ACROW

TOOL HOLDERS



CNC TOOLING SYSTEMS

INDEX

- HEC 油壓刀把
  HEC Hydraulic Chucks, BT

07

- BSD 精搪組
  BSD Fine Boring Systems, BT / ABT

08

- BSH 雙刃搪刀組
  BSH Twin-cutter Boring Systems, BT / ABT

09

- BSD-ST 精搪組 + BSH-ST 雙刃搪刀組
  BSD-ST Fine Boring Systems +
  BSH-ST Twin-cutter Boring Systems

10

- SCAK 鎢鋼直刀柄
  SCAK Straight Carbide Holders

11

- AK 搪孔刀把
  AK Modular Boring Shanks, BT / ABT

12

- AK-ST 搪孔刀把 + AK-EXT 延長桿
  AK-ST Straight Shanks + AK-EXT Extensions

13

- BSD 精搪頭
  BSD Fine Boring Systems

14

- BSH 雙刃搪刀頭及配件
  BSH Twin-cutter Boring Systems

16

- FBH 小徑精搪組
  FBH Modular Fine Boring Systems, BT / ABT

17

- FBH84 精搪頭刀桿
  FBH84 Modular Fine Boring Systems, BT / ABT

20

- BSH 大孔徑搪刀組
  BSH Twin-cutter for Large Boring, BT / ABT

21

- BST 大孔徑搪刀組
  BST Large Boring Master Shanks (type T),
  BT / ABT

22

- BSH 轉接部 + BSH & BST 刀架規格
  BSH Connection + BSH & BST Bridge Adaptor

24

- SB 四方柄搪孔刀架 + BSD 平衡塊
  SB Square Shank Boring Bars +
  BSD Balance Block

25

- NR 高速精密筒夾刀把
  NR High Speed Precision Collet Chucks,
  BT / ABT

26

- NR-WD 高速精密筒夾刀把
  NR-WD High Speed Precision Collet Chucks,
  BT / ABT

27

- NR-NK 高速精密筒夾刀把(無驅動鍵槽)
  NR-NK High Speed Precision Collet Chucks
  (w/o Keyway), BT

28

- NR-AZWD 可調整精度刀把
  NR-AZWD Adjustable Chucks, BT

29

- FANR 微調式精度刀把
  FANR Fine Adjustable Chucks, BT

30

- C-H 高速強力精密銑刀夾頭
  C-H High Speed Precision Power Milling
  Chucks, BT / ABT

31

- C 型強力精密銑刀夾頭
  C Type Precision Power Milling Chucks,
  BT / ABT

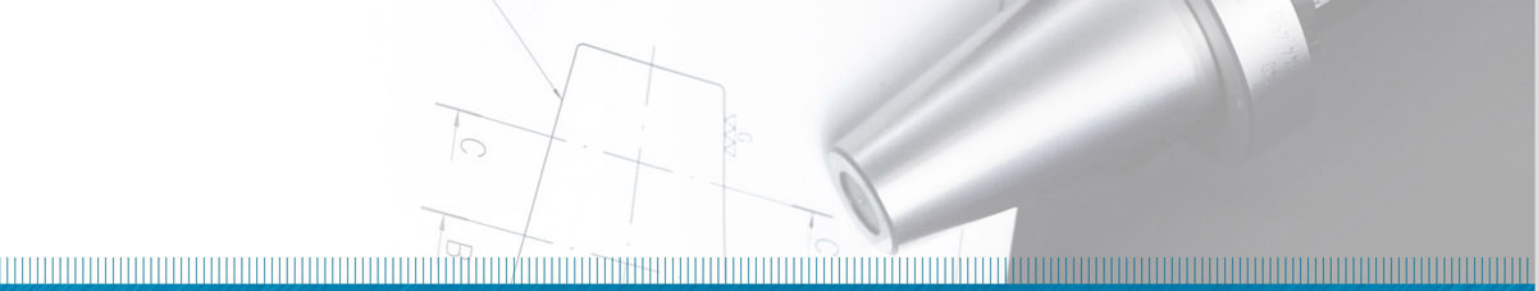
31

- HC 高速精密筒夾刀把
  HC High Speed Precision Collet Chucks,
  BT / ABT

32

- SGER 彈性筒夾刀把
  SGER Collet Chucks (DIN6499), BT

33



- ER 彈性筒夾刀把
  ER Collet Chucks (DIN6499), BT / ABT

35

- ER-NK 高速彈性筒夾刀把（無驅動鍵槽）
  ER-NK High Speed Spring Collet Chucks (w/o Keyway), BT / ISO20 / ISO25

37

- ER 彈性筒夾直柄刀把
  ER Collet Chucks, Straight Shank (DIN6499)

38

- SRK & SRK-BK 直柄熱膨脹燒結刀把
  SRK & SRK-BK Shrink Fit Chucks, Straight Shank

39

- SLN 側固式刀把
  SLN Weldon Chucks (DIN1835B), BT / ABT

41

- 鎖牙式靠模銑刀把
  Adaptors for Threaded Shank End-mill, BT / ABT

44

- MT 莫氏錐度刀把
  MT Morse Taper Holders, BT

45

- APU 鑽夾刀把 + TSA 錐度轉換刀把
  APU CNC Drill Chucks, BT + TSA Reduction Holders, BT

46

- SM 殼型銑刀把
  SM Shell Mill Holders, BT / ABT

47

- FMA 面銑刀把
  FMA Face Mill Holders, BT / ABT

49

- SCA 側銑刀把
  SCA Side Cutter Holders, BT / ABT

50

- OSL 油路側固式刀把 + OHER 油路彈性筒夾刀把
  OSL Rotary Through Coolant Supply Chucks, BT + OHER Rotary Through Coolant Supply Chucks (DIN6499), BT

51

- TR90 角度頭刀把
  TR90 Angle Head Chucks, BT

52

- UAH 萬向角度頭刀把
  UAH Universal Angle Head Chucks, BT

54

- TRH & TRN 角度頭刀把
  TRH & TRN Angle Head Chucks, BT

55

- TRSN 角度頭刀把
  TRSN Angle Head Chucks, BT

57

- WNR 刀把本體 + WNR 可換式絲攻夾持柄
  WNR Tapping Holder Main Bodies, BT + WNR Changeable Tap Holders

60

- WNR 同步攻牙刀把
  WNR Synchro Tap Holders, BT

61

- WER 攻牙刀把（伸縮型）（DIN6499）
  WER Tapping Chucks (with length flexibility) (DIN6499), BT

62

- WER-ST & SL 直柄 & 側固式圓柄攻牙刀把（伸縮型）
  WER-ST & SL WER Tapping Chucks (with length flexibility)

62

- WF 快換式攻牙刀把（伸縮型）
  WF Quick Change Tapping Chucks (with length compensation), BT

63

- WFE 快換式攻牙刀把（伸縮加長型）
  WFE Quick Change Tapping Chucks (with length compensation), BT

63

- WF 快換式攻牙刀把（伸縮型）
  WF Quick Change Tapping Chucks (with length compensation)

64

- SF 快換式攻牙刀把（剛性）
  SF Quick Change Tapping Chucks (rigid type), BT

65

INDEX

- BSD 精搪組
  BSD Fine Boring Systems, HSK

66

- FBH 小徑精搪組
  FBH Modular Fine Boring Systems, HSK

66

- BSH 雙刃搪刀組
  BSH Twin-cutter Boring Systems, HSK

67

- HEC 油壓刀把
  HEC Hydraulic Chucks, HSK

67

- NR 高速精密筒夾刀把
  NR High Speed Precision Collet Chucks, HSK

68

- NR-AZWD 可調整精度刀把
  NR-AZWD Adjustable Chucks, HSK

69

- C-H 高速強力精密銑刀夾頭
  C-H High Speed Precision Power Milling Chucks, , HSK

70

- C 型強力精密銑刀夾頭
  C Type Precision Power Milling Chucks, HSK

70

- HC 高速精密筒夾刀把
  HC High Speed Precision Collet Chucks, HSK

71

- ER 彈性筒夾刀把
  ER Collet Chucks (DIN6499), HSK

72

- SLN 側固式刀把
  SLN Weldon Chucks (DIN1835B), HSK

73

- APU 鑽夾刀把
  APU CNC Drill Chucks, HSK

74

- MT 莫氏錐度刀把
  MT Morse Taper Holders, HSK

74

- 鎖牙式靠模銑刀把
  Adaptors for Threaded Shank End-mill, HSK

75

- SM 殼型銑刀把
  SM Shell Mill Holders, HSK

76

- FMA 面銑刀把
  FMA Face Mill Holders, HSK

76

- WF 快換式攻牙刀把(伸縮型)
  WF Quick Change Tapping Chucks (with length compensation), HSK

77

- SF 快換式攻牙刀把(剛性)
  SF Quick Change Tapping Chucks (rigid type), HSK

77

INDEX

- TC 快換式絲攻筒夾
  TC Quick Change Tap Collets
  
  78

- SCER 浮動式滾磨倒角刀
  SCER Floating Rotary Chamfering Burr
  
  82

- DC 快換式鑽孔攻牙夾具組
  DC Quick Change Tapping / Drill Chucks & Collets
  
  83

- 拉桿螺栓
  Pull Studs
  
  84

- STB 標準測試棒
  STB Standard Test Bars
  
  88

- ATC 校刀治具
  ATC / Spindle Aligners
  
  89

- ISO-D & HSK-D 平衡刀把
  ISO-D & HSK-D Balanced Toolholder
  
  90

- 周邊配件
  Accessories
  
  91

- 拉力計
  Grip Pull Force Gauges
  
  102

- 中心出水壓力計 + 棘輪扳手
  Coolant Through Pressure Gauges + Ratchet Wrenches
  
  103

- TQW 扭矩扳手與配件
  TQW Torque Wrenches & Accessories
  
  104

- NCC 中心頂針與頂針頭
  NCC Live Center & Center Head
  
  105

- DV 刀把(DIN69871A)
  DV Shanks (DIN69871A)
  
  106

- 主軸拉刀夾爪
  Grippers / Clamping Units
  
  107

- 其他
  Other
  
  108

- MC 雙倍力增壓 / 角固式精密虎鉗
  MC Dual Force Pressure Increasing / Precision Angle Lock Vise
  

  109

- MC 空壓式精密虎鉗
  MC-Cobra Pneumatic Power Vise
  
  110

- TR-1000 中心孔研磨機
  TR-1000 Center Hole Grinding Machine
  
  115

- 偏擺檢查儀
  Run Out Checking Fixture
  
  116

- HSK63T 角車刀用刀把 180° 型 +
  HSK63T 角車刀用刀把 180° 多用途型
  HSK63T Square Toolholder 180° Type +
  HSK63T Square Toolholder 180° Multi-purpose Type
  
  117

- HSK63T 搪刀桿用側固式刀把 + TSL 套筒
  HSK63T Side Lock Toolholder for Boring Bar + TSL Reduction Sleeves
  
  118

刀具適用一覽表

• 鑽頭系列 Drill System



- NR  26
- NR-AZWD  29
- FANR  30
- SGER  33
- ER  35
- MT  45
- APU  46
- OSL& OHER  51
- TR90  52
- UAH  54
- TRN  56
- TRSN  57

• 螺絲攻系列 Tap System



- WNR  60
- WNR  61
- WER  62
- WER+ ST&SL  62
- WF  63
- WFE  63
- WF+ MT&SL  64
- SF  65
- SF+ MT&SL  65

• 絞刀系列 Reamer System



- NR  26
- NR-AZWD  29
- FANR  30
- SGER  33
- ER  35
- MT  45
- APU  46

• 端銑刀系列 End-mill System



- HEC  07
- NR  26
- NR-AZWD  29
- FANR  30
- HC  32
- SGER  33
- ER  35
- SRK  39
- SRK-BK  40
- SLN  41
- APU  46
- OSL& OHER  51
- TR90  52
- UAH  54
- TRH  55
- TRSN  57

• 搪頭系列 Boring System



- BSD  08
- BSH  09
- BSD-ST  10
- SCAK  11
- FBH  17
- FBH84  20
- BSH  21
- BST  22
- BST  23

• 面銑系列 Face-mill System



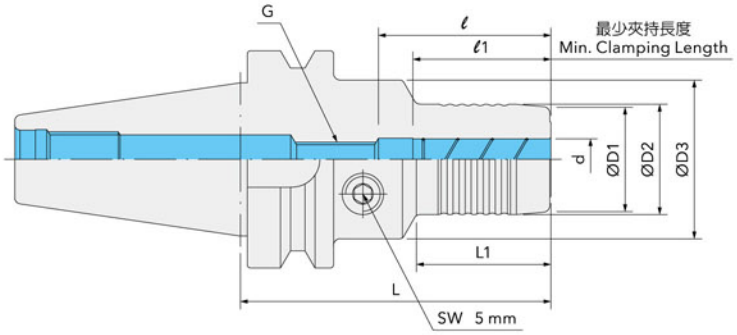
- M  44
- SM  47
- FMA  49
- SCA  50
- TR90  52

HEC油壓刀把

HEC Hydraulic Chucks, BT



P95



規格 Part No.	Ød	L	L1	ØD1	ØD2	ØD3	ℓ	ℓ1	G
BT30-HEC06-075	6	75	29	26	28	46	40	30	M05*P0.80
-HEC08-075	8								M06*P1.00
-HEC10-080	10	80	39	28	30		50	40	M08*P1.25
-HEC12-080	12			30	32				M10*P1.50
-HEC14-080	14			36	38				
-HEC16-080	16								
-HEC20-095	20	95	42	45	48	50	54	49	
BT40-HEC06-080	6	80	29	26	28	46	40	30	M05*P0.80
-110		110							
-HEC08-080	8	80							M06*P1.00
-110		110							
-HEC10-090	10	90	39	28	30		50	40	M08*P1.25
-120		120							
-HEC12-090	12	90		30	32				M10*P1.50
-120		120							
-HEC14-090	14	90		36	38				M12*P1.75
-120		120							
-HEC16-090	16	90							
-120		120							
-HEC20-105	20	105	48	47	50	62	80	49	
-135		135							
-HEC25-105	25	105	49	49	52		81	50	
-135		135							
-HEC32-120	32	120	62	57	60		75	65	
-150		150					80	65	
BT50-HEC06-090	6	90	29	26	28	46	30	30	M05*P0.80
-120		120							
-HEC08-090	8	90							M06*P1.00
-120		120							
-HEC10-105	10	105	39	28	30		40	40	M08*P1.25
-135		135							
-HEC12-105	12	105		30	32				M10*P1.50
-135		135							
-HEC14-105	14	105		36	38				M12*P1.75
-135		135							
-HEC16-105	16	105							
-135		135							
-HEC20-105	20	107	48	47	50	62	80	49	
-135		135							
-HEC25-120	25	120	49	49	52		81	50	
-150		150							
-HEC32-135	32	135	70	59	62	75	80	65	
-165		165						65	

BSD精搪組

BSD Fine Boring Systems, BT / ABT



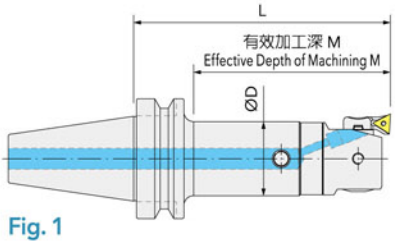


Fig. 1

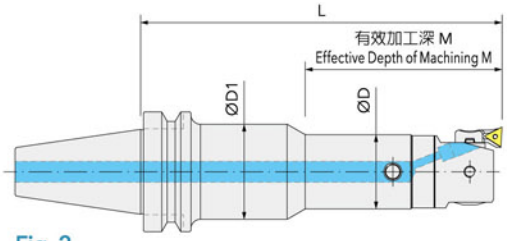


Fig. 2

P12 P13 P14 P15

特性 Features

- BSD19~BSD90 其搪孔範圍為：Ø20~Ø153。
- 標準刀把皆有中心出水功能，且為粗搪、精搪共通刀桿。
- Boring range of BSD19~BSD90: Ø20~Ø153.
- The holder is coolant type and compatible for rough and fine boring system.

整組 Set		搪孔範圍 Ø Range	Fig.	M	ØD	ØD1	L
刀把規格 Shanks	精搪頭 Boring Heads						
BT30-AK1-070	BSD19	20~ 26	2	67	19	31	100
-AK2-040	BSD24	25~ 33	1	48	24	—	75
-080				88			115
-AK3-040	BSD31	32~ 42	1	53	31	—	80
-075				88			115
-AK4-040	BSD39	41~ 54	1	64	39	—	85
-075				98			120
-AK5-065	BSD50	53~ 70	1	95	50	—	120
-AK6-084	BSD64	68~100	1	128	64	—	155
BT40-AK1-070	BSD19	20~ 26	1	70	19	—	100
-120			2	72		40	150
-170							200
-AK2-080	BSD24	25~ 33	1	83	24	—	115
-125			2	88		45	160
-175							210
-AK3-095	BSD31	32~ 42	1	103	31	—	135
-150			2	98		50	190
-200							240
-AK4-090	BSD39	41~ 54	1	105	39	—	135
-145			2	103		50	190
-195							240
-AK5-080	BSD50	53~ 70	1	105	50	—	135
-135			2	140		55	190
-185				150			240
-AK6-065	BSD64	68~100	1	104	64	—	135
-120				159			190
-170				209			240
-AK6-065	BSD90	100~153	1	104	64	—	135
-120				159			190
-170				209			240
BT50-AK1-105	BSD19	20~ 26	2	72	19	31	135
-170						40	200
-220							250
-AK2-110	BSD24	25~ 33	1	100	24	—	145
-175			2			45	210
-225							260
-AK3-120	BSD31	32~ 42	1	115	31	—	160
-200			2	120		50	240
-240							280
-AK4-120	BSD39	41~ 54	1	122	39	—	165
-195			2	127		50	240
-235							280
-AK5-110	BSD50	53~ 70	1	122	50	—	165
-185				192			240
-225				232			280
-AK6-095	BSD64	68~100	1	126	64	—	165
-170				201			240
-210				241			280
-AK6-095	BSD90	100~153	1	126	64	—	165
-170				201			240
-210				241			280

BSH雙刃搪刀組

BSH Twin-cutter Boring Systems, BT / ABT



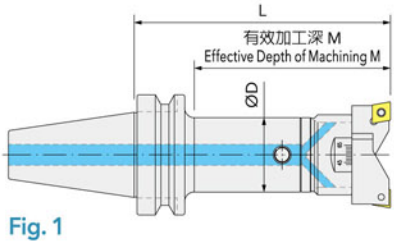


Fig. 1

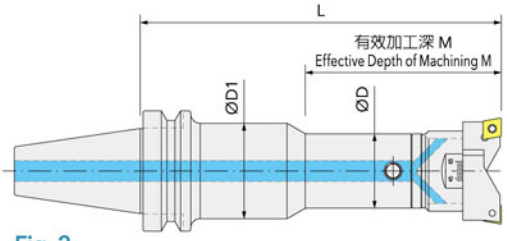


Fig. 2


P12


P13


P15


P16

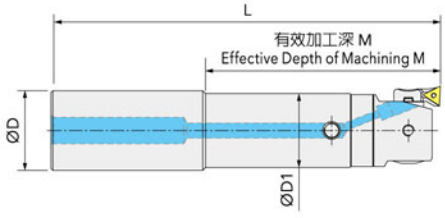
整組 Set 刀把規格 Shanks	精搪頭 Boring Heads	搪孔範圍 Ø Range	Fig.	M	ØD	ØD1	L
BT30-AK2-040	BSH25	25~ 33	1	50	24	—	75
-080				90			115
-AK3-040	BSH32	32~ 45	1	50	31	—	75
-075				85			110
-AK4-040	BSH44	44~ 63	1	63	39	—	85
-075				97			120
-AK5-065	BSH62	62~ 89	1	97	50	—	120
BT40-AK2-080	BSH25	25~ 33	1	85	24	—	115
-125			2	90		45	160
-175							210
-AK3-095	BSH32	32~ 45	1	100	31	—	130
-150			2	95		50	185
-200							235
-AK4-090	BSH44	44~ 63	1	104	39	—	135
-145			2	102		50	190
-195							240
-AK5-080	BSH62	62~ 89	1	107	50	—	135
-135				142		55	190
-185				152			240
-AK6-065	BSH88	88~126	1	103	64	—	135
-120				158			190
-170				208			240
BT50-AK2-110	BSH25	25~ 33	1	102	24	—	145
-175			2			45	210
-225							260
-AK3-120	BSH32	32~ 45	1	112	31	—	155
-200			2	117		50	235
-240							275
-AK4-120	BSH44	44~ 63	1	121	39	—	165
-195			2	126		50	240
-235							280
-AK5-110	BSH62	62~ 89	1	124	50	—	165
-185				194			240
-225				234			280
-AK6-095	BSH88	88~126	1	125	64	—	165
-170				200			240
-210				240			280
-AK6-095	BSH125	125~175	1	131	64	—	170
-170				206			245
-210				246			285

特性 Features

- BSH25~BSH125 其搪孔範圍為：Ø25~Ø175。
- 標準刀把皆有中心出水功能，且為粗搪、精搪共通刀桿。
- 刀片座與本體均有齒槽，結合緊密、更穩固，提高工作效率。
- Boring range of BSH25~BSH125: Ø25~Ø175.
- The holder is coolant type and compatible for rough and fine boring system.
- Both insert holder and boring head have gullets, it could make combination tightly, more stable.

BSD-ST精搪組
BSD-ST Fine Boring Systems






P13


P13

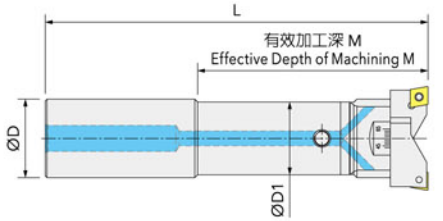

P14


P15

整組 Set		搪孔範圍 Ø Range	M	ØD	ØD1	L
刀把規格 Shanks	精搪頭 Boring Heads					
ST32-AK1-050	BSD19	20~ 26	75	32	19	160
-AK2-070	BSD24	25~ 33	100		24	180
-AK3-090	BSD31	32~ 42	125		31	205
-AK4-085	BSD39	41~ 54			39	
-AK5-075	BSD50	53~ 70			50	
-AK6-060	BSD64	68~100			64	
ST42-AK2-070	BSD24	25~ 33	100	42	24	180
-AK3-090	BSD31	32~ 42	125		31	205
-AK4-085	BSD39	41~ 54			39	
-AK5-075	BSD50	53~ 70			50	
-AK6-060	BSD64	68~100			64	

BSH-ST雙刃搪刀組
BSH-ST Twin-cutter Boring Systems






P13


P13

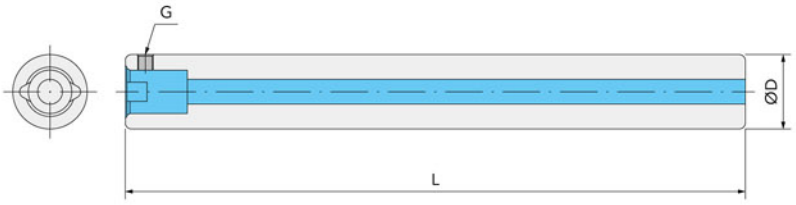

P15


P16

整組 Set		搪孔範圍 Ø Range	M	ØD	ØD1	L
刀把規格 Shanks	精搪頭 Boring Heads					
ST32-AK2-070	BSH25	25~33	102	32	24	185
-AK3-090	BSH32	32~45	122		31	200
-AK4-085	BSH44	44~63	124		39	200
-AK5-075	BSH62	62~89	127		50	205
ST42-AK2-070	BSH25	25~33	102	42	24	185
-AK3-090	BSH32	32~45	119		31	200
-AK4-085	BSH44	44~63	124		39	200
-AK5-075	BSH62	62~89	127		50	205

SCAK鎢鋼直刀柄
SCAK Straight Carbide Holders






P13


P14


P15

規格 Part No.	精搪頭 Boring Heads	L	ØD	G
ST19-SCAK1-150L	BSD19	150	19	M04*P0.50
ST19-SCAK1-200L		200		
ST19-SCAK1-250L		250		
ST24-SCAK2-200L	BSD24	200	24	M05*P0.50
ST24-SCAK2-250L		250		
ST24-SCAK2-300L		300		
ST31-SCAK3-250L	BSD31	250	31	M06*P0.75
ST31-SCAK3-300L		300		
ST31-SCAK3-400L		400		

特性 Features

- 中心出水。
- 鎢鋼合金製成，剛性優異。
- 有效改善深孔搪孔加工條件。
- With coolant through hole.
- Made of carbide, excellent rigidity.
- Improve deep hole boring machining condition.

