铤沉孔的加工。

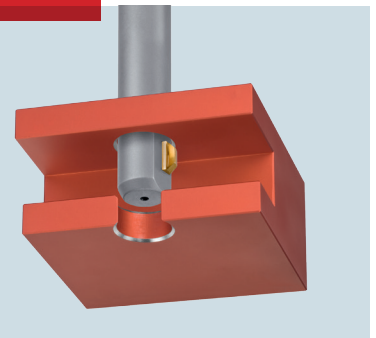
去毛刺

- COFA
- SNAP



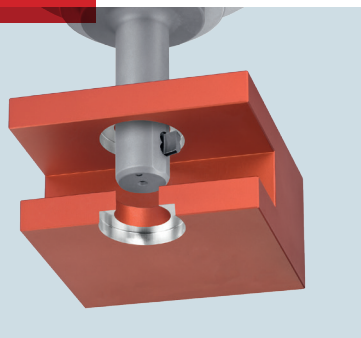
倒角

- SNAP
- GH-S
- DEFA



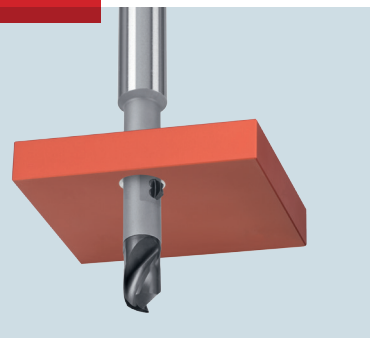
铤沉孔

- BSF
- SOLO
- GH-Z/E



钻孔正反倒角

- VEX-P
- VEX-S



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