AK搪孔刀把

AK Modular Boring Shanks, BT / ABT



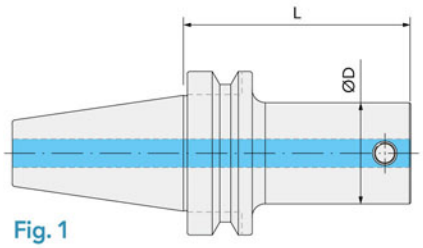


Fig. 1

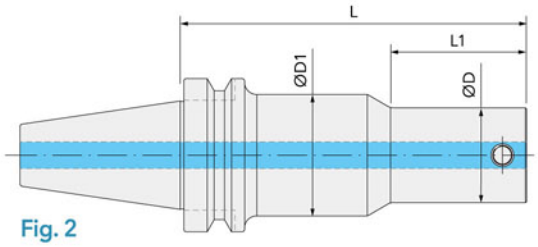


Fig. 2


P13


P14

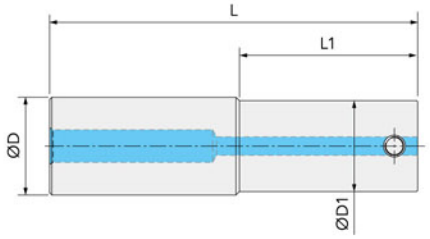

P15


P16

刀把規格 Shanks	Fig.	ØD	ØD1	L	L1
BT30-AK1-070	2	19	31	70	35
-AK2-040	1	24	—	40	—
-080				80	
-AK3-040	1	31	—	40	—
-075				75	
-AK4-040	1	39	—	40	—
-075				75	
-AK5-065	1	50	—	65	—
-AK6-084	1	64	—	84	—
BT40-AK1-070	1	19	—	70	—
-120	2		40	120	40
-170				170	
-AK2-080	1	24	—	80	—
-125	2		45	125	53
-175				175	
-AK3-095	1	31	—	95	—
-150	2		50	150	58
-200				200	
-AK4-090	1	39	—	90	—
-145	2		50	145	56
-195				195	
-AK5-080	1	50	—	80	—
-135	2		55	135	83
-185				185	93
-AK6-065	1	64	—	65	—
-120				120	
-170				170	
BT50-AK1-105	2	19	31	105	40
-170			40	170	
-220				220	
-AK2-110	1	24	—	110	—
-175	2		45	175	65
-225				225	
-AK3-120	1	31	—	120	—
-200	2		50	200	80
-240				240	
-AK4-120	1	39	—	120	—
-195	2		50	195	80
-235				235	
-AK5-110	1	50	—	110	—
-185				185	
-225				225	
-AK6-095	1	64	—	95	—
-170				170	
-210				210	

AK-ST搪孔刀把
AK-ST Straight Shanks






P13


P14

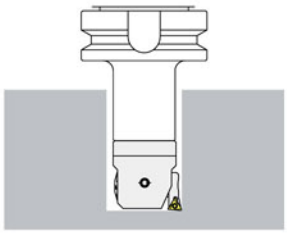

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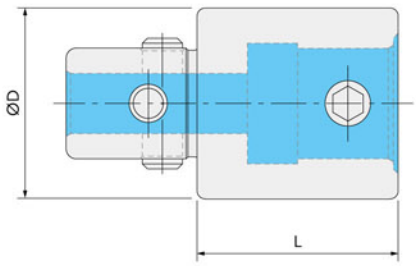

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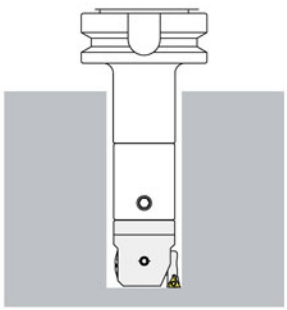
刀把規格 Shanks	ØD	ØD1	L	L1
ST32-AK1-050	32	19	128	48
-AK2-070		24	148	68
-AK3-090		31	165	85
-AK4-085		39	158	78
-AK5-075		50	148	68
-AK6-060		64	134	54
ST42-AK2-070	42	24	148	68
-AK3-090		31	165	85
-AK4-085		39	158	78
-AK5-075		50	148	68
-AK6-060		64	134	54

AK-EXT延長桿
AK-EXT Extensions





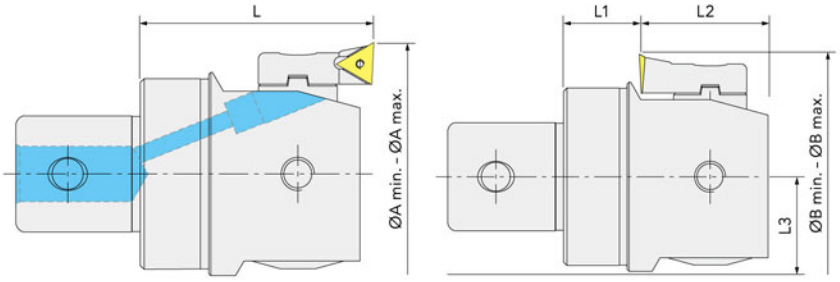




規格 Part No.	ØD	L
AK1.020EXT	19	20
.050EXT		50
AK2.030EXT	24	30
.050EXT		50
AK3.030EXT	31	30
.060EXT		60
AK4.045EXT	39	45
.090EXT		90
AK5.050EXT	50	50
.090EXT		90
AK6.060EXT	64	60
.100EXT		100

BSD精搪頭
BSD Fine Boring Systems



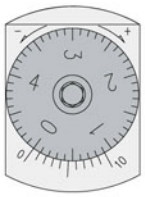


- 訂購精搪頭時，即已包含 1 只刀片座在內。
- 請依照隨附之使用說明書，並使用正確之六角扳手及 Torx 扳手操作。
- Included in the delivery is insert holder type BSD.H.
- Please use the correct hexagon and Torx wrenches according operations.



刀片座
Insert Holder

標準附件
Standard Accessory



- 清晰之大刻度盤，每刻度移動量為 0.005 mm。(直徑 0.01 mm)
- 副尺每刻度 0.001 mm。(直徑)
- One division on the scale corresponds to 0.005 mm movement, or 0.01 mm diametrical adjustment.
- High precision vernier setting to 0.001 mm. (dia)

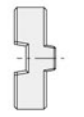


Fig. 8 Pat.

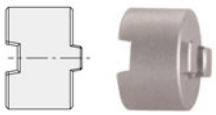


Fig. 9 Pat.

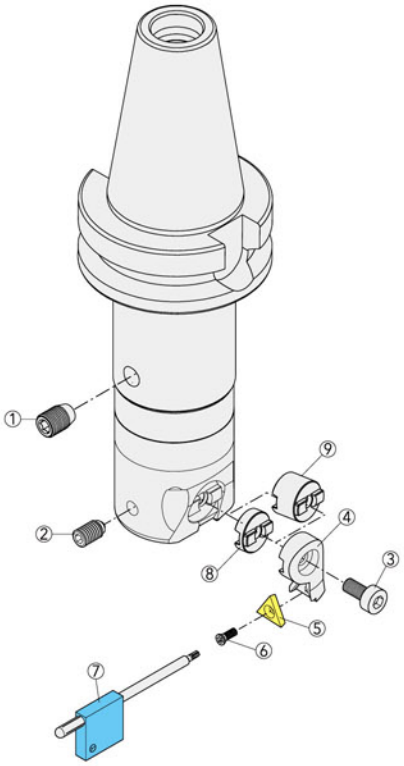
選購品
Option

規格 Part No.	搪孔範圍 ØA Range	搪孔範圍 ØB Range	L	L1	L2	L3
BSD19	20~ 26	—	32.5	10.5	19	10
BSD24	25~ 33	—	35.5	11.5	21	12.5
BSD31	32~ 42	—	40	10	25	16
BSD39	41~ 54	—	47	14	29	20
BSD50	53~ 70	62~ 70	57	19	34	25.5
BSD64	68~100	80~100	71	22	45.2	32.5
BSD90	100~153	112~153				45.5

刀片座延伸環
BSD Insert Holder Extensions

規格 Part No.	適用搪頭 For BSD	Fig.	搪孔範圍 Ø Range	倒搪孔範圍 Ø Back Range	
B.BSD19-025	BSD19	8	25~ 31	30~ 31	B.BSD.HC1.19.1
B.BSD19-050		9	30~ 36	30~ 36	B.BSD.HC1.19.2
B.BSD24-045	BSD24	8	32~ 40	36~ 40	B.BSD.HC2.24.1
B.BSD24-070		9	39~ 47	39~ 47	B.BSD.HC2.24.2
B.BSD31-045	BSD31	8	41~ 51	46~ 51	B.BSD.HC3.31.1
B.BSD31-090		9	50~ 60	50~ 60	B.BSD.HC3.31.2
B.BSD39-045	BSD39	8	50~ 63	53~ 63	B.BSD.HC4.39.1
B.BSD39-100		9	61~ 74	61~ 74	B.BSD.HC4.39.2
B.BSD50-060	BSD50	8	65~ 82	65~ 82	B.BSD.HC5.50.1
B.BSD50-125		9	78~ 95	78~ 95	B.BSD.HC5.50.2
B.BSD64-130	BSD64	8	94~126	94~126	B.BSD.HC6.64.1
B.BSD64-250		9	118~150	118~150	B.BSD.HC6.64.2
B.BSD64-130	BSD90	8	126~179	126~179	B.BSD.HC6.64.1
B.BSD64-250		9	150~203	150~203	B.BSD.HC6.64.2

BSD精搪頭配件
Accessories for BSD Fine Boring Systems



備份零件
Spare Parts

規格 Part No.	①	②	③
BSD19	B.BSD.LS.19	X.0855-M040P070-0050	B.BSD.HC1.19
BSD24	B.BSD.LS.24	X.0840-M040P070-0056.01	B.BSD.HC2.24
BSD31	B.BSD.LS.31	X.0840-M050P080-0095.01	B.BSD.HC3.31
BSD39	B.BSD.LS.39	X.0840-M060P100-0120.01	B.BSD.HC4.39
BSD50	B.BSD.LS.50	X.0840-M080P125-0120.01	B.BSD.HC5.50
BSD64	B.BSD.LS.64	X.0840-M100P150-0160.01	B.BSD.HC6.64
BSD90			

規格 Part No.	④	⑤	⑥	⑦
BSD19	B.BSD.H1.19	TPGP/TPGD0802..	B.BSD.M2.0*5.5	X.3036-T06
BSD24	B.BSD.H2.24			
BSD31	B.BSD.H3.31			
BSD39	B.BSD.H4.39	TCGT/TCMT1102..	B.BSD.M2.5*6.3	X.3036-T07-01
BSD50	B.BSD.H5.50			
BSD64	B.BSD.H6.64			
BSD90				

菱形刀片座零件
Insert Holders

規格 Part No.				
BSD31	B.BSD.HD3.31	CCGT0602	X.0837-M025P045-0050	X.3036-T08
BSD39	B.BSD.HD4.39			
BSD50	B.BSD.HD5.50			
BSD64	B.BSD.HD6.64	CCGT09T3	X.0837-M040P070-0100	X.3036-T15



三角刀片座



菱形刀片座

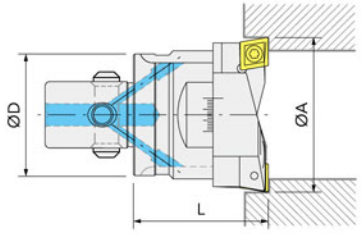
刀片座 Insert Holder	適用搪頭 For BSD
B.BSD.H1.19	BSD19
B.BSD.H2.24	BSD24
B.BSD.H3.31	BSD31
B.BSD.H4.39	BSD39
B.BSD.H5.50	BSD50
B.BSD.H6.64	BSD64

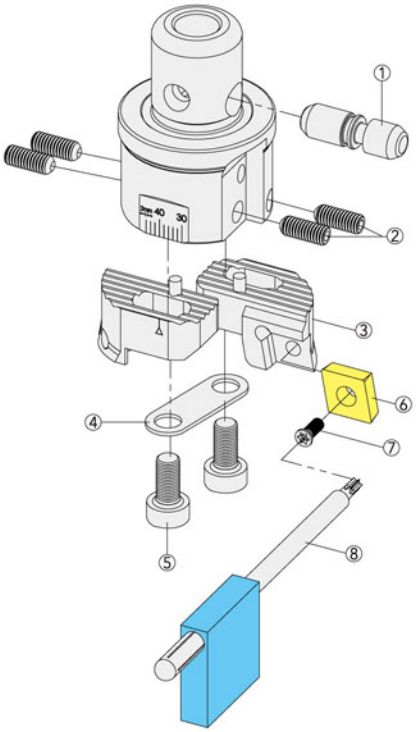
刀片座 Insert Holder	適用搪頭 For BSD
B.BSD.HD3.31	BSD31
B.BSD.HD4.39	BSD39
B.BSD.HD5.50	BSD50
B.BSD.HD6.64	BSD64

BSH雙刃搪刀頭及配件
BSH Twin-cutter Boring Systems



規格 Part No.	搪孔範圍 Ø Range		ØD	L
	ØA min.	ØA max.		
BSH25	25	33	24	37
BSH32	32	45	31	
BSH44	44	63	39	46.5
BSH62	62	89	50	59
BSH88	88	126	64	70
BSH125	125	175		76





備份零件
Spare Parts

規格 Part No.	①	②	③
BSH25	Z-BSD-15-24	X.0855-M040P070-0080	1310-BSH25
BSH32	-31		-BSH32
BSH44	-39	X.0855-M050P080-0120	-BSH44
BSH62	-50	X.0855-M060P100-0200	-BSH62
BSH88	-64		-BSH88
BSH125			-BSH125

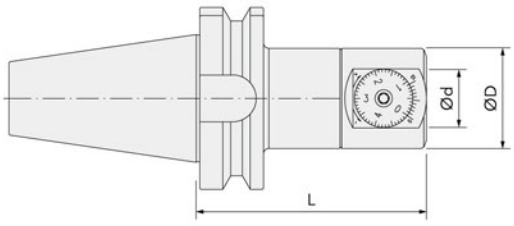
規格 Part No.	④ Fig. 1	Fig. 2	⑤	⑥
BSH25	Z-BSH25-03	1	X.0846-M040P070-0160	CCMT0602
BSH32	-BSH32-03	1	X.0846-M050P080-0180	CCMT0602
BSH44	-BSH44-03	2		CCMT09T3
BSH62	-BSH62-03	2	X.0846-M060P100-0250	CCMT1204
BSH88	-BSH88-03	2	X.0846-M080P125-0300	
BSH125	-BSH125-03	1	X.0846-M100P150-0300	

規格 Part No.	⑦	⑧
BSH25	X.0837-M025P045-0050	X-3036-T08
BSH32		
BSH44	X.0837-M040P070-0100	X-3036-T15
BSH62	X.0837-M050P080-0110.01	X-3036-T20
BSH88		
BSH125		

FBH小徑精搪組

FBH Modular Fine Boring Systems, BT / ABT



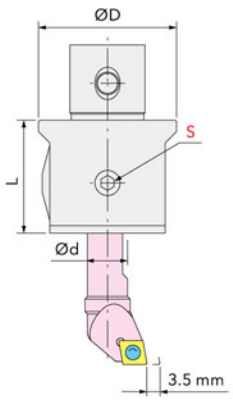


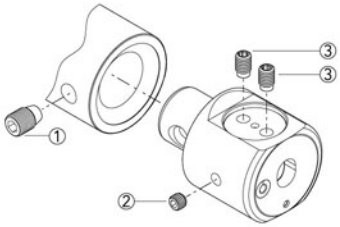
整組 Set		搪孔範圍 Ø Range	Ød	ØD	L
刀把規格 Shanks	FBH搪頭 FBH Boring Heads				
BT30-FBH55-080	FBH55	4.0~32	12	55	125
-AK6-084	FBH64	4.0~40	16	64	130
BT40-FBH55-057	FBH55	4.0~32	12	55	102
-AK6-065	FBH64	4.0~40	16	64	110
BT50-FBH55-080	FBH55	4.0~32	12	55	125
-AK6-095	FBH64	4.0~40	16	64	140

P17 P18 P18 P19



Fig. 1



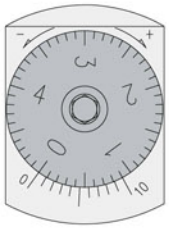


● FBH小徑精搪頭
FBH Fine Boring Heads

規格 Part No.	搪孔範圍 Ø Range	Fig.	Ød	ØD	L
FBH55	4.0~32	1	12	55	47
FBH64	4.0~40	1	16	64	47

- 中心通孔，可供切削液。
- 請依照隨附之使用說明書，並使用正確之六角扳手操作。
- 在任何微調前，請先旋鬆鎖定螺絲 S，調好後再鎖緊之。
- With coolant supply.
- Please use the correct hexagon wrenches according operations.
- Before adjusting, the screw "S" should be loosened.

FBH



- 清晰之大刻度盤，每刻度移動量為 0.005 mm。(直徑 0.01 mm)
- 副尺每刻度 0.001 mm。(直徑)
- One division on the scale corresponds to 0.005 mm movement, or 0.01 mm diametrical adjustment.
- High precision vernier setting to 0.001 mm. (dia)

● 備份零件
Spare Parts

規格 Part No.	①	②	③
FBH55	M.800.000.550	X.0855-M080P125-0060	Z-FBH-11-55
FBH64	B.BSD.LS.64	X.0855-M100P150-0100	Z-FBH-11-64

FBH小徑精搪頭配件
Accessories for FBH Fine Boring Systems

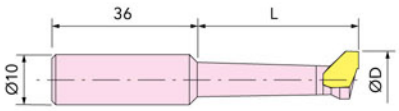




RSV小徑搪刀套筒
RSV Reduction Sleeves

規格 Part No.	Ød	ØD
RSV.12.05	5	12
RSV.12.06	6	
RSV.12.08	8	
RSV.12.10	10	
RSV.16.05	5	16
RSV.16.06	6	
RSV.16.08	8	
RSV.16.10	10	
RSV.16.12	12	



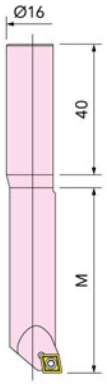


焊刃式治具小徑搪刀
Boring Bars with Carbide Tipped

規格 Part No.	ØD	L	刀刃材質 Cutter Material
BS.004	4.0	23	K10
BS.005	5.0	25	

- 期貨。
- Upon request.

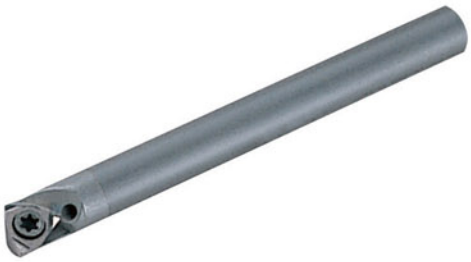


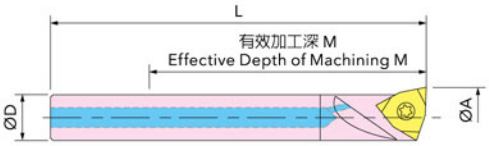


BS小徑搪刀
BS Boring Bars

規格 Part No.	搪孔範圍 ØA Range	搪孔深度 M	適用刀片 Inserts
BS.008.002	8.0~13.0	18	WCGT0201L
BS.010.006	10.0~15.0	30	CCMT.0602. CCGT.0602.
BS.012.006	12.0~17.0	35	
BS.014.006	14.0~19.0	40	
BS.015.006	15.0~20.0	45	
BS.016.006	16.0~21.0	50	
BS.018.006	18.0~23.0	55	
BS.020.009	20.0~25.0	65	CCMT.09T3. CCGT.09T3.
BS.022.009	22.0~27.0	85	
BS.025.009	25.0~30.0		
BS.028.009	28.0~33.0		
BS.032.009	32.0~37.0		
BS.035.009	35.0~40.0		

FBH小徑精搪頭配件
Accessories for FBH Fine Boring Systems





● 中心通孔鎢鋼柄搪刀
Boring Bars with Solid Carbide Shank, With Coolant Through Hole

規格 Part No.	M	搪孔範圍 Ø Range	ØD	L	刀片規格 Cutter Spec
SCB.05.080	45	6.0~7.0	5	80	WCGT02
SCB.06.100	60	7.5~9.0	6	100	

- 期貨。
- Upon request.

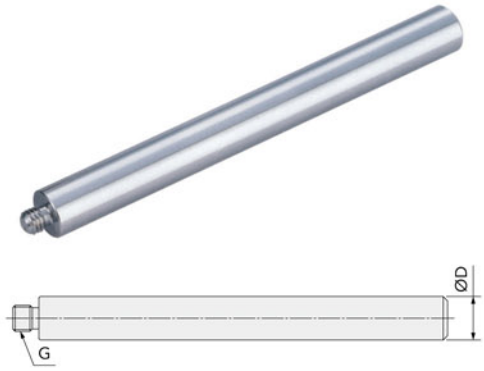


Fig. 1

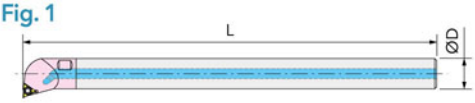


Fig. 2

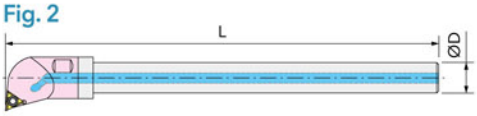


Fig. 3



Fig. 4



● SCB中心通孔鎢鋼柄小徑搪刀桿
SCB Solid Carbide Shank Boring Bars, With Coolant Through Hole

規格 Part No.	Fig.	柄徑 ØD	G	L	適用搪刀頭 Suitable BH
SCB.08.120	1	8	M05*P0.80	129	BH09, BH10.5
SCB.10.140		10	M06*P1.00	146	BH12
SCB.12.160		12		180	BH14, BH16
SCB.16.100	1	16	M10*P1.25	132	BH18, BH20, BH22, BH24, BH26, BH28, BH30
SCB.16.150				172	
SCB.16.200				217	
SCBS.12.160	2	12		180	

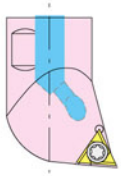
● SHB鋼柄小徑搪刀桿（無通孔）
SHB Steel Shank Boring Bars (w/o coolant through hole)

規格 Part No.	Fig.	柄徑 ØD	G	L	適用搪刀頭 Suitable BH
SHB.08.080	3	8	M05*P0.80	94	BH09, BH10.5
SHB.10.100		10	M06*P1.00	117	BH12
SHB.12.120		12		137	BH14, BH16
SHB.16.140		16	M10*P1.25	157	BH18, BH20, BH22, BH24, BH26, BH28, BH30
SHBS.12.120	4	12		140	

● BH替換式搪刀頭
BH Interchangeable Insert Holders

規格 Part No.	搪孔範圍 Ø Range	適用 Suitable		適用刀片 Inserts
		SCB	SHB	
BH09	9.0~10.5	SCB.08.120	SHB.08.080	TPGT0802
BH10.5	10.5~12.0			
BH12	12.0~14.0	SCB.10.140	SHB.10.100	
BH14	14.0~16.0	SCB.12.160	SHB.12.120	
BH16	16.0~18.0			
BH18	18.0~20.0	SCB.16.100 SCB.16.150 SCB.16.200 SCBS.12.160	SHB.16.140 SHBS.12.120	
BH20	20.0~22.0			
BH22	22.0~24.0			
BH24	24.0~26.0			
BH26	26.0~28.0			
BH28	28.0~30.0			
BH30	30.0~32.0			





FBH84精搪頭刀桿

FBH84 Modular Fine Boring Systems, BT / ABT



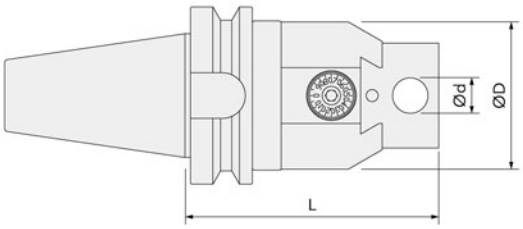
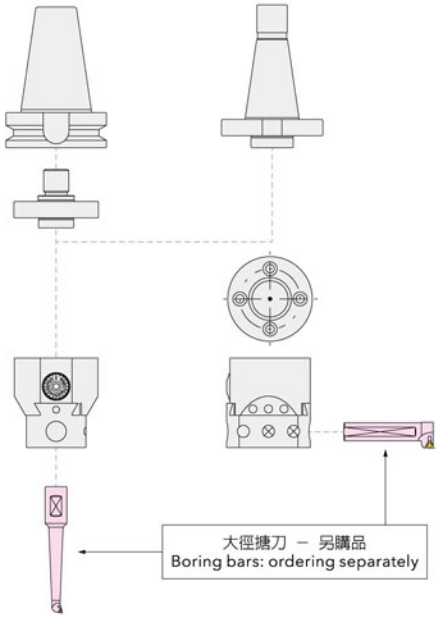


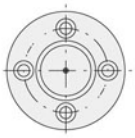
Fig. 1 Fig. 2

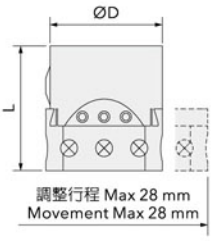


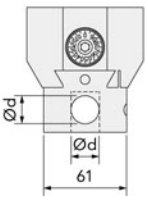
規格 Part No.	搪孔範圍 Ø Range	Fig.	FBH搪頭 Boring Head	Ød	柄徑 ØD	L
BT40-FBH84	8~280	1	FBH.84	20	84	150
BT50-FBH84						140
NT40-FBH84		2				100
NT50-FBH84						110

- NT 刀把可提供英制牙 NT40：UNC5/8"-11 / NT50：UNC1"-8。
- Inch thread of NT holder is available. NT40: UNC5/8"-11 / NT50: UNC1"-8.









● FBH精搪頭
FBH Fine Boring Head

規格 Part No.	搪孔範圍 Ø Range	調整行程 Movement	Ød	ØD	L
FBH84	8~280	28	20	84	89

- 清晰之大刻度盤，每刻度移動量為直徑 0.01 mm。
- 請依照隨附之使用說明書，並使用正確之六角扳手操作。
- Easily read by large dials. One division on the main scale corresponds to 0.01 mm movement.
- Please use the correct hexagon wrenches according operations.





● FBH84搪刀桿
FBH84 Boring Bars

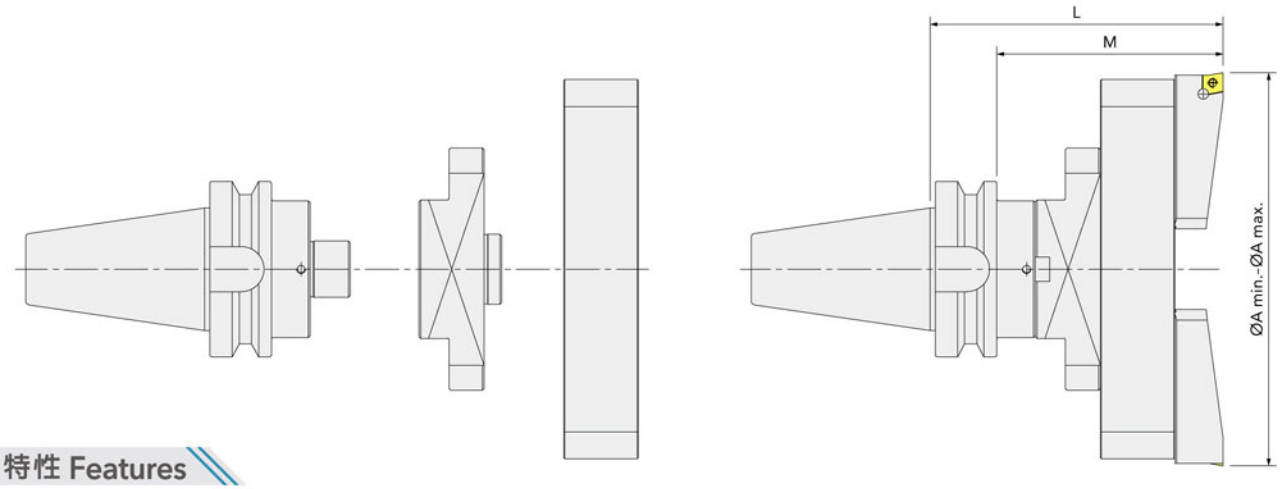
規格 Part No.	搪孔範圍 Ø Range	搪孔深度 M	適用刀片 Inserts
BJ.008.006	8~ 11	32	TBGT060102L
BJ.010.006	10~ 13	40	TBGT060104L
BJ.012.009	12~ 17	53	TPGH090202L
BJ.016.009	16~ 21	68	TPGH090204L
BJ.020.011	20~130	83	TPGH110302L TPGH110304L
BJ.025.011	25~135	96	
BJ.030.011	30~140	115	
BJ.120.011	120~280	84+BT bar	

BSH大孔徑搪刀組

BSH Twin-cutter for Large Boring, BT / ABT







特性 Features

- BSH 大孔徑搪刀把是專為大孔徑粗搪加工所開發之刀把。
- 刀片座與本體均有齒槽，結合緊密，更為穩固，提高工作效率。
- 搪孔範圍 Ø175~Ø375。

- BSH twin-cutter is designed for large boring.
- Both insert holder and bridge adaptor have gullets; it could make combination tightly, more stable.
- Boring range: Ø175~Ø375.

整組刀把規格 Set Shanks	刀把規格 Shanks	轉接部 Connection	刀架 Bridge Adaptor	刀片座 Insert Holder	搪孔範圍 ØA Range	M	L
BT50-BSH175-167	BT50-SM32-060	1313-BSH-SM32	1311-BSH175	1310-BSH125 刀片規格 (Insert) CCMT1204	175~225	129	167
-207	-100					169	207
-257	-150					219	257
BT50-BSH225-167	BT50-SM32-060		1311-BSH225		225~275	129	167
-207	-100					169	207
-257	-150					219	257
BT50-BSH275-167	BT50-SM32-060		1311-BSH275		275~325	129	167
-207	-100					169	207
-257	-150					219	257
BT50-BSH325-167	BT50-SM32-060		1311-BSH325		325~375	129	167
-207	-100					169	207
-257	-150					219	257

BST大孔徑搪刀組

BST Large Boring Master Shanks (type T), BT / ABT

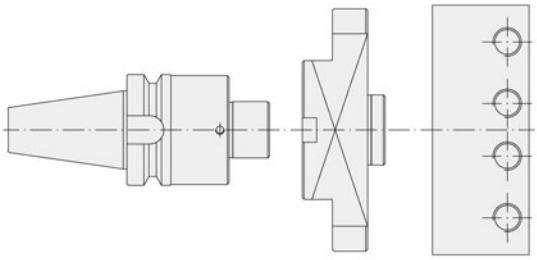


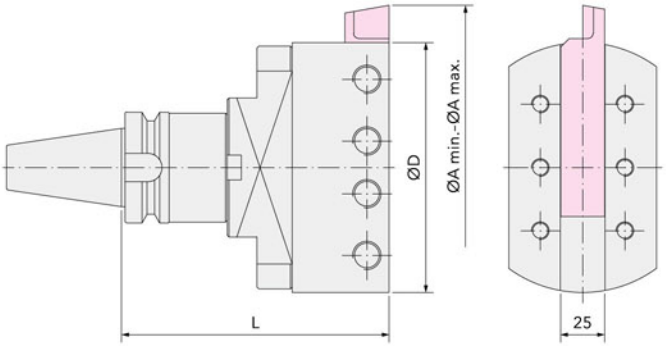
Fig. 1



Fig. 2







特性 Features

- BST 大孔徑搪刀把可多種搭配組合。
  a. 搭配 S25-BSB-T16-150S 即成粗搪刀。(Fig 1.)
  b. 搭配 S25-BST-BSD31-135 刀架以及 BSD 精搪頭即成精搪刀。(Fig 2.)
- 本系列搪孔範圍 Ø150~Ø640。刀片為 ISO 國際規格，市面均容易購得。
- 搪刀座為鋁合金製品，輕量化設計，可減輕操作人員裝卸及機械主軸之負荷。

- BST large boring master shanks have several combinations.
  a. With S25-BSB-T16-150S: rough boring systems. (Fig 1.)
  b. With S25-BST-BSD31-135 and BSD fine boring head: fine boring systems. (Fig 2.)
- Boring range: Ø150~Ø640. Insert is ISO specification, easily to buy.
- Bridge adaptor is aluminum alloy, light weight design let set up easily.

整組刀把規格 Set Shanks	刀把規格 Shanks	轉接部 Connection	刀架 Bridge Adaptor	搪孔範圍 ØA Range	ØD	L
BT40-BST150-152	BT40-SM32-060	1313-BSH-SM32	B.BST150	150~240	142	152
-192	-100					192
-BST230-152	BT40-SM32-060		B.BST230	230~320	220	152
-192	-100					192
-BST300-152	BT40-SM32-060		B.BST300	300~400	290	152
-192	-100					192
-BST380-152	BT40-SM32-060		B.BST380	380~480	370	152
-192	-100					192
-BST460-152	BT40-SM32-060		B.BST460	460~560	450	152
-192	-100					192
-BST540-152	BT40-SM32-060		B.BST540	540~640	530	152
-192	-100					192

- SB 四方柄搪孔刀架與 BSD 精搪頭為另購品。
- SB square shank boring bars and BSD fine boring heads: ordering separately.

BST大孔徑搪刀組

BST Large Boring Master Shanks (type T), BT / ABT

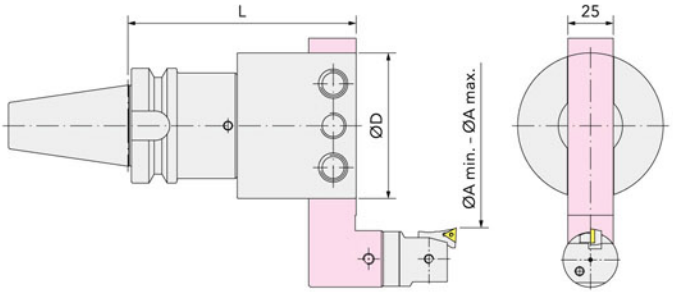
整組刀把規格 Set Shanks	刀把規格 Shanks	轉接部 Connection	刀架 Bridge Adaptor	搪孔範圍 Ø Range	ØD	L
BT50-BST150-152	BT50-SM32-060	1313-BSH-SM32	B.BST150	150~240	142	152
-BST150-192	-100					192
-BST150-242	-150					242
BT50-BST230-152	BT50-SM32-060		B.BST230	230~320	220	152
-BST230-192	-100					192
-BST230-242	-150					242
BT50-BST300-152	BT50-SM32-060		B.BST300	300~400	290	152
-BST300-192	-100					192
-BST300-242	-150					242
BT50-BST380-152	BT50-SM32-060		B.BST380	380~480	370	152
-BST380-192	-100					192
-BST380-242	-150					242
BT50-BST460-152	BT50-SM32-060		B.BST460	460~560	450	152
-BST460-192	-100					192
-BST460-242	-150					242
BT50-BST540-152	BT50-SM32-060		B.BST540	540~640	530	152
-BST540-192	-100					192
-BST540-242	-150					242

- SB 四方柄搪孔刀架與 BSD 精搪頭為另購品。
- SB square shank boring bars and BSD fine boring heads: ordering separately.

BST大孔徑搪刀組

BST Large Boring Master Shanks (type T), BT / ABT






P24


P25


P25

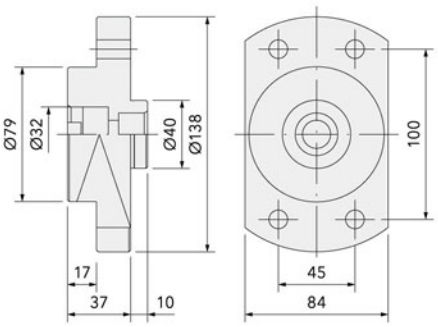

P47

整組刀把規格 Set Shanks	刀把規格 Shanks	刀架 Bridge Adaptor	搪孔範圍 ØA Range	ØD	L
BT40-BST090-120	BT40-SM27-055	B.BST090	90~120	80	120
-165	-100				165
-195	130				195
BT50-BST090-125	BT50-SM27-060				125
-165	-100				165
-215	-150				215
-265	-200				265
-315	-250				315

- SB 四方柄搪孔刀架與 BSD 精搪頭為另購品。
- SB square shank boring bars and BSD fine boring heads: ordering separately.

BSH轉接部
BSH Connection

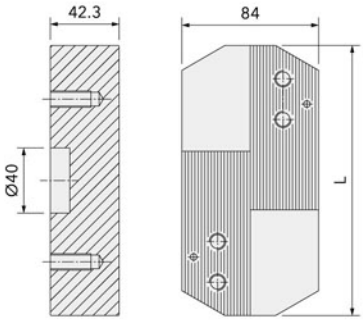




規格 Part No.	搪孔範圍 Ø Range
1313-BSH-SM32	150~640

BSH刀架規格
BSH Bridge Adaptor





規格 Part No.	L	搪孔範圍 Ø Range
1311-BSH175	166	175~225
1311-BSH225	216	225~275
1311-BSH275	266	275~325
1311-BSH325	316	325~375

BST刀架規格
BST Bridge Adaptor



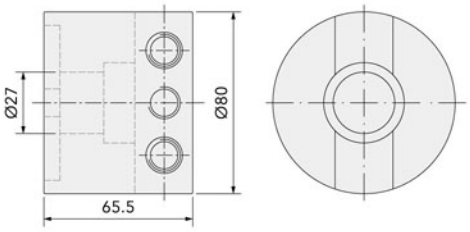


Fig. 1



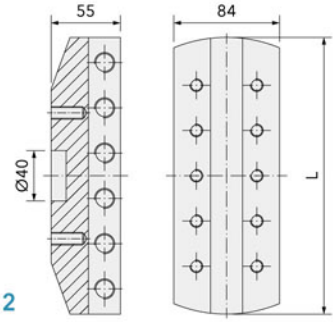


Fig. 2

規格 Part No.	Fig.	L	搪孔範圍 Ø Range
B.BST090	1	—	90~120
B.BST150	2	142	150~240
B.BST230	2	220	230~320
B.BST300	2	290	300~400
B.BST380	2	370	380~480
B.BST460	2	450	460~560
B.BST540	2	530	540~640

SB四方柄搪孔刀架
SB Square Shank Boring Bars





Fig. 1

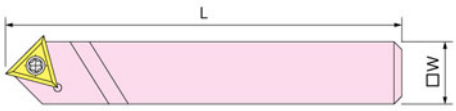
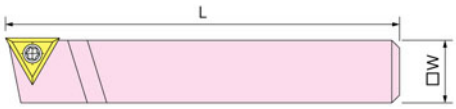


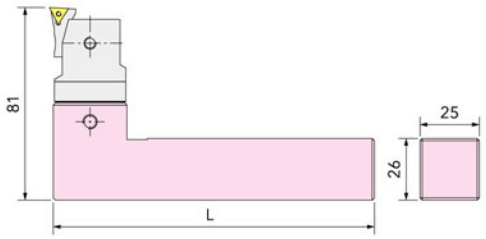
Fig. 2

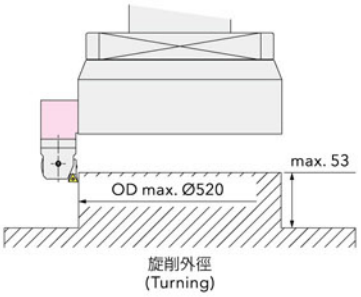


規格 Part No.	Fig.	L	□W	適用刀片 Insert
S08-BSA-T09-050S	1	50	8	TPMV090204..
S10-BSA-T09-060S		60	10	
S13-BSA-T11-070S		70	13	TPMV110308..
S16-BSA-T16-100S		100	16	TCMT16T304..
S19-BSA-T16-150S		150	19	
S25-BSA-T16-150S			25	
S08-BSB-T09-050S	2	50	8	TPMV090204..
S10-BSB-T09-060S		60	10	
S13-BSB-T11-070S		70	13	TPMV110308..
S16-BSB-T16-100S		100	16	TCMT16T304..
S19-BSB-T16-150S		150	19	
S25-BSB-T16-150S			25	



P14



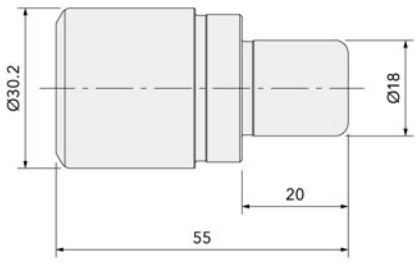


- 精搪頭：另購品。
- Fine boring heads: ordering separately.

整組 Set		L	適用刀片 Insert
精搪頭 Boring Heads	刀架 Bridge Adaptor		
BSD31	S25-BST-BSD31-135	135	TPGP/TPGD0802..

BSD平衡塊
BSD Balance Block



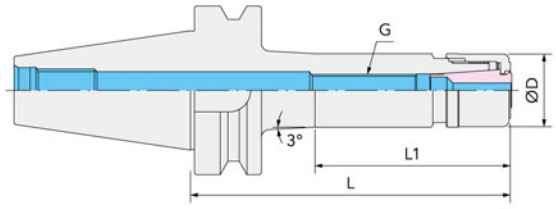


規格 Part No.
B.BSD31.BW

NR高速精密筒夾刀把

NR High Speed Precision Collet Chucks, BT / ABT






P93


P94


P99


P101


P101

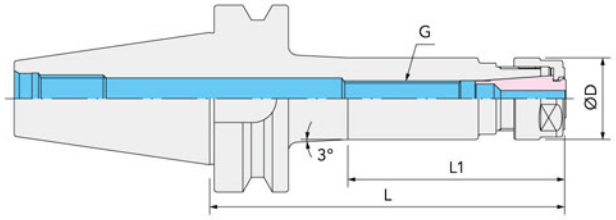
規格 Part No.	夾持範圍 Ø Range	ØD	L	L1	G	彈性筒夾 Collets	扳手 Wrench
BT30-NR06-060	3.0~ 6.0	19.5	60	—	M08*P1.25	NR06	W-D19.5
-090			90				
-NR10-060	3.0~10.0	27	60		M12*P1.75	NR10	W-D27
-090			90				
-NR13-060	3.0~13.0	34	60		M14*P1.00	NR13	W-D34
-090			90				
-NR16-060	3.0~16.0	40	60		M18*P1.50	NR16	W-D40
-090			90				
BT40-NR06-060	3.0~ 6.0	19.5	60	—	M08*P1.25	NR06	W-D19.5
-090			90				
-120			120	73			
-160			160				
-NR10-060	3.0~10.0	27	60	—	M12*P1.75	NR10	W-D27
-090			90				
-120			120	73			
-160			160	96			
-200			200	106			
-NR13-060	3.0~13.0	34	60	—	M14*P1.00	NR13	W-D34
-090			90				
-120			120				
-160			160				
-200			200				
-NR16-065	3.0~16.0	40	65		M18*P1.50	NR16	W-D40
-090			90				
-120			120				
-160			160				
-200			200				
BT50-NR06-105	3.0~ 6.0	19.5	105	—	M08*P1.25	NR06	W-D19.5
-135			135	68			
-165			165				
-NR10-105	3.0~10.0	27	105	—	M12*P1.75	NR10	W-D27
-135			135	65			
-165			165	77			
-NR13-105	3.0~13.0	34	105	—	M14*P1.00	NR13	W-D34
-135			135				
-165			165	89			
-NR16-105	3.0~16.0	40	105	—	M18*P1.50	NR16	W-D40
-135			135				
-165			165	90			

- 若以端銑刀實施重切削，請選用 "C-H" 或 "C" 系列強力精密銑刀夾頭。
- In case of heavy cutting with end-mill, please use "C-H" or "C" Power Milling Chunks.

NR-WD高速精密筒夾刀把

NR-WD High Speed Precision Collet Chucks, BT / ABT






P93


P94


P99


P101


P101

規格 Part No.	夾持範圍 Ø Range	ØD	L	L1	G	彈性筒夾 Collets	扳手 Wrench
BT30-NR06-060WD	3.0~ 6.0	19.5	60	—	M08*P1.25	NR06	W-NR06WD
-090WD			90				
-NR10-060WD	3.0~10.0	27.5	60		M12*P1.75	NR10	W-NR10WD
-090WD			90				
-NR13-060WD	3.0~13.0	34	60		M14*P1.00	NR13	W-FK05
-090WD			90				
-NR16-060WD	3.0~16.0	40	60		M18*P1.50	NR16	W-FK06
-090WD			90				
-NR20-060WD	12.0~20.0	48	60		—	NR20	W-FK07
-090WD			90		M22*P1.50		
-NR25-090WD	16.0~25.0	55	90		—	NR25	W-FK08
BT40-NR06-060WD	3.0~ 6.0	19.5	60	—	M08*P1.25	NR06	W-NR06WD
-090WD			90				
-120WD			120	73			
-160WD			160				
-NR10-060WD	3.0~10.0	27.5	60	—	M12*P1.75	NR10	W-NR10WD
-090WD			90				
-120WD			120	73			
-160WD			160	96			
-200WD			200	106			
-NR13-060WD	3.0~13.0	34	60	—	M14*P1.00	NR13	W-FK05
-090WD			90				
-120WD			120				
-160WD			160				
-200WD			200				
-NR16-065WD	3.0~16.0	40	65		M18*P1.50	NR16	W-FK06
-090WD			90				
-120WD			120				
-160WD			160				
-200WD			200				
-NR20-060WD	12.0~20.0	48	60		M22*P1.50	NR20	W-FK07
-090WD			90				
-120WD			120				
-NR25-075WD	16.0~25.0	55	75		—	NR25	W-FK08
-090WD			90		M28*P1.50		
-120WD			120				

- 若以端銑刀實施重切削，請選用 "C-H" 或 "C" 系列強力精密銑刀夾頭。
- In case of heavy cutting with end-mill, please use "C-H" or "C" Power Milling Chunks.

NR-WD高速精密筒夾刀把

NR-WD High Speed Precision Collet Chucks, BT / ABT

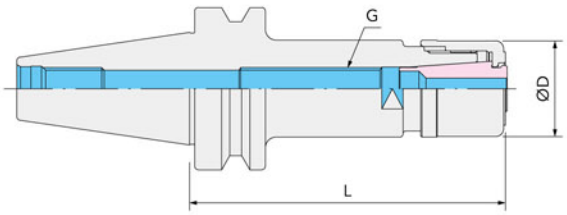
規格 Part No.	夾持範圍 Ø Range	ØD	L	L1	G	彈性筒夾 Collets	扳手 Wrench
BT50-NR06-105WD	3.0~ 6.0	19.5	105	—	M08*P1.25	NR06	W-NR06WD
-135WD			135	68			
-165WD			165				
-NR10-105WD	3.0~10.0	27.5	105	—	M12*P1.75	NR10	W-NR10WD
-135WD			135	65			
-165WD			165	77			
-NR13-105WD	3.0~13.0	34	105	—	M14*P1.00	NR13	W-FK05
-135WD			135				
-165WD			165	89			
-NR16-105WD	3.0~16.0	40	105	—	M18*P1.50	NR16	W-FK06
-135WD			135				
-165WD			165	90			
-NR20-105WD	12.0~20.0	48	105	—	M22*P1.50	NR20	W-FK07
-135WD			135				
-165WD			165				
-NR25-105WD	16.0~25.0	55	105		M28*P1.50	NR25	W-FK08
-135WD			135				
-165WD			165				

- 若以端銑刀實施重切削，請選用 "C-H" 或 "C" 系列強力精密銑刀夾頭。
- In case of heavy cutting with end-mill, please use "C-H" or "C" Power Milling Chunks.

NR-NK高速精密筒夾刀把(無驅動鍵槽)

NR-NK High Speed Precision Collet Chucks (w/o Keyway), BT






P93


P94


P99


P101


P101

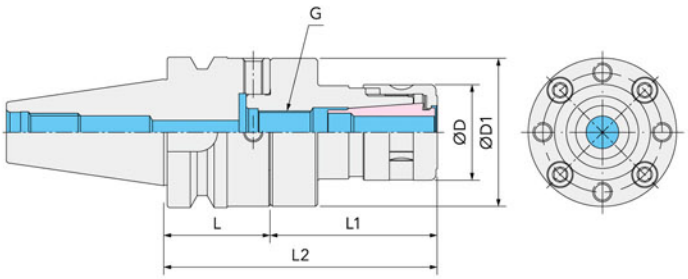
規格 Part No.	夾持範圍 Ø Range	ØD	L	G	彈性筒夾 Collets	扳手 Wrench	最高轉速 Max. rpm
ISO25-NR10-038	3.0~10.0	27	38	—	NR10	W-D27	40,000
BT30-NR06-060NK	3.0~ 6.0	19.5	60	M08*P1.25	NR06	W-D19.5	40,000
-090NK			90				
-NR10-060NK	3.0~10.0	27	60	M12*P1.75	NR10	W-D27	
-090NK			90				
-NR13-070NK	3.0~13.0	34	70	M14*P1.00	NR13	W-D34	
-090NK			90				
-NR16-090NK	3.0~16.0	40	90	M18*P1.50	NR16	W-D40	

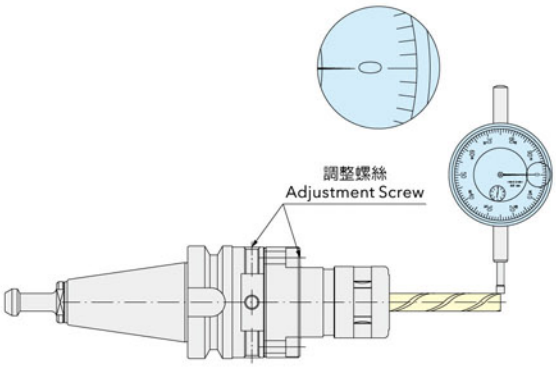
- 以上接單生產。
- Customized Production.

NR-AZWD可調整精度刀把

NR-AZWD Adjustable Chucks, BT







P93 P94 P99 P101

特性 Features

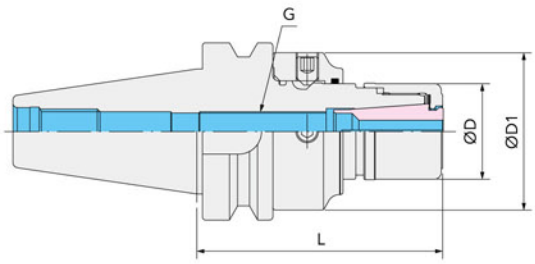
- 刀尖位置可調至 "0" 位置。
- 機械主軸、夾頭、刀具的累積誤差值可一次調整補正。
- The tool tip position can be adjusted to "0" position.
- The accumulated error value of the spindle, the chuck, and the tool can all be adjusted and corrected at the same time.

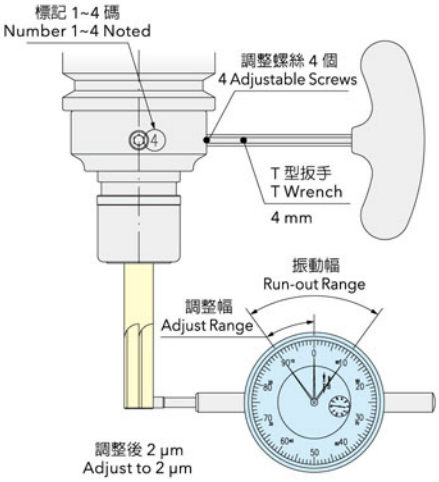
規格 Part No.	夾持範圍 Ø Range	ØD	ØD1	L	L1	L2	G	彈性筒夾 Collets	扳手 Wrench
BT30-NR16AZWD-100	3.0~16.0	40	62	45	55	100	M18*P1.50	NR16	W-FK06
-115					70	115			
BT40-NR16AZWD-100	3.0~16.0	40	62	45	55	100	M18*P1.50	NR16	W-FK06
-115					70	115			
BT40-NR25AZWD-115	16.0~25.0	55	80	45	70	115	M28*P1.50	NR25	W-FK08
BT50-NR16AZWD-110	3.0~16.0	40	62	55	55	110	M18*P1.50	NR16	W-FK06
-125					70	125			
BT50-NR25AZWD-125	16.0~25.0	55	80	55	70	125	M28*P1.50	NR25	W-FK08

FANR微調式精度刀把

FANR Fine Adjustable Chucks, BT








P93


P94


P99


P101

特性 Features

- 簡單有效的解決因機床主軸老化而引起的跳動偏大問題。
- 可在機台上直接調整刀尖跳動精度。
- 可實現內孔加工的穩定、降低表面粗糙度。
- Effective solution for the run-out problem caused from the machine spindle aging.
- Adjust the run-out accuracy from tooling directly on the machine.
- Increase the stability of inner hole machining; reduce the surface roughness.

調整偏擺

Run-Out Adjusting

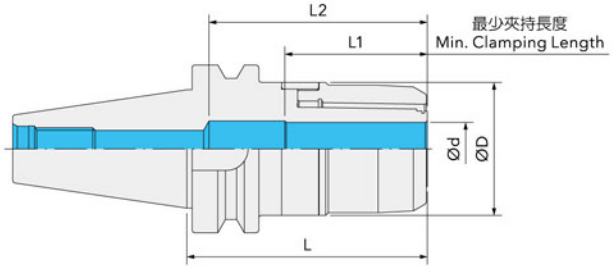
- 將調整環上的四個調整螺絲放鬆。
- 將調整環上的標記 1 與偏擺最高點對齊。
- 使用 T 型扳手調整振幅調至一半，再次檢查跳動值，重複調整至跳動 2 μm。
- Loosen the four screws on the adjust ring.
- Align mark 1 screw (on the adjusting ring) with the highest run-out point.
- Use the T wrench to adjust run-out half decreased, then check the run-out again. Repeat the adjust process till the run-out is around 2 μm.

規格 Part No.	夾持範圍 Ø Range	ØD	ØD1	L	G	彈性筒夾 Collets	扳手 Wrench
BT40-FANR13-090	3.0~13.0	34	56	90	M14*P1.00	NR13	W-D34

C-H高速強力精密銑刀夾頭

C-H High Speed Precision Power Milling Chucks, BT / ABT





刀 具 柄 部 (h6)
Tool Shanks (h6)



P96 P101

規格 Part No.	Ød	ØD	L	L1	L2	彈性筒夾 Collets	扳手 Wrench
BT30-C20H-085	20	50	85	53	82	ARH20	W-D48
BT40-C20H-090	20	50	90	53	82	ARH20	W-D48
-C25H-090	25	57	90	55.5	82	ARH25	W-D55
-C32H-090	32	69	90	60	90	ARH32	W-D68
-105			105				
-120			120				
BT50-C20H-105	20	50	105	53	—	ARH20	W-D48
-165			165				
-C25H-105	25	57	105	55.5	82	ARH25	W-D55
-165			165				
-C32H-105	32	69	105	60	90	ARH32	W-D68
-165			165				

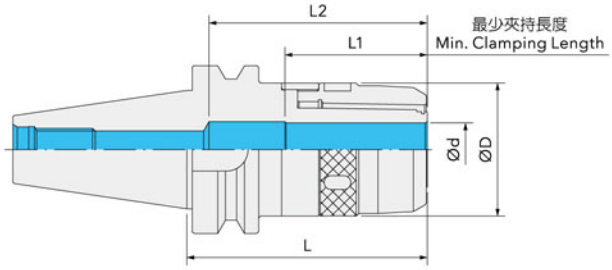
特性 Features

- 特殊的防塵設計，刀把使用壽命增加 50% 以上。
- 請注意：若螺帽旋緊扭力超過限度，將導致刀把、螺帽或筒夾永久損壞。
- Special dust-proof design can extend more than 50% lifetime of tool holders.
- Caution: Excessive tightening torque will damage the chucks, nut or / and collet permanently.

C型強力精密銑刀夾頭

C Type Precision Power Milling Chucks, BT / ABT





刀 具 柄 部 (h6)
Tool Shanks (h6)



P96 P101

規格 Part No.	Ød	ØD	L	L1	L2	彈性筒夾 Collets	扳手 Wrench
BT30-C20-085	20	50	85	53	82	ARH20	W-FK08
BT40-C20-090	20	50	90	53	82	ARH20	W-FK08
-C25-090	25	57	90	55.5	82	ARH25	W-FK09
-C32-090	32	69	90	60	90	ARH32	W-FK10
-105			105				
-120			120				
BT50-C20-105	20	50	105	53	—	ARH20	W-FK08
-165			165				
-C25-105	25	57	105	55.5	82	ARH25	W-FK09
-165			165				
-C32-105	32	69	105	60	90	ARH32	W-FK10
-165			165				

特性 Features

- 特殊的防塵設計，刀把使用壽命增加 50% 以上。
- 請注意：若螺帽旋緊扭力超過限度，將導致刀把、螺帽或筒夾永久損壞。
- Special dust-proof design can extend more than 50% lifetime of tool holders.
- Caution: Excessive tightening torque will damage the chucks, nut or / and collet permanently.

HC高速精密筒夾刀把

HC High Speed Precision Collet Chucks, BT / ABT



P95

Fig. 1

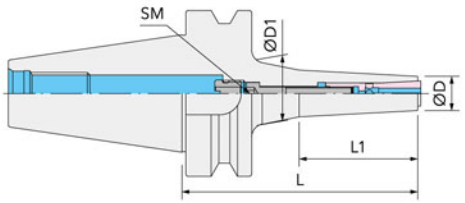


Fig. 2

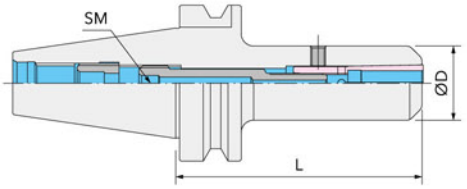


Fig. 3

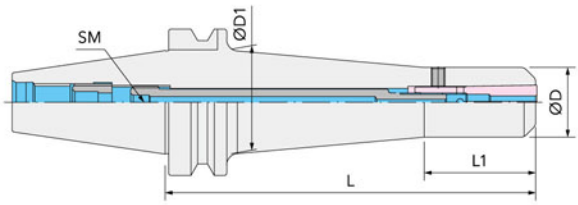


Fig. 4

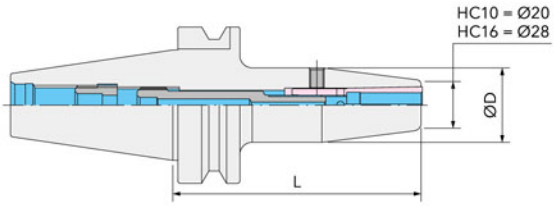
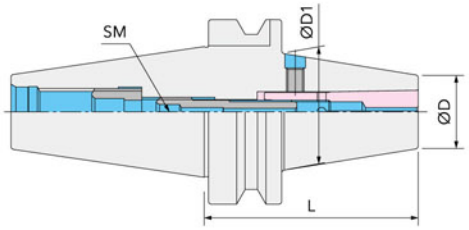


Fig. 5



特性 Features

- 適用於高速輕切削。
- 此刀把有自緊功能。
- Suitable for high speed & light cutting.
- These chucks have self-holding function.

規格 Part No.	Fig.	夾持範圍 Ø Range	ØD	ØD1	L	L1	彈性筒夾 Collets	旋緊扭矩 Nm Tightening Torque	扳手(SM) Wrench
BT30-HC06-060	1	3.0~ 6.0	13	22	60	26	HC06	4	4 mm
-090				25	90	50			
-HC10-080	2	3.0~10.0	30	—	80	—	HC10	12	5 mm
-HC16-070		6.0~16.0	35		70		HC16	20	
BT40-HC06-060	1	3.0~ 6.0	13	20	60	26	HC06	4	4 mm
-090				25	90	45			
-120				28	120	60			
-150				30	150	76			
-HC10-075	5	3.0~10.0	25	40	73.6	—	HC10	12	5 mm
-100	2		30	—	100	—			6 mm
-100S	4			—	100	—			
-160	3			45	160	48			
-HC16-100	2	6.0~16.0	35	—	100	—	HC16	20	
-100S	4			—	100	—			
-160	3			45	160	63			
BT50-HC10-100	2	3.0~10.0	30	—	100	—	HC10	12	6 mm
-160	3			43	160	48			
-HC16-100	2	6.0~16.0	35	—	100	—	HC16	20	
-160	3			43	160	63			

SGER彈性筒夾刀把

SGER Collet Chucks (DIN6499), BT




P97


P99


P101


P101

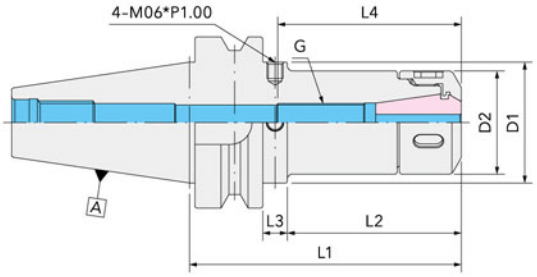


Fig. 1

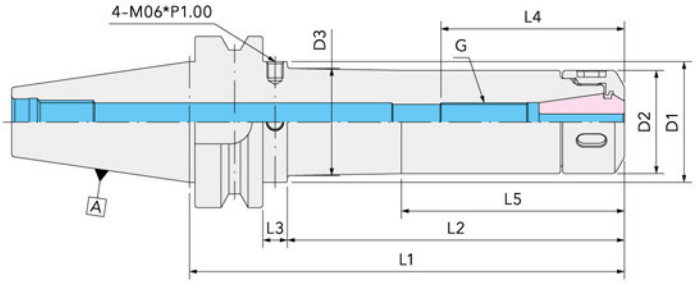


Fig. 2

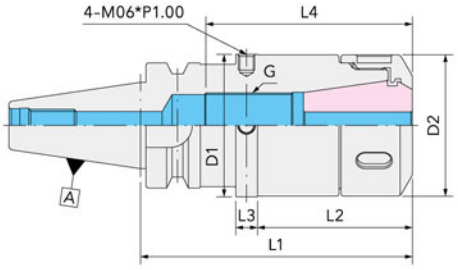


Fig. 3

規格 Part No.	Fig.	夾持範圍 Ø Range	ØD1	ØD2	ØD3	L1	L2	L3	L4	L5	G	螺帽 Nut	彈性筒夾 Collets	扳手 Wrench
BT30-SGER16-060	1	0.5~10.0	44.4	34	—	60	29	9	58.6	—	M11*P1.00	SGER16SX	ER16	W-FK05
-080						80	49							
-100						100	69							
-SGER20-060		1.0~13.0	44.4	38	—	60	29	9	65.5	—	M14*P1.00	SGER20SX	ER20	W-FK06
-080						80	49							
-100						100	69							
-SGER25-060		1.0~16.0	44.4	44	—	60	29	9	69	—	M18*P1.50	SGER25SX	ER25	W-FK07
-080						80	49							
-100						100	69							
-SGER32-070	3	2.0~20.0	52.4	52	—	70	27	8	70	—	M18*P1.50	SGER32SX	ER32	W-FK08
-100						100	57		76		M24*P1.50			

SGER彈性筒夾刀把

SGER Collet Chucks (DIN6499), BT

規格 Part No.	Fig.	夾持範圍 Ø Range	ØD1	ØD2	ØD3	L1	L2	L3	L4	L5	G	螺帽 Nut	彈性筒夾 Collets	扳手 Wrench
BT40-SGER16-070	1	0.5~10.0	44.4	34	—	70	34	9	67	—	M11*P1.00	SGER16SX	ER16	W-FK05
-100						100	64							
-120						120	84							
-160	2				36.9	160	124			80				
-200					38.3	200	164							
-SGER20-070	1	1.0~13.0	44.4	38	—	70	34	9	68	—	M14*P1.00	SGER20SX	ER20	W-FK06
-100						100	64							
-120						120	84							
-160	2				39.4	160	124			82				
-200					39.9	200	164							
-SGER25-070	1	1.0~16.0	44.4	44	—	70	34	9	68	—	M18*P1.50	SGER25SX	ER25	W-FK07
-100						100	64							
-120						120	84							
-160	2					160	124							
-200						200	164							
-SGER32-070	1	2.0~20.0	52.4	52	—	70	34	9	76	—	M24*P1.50	SGER32SX	ER32	W-FK08
-100						100	64							
-120						120	84							
-160	2					160	124							
-200						200	164							
-SGER40-070	1	2.5~26.0	62.4	62	—	70	34	9	85	—	M28*P1.50	SGER40SX	ER40	W-FK09
-100						100	64							
-120						120	84							
-160	2					160	124							
-200						200	164							

BT50-SGER16-080	1	0.5~10.0	69.8	34	—	80	33	9	67	—	M11*P1.00	SGER16SX	ER16	W-FK05
-100						100	53							
-120						120	73							
-160	2				36	160	128			80				
-200					43.6	200	168							
-SGER20-080	1	1.0~13.0	69.8	38	—	80	33	9	68	—	M14*P1.00	SGER20SX	ER20	W-FK06
-100						100	53							
-120						120	73							
-160	2				40	160	128			80				
-200					47.6	200	168							
-SGER25-080	1	1.0~16.0	69.8	44	—	80	33	9	73	—	M18*P1.50	SGER25SX	ER25	W-FK07
-100						100	53							
-120						120	73							
-160	2				46	160	128			80				
-200					53.6	200	168							
-SGER32-080	1	2.0~20.0	69.8	52	—	80	33	9	76	—	M24*P1.50	SGER32SX	ER32	W-FK08
-100						100	53							
-120						120	73							
-160	2				54	160	128			80				
-200					56.8	200	168							
-SGER40-080	1	2.5~26.0	69.8	62	—	80	33	9	86	—	M28*P1.50	SGER40SX	ER40	W-FK09
-100						100	53							
-120						120	73							
-160	2					160	128							
-200						200	168							

ER彈性筒夾刀把

ER Collet Chucks (DIN6499), BT / ABT





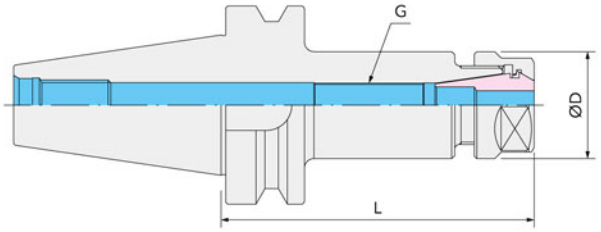


Fig. 1

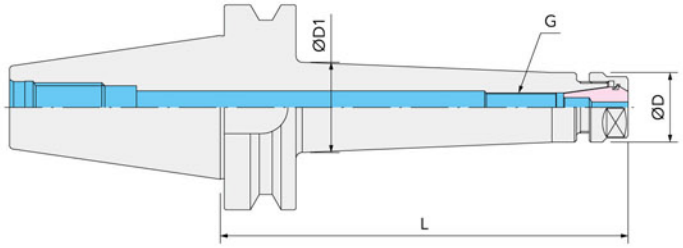


Fig. 2


P97


P98


P100


P101

規格 Part No.	Fig.	夾持範圍 Ø Range	ØD	L	G	螺帽 Nut	彈性筒夾 Collets	扳手 Wrench
BT30-ER11-075	1	0.5~ 7.0	19	75	M08*P1.00	ER11SH	ER11	W-ER11
-100				100				
-ER16-060		0.5~10.0	28	60	M11*P1.00	ER16SH	ER16	W-ER16
-100				100				
-ER20-060		1.0~13.0	34	60	M14*P1.00	ER20SH	ER20	W-ER20
-100				100				
-140				140				
-ER25-060		1.0~16.0	42	60	M18*P1.50	ER25SH	ER25	W-ER25
-100				100				
-ER32-070		2.0~20.0	50	70	M10*P1.50 M24*P1.50	ER32SH	ER32	W-ER32
-100				100				
BT30-ER16M-070		0.5~10.0	22	70	M11*P1.00	ER16M	ER16	W-ER16M
-100				100				

ER彈性筒夾刀把

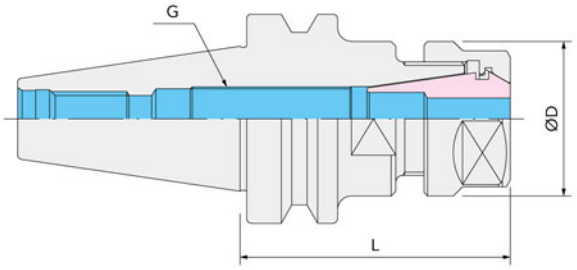
ER Collet Chucks (DIN6499), BT / ABT

規格 Part No.	Fig.	夾持範圍 Ø Range	ØD	ØD1	L	G	螺帽 Nut	彈性筒夾 Collets	扳手 Wrench
BT40-ER11-075	1	0.5~ 7.0	19	—	75	M08*P1.00	ER11SH	ER11	W-ER11
-100					100				
-ER16-070		0.5~10.0	28		70	M11*P1.00	ER16SH	ER16	W-ER16
-100					100				
-120					120				
-150					150				
-200	2			38	200				
-ER20-070	1	1.0~13.0	34	—	70	M14*P1.00	ER20SH	ER20	W-ER20
-100					100				
-120					120				
-150					150				
-200	2			44	200				
-ER25-070	1	1.0~16.0	42	—	70	M18*P1.50	ER25SH	ER25	W-ER25
-100					100				
-120					120				
-150					150				
-ER32-070		2.0~20.0	50		70	M24*P1.50	ER32SH	ER32	W-ER32
-100					100				
-120					120				
-150					150				
-ER40-080		2.5~26.0	63		80	M10*P1.50	ER40SH	ER40	W-ER40
-120					120	M28*P1.50			
BT40-ER11M-100		0.5~ 7.0	16		100	M08*P1.00	ER11M	ER11	W-ER11M
-ER16M-100		0.5~10.0	22		100	M11*P1.00	ER16M	ER16	W-ER16M
BT50-ER16-100	1	0.5~10.0	28	—	100	M11*P1.00	ER16SH	ER16	W-ER16
-120					120				
-150					150				
-200	2			38	200				
-ER20-100	1	1.0~13.0	34	—	100	M14*P1.00	ER20SH	ER20	W-ER20
-120					120				
-150					150				
-200	2			44	200				
-250				54	250				
-ER25-070	1	1.0~16.0	42	—	70	M18*P1.50	ER25SH	ER25	W-ER25
-150					150				
-200					200				
-ER32-070		2.0~20.0	50		70	M24*P1.50	ER32SH	ER32	W-ER32
-100					100				
-150					150				
-200	2			60	200				
-250					250				
-ER40-080	1	2.5~26.0	63	—	80	M28*P1.50	ER40SH	ER40	W-ER40
-150					150				
-250					250				
-ER50-090		10.0~34.0	78		90	M10*P1.50	ER50	ER50	W-ER50
-150					150				

ER-NK高速彈性筒夾刀把(無驅動鍵槽)

ER-NK High Speed Spring Collet Chucks (w/o Keyway), BT






P97


P98


P100


P101

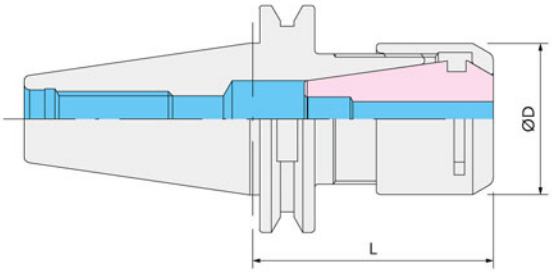
規格 Part No.	夾持範圍 Ø Range	ØD	L	G	螺帽 Nut	彈性筒夾 Collets	扳手 Wrench
BT30-ER16-060NK	0.5~10.0	28	60	M11*P1.00	ER16SH	ER16	W-ER16
-ER20-060NK	1.0~13.0	34		M14*P1.00	ER20SH	ER20	W-ER20
-ER25-060NK	1.0~16.0	42		M18*P1.50	ER25SH	ER25	W-ER25

- 以上接單生產。
- Customized Production.

ER-NK高速彈性筒夾刀把(無驅動鍵槽)

ER-NK High Speed Spring Collet Chucks (w/o Keyway), ISO20 / ISO25






P97


P98


P100

規格 Part No.	夾持範圍 Ø Range	ØD	L	螺帽 Nut	彈性筒夾 Collets	扳手 Wrench
ISO20-ER16-035MS	0.5~10.0	28	35	ER16MS	ER16	W-ER16MS
ISO25-ER20-035MS	1.0~13.0	34		ER20MS	ER20	W-ER20MS

- 以上接單生產。
- Customized Production.

ER彈性筒夾直柄刀把

ER Collet Chucks, Straight Shank (DIN6499)



Fig. 1

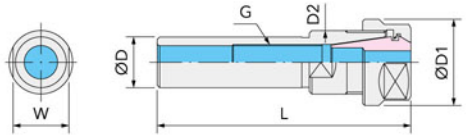


Fig. 2

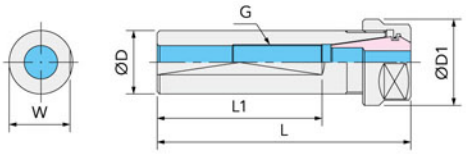
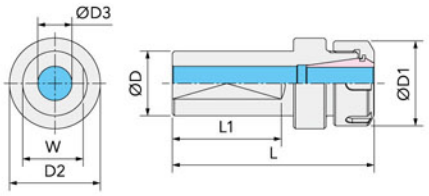


Fig. 3




P97

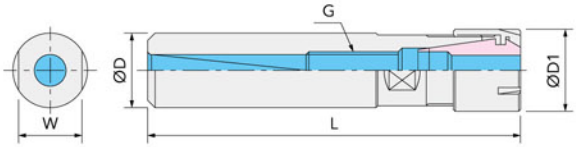

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P101

規格 Part No.	Fig.	夾持範圍 Ø Range	ØD	ØD1	ØD2	ØD3	L	L1	G	W	螺帽 Nut	彈性筒夾 Collets	扳手 Wrench
ST16-ER11-150	1	0.5~ 7.0	16	19	18	—	150	—	M08*P1.00	16	ER11SH	ER11	W-ER11
ST20-ER16-100	1	0.5~10.0	20	28	22	—	100	—	M11*P1.00	19	ER16SH	ER16	W-ER16
-150							150						
-200							200						
-ER20-100		1.0~13.0		34	25		100		M14*P1.00	22	ER20SH	ER20	W-ER20
-150							150						
-200							200						
SL25-ER20-100	2	1.0~13.0	25	34	25	—	100	65	M14*P1.00	24	ER20SH	ER20	W-ER20
ST32-ER20-100	1	1.0~13.0	32	34	—	—	100	—	M14*P1.00	29	ER20SH	ER20	W-ER20
-150							150						
-200							200						
-ER25-100		1.0~16.0		42	32		100		M18*P1.50		ER25SH	ER25	W-ER25
-150							150						
SL32-ER32-100	3	2.0~20.0	32	50	45	21	100	54	—	30	ER32SH	ER32	W-ER32
SL40-ER25-100		1.0~16.0	40	42		17				38	ER25SH	ER25	W-ER25
-ER32-100		2.0~20.0		50		21					ER32SH	ER32	W-ER32






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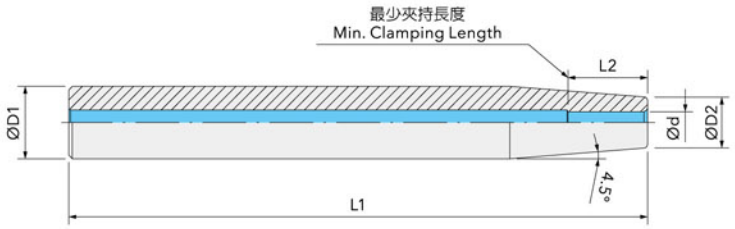

P101

規格 Part No.	夾持範圍 Ø Range	ØD	ØD1	L	G	W	螺帽 Nut	彈性筒夾 Collets	扳手 Wrench
ST12-ER08M-150	0.5~ 5.0	12	12	150	—	10	ER08M	ER08	W-ER08M
ST16-ER11M-150	0.5~ 7.0	16	16	150	M08*P1.00	14	ER11M	ER11	W-ER11M
ST20-ER16M-100	0.5~10.0	20	22	100	M11*P1.00	19	ER16M	ER16	W-ER16M
-150				150					
-200				200					
-ER20M-100	1.0~13.0		28	100	M14*P1.00	22	ER20M	ER20	W-ER20M
-150				150					
-200				200					

SRK直柄熱膨脹燒結刀把

SRK Shrink Fit Chucks, Straight Shank



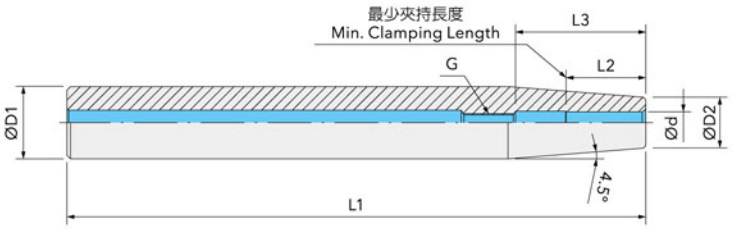


刀把規格 Shanks	Ød	ØD1 h5	ØD2	L1	L2
ST12-SRK06-120	6	12	10	120	23
-SRK06-160				160	
ST16-SRK06-120	6	16	10	120	23
-SRK06-160				160	
-SRK08-120	8		12	120	27
-SRK08-160				160	
-SRK10-120	10		14	120	33
-SRK10-160				160	
ST20-SRK06-160	6	20	14	160	23
-SRK06-300				300	
-SRK08-160	8			160	27
-SRK08-300				300	
-SRK10-160	10			160	33
-SRK10-300				300	
-SRK12-160	12		16	160	38
-SRK12-300				300	
ST25-SRK06-160	6	25	19	160	23
-SRK06-300				300	
-SRK08-160	8			160	27
-SRK08-300				300	
-SRK10-160	10		20	160	33
-SRK10-300				300	
-SRK12-160	12			160	38
-SRK12-300				300	
-SRK14-160	14			160	
-SRK14-300				300	
-SRK16-160	16		22	160	40
-SRK16-300				300	
ST32-SRK10-160	10	32	24	160	33
-SRK10-300				300	
-SRK12-160	12			160	38
-SRK12-300				300	
-SRK14-160	14		27	160	
-SRK14-300				300	
-SRK16-160	16			160	40
-SRK16-300				300	
-SRK18-160	18			160	
-SRK18-300				300	
-SRK20-160	20			160	42
-SRK20-300				300	

SRK-BK直柄熱膨脹燒結刀把

SRK-BK Shrink Fit Chucks, Straight Shank





刀把規格 Shanks	Ød	ØD1 h5	ØD2	L1	L2	L3	G
ST12-SRK06-120BK	6	12	10	120	23	36	M05*P0.80
-SRK06-160BK				160			
ST16-SRK06-120BK	6	16	10	120	23	36	M05*P0.80
-SRK06-160BK				160			
-SRK08-120BK	8		12	120	27	37	M06*P1.00
-SRK08-160BK				160			
-SRK10-120BK	10		14	120	33	42	M08*P1.00
-SRK10-160BK				160			
ST20-SRK06-160BK	6	20	14	160	23	36	M05*P0.80
-SRK08-160BK	8				27	37	M06*P1.00
-SRK10-160BK	10				32	42	M08*P1.00
-SRK12-160BK	12		16		37	48	M10*P1.00
ST25-SRK06-160BK	6	25	19	160	23	36	M05*P0.80
-SRK08-160BK	8				27	37	M06*P1.00
-SRK10-160BK	10		20		32	42	M08*P1.00
-SRK12-160BK	12				37	48	M10*P1.00
-SRK14-160BK	14						
-SRK16-160BK	16		22		40	51	M12*P1.00
ST32-SRK10-160BK	10	32	24	160	32	42	M08*P1.00
-SRK12-160BK	12				37	48	M10*P1.00
-SRK14-160BK	14		27				
-SRK16-160BK	16				40	51	M12*P1.00
-SRK18-160BK	18						
-SRK20-160BK	20				42	53	M16*P1.00

SLN側固式刀把

SLN Weldon Chucks (DIN1835B), BT / ABT







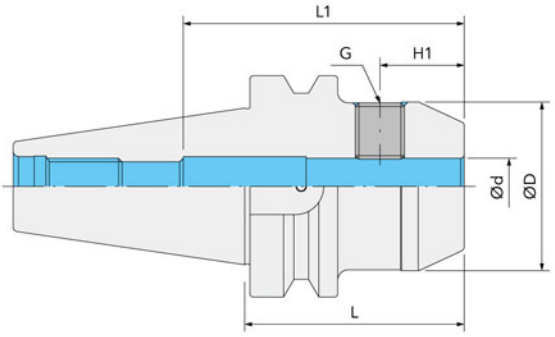


Fig. 1

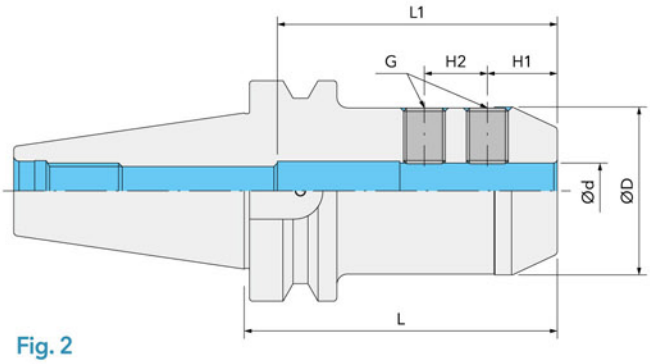


Fig. 2

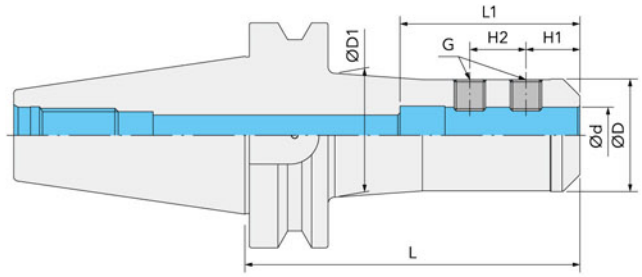


Fig. 3

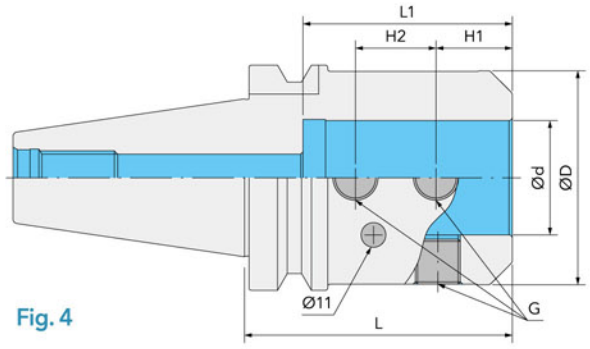


Fig. 4

- 重切削型。
- For combination shank mill.

SLN側固式刀把

SLN Weldon Chucks (DIN1835B), BT / ABT

規格 Part No.	Fig.	Ød	ØD	L	L1	H1	H2	G
BT30-SLN06-050	1	6	25	50	22	18	—	M06*P1.00
-SLN08-060		8	28	60	31			M08*P1.25
-SLN10-060		10	35		60	20		M10*P1.50
-SLN12-060		12	42			22.5		M12*P1.75
-SLN16-060		16	48			24		M14*P2.00
-SLN20-080		20	52	80		25		M16*P2.00
-SLN25-080S	2	25	45		70	24	25	M10*P1.50
-SLN32-095		32	60	95	75		28	M14*P2.00
BT40-SLN04-075	2	4	20	75	18	6	7	M04*P0.70
-SLN06-050	1	6	25	50	25	18	—	M06*P1.00
-075	2			75	30	14	12	
-090				90				
-SLN08-050	1	8	28	50	31	17	—	M08*P1.25
-075	2			75		14	12	
-090				90				
-SLN10-063	1	10	35	63	34	20	—	M10*P1.50
-090	2			90		15	14	M08*P1.25
-SLN12-063	1	12	42	63	43	22.5	—	M12*P1.75
-090	2			90		20	16	
-SLN14-063	1	14		63	80		—	
-090	2			90			16	
-SLN16-063	1	16	48	63		24	—	M14*P2.00
-090	2			90		20	18	M12*P1.75
-SLN18-063	1	18	50	63		24	—	M14*P2.00
-090	2			90		20	18	M12*P1.75
-SLN20-063	1	20	52	63		25	—	M16*P2.00
-090	2			90		23	19	M12*P1.75
-SLN25-090		25	62			24	25	M18*P2.00
-090S			50					M14*P2.00
-SLN32-110		32	72	110	90		28	M20*P2.00
-100S			60	100	80			M14*P2.00
-SLN40-100		40	72		90			
-SLN42-100		42						

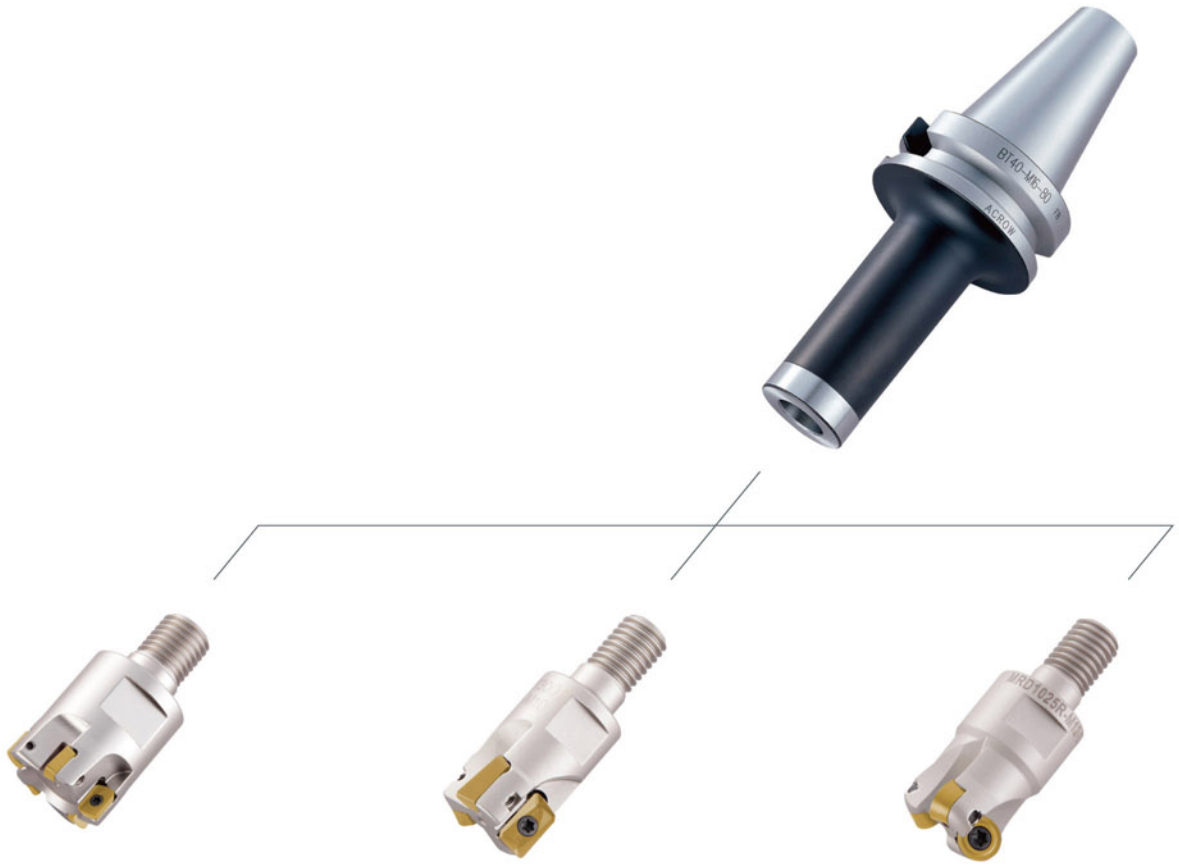
SLN側固式刀把

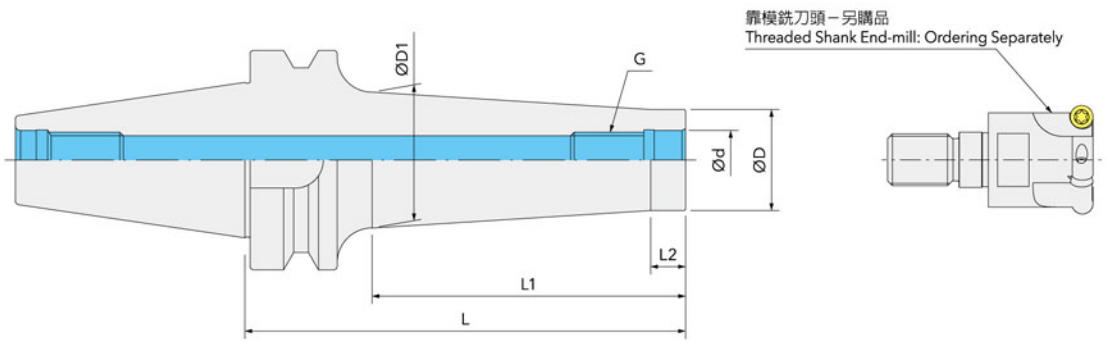
SLN Weldon Chucks (DIN1835B), BT / ABT

規格 Part No.	Fig.	Ød	ØD	ØD1	L	L1	H1	H2	G
BT50-SLN06-063	1	6	25	—	63	25	18	—	M06*P1.00
-090	2				90	30	14	12	
-150	3			30	150				
-SLN08-063	1	8	28	—	63	31	18	—	M08*P1.25
-090	2				90		14	12	
-150	3			33	150				
-SLN10-080	1	10	35	—	80	34	18	—	M10*P1.50
-100	2				100		15	14	M08*P1.25
-150	3			40	150				
-SLN12-080	1	12	42	—	80	43	22.5	—	M12*P1.75
-100	2				100		20	16	
-150	3			47	150				
-SLN14-100	2	14		—	100				
-SLN16-080	1	16	48		80	45	24	—	M14*P2.00
-100	2				100		20	18	M12*P1.75
-150	3			53	150				
-SLN18-100	2	18	50		100				
-SLN20-080	1	20	52	—	80	49	25	—	M16*P2.00
-100	2				100		23	19	M12*P1.75
-150	3			57	150				
-200					200				
-250				62	250				
-SLN25-105	2	25	65	—	105	80	24	25	M18*P2.00
-100S			50		100				M14*P2.00
-150	3			55	150				
-200				57	200				
-250					250				
-SLN32-105	2	32	72	—	105			28	M20*P2.00
-105S			60						M14*P2.00
-150	3			65	150				
-200					200				
-250				67	250				
-SLN40-120	2	40	90	—	120	95	30	32	M20*P2.00
-SLN42-120		42				90			
-120S			70						M14*P2.00
-SLP50.8-120	4	50.8	95			100	33.9	35.78	M20*P2.00

鎖牙式靠模銑刀把

Adaptors for Threaded Shank End-mill, BT / ABT





規格 Part No.	Ød	ØD	ØD1	L	L1	L2	G
BT40-M06-087	6.5	9.8	20	87	50	10	M06*P1.00
-M08-087	8.5	13.0	23				M08*P1.25
-M10-087	10.5	18.0	25				M10*P1.50
-M12-087	12.5	21.0	24				M12*P1.75
-M16-087	17.0	29.0	34				M16*P2.00
-M16-127			39	127	90		
BT50-M12-125	12.5	21.0	35	125	75	10	M12*P1.75
-M16-125	17.0	29.0	34				M16*P2.00
-M16-200			48	200	150		

MT莫氏錐度刀把
MT Morse Taper Holders, BT



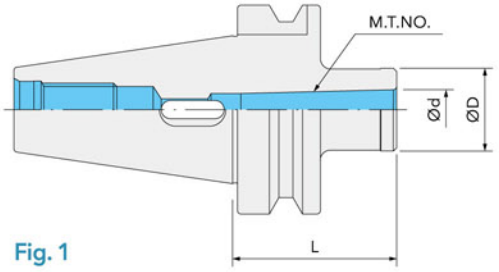


Fig. 1

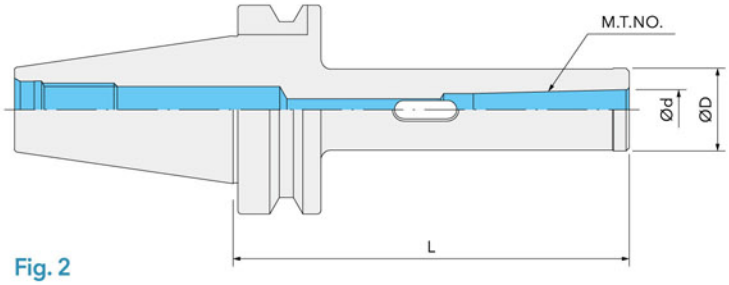


Fig. 2

莫氏錐度尺寸與對應鑽頭直徑
Morse Taper Size and Corresponding Drill Diameter

M.T. No.	鑽頭直徑 Ø Drill Diameter
1	3 ~14
2	14.5~23
3	23.5~31.5
4	32 ~50
5	51 ~76

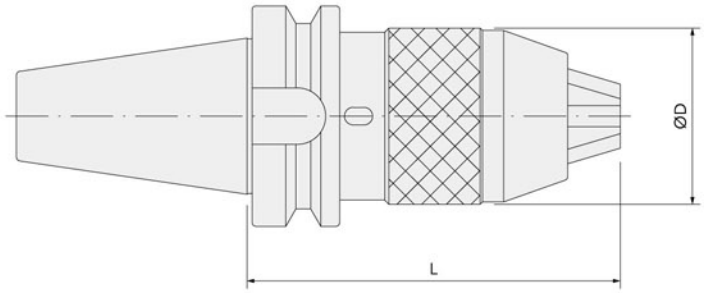
- 鑽頭直徑依 JIS B4302 1 規範。
- Drill diameter: JIS B4302 1 Standard.

規格 Part No.	M.T. No.	Fig.	Ød	ØD	L
BT30-MTA1-050	MTA1	1	12.065	25	50
-MTA2-060	MTA2		17.780	32	60
BT40-MTA1-050	MTA1	1	12.065	25	50
-120		2			120
-MT2 -050	MTA2/MTB2	1	17.780	32	50
-MTA2-120	MTA2	2			120
-MT3 -070	MTA3/MTB3	1	23.825	40	70
-MTA3-135	MTA3	2			135
-MT4 -095	MTA4/MTB4	1	31.267	48	95
-MTA4-165	MTA4	2			165
BT50-MTA1-045	MTA1	1	12.065	25	45
-120		2			120
-180					180
-MT2 -060	MTA2/MTB2	1	17.780	32	60
-MTA2-135	MTA2	2			135
-180					180
-MT3 -065	MTA3/MTB3	1	23.825	40	65
-MTA3-150	MTA3	2			150
-180					180
-MT4 -095	MTA4/MTB4	1	31.267	48	95
-MTA4-180	MTA4	2			180
-MT5 -105	MTA5/MTB5	1	44.399	63	105
-MTA5-210	MTA5	2			210

APU鑽夾刀把

APU CNC Drill Chucks, BT





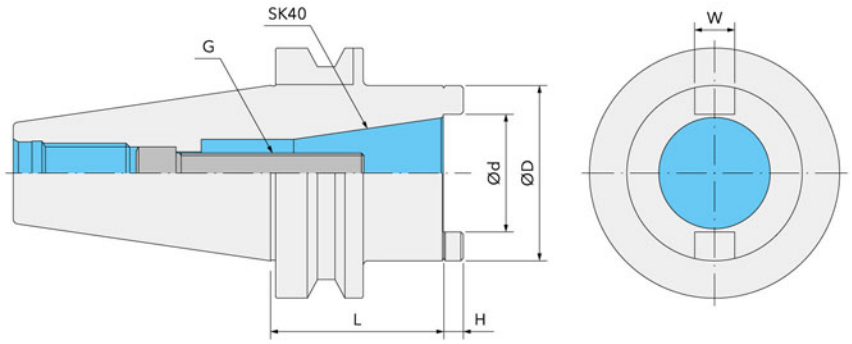
- 隨附扳手。
- Delivery with wrench.

規格 Part No.	夾持範圍 Ø Range	APU夾頭 APU Drill Chuck	ØD	L
BT30-APU08-075	1~ 8	APU08	36.0	75
-APU13-110	1~13	APU13	50.5	110
BT40-APU08-075	1~ 8	APU08	36.0	75
-APU13-090	1~13	APU13	50.5	90
-140				140
-APU16-130	3~16	APU16	57.0	130
BT50-APU08-085	1~ 8	APU08	36.0	85
-APU13-100	1~13	APU13	50.5	100
-150				150
-APU16-130	3~16	APU16	57.0	130

TSA錐度轉換刀把

TSA Reduction Holders, BT





規格 Part No.	Ød	ØD	L	H	螺栓 G	W
BT50-TSA40M-075	47	70	70	8	M16*P2.00	15.9
-TSA40U-075					UNC 5/8"	

- 隨貨附螺栓。
- G: Delivery with Pull Studs.

SM殼型銑刀把

SM Shell Mill Holders, BT / ABT



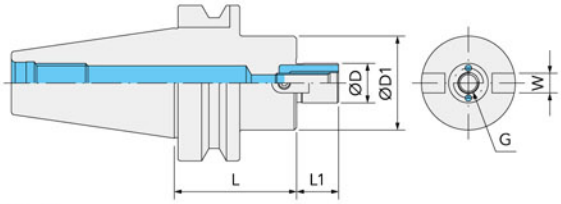


Fig. 1

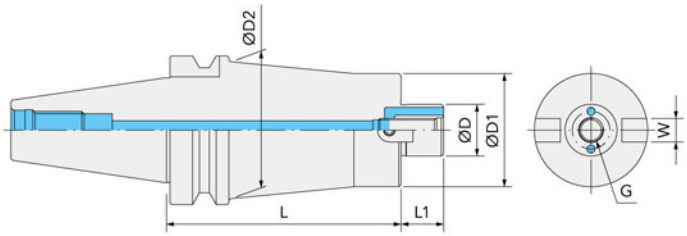


Fig. 2



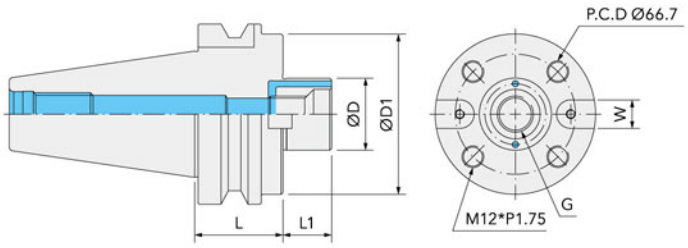


Fig. 3

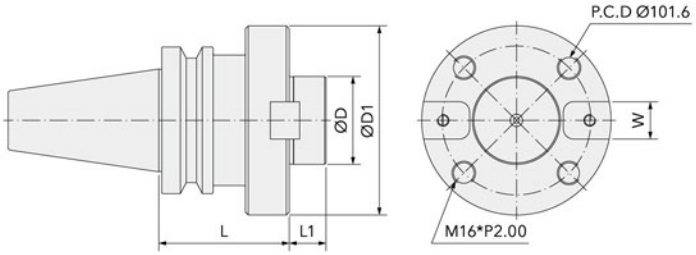


Fig. 4

SM殼型銑刀把

SM Shell Mill Holders, BT / ABT

規格 Part No.	Fig.	ØD	ØD1	ØD2	L	L1	G	W
BT30-SM16-050	1	16	38	—	50	16	M08*P1.25	8
-SM22-050		22	48			18	M10*P1.50	10
-SM27-050		27	52			20	M12*P1.75	12
BT40-SM16-050	1	16	38	—	50	16	M08*P1.25	8
-SM22-055		22	48		55	18	M10*P1.50	10
-100					100			
-150	2			58	150			
-SM27-055	1	27	58	—	55	20	M12*P1.75	12
-100					100			
-130					130			
-SM32-060		32	62		60	23	M16*P2.00	14
-100					100			
-SM40-060	3	40	88		60	27	M20*P2.50	15.875
-100					100			
BT50-SM16-050	1	16	38	—	50	16	M08*P1.25	8
-150	2			40	150			
-SM22-060	1	22	48	—	60	18	M10*P1.50	10
-100					100			
-150	2			60	150			
-200				62	200			
-250				68	250			
-300				73	300			
-SM27-060	1	27	58	—	60	20	M12*P1.75	12
-100					100			
-150	2			68	150			
-200					200			
-250					250			
-300				73	300			
-SM32-060	1	32	78	—	60	23	M16*P2.00	14
-100					100			
-150	2			88	150			
-SM40-050	3	40	89	—	50	27	M20*P2.50	15.875
-100					100			
-150					150			
-SM60-090	4	60	129.1		90	25	—	25.4

FMA面銑刀把

FMA Face Mill Holders, BT / ABT





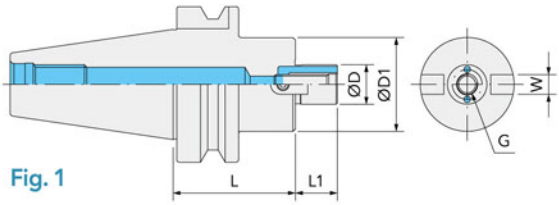


Fig. 1

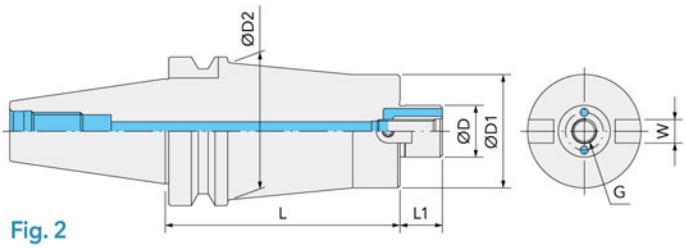


Fig. 2

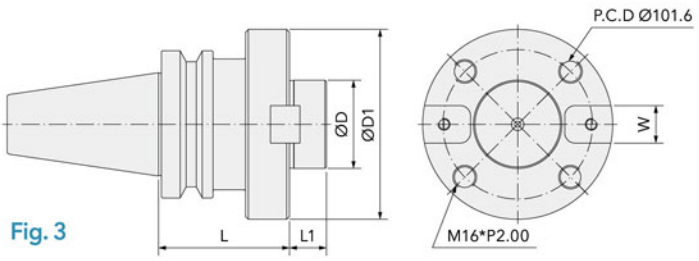


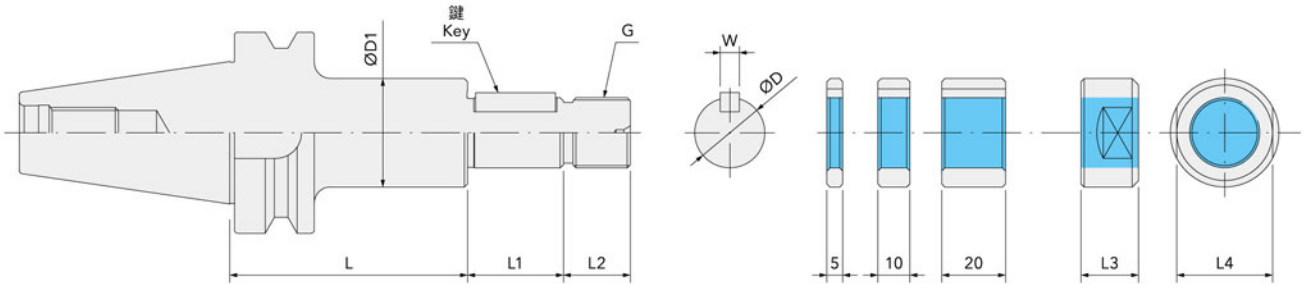
Fig. 3

規格 Part No.	Fig.	ØD	ØD1	ØD2	L	L1	G	W
BT30-FMA25.4 -050	1	25.4	50	—	50	18	M12*P1.75	9.525
BT40-FMA25.4 -045	1	25.4	50	—	45	18	M12*P1.75	9.525
-090					90			
-150	2			58	150			
-FMA31.75 -045	1	31.75	60	—	45	20	M16*P2.00	12.7
-075					75			
-130					130			
-FMA38.1 -060		38.1	78		60	25	M20*P2.50	15.875
BT50-FMA25.4 -050	1	25.4	50	—	53	18	M12*P1.75	9.525
-090					90			
-150	2			60	150			
-200				70	200			
-250					250			
-FMA31.75 -050	1	31.75	60	—	53	20	M16*P2.00	12.7
-075					75			
-105					105			
-150	2			70	150			
-200				75	200			
-FMA38.1 -055	1	38.1	78	—	55	25	M20*P2.50	15.875
-075					75			
-150	2			88	150			
-FMA50.8 -050	1	50.8	98	—	48		M24*P3.00	19.05
-075					75			
-FMA47.625-080	3	47.625	128.57		83	30	—	25.4

SCA側銑刀把

SCA Side Cutter Holders, BT / ABT



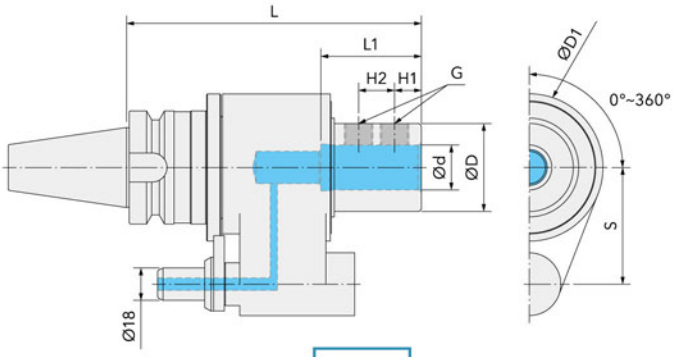


規格 Part No.	ØD	ØD1	L	L1	L2	L3	L4	G	W	Key
BT30-SCA22 -060	22	34	60	30	21	18	30	M22*P1.50	6	6*6*25L
-SCA25.4-050	25.4	40	50		25	21	32	M24*P2.00	6.35	6.35*6.35*25L
-075			75							
-SCA27 -060	27		60					M25*P1.50	7	7*7*25L
BT40-SCA22 -075	22	34	75	30	21	18	30	M22*P1.50	6	6*6*25L
-120			120							
-SCA25.4-075	25.4	40	75		25	21	32	M24*P2.00	6.35	6.35*6.35*25L
-120			120							
-075A			75	75						6.35*6.35*70L
-SCA27 -075	27		75	30				M25*P1.50	7	7*7*25L
-120			120							
-SCA32 -090	32	46	90		30	26	36	M30*P2.00	8	8*8*25L
BT50-SCA22 -090	22	34	90	30	21	18	30	M22*P1.50	6	6*6*25L
-135			135							
-SCA25.4-090	25.4	40	90		25	21	32	M24*P2.00	6.35	6.35*6.35*25L
-135			135							
-090A			90	75						6.35*6.35*70L
-SCA27 -090	27			30				M25*P1.50	7	7*7*25L
-135			135							
-SCA32 -090	32	46	90		30	26	36	M30*P2.00	8	8*8*25L
-135			135							
-SCA40 -090	40	55	90		36	31	46	M36*P2.00	10	10*10*25L
-135			135							

OSL油路側固式刀把

OSL Rotary Through Coolant Supply Chucks, BT





- 承受 7 kgf/cm² (4.8 Mpa) 水壓。
- 最高轉數限制：3,000 rpm。
- Max water pressure: 7 kgf/cm² (4.8 Mpa).
- Max speed: 3,000 rpm.

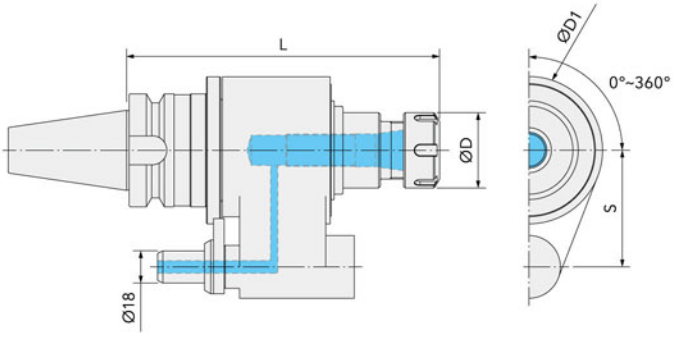
P96

規格 Part No.	Ød	ØD	ØD1	L	L1	H1	H2	G	S
BT40-OSL16-150	16	49	82	150	48	25	—	M12*P1.75	65
-OSL20-150	20				50				
-OSL25-165	25			165	56	15	20	M16*P2.00	
-OSL32-165	32				60			M12*P1.75	
BT50-OSL16-165	16	49	98	165	48	25	—	M12*P1.75	80
-OSL20-165	20				50				
-OSL25-165	25	59			56	15	20	M16*P2.00	
-OSL32-165	32				60				
-OSL40-165	40				70		25	M14*P2.00	

OHER油路彈性筒夾刀把

OHER Rotary Through Coolant Supply Chucks (DIN6499), BT





- 承受 7 kgf/cm² (4.8 Mpa) 水壓。
- 最高轉數限制：3,000 rpm。
- Max water pressure: 7 kgf/cm² (4.8 Mpa).
- Max speed: 3,000 rpm.

P97 P98 P98 P100 P100

規格 Part No.	夾持範圍 Ø Range	ØD	ØD1	L	S	彈性筒夾 Collets
BT30-OHER20M-135	1~13	28	67	135	65	ER20OH
BT40-OHER25-175	4~16	42	82	175	65	ER25OH
-OHER32-175	4~20	50				ER32OH
BT50-OHER25-180	4~16	42	98	180	80	ER25OH
-OHER32-180	4~20	50				ER32OH

TR90角度頭刀把

TR90 Angle Head Chucks, BT



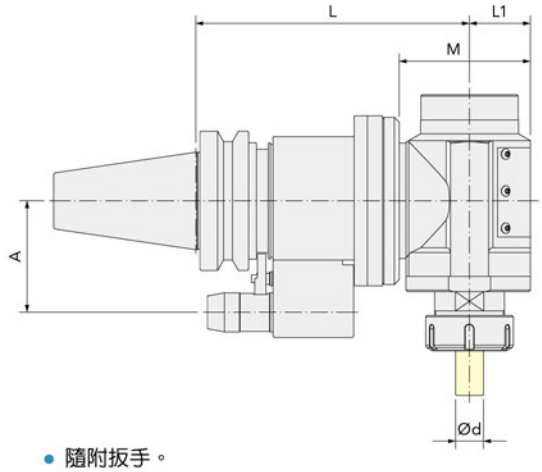
P97 P98 P100

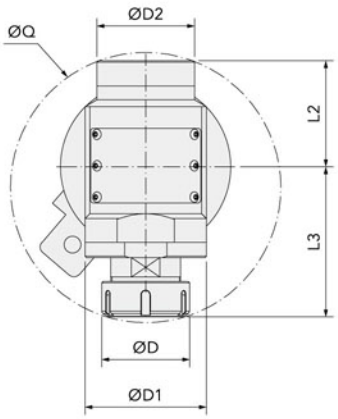
● 旋轉方向
Rotation

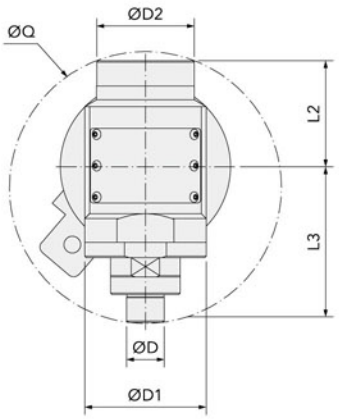
機械主軸側 Main Spindle	角度頭軸側 Angle Shaft
逆時針方向回轉 (參數：M04) CCW (Parameter: M04)	順時針方向回轉 CW

● 容許最高轉數
Max. min^{-1}

規格 Part No.	齒輪比 Gear Ratio	主軸 Main Spindle (CCW)	刀軸 Angle Shaft (CW)
BT40 / HSK63A	1 : 0.81	3,000	2,430
BT50	1 : 0.96	2,500	2,400







- 隨附扳手。
- Delivery with wrench.

Fig. 1 Fig. 2

規格 Part No.	Fig.	夾持範圍 Ø Range	Ød1	A	L	L1	L2	L3	M	ØD	ØD1	ØD2	ØQ
BT40-TR90-ER32 -160	1	2.0~20.0	—	65	160	40	65	95	86	50	88	65	171
BT50-TR90-ER40 -195		2.5~26.0		80	195	44	70	110	97	63	90	70	193
-TR90-SM22-195	2	—	22					108		48			190
HSK63A-TR90-ER32 -185	1	2.0~20.0	—	65	185	40	65	95	86	50	88	65	171

- 機械主軸旋轉方向應與角度頭相反。
- 需確認主軸為逆時針旋轉。
- The rotation direction of machine spindle should be reverse with angle shaft.
- Please make sure the spindle rotates in CCW direction.

TR90角度頭刀把
TR90 Angle Head Chucks, BT



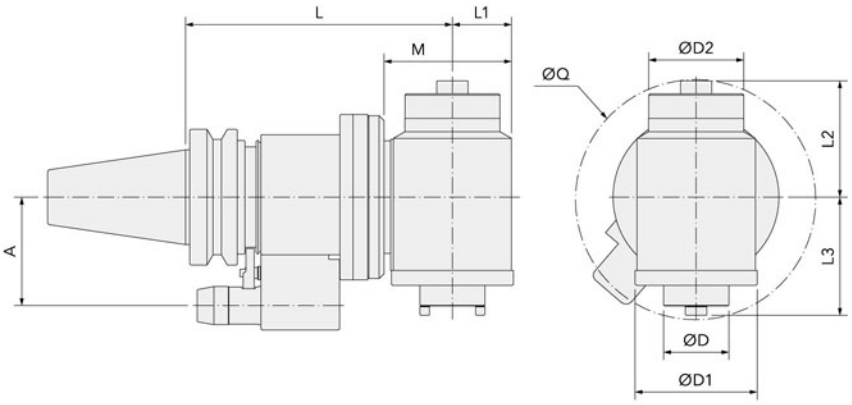
旋轉方向
Rotation

機械主軸側 Main Spindle	角度頭軸側 Angle Shaft
逆時針方向回轉 (參數：M04) CCW (Parameter: M04)	順時針方向回轉 CW

容許最高轉數
Max. min^{-1}

規格 Part No.	齒輪比 Gear Ratio	主軸 Main Spindle (CCW)	刀軸 Angle Shaft (CW)
BT50	1 : 0.96	2,500	2,400





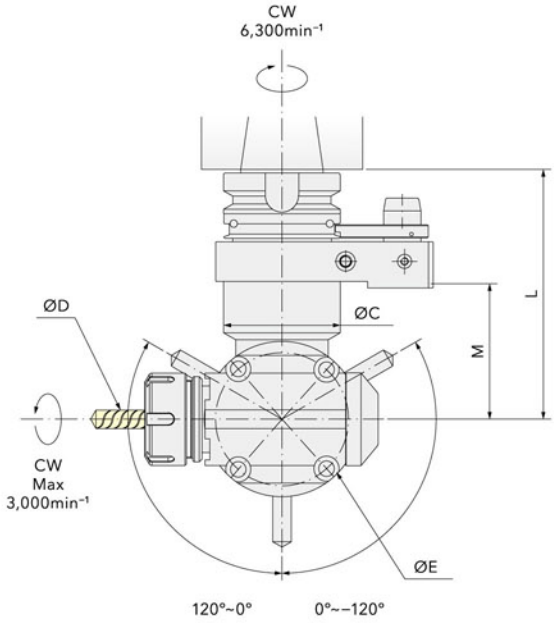
規格 Part No.	夾持範圍 Ø Range	Ød1	A	L	L1	L2	L3	M	ØD	ØD1	ØD2	ØQ
BT50-TR90-TSA30-195	—	—	80	195	44	86	87	94	48	90	70	177

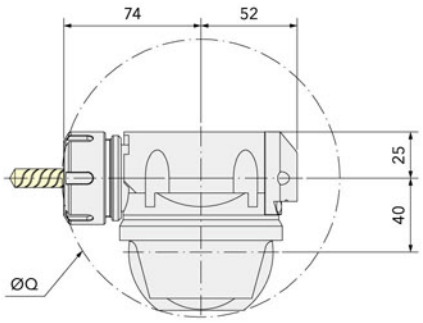
- 機械主軸旋轉方向應與角度頭相反。
- 需確認主軸為逆時針旋轉。
- The rotation direction of machine spindle should be reverse with angle shaft.
- Please make sure the spindle rotates in CCW direction.

UAH萬向角度頭刀把

UAH Universal Angle Head Chucks, BT







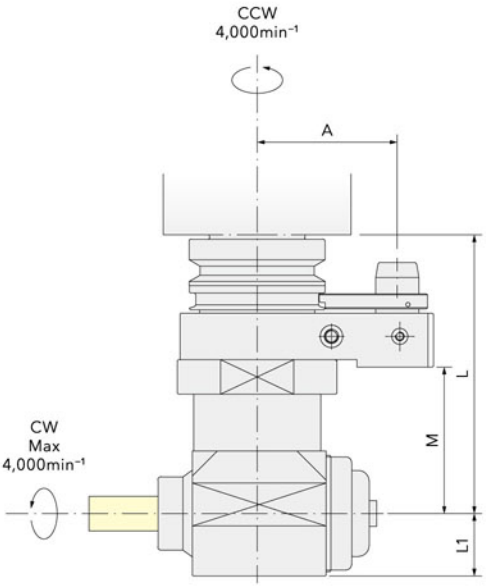
P59 P97 P98 P101

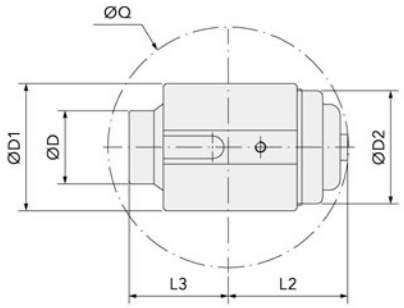
規格 Part No.	夾持範圍 ØD Range	A	L	M	ØC	ØE	ØQ	彈性筒夾 Collets	最高轉數 (min⁻¹) (主軸：角軸) Max (min⁻¹) (Main Spindle: Angle Shaft)
BT40-UAH-ER32-135	2.0~20.0	65	135	73	62	84	157	ER32	6,300 : 3,000 (1 : 0.48)
BT50-UAH-ER32-150		80	150						
HSK63A-UAH-ER32-160		65	160						

- 機械主軸旋轉方向應與角度頭相同。
- 需確認主軸為順時針旋轉。
- The rotation direction of machine spindle should be same with angle shaft.
- Please make sure the spindle rotates in CW direction.

TRH角度頭刀把
TRH Angle Head Chucks, BT



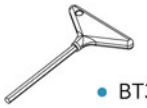




P59 P95

特性 Features

- 適用於高速輕切割。
- 此刀把有自緊功能。
- Suitable for high speed and light cutting.
- These chucks have self-holding function.



- BT30/40/50 = 5 mm.

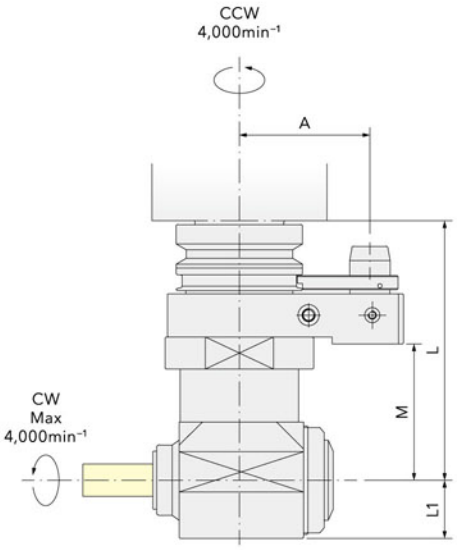
規格 Part No.	夾持範圍 Ø Range	A	L	L1	L2	L3	M	ØD	ØD1	ØD2	ØQ	彈性筒夾 Collets	最高轉數 (min⁻¹) (主軸：角軸) Max (min⁻¹) (Main Spindle: Angle Shaft)
BT30-TRHC16-140	6.0~16.0	75	140	29	55.5	46	67.5	34	59	52.5	112	HC16	4,000 : 4,000 (1 : 1)
BT40-TRHC16-130		65	129.5										
BT50-TRHC16-145		80	145										

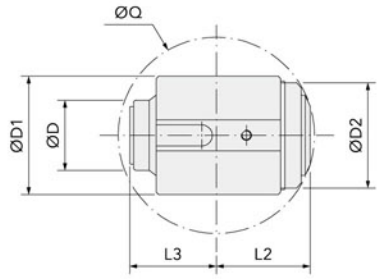
- 機械主軸旋轉方向應與角度頭相反。
- 需確認主軸為逆時針旋轉。
- The rotation direction of machine spindle should be reverse with angle shaft.
- Please make sure the spindle rotates in CCW direction.

TRN角度頭刀把

TRN Angle Head Chucks, BT







P59 P59 P93 P94 P100

- 僅限搭配泛用型筒夾使用，不可使用銑刀型。
  Cannot use End-mill type collet.

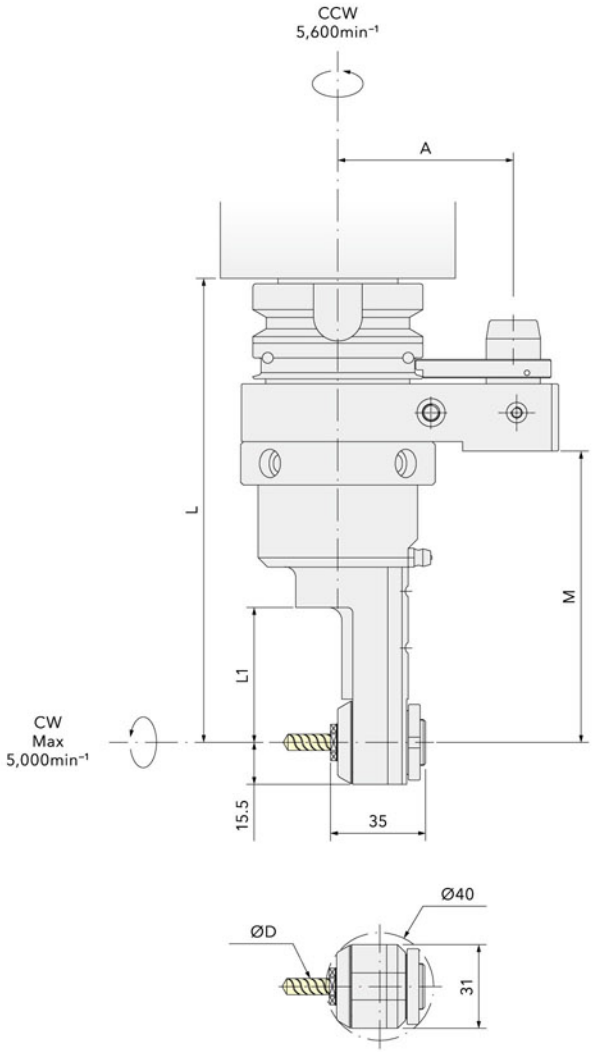
規格 Part No.	夾持範圍 Ø Range	A	L	L1	L2	L3	M	ØD	ØD1	ØD2	ØQ	泛用精密筒夾 Precision Collets	最高轉數 (min⁻¹) (主軸：角軸) Max (min⁻¹) (Main Spindle: Angle Shaft)
BT30-TRNR13-140	3.0~13.0	75	140	29	46.7	43.2	67.5	35	59	52.5	100	NR13	4,000 : 4,000 (1 : 1)
BT40-TRNR13-130		65	129.5										
BT50-TRNR13-145		80	145										

- 機械主軸旋轉方向應與角度頭相反。
- 需確認主軸為逆時針旋轉。
- The rotation direction of machine spindle should be reverse with angle shaft.
- Please make sure the spindle rotates in CCW direction.

TRSN角度頭刀把

TRSN Angle Head Chucks, BT

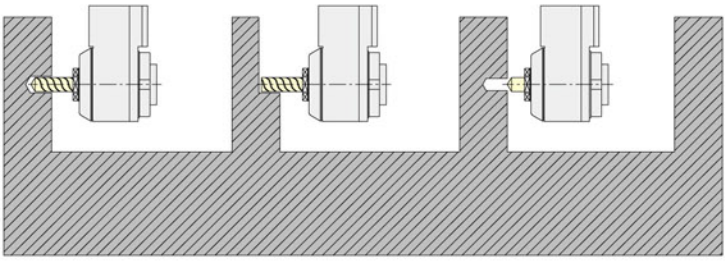






- 僅限搭配泛用型筒夾使用，不可使用銑刀型。
  Cannot use End-mill type collet.

- 鑽頭加工。 Drilling Machining.
- 立銑刀加工。 End-mill Machining.
- 倒角。 Chamfering.



規格 Part No.	夾持範圍 Ø Range	A	L	L1	M	泛用彈性筒夾 Precision Collets	最高轉數 (min⁻¹) (主軸：角軸) Max (min⁻¹) (Main Spindle: Angle Shaft)
BT30-TRSNR6-180	3.0~6.0	75	180	50	107	NR06	5,600 : 5,000 (1 : 0.88)
BT40-TRSNR6-170		65	170				
★BT40-TRSNR6-260		65	260	138	195		
BT50-TRSNR6-185		80	185	50	107		
★BT50-TRSNR6-275		80	275	138	185		
★HSK63A-TRSNR6-190		65	190	50	107		

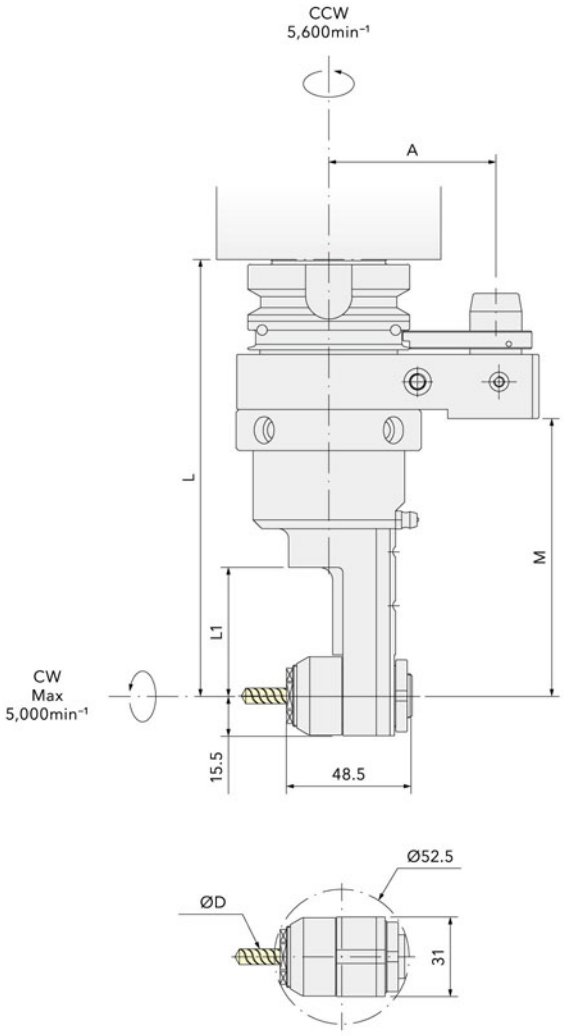
- 機械主軸旋轉方向應與角度頭相反。
- 旋轉方向需確認主軸為逆時針旋轉。
- 符號★：接單生產。

- The rotation direction of machine spindle should be reverse with angle shaft.
- Please make sure the spindle rotates in CCW direction.
- Symbol★: Customized production.

TRSN角度頭刀把

TRSN Angle Head Chucks, BT

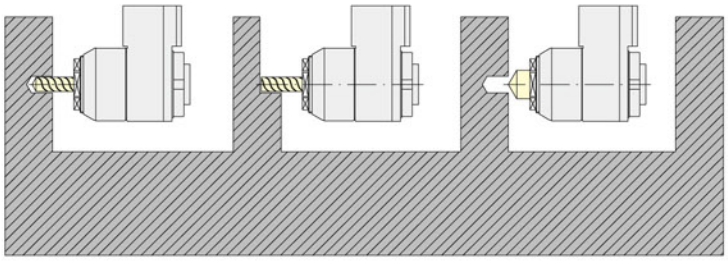






- 僅限搭配泛用型筒夾使用，不可使用銑刀型。
  Cannot use End-mill type collet.

- 鑽頭加工。 Drilling Machining.
- 立銑刀加工。 End-mill Machining.
- 倒角。 Chamfering.



規格 Part No.	夾持範圍 Ø Range	A	L	L1	M	泛用彈性筒夾 Precision Collets	最高轉數 (min⁻¹) (主軸：角軸) Max (min⁻¹) (Main Spindle: Angle Shaft)
BT30-TRSNR10-180	3.0~10.0	75	180	50	107	NR10	5,600 : 5,000 (1 : 0.88)
BT40-TRSNR10-170		65	170				
★BT40-TRSNR10-260		65	260	138	195		
BT50-TRSNR10-185		80	185	50	107		
★BT50-TRSNR10-275		80	275	138	185		
★HSK63A-TRSNR10-190		65	190	50	107		

- 機械主軸旋轉方向應與角度頭相反。
- 旋轉方向需確認主軸為逆時針旋轉。
- 符號★：接單生產。

- The rotation direction of machine spindle should be reverse with angle shaft.
- Please make sure the spindle rotates in CCW direction.
- Symbol★: Customized production.

角度頭刀把配件
Accessories for Angle Head Chucks, BT



Fig. 1

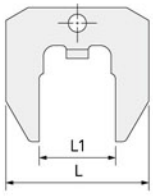
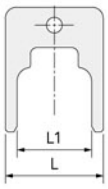




Fig. 2



● **TRH/TRN/UAH固定扳手**
TRH/TRN/UAH Fixed Wrenches

規格 Part No.	Fig.	L	L1
W-TRNR13	1	63.9	34.15
W-TRHC16			30.3
W-UAH	2	43.8	33.3



Fig. 1

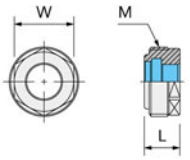
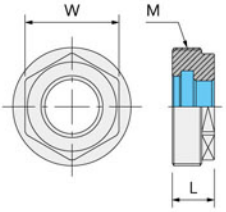




Fig. 2

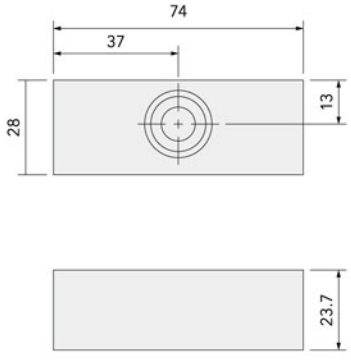


● **TRN/TRS螺帽**
TRN/TRS Clamping Nuts

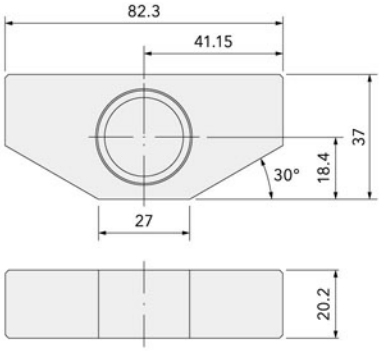
規格 Part No.	Fig.	L	W	M
N-TRS-NR06	1	7.2	12	M14.0*P1.00
N-TRS-NR10	2	8.5	19	M24.0*P1.00
N-TR-NR13		12	25	M30.0*P1.00

角度頭定位塊
Stop Block of Angle Head

● **BT40/BT50/HSK63A定位塊**
BT40/BT50/HSK63A Stop Block

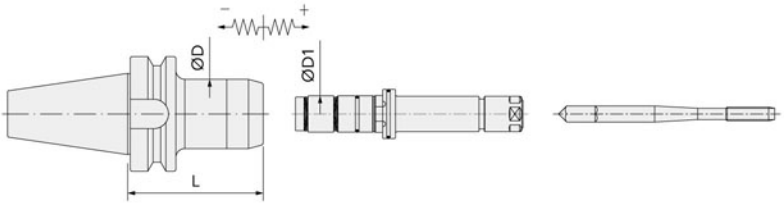


● **TR90-BT50定位塊**
TR90-BT50 Stop Block



WNR刀把本體
WNR Tapping Holder Main Bodies, BT



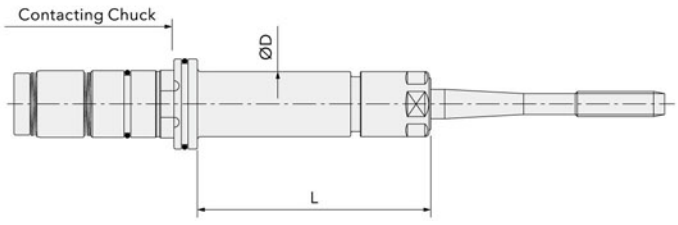




規格 Part No.	ØD	ØD1	伸縮長度 Length Flexibility		L
			壓縮 Comp.	伸長 Tens.	
BT30-WNR-20-070	38	20	0.7	0.7	70
BT40-WNR-20-075					75
BT50-WNR-20-090					90

WNR可換式絲攻夾持柄
WNR Changeable Tap Holders





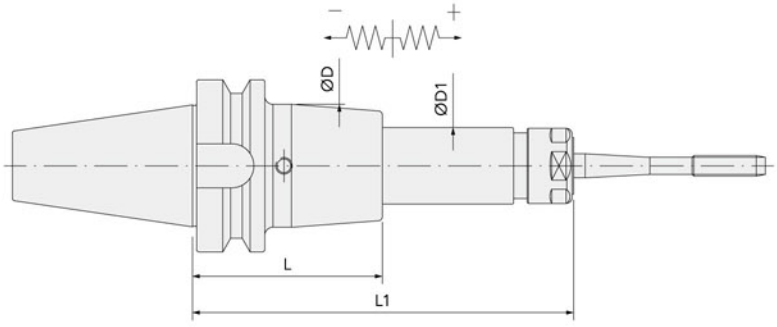


規格 Part No.	攻牙範圍 Tapping Range	ØD	L	彈性筒夾 Collets
S20T-WNR06-030	M02~M06	19.5	30	NR06-Exxx -Txxx
-070			70	
-100			100	
-150			150	
-200			200	
S20T-WNR10-030	M02~M12	27	30	NR10-Exxx -Txxx
-070			70	
-100			100	
-150			150	
-200			200	

WNR同步攻牙刀把

WNR Synchro Tap Holders, BT






P94


P94


P99

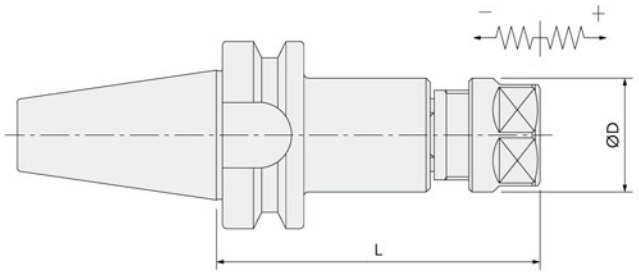

P100

規格 Part No.	攻牙範圍 Tapping Range	ØD	ØD1	L	L1	伸縮長度 Length Flexibility		彈性筒夾 Collets
						壓縮 Comp.	伸長 Tens.	
BT30-WNR10-100	M02~M12	45	28	65	100	0.3	1.2	NR10-Exxx -Txxx
-135					135			
-170					170			
BT40-WNR10-105	M02~M12	45	28	70	105	0.3	1.2	NR10-Exxx -Txxx
-140					140			
-175					175			
BT50-WNR10-125	M02~M12	45	28	90	125	0.3	1.2	NR10-Exxx -Txxx
-160					160			
-195					195			

WER攻牙刀把(伸縮型)(DIN6499)

WER Tapping Chucks (with length flexibility) (DIN6499), BT





P97 P98 P100

規格 Part No.	夾持範圍 Ø Range	攻牙範圍 Tapping Range	ØD	L	伸縮長度 Length Flexibility 壓縮 Comp.	伸縮長度 Length Flexibility 伸長 Tens.	彈性筒夾 Collets
BT30-WER16-090	0.5~10.0	M03~M10	28	90	3	7	ER16
-WER20-095	1.0~13.0	M03~M12	34	95			ER20
BT40-WER16-090	0.5~10.0	M03~M10	28	90	3	7	ER16
-WER20-095	1.0~13.0	M03~M12	34	95			ER20
-WER32-120	2.0~20.0	M06~M20	50	120		10	ER32
BT50-WER16-110	0.5~10.0	M03~M10	28	110	3	7	ER16
-WER20-115	1.0~13.0	M03~M12	34	115			ER20
-WER32-120	2.0~20.0	M06~M20	50	120		10	ER32



Fig. 1

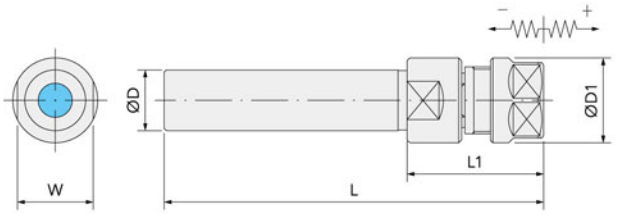
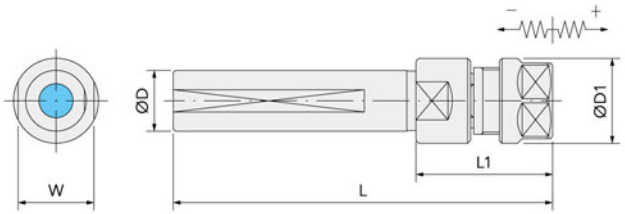


Fig. 2



P97 P98 P100

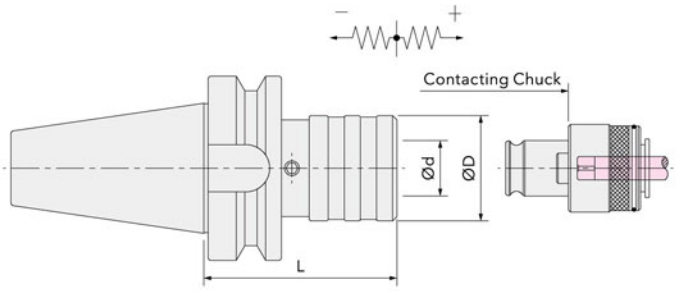
● WER-ST & SL直柄 & 側固式圓柄攻牙刀把－伸縮型
WER-ST & SL WER Tapping Chucks (with length flexibility)

規格 Part No.	Fig.	夾持範圍 Ø Range	攻牙範圍 Tapping Range	ØD	ØD1	L	L1	W	伸縮長度 Length Flexibility 壓縮 Comp.	伸縮長度 Length Flexibility 伸長 Tens.	彈性筒夾 Collets
ST20-WER16-135	1	0.5~10.0	M03~M10	20	28	135	55	25	3	7	ER16
-WER20-140		1.0~13.0	M03~M12		34	140	60	28			ER20
ST32-WER32-160	1	2.0~20.0	M06~M20	32	50	160	80	45	3	10	ER32
SL20-WER16-135	2	0.5 ~10.0	M03~M10	20	28	135	55	25	3	7	ER16
-WER20-140		1.0~13.0	M03~M12		34	140	60	28			ER20
SL32-WER32-160	2	2.0~20.0	M06~M20	32	50	160	80	45	3	10	ER32

WF快換式攻牙刀把(伸縮型)

WF Quick Change Tapping Chucks (with length compensation), BT






P78


P79


P81

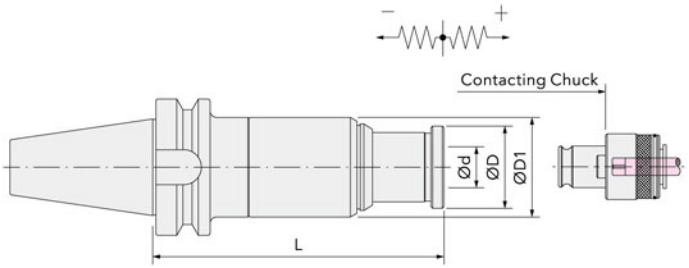

P81

規格 Part No.	攻牙範圍 Range	Ød	ØD	L	伸縮長度 Length Flexibility		絲攻筒夾 Collets
					壓縮 Comp.	伸長 Tens.	
BT30-WF12	M03~M12	19	36	69	8.0	6.5	TC312
-WF20	M08~M20	31	53	95	12.5	12.5	TC820
BT40-WF12	M03~M12	19	36	67	8.0	6.5	TC312
-WF20	M08~M20	31	53	92	12.5	12.5	TC820
-WF33	M14~M33	48	78	163	20.0	20.0	TC1433
BT50-WF12	M03~M12	19	36	100	8.0	6.5	TC312
-WF20	M08~M20	31	53	102	12.5	12.5	TC820
-WF33	M14~M33	48	78	143	20.0	20.0	TC1433

WFE快換式攻牙刀把(伸縮加長型)

WFE Quick Change Tapping Chucks (with length compensation), BT






P78


P79


P81

規格 Part No.	攻牙範圍 Range	Ød	ØD	ØD1	L	伸縮長度 Length Flexibility		絲攻筒夾 Collets
						壓縮 Comp.	伸長 Tens.	
BT40-WFE12-135	M03~M12	19	38	46	135	15.0	20.0	TC312
-165					165			
BT50-WFE12-135	M03~M12	19	38	46	135	15.0	20.0	TC312
-165					165			
-195					195			

WF快換式攻牙刀把(伸縮型)

WF Quick Change Tapping Chucks (with length compensation)



Fig. 1

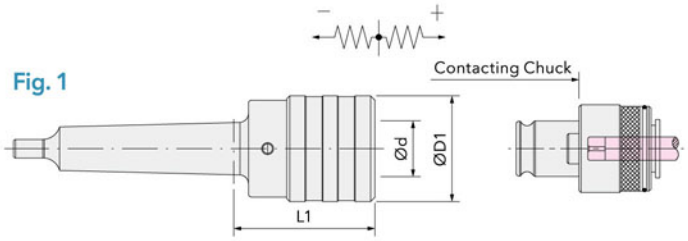
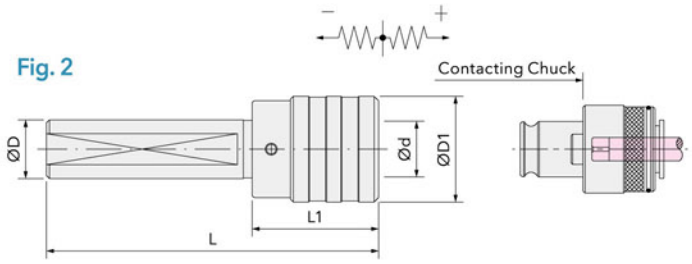


Fig. 2




P78

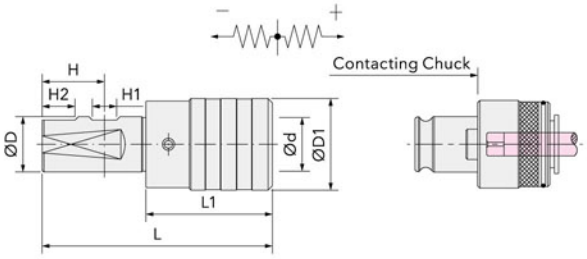

P79


P81


P81

規格 Part No.	Fig.	攻牙範圍 Range	Ød	ØD	ØD1	L	L1	伸縮長度 Length Flexibility 壓縮 Comp.	伸縮長度 Length Flexibility 伸長 Tens.	絲攻筒夾 Collets
MT2-WF12	1	M03~M12	19	—	36	—	47	8.0	6.5	TC312
MT3-WF12							50			
MT4-WF12							65			
MT3-WF20		M08~M20	31		53		68	12.5	12.5	TC820
MT4-WF20							70			
MT4-WF33		M14~M33	48		78		124	20.0	20.0	TC1433
SL20-WF12	2	M03~M12	19	20	36	112	42	8.0	6.5	TC312
SL25-WF20		M08~M20	31	25	53	143	63	12.5	12.5	TC820
SL32-WF20				32						






P78


P79


P81

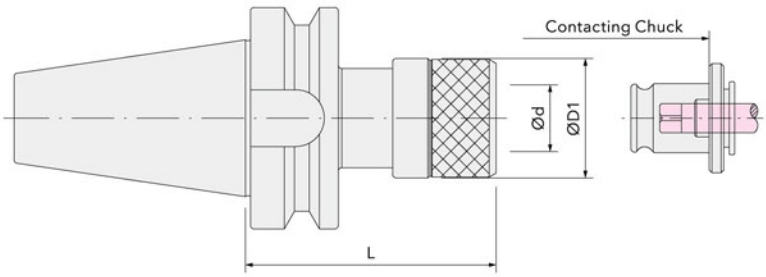

P81

規格 Part No.	攻牙範圍 Range	Ød	ØD	ØD1	L	L1	H	H1	H2	伸縮長度 Length Flexibility 壓縮 Comp.	伸縮長度 Length Flexibility 伸長 Tens.	絲攻筒夾 Collets
SL20-WF12E	M03~M12	19	20	36	92	42	25	11	—	8.0	6.5	TC312
-WF20E	M08~M20	31		53	121	71				12.5	12.5	TC820
SL25-WF12E	M03~M12	19	25	36	98	42	32	12	17	8.0	6.5	TC312
-WF20E	M08~M20	31		53	127	71				12.5	12.5	TC820
SL32-WF20E	M08~M20	31	32	53	131	71	36	14	19	12.5	12.5	TC820
SL40-WF20E	M08~M20	31	40	53	141	71	40	14	19	12.5	12.5	TC820

SF快換式攻牙刀把(剛性)

SF Quick Change Tapping Chucks (rigid type), BT













規格 Part No.	攻牙範圍 Range	Ød	ØD1	L	絲攻筒夾 Collets
BT30-SF12	M03~M12	19	34	66	TC312B
-SF20	M08~M20	31	49	80	TC820B
BT40-SF12	M03~M12	19	34	72	TC312B
-SF20	M08~M20	31	49	91	TC820B
-SF33	M14~M33	48	73.5	130	TC1433B
BT50-SF12	M03~M12	19	34	78	TC312B
-SF20	M08~M20	31	49	95	TC820B
-SF33	M14~M33	48	73.5	142	TC1433B



Fig. 1

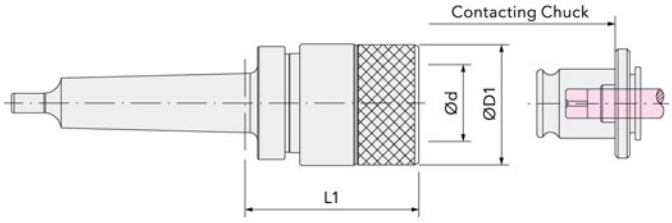
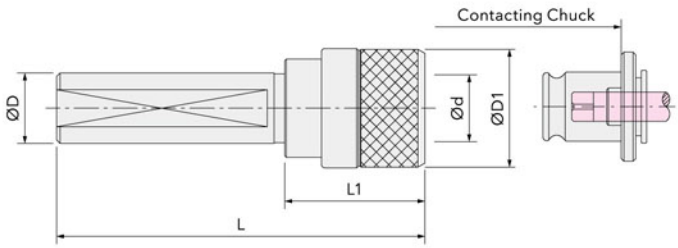


Fig. 2









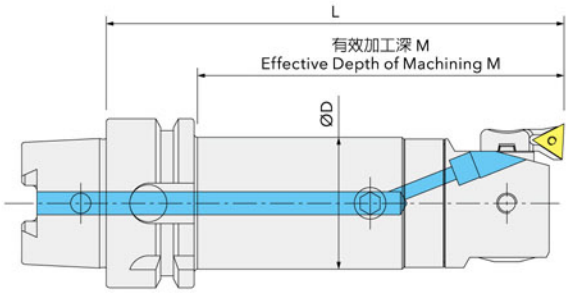


規格 Part No.	Fig.	攻牙範圍 Range	Ød	ØD	ØD1	L	L1	絲攻筒夾 Collets
MT2-SF12	1	M03~M12	19	—	34	—	44	TC312B
MT3-SF20		M08~M20	31		49		61	TC820B
MT4-SF20							77	
SL20-SF12	2	M03~M12	19	20	34	105	40	TC312B
SL25-SF20(B+E)		M08~M20	31	25	49	118	60	TC820B

BSD精搪組

BSD Fine Boring Systems, HSK






P13


P14


P15

特性 Features

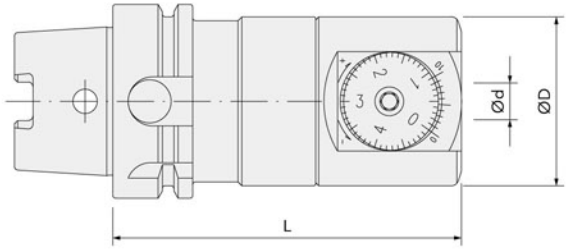
- BSD19~BSD90 其搪孔範圍為：Ø20~Ø153。
- 標準刀把皆有中心出水功能，且為粗搪、精搪共通刀桿。
- Boring range of BSD19~BSD90: Ø20~Ø153.
- The holder is coolant type and compatible for rough and fine boring system.

整組 Set		搪孔範圍 Ø Range	M	ØD	L
刀把規格 Shanks	精搪頭 Boring Heads				
HSK50A-AK1-070	BSD19	20~ 26	71	19	100
-AK2-080	BSD24	25~ 33	84	24	115
-AK3-095	BSD31	32~ 42	104	31	135
-AK4-088	BSD39	41~ 54		39	
-AK5-078	BSD50	53~ 70		50	
HSK63A-AK1-070	BSD19	20~ 26	71	19	100
-AK2-080	BSD24	25~ 33	84	24	115
-AK3-095	BSD31	32~ 42	104	31	135
-AK4-088	BSD39	41~ 54		39	
-AK5-078	BSD50	53~ 70		50	
-AK6-069	BSD64	68~100	109	64	140

FBH小徑精搪組

FBH Modular Fine Boring Systems, HSK






P17


P18


P18

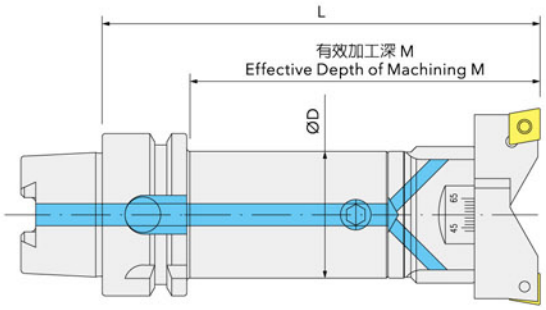

P19

整組 Set		搪孔範圍 Ø Range	Ød	ØD	L
刀把規格 Shanks	精搪頭 Boring Heads				
HSK50A-FBH55-066	FBH55	3~32	12	55	113
HSK63A-FBH55-066	FBH55	3~32	12	55	113
-AK6-069	FBH64	3~40	16	64	116

BSH雙刃搪刀組

BSH Twin-cutter Boring Systems, HSK






P13


P15


P16

特性 Features

- BSH25~BSH125 其搪孔範圍為：Ø25~Ø175。
- 標準刀把皆有中心出水功能，且為粗搪、精搪共通刀桿。
- 刀片座與本體均有齒槽，結合緊密、更穩固，提高工作效率。
- Boring range of BSH25~BSH125: Ø25~Ø175.
- The holder is coolant type and compatible for rough and fine boring system.
- Both insert holder and boring head have gullets, it could make combination tightly, more stable.

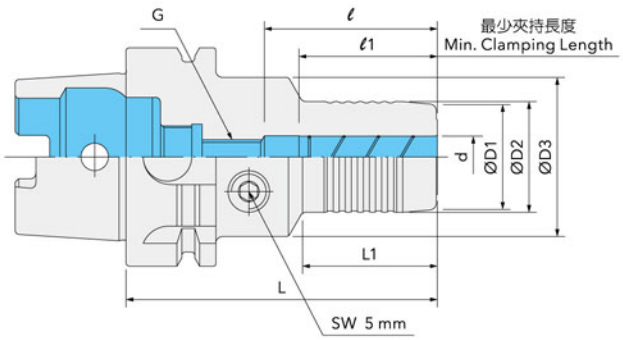
整組 Set		搪孔範圍 Ø Range	M	ØD	L
刀把規格 Shanks	精搪頭 Boring Heads				
HSK50A-AK2-080	BSH25	25~ 33	86	24	115
-AK3-095	BSH32	32~ 45	101	31	130
-AK4-088	BSH44	44~ 63	103	39	
-AK5-078	BSH62	62~ 89	106	50	135
HSK63A-AK2-080	BSH25	25~ 33	86	24	115
-AK3-095	BSH32	32~ 45	101	31	130
-AK4-088	BSH44	44~ 63	103	39	
-AK5-078	BSH62	62~ 89	108	50	135
-AK6-069	BSH88	88~126		64	
	BSH125	125~175	113		145

HEC油壓刀把

HEC Hydraulic Chucks, HSK




P95



規格 Part No.	Ød	L	L1	ØD1	ØD2	ØD3	ℓ	ℓ1	G
HSK63A-HEC06-080	6	80	29	26	28	46	40	30	M05*P0.80
-HEC08-080	8								M06*P1.00
-HEC10-090	10	90	39	28	30		50	40	M08*P1.25
-HEC12-090	12			30	32				M10*P1.50
-HEC14-090	14			36	38				
-HEC16-090	16								
-HEC20-095	20	95	42	45	48	50	54	49	
-HEC25-095	25	96	42	48	51	53	55	50	
-HEC32-095	32	95	28	59	62	75	62	52	—

NR高速精密筒夾刀把

NR High Speed Precision Collet Chucks, HSK



Fig. 1

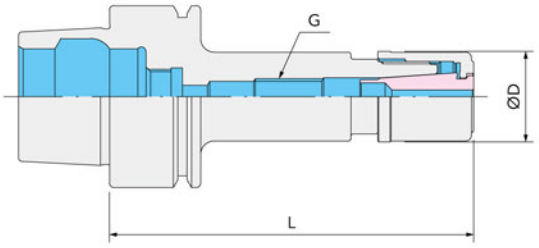
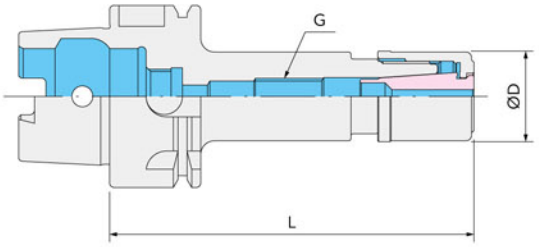




Fig. 2




P93


P94


P99


P101

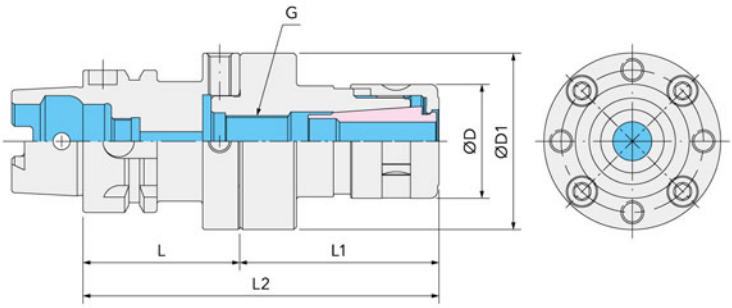

P101

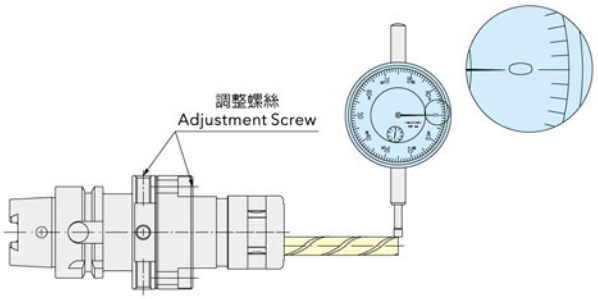
規格 Part No.	Fig.	夾持範圍 Ø Range	ØD	L	G	彈性筒夾 Collets	扳手 Wrench	最高轉速 Max. rpm
HSK40E-NR06-060	1	3.0~ 6.0	19.5	60	—	NR06	W-D19.5	30,000
-NR06-080				80	M08*P1.25			
-NR10-060		3.0~10.0	27	60	—	NR10	W-D27	
-NR10-080				80				
-NR13-090		3.0~13.0	34	90		NR13	W-D34	
-NR16-070		3.0~16.0	40	70		NR16	W-D40	
-NR16-090				90				
HSK50A-NR06-060	2	3.0~ 6.0	19.5	60	—	NR06	W-D19.5	30,000
-NR06-080				80	M08*P1.25			
-NR10-080		3.0~10.0	27	80	—	NR10	W-D27	
-NR13-090		3.0~13.0	34	90		NR13	W-D34	
-NR16-100		3.0~16.0	40	100	M18*P1.50	NR16	W-D40	
HSK63A-NR06-060	2	3.0~ 6.0	19.5	60	—	NR06	W-D19.5	30,000
-NR06-080				80	M08*P1.25			
-NR06-100				100				
-NR06-120				120				
-NR10-100		3.0~10.0	27	100	M12*P1.75	NR10	W-D27	
-NR13-090		3.0~13.0	34	90	—	NR13	W-D34	
-NR13-120				120	M14*P1.00			
-NR16-120		3.0~16.0	40	120	M18*P1.50	NR16	W-D40	

NR-AZWD可調整精度刀把

NR-AZWD Adjustable Chucks, HSK









特性 Features

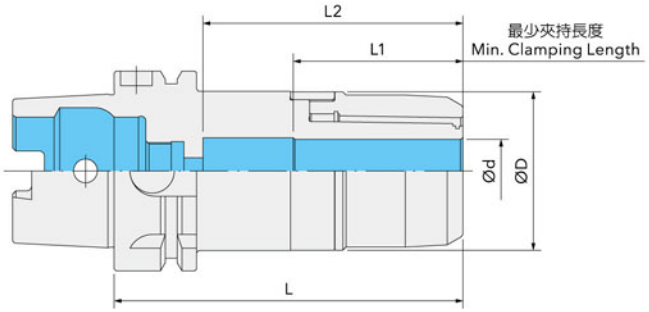
- 刀尖位置可調至 "0" 位置。
- 機械主軸、夾頭、刀具的累積誤差值可一次調整補正。
- The tool tip position can be adjusted to "0" position.
- The accumulated error value of the spindle, the chuck, and the tool can all be adjusted and corrected at the same time.

規格 Part No.	夾持範圍 Ø Range	ØD	ØD1	L	L1	L2	G	彈性筒夾 Collets	扳手 Wrench
HSK50A-NR16AZWD-110	3.0~16.0	40	62	55	55	110	M18*P1.50	NR16	W-FK06
-125					70	125			
HSK63A-NR16AZWD-110	3.0~16.0	40	62	55	55	110	M18*P1.50	NR16	W-FK06
-125					70	125			
HSK63A-NR25AZWD-130	16.0~25.0	55	80	60	70	130	M28*P1.50	NR25	W-FK08
HSK100A-NR25AZWD-125	16.0~25.0	55	80	60	70	125	M28*P1.50	NR25	W-FK08

C-H高速強力精密銑刀夾頭

C-H High Speed Precision Power Milling Chucks, HSK






P96


P101

特性 Features

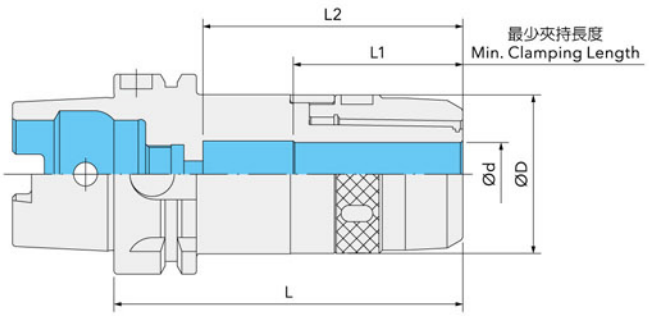
- 特殊的防塵設計，刀把使用壽命增加 50% 以上。
- 請注意：若螺帽旋緊扭力超過限度，將導致刀把、螺帽或筒夾永久損壞。
- Special dust-proof design can extend more than 50% lifetime of tool holders.
- Caution: Excessive tightening torque will damage the chucks, nut or / and collet permanently.

規格 Part No.	Ød	ØD	L	L1	L2	彈性筒夾 Collets	扳手 Wrench
HSK40A-C20H-110	20	50	110	53	83	ARH20	W-D48
HSK50A-C20H-110	20	50	110	53	83	ARH20	W-D48
HSK63A-C20H-110	20	50	110	53	83	ARH20	W-D48
-C25H-110	25	57		55.5	83	ARH25	W-D55
-C32H-110	32	69		60	84	ARH32	W-D68
HSK100A-C32H-135			135		90		

C型強力精密銑刀夾頭

C Type Precision Power Milling Chucks, HSK





P96


P101

特性 Features

- 特殊的防塵設計，刀把使用壽命增加 50% 以上。
- 請注意：若螺帽旋緊扭力超過限度，將導致刀把、螺帽或筒夾永久損壞。
- Special dust-proof design can extend more than 50% lifetime of tool holders.
- Caution: Excessive tightening torque will damage the chucks, nut or / and collet permanently.

規格 Part No.	Ød	ØD	L	L1	L2	彈性筒夾 Collets	扳手 Wrench
HSK40A-C20-110	20	50	110	53	83	ARH20	W-FK08
HSK50A-C20-110	20	50	110	53	83	ARH20	W-FK08
HSK63A-C20-110	20	50	110	53	83	ARH20	W-FK08
-C25-110	25	57		55.5	83	ARH25	W-FK09
-C32-110	32	69		60	84	ARH32	W-FK10
HSK100A-C32-110			135		90		

HC高速精密筒夾刀把

HC High Speed Precision Collet Chucks, HSK



Fig. 1

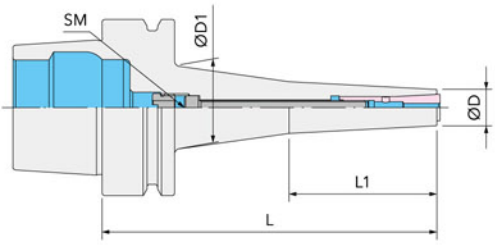




Fig. 2

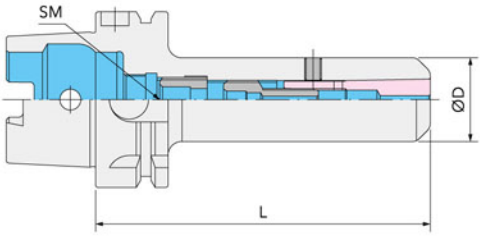
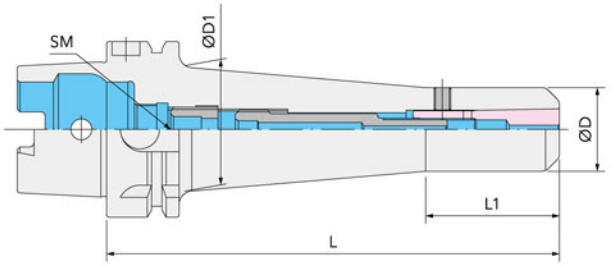




Fig. 3



特性 Features

- 適用於高速輕切削。
- 此刀把有自緊功能。
- Suitable for high speed & light cutting.
- These chucks have self-holding function.

規格 Part No.	Fig.	夾持範圍 Ø Range	ØD	ØD1	L	L1	彈性筒夾 Collets	旋緊扭矩 Nm Tightening Torque	扳手(SM) Wrench
HSK40E-HC06-075	1	3.0~ 6.0	13	22	75	26	HC06	4	4
HSK50E-HC06-080	1	3.0~ 6.0	13	22	80	26	HC06	4	4
HSK63E-HC06-075	1	3.0~ 6.0	13	22	75	26	HC06	4	4
-095				25	95	45			
-120				30	120	53			
HSK63A-HC10-120	2	3.0~10.0	30	—	120	—	HC10	12	6
-160	3			45	162.4	48			

ER彈性筒夾刀把

ER Collet Chucks (DIN6499), HSK



Fig. 1

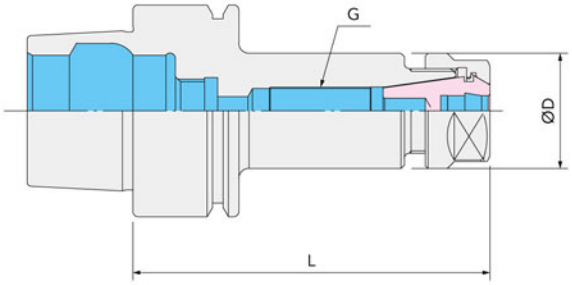
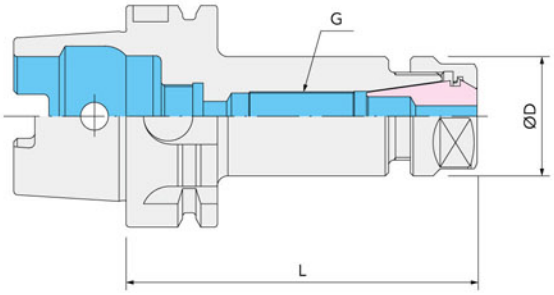




Fig. 2











規格 Part No.	Fig.	夾持範圍 Ø Range	ØD	L	G	螺帽 Nut	彈性筒夾 Collets	扳手 Wrench
HSK40E-ER16-080	1	0.5~10.0	28	80	M11*P1.00	ER16SH	ER16	W-ER16
-ER20-080		1.0~13.0	34		M14*P1.00	ER20SH	ER20	W-ER20
-ER25-080		1.0~16.0	42		M18*P1.50	ER25SH	ER25	W-ER25
-ER32-080		2.0~20.0	50		M10*P1.50	ER32SH	ER32	W-ER32
HSK50A-ER16-100	2	0.5~10.0	28	100	M11*P1.00	ER16SH	ER16	W-ER16
-ER20-100		1.0~13.0	34		M14*P1.00	ER20SH	ER20	W-ER20
-ER25-100		1.0~16.0	42		M18*P1.50	ER25SH	ER25	W-ER25
-ER32-080		2.0~20.0	50	80	—	ER32SH	ER32	W-ER32
-100				100	M24*P1.50			
HSK63A-ER11-075	2	0.5~ 7.0	19	75	M08*P1.00	ER11SH	ER11	W-ER11
-ER16-100		0.5~10.0	28	100	M11*P1.00	ER16SH	ER16	W-ER16
-160				160				
-ER20-100		1.0~13.0	34	100	M14*P1.00	ER20SH	ER20	W-ER20
-160				160				
-ER25-070		1.0~16.0	42	70	—	ER25SH	ER25	W-ER25
-100				100	M18*P1.50			
-ER32-080		2.0~20.0	50	80	—	ER32SH	ER32	W-ER32
-100				100	M24*P1.50			
-ER40-080		2.5~26.0	63	80	—	ER40SH	ER40	W-ER40
-120				120	M28*P1.50			

SLN側固式刀把

SLN Weldon Chucks (DIN1835B), HSK



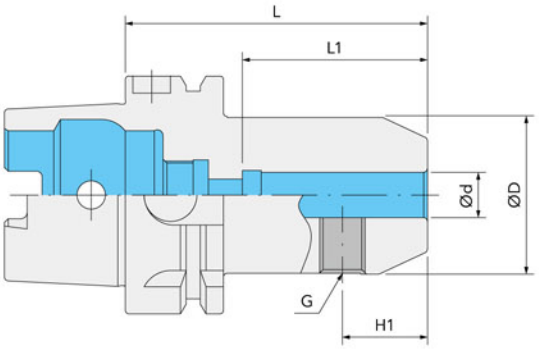


Fig. 1

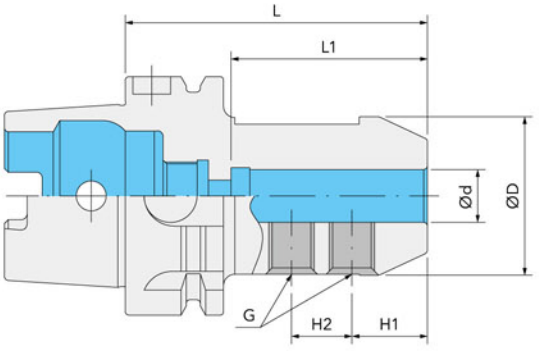


Fig. 2

規格 Part No.	Fig.	Ød	ØD	L	L1	H1	H2	G
HSK40A-SLN06-060	1	6	25	60	35	18	—	M06*P1.00
-SLN08-060		8	28		36	17		M08*P1.25
-SLN10-060		10	35		39	20		M10*P1.50
-SLN12-070		12	42	70	49	22.5		M12*P1.75
-SLN14-075		14		75	50	20		
-SLN16-075		16	48		52	24		M14*P2.00

• 以上接單生產。 • Customized Production.

HSK50A-SLN06-065	1	6	25	65	22	18	—	M06*P1.00
-SLN08-065		8	28		36	17		M08*P1.25
-SLN10-065		10	35		39	20		M10*P1.50
-SLN12-080		12	42	80	49	22.5		M12*P1.75
-SLN14-080	2	14			50	20	16	
-SLN16-080	1	16	48		52	24	—	M14*P2.00
-SLN18-080		18	50			20		M12*P1.75
-SLN20-080		20	52		54	25		M16*P2.00

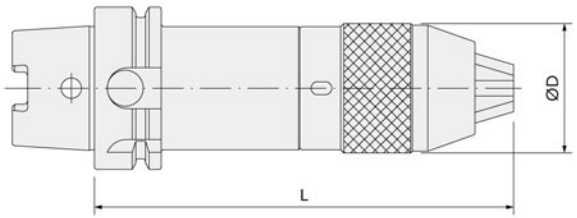
• 以上接單生產。 • Customized Production.

HSK63A-SLN06-065	1	6	25	65	22	18	—	M06*P1.00
-SLN08-065		8	28		31	17		M08*P1.25
-SLN10-065		10	35		39	20		M10*P1.50
-SLN12-080		12	42	80	49	22.5		M12*P1.75
-SLN14-080	2	14			52	20	16	
-SLN16-080	1	16	48			24	—	M14*P2.00
-SLN18-080	2	18	50			20	18	M12*P1.75
-SLN20-080	1	20	52			25	—	M16*P2.00
-SLN25-110	2	25	62	110	65	24	25	M18*P2.00
-SLN32-110		32	72		80		28	M20*P2.00
-SLN40-120		40		120	90			M14*P2.00

APU鑽夾刀把

APU CNC Drill Chucks, HSK





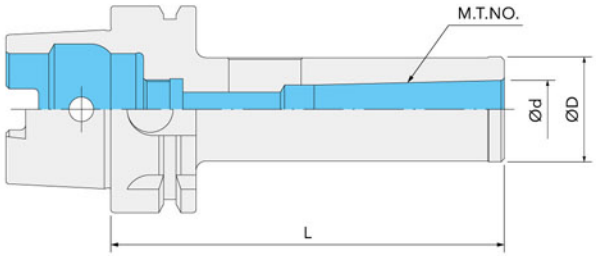
- 隨附扳手。
- Delivery with wrench.

規格 Part No.	夾持範圍 Ø Range	APU夾頭 APU Drill Chuck	ØD	L
HSK40A-APU08-110	1~ 8	APU08	36.0	110
HSK50A-APU08-120	1~ 8	APU08	36.0	120
-APU13-140	1~13	APU13	50.5	140
HSK63A-APU08-120	1~ 8	APU08	36.0	120
-APU13-140	1~13	APU13	50.5	140
-APU16-165	3~16	APU16	57.0	165

MT莫氏錐度刀把

MT Morse Taper Holders, HSK





莫氏錐度尺寸與對應鑽頭直徑
Morse Taper Size and Corresponding Drill Diameter

M.T. No.	鑽頭直徑 Ø Drill Diameter
MT1	3 ~14
MT2	14.5~23
MT3	23.5~31.5
MT4	32 ~50
MT5	51 ~76

- 鑽頭直徑依 JIS B4302 1 規範。
- Drill diameter: JIS B4302 1 Standard.

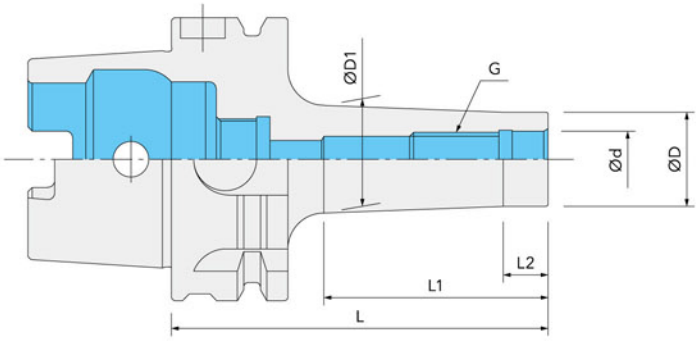
規格 Part No.	M.T. No.	Ød	ØD	L
HSK50A-MT1-100	MT1	12.065	25	106
-MT2-120	MT2	17.780	32	120
-MT3-140	MT3	23.825	40	140
HSK63A-MT1-100	MT1	12.065	25	106
-MT2-120	MT2	17.780	32	120
-MT3-140	MT3	23.825	40	140
-MT4-160	MT4	31.267	48	166

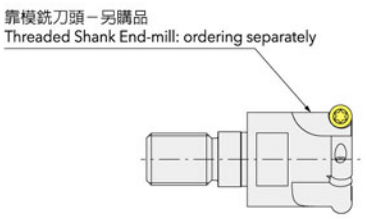
鎖牙式靠模銑刀把

Adaptors for Threaded Shank End-mill, HSK









規格 Part No.	Ød	ØD	ØD1	L	L1	L2	G
HSK40A-M06-078	6.5	9.8	20	78	53	10	M06*P1.00
-M08-078	8.5	13.0	23				M08*P1.25
-M10-078	10.5	18.0	25				M10*P1.50
-M12-078	12.5	21.0	24				M12*P1.75
HSK50A-M06-084	6.5	9.8	20	84	50	10	M06*P1.00
-M08-084	8.5	13.0	23				M08*P1.25
-M10-084	10.5	18.0	25				M10*P1.50
-M12-084	12.5	21.0	24				M12*P1.75
HSK63A-M06-084	6.5	9.8	20	84	50	10	M06*P1.00
-M08-084	8.5	13.0	23				M08*P1.25
-M10-084	10.5	18.0	25				M10*P1.50
-M12-084	12.5	21.0	24				M12*P1.75
-M16-084	17.0	29.0	34				M16*P2.00

SM殼型銑刀把

SM Shell Mill Holders, HSK



Fig. 1

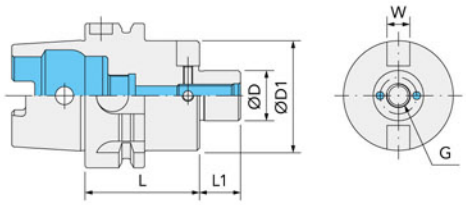
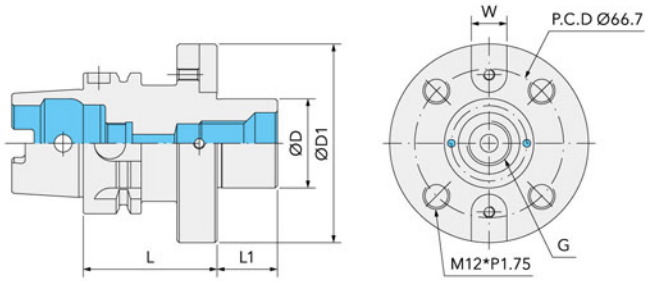


Fig. 2

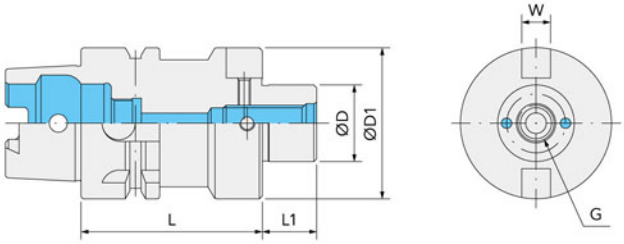


規格 Part No.	Fig.	ØD	ØD1	L	L1	G	W
HSK40A-SM16-050	1	16	38	50	16	M08*P1.25	8
-SM22-050		22	48		18	M10*P1.50	10
HSK50A-SM16-050	1	16	38	50	16	M08*P1.25	8
-SM22-060		22	48	60	18	M10*P1.50	10
-SM27-060		27	58		20	M12*P1.75	12
-SM32-060		32	62		23	M16*P2.00	14
HSK63A-SM16-050	1	16	38	50	16	M08*P1.25	8
-SM22-050		22	48		18	M10*P1.50	10
-100				100			
-SM27-060		27	58	60	20	M12*P1.75	12
-100				100			
-SM32-060		32	62	60	23	M16*P2.00	14
-SM40-060	2	40	89		27	M20*P2.50	15.875

FMA面銑刀把

FMA Face Mill Holders, HSK



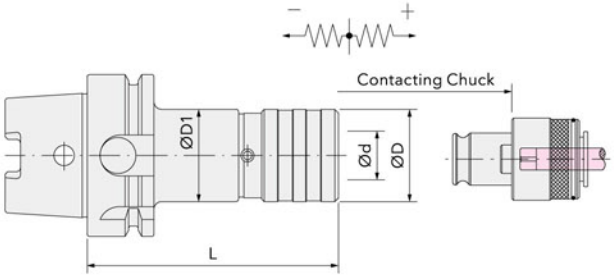


規格 Part No.	ØD	ØD1	L	L1	G	W
HSK50A-FMA25.4-060	25.4	50	60	18	M12*P1.75	9.525
HSK63A-FMA25.4-060	25.4	50	60	18	M12*P1.75	9.525
-100			100			

WF快換式攻牙刀把(伸縮型)

WF Quick Change Tapping Chucks (with length compensation), HSK











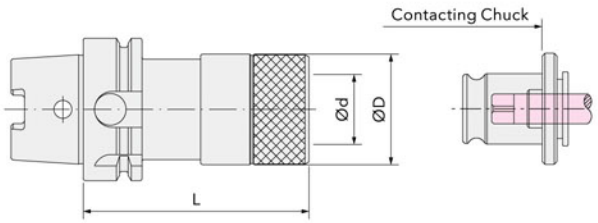


規格 Part No.	攻牙範圍 Range	Ød	ØD	ØD1	L	伸縮長度 Length Flexibility		絲攻筒夾 Collets
						壓縮 Comp.	伸長 Ten.	
HSK50A-WF12	M03~M12	19	36	36	98	8	6.5	TC312
-WF20	M08~M20	31	53	53	135	12.5	12.5	TC820
HSK63A-WF12	M03~M12	19	36	36	98	8	6.5	TC312
-WF20	M08~M20	31	53	53	135	12.5	12.5	TC820
-WF33	M14~M33	48	78	72	210	20.0	20.0	TC1433
HSK100A-WF12	M03~M12	19	36	36	110	8	6.5	TC312
-WF20	M08~M20	31	53	53	145	12.5	12.5	TC820
-WF33	M14~M33	48	78	78	210	20.0	20.0	TC1433

SF快換式攻牙刀把(剛性)

SF Quick Change Tapping Chucks (rigid type), HSK











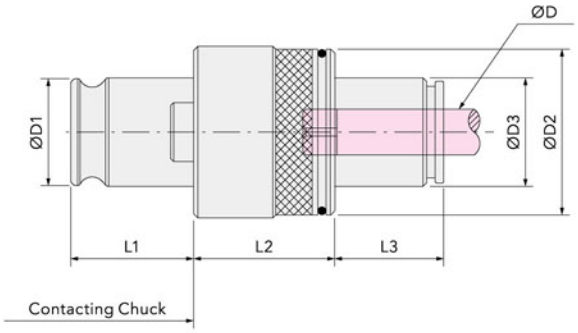


規格 Part No.	攻牙範圍 Range	Ød	ØD	L	絲攻筒夾 Collets
HSK50A-SF12	M03~M12	19	34	65	TC312B
-SF20	M08~M20	31	49	98	TC820B
HSK63A-SF12	M03~M12	19	34	65	TC312B
-SF20	M08~M20	31	49	100	TC820B
-SF33	M14~M33	48	73.5	137	TC1433B
HSK100A-SF12	M03~M12	19	34	72	TC312B
-SF20	M08~M20	31	49	90	TC820B
-SF33	M14~M33	48	73.5	126	TC1433B

TC加長型快換式絲攻筒夾(扭力裝置型)

TC Quick Change Tap Collets (with overload clutch)





	攻牙範圍 Range	ØD1	ØD2	ØD3	L1	L2	L3
TC312L	M03	19.0	32.5	15	21.5	24.5	20.0
	M04~M14			18			
TC820L	M08~M12	31.0	50.5		35.0	30.5	
	M14~M24			29			

● 絲攻筒夾
TAP Collets, Type JIS

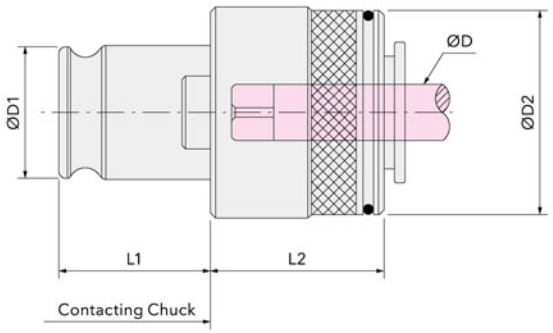
JIS絲攻 JIS Tap			絲攻柄尺寸 Tap Shank		訂單編號 Order No.	
			柄徑 Shank ØD	四方孔 Square □	TC312L (#1)	TC820L (#2)
M3		#5, #6	4.0	3.2	010L-01	
M4	M4.5	#8	5.0	4.0	010L-02	
M5	M5.5	#10	5.5	4.5	010L-03	
M6		UNC1/4	6.0		010L-04	
		UNC5/16	6.1	5.0	010L-05	
M8	M7		6.2		010L-06	020L-01
M10	M9	UNC3/8	7.0	5.5	010L-07	020L-02
	M11	UNC7/16	8.0	6.0	010L-08	020L-03
M12			8.5	6.5	010L-09	020L-04
		UNC1/2	9.0	7.0	010L-10	020L-05
M14	M15	UNC9/16	10.5	8.0	*010L-11	020L-06
		UNC5/8	12.0	9.0		020L-07
M16			12.5	10.0		020L-08
M18		UNC3/4	14.0	11.0		020L-10
M20			15.0	12.0		020L-11
M22		UNC7/8	17.0	13.0		020L-12
M24	M25		19.0	15.0		*020L-13
PT1/8			8.0	6.0	010L-12	020L-14
PT1/4			11.0	9.0	*010L-13	020L-15
PT3/8			14.0	11.0		020L-16
PT1/2			18.0	14.0		020L-17

- "＊" 適用輕合金加工。
- "＊" Only suitable for light / aluminum tapping.

TC快換式絲攻筒夾(扭力裝置型)

TC Quick Change Tap Collets (with overload clutch)





	攻牙範圍 Range	ØD1	ØD2	L1	L2
TC312	M03~M12	19.0	32.5	21.5	24.5
TC820	M08~M20	31.0	50.5	35.0	30.5
TC1433	M14~M33	48.0	73.0	55.5	41.0

絲攻 Tap			規格 Standard	絲攻柄尺寸 Tap Shank		訂單編號 Order No.		
				柄徑 Shank ØD	四方孔 Square □	TC312 (#1)	TC820 (#2)	TC1433 (#3)
M1 ~M1.8			DIN371	2.5	2.1	011-01		
M1 ~M2			ISO529		2.0	013-01		
M2 ~M2.5			DIN371	2.8	2.1	011-02		
M2.2~M2.5			ISO529		2.24	013-02		
M2 ~M2.5			JIS	3.0	2.5	010-14		
M3			ISO529/2283	2.24	1.8	014-01		
			ISO529	3.15	2.5	013-03		
			DIN371	3.5	2.7	011-03		
		#5, #6	JIS	4.0	3.2	010-01		
M3.5			ISO529/2283	2.5	2.0	014-02		
			DIN376		2.1	012-01		
			ISO529	3.55	2.8	013-04		
			DIN371	4.0	3.0	011-04		
M4			DIN376	2.8	2.1	012-02		
			ISO529/2283	3.15	2.5	014-03		
			ISO529	4.0	3.15	013-05		
			DIN371	4.5	3.4	011-05		
	M4.5	#8	JIS	5.0	4.0	010-02		
M4.5			DIN376	3.5	2.7	012-03		
			ISO529/2283	3.55	2.8	014-04		
			ISO529	4.5	3.55	013-06		
			DIN371	6.0	4.9	011-06		
M5			DIN376	3.5	2.7	012-04		
			ISO529/2283	4.0	3.15	014-05		
			ISO529	5.0	4.0	013-07		
	M5.5	#10	JIS	5.5	4.5	010-03		
			DIN371	6.0	4.9	011-07	021-01	
M6			DIN376	4.5	3.4	012-05		
			ISO529/2283		3.55	014-06		
			DIN371	6.0	4.9	011-08	021-02	
		UNC1/4	JIS		4.5	010-04		
			ISO529	6.3	5.0	013-08	023-01	

TC快換式絲攻筒夾(扭力裝置型)

TC Quick Change Tap Collets (with overload clutch)

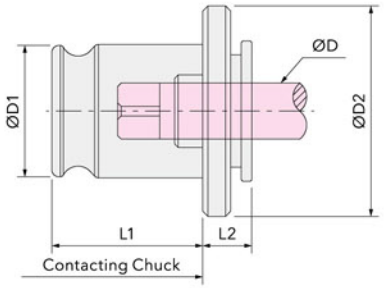
絲攻 Tap			規格 Standard	絲攻柄尺寸 Tap Shank		訂單編號 Order No.		
				柄徑 Shank ØD	四方孔 Square □	TC312 (#1)	TC820 (#2)	TC1433 (#3)
M7			DIN376	5.5	4.3	012-06		
			ISO529/2283	5.6	4.5	014-07		
			ISO529	7.1	5.6	013-09	023-02	
		UNC5/16	JIS	6.1	5.0	010-05		
M8			DIN376	6.0	4.9	012-07	022-01	
	M7		JIS	6.2	5.0	010-06	020-01	
			ISO529/2283	6.3		014-08	024-01	
			DIN371	8.0	6.2	011-09	021-03	
			ISO529		6.3	013-10	023-03	
M9			ISO529/2283	7.1	5.6	014-09	024-02	
			ISO529	9.0	7.1	013-11	023-04	
M10	M9	UNC3/8	JIS, DIN376	7.0	5.5	010-07	020-02	
			ISO529/2283	8.0	6.3	014-10	024-03	
			DIN371, ISO529	10.0	8.0	011-10	021-04	
	M11	UNC7/16	JIS	8.0	6.0	010-08	020-03	
		UNC1/2		9.0	7.0	010-10	020-05	
M12				8.5	6.5	010-09	020-04	
			DIN376	9.0	7.0	012-09	022-03	
			ISO529/2283		7.1	014-11	024-04	
M14	M15	UNC9/16	JIS	10.5	8.0	010-11*	020-06	030-01
			DIN376	11.0	9.0	012-10*	022-04	032-01
			ISO529/2283	11.2		014-12*	024-05	034-01
		UNC5/8	JIS	12.0			020-07	030-02
M16			DIN376				022-05	032-02
			JIS, ISO529/2283	12.5	10.0		020-08	030-03
M18		UNC7/8	JIS, DIN376	14.0	11.0		020-10	030-05
			ISO529/2283		11.2		024-07	034-03
M20							024-08	034-04
			JIS	15.0	12.0		020-11	030-06
			DIN376	16.0			022-07	032-04
M22			ISO529/2283		12.5		024-09	034-05
		UNC7/8	JIS	17.0	13.0		020-12	030-07
			DIN376	18.0	14.5		022-08	032-05
M24			ISO529/2283		14.0		024-10*	034-06
			DIN376		14.5		022-09*	032-06
	M25		JIS	19.0	15.0		020-13	030-08
M27	M26	UNC1"		20.0				030-09
			DIN376, ISO529/2283		16.0			032-07
M28			JIS	21.0	17.0			030-10
		UNC1-1/8		22.0				030-11
M30			ISO529/2283	20.0	16.0			034-08
			DIN376	22.0	18.0			032-08
			JIS	23.0	17.0			030-12
M32		UNC1-1/4		24.0	19.0			030-13
M33			ISO529/2283	22.4	18.0			034-09
			DIN376	25.0	20.0			032-09
			JIS		19.0			030-14
M35	M34	UNC1-3/8		26.0	21.0			030-15
M36			ISO529/2283	25.0	20.0			034-10
			JIS	28.0	21.0			030-16
			DIN376		22.0			032-10
PT1/8			JIS	8.0	6.0	010-12	020-14	
PT1/4				11.0	9.0	010-13*	020-15	030-17
PT3/8				14.0	11.0		020-16	030-18
PT1/2				18.0	14.0		020-17*	030-19
PT3/4				23.0	17.0			030-20
PT1				26.0	21.0			030-21

- "＊" 適用輕合金加工。
- "＊" Only suitable for light / aluminum tapping.

TC快換式絲攻筒夾(剛性)

TC Quick Change Tap Collets (rigid type)





	攻牙範圍 Range	ØD1	ØD2	L1	L2
TC312B	M03~M12	19.0	30.0	21.6	7.0
TC820B	M08~M20	31.0	48.0	35.1	11.0
TC1433B	M14~M33	48.0	68.0	48.75	14.0

規格 Standard	絲攻柄尺寸 Tap Shank		訂單編號 Order No.		
	柄徑 Shank ØD	四方孔 Square □	TC312B (#1)	TC820B (#2)	TC1433B (#3)
ISO529/2283	2.24	1.8	014B-01		
ISO529, ISO529/2283	2.5	2.0	013B-01		
DIN371, DIN376		2.1	011B-01		
	2.8		011B-02		
ISO529		2.24	013B-02		
JIS	3.0	2.5	010B-14		
ISO529, ISO529/2283	3.15	2.5	013B-03		
DIN371	3.5	2.7	011B-03		
ISO529, ISO529/2283	3.55	2.8	013B-04		
DIN371	4.0	3.0	011B-04		
ISO529, ISO529/2283		3.15	013B-05		
JIS		3.2	010B-01		
DIN371	4.5	3.4	011B-05		
ISO529, ISO529/2283		3.55	013B-06		
JIS	5.0	4.0	010B-02		
DIN376	5.5	4.3	012B-05		
JIS		4.5	010B-03		
ISO529/2283	5.6		014B-07		
JIS	6.0		010B-04		
DIN371, DIN376		4.9	011B-06	021B-01	
JIS	6.1	5.0	010B-05		
	6.2		010B-06	020B-01	
ISO529, ISO529/2283	6.3		013B-08	023B-01	
JIS, DIN376	7.0	5.5	010B-07	020B-02	
ISO529, ISO529/2283	7.1	5.6	013B-09	023B-02	
JIS	8.0	6.0	010B-08	020B-03	
DIN371		6.2	011B-07	021B-02	
ISO529, ISO529/2283		6.3	013B-10	023B-03	
JIS	8.5	6.5	010B-09	020B-04	
	9.0	7.0	010B-10	020B-05	

規格 Standard	絲攻柄尺寸 Tap Shank		訂單編號 Order No.		
	柄徑 Shank ØD	四方孔 Square □	TC312B (#1)	TC820B (#2)	TC1433B (#3)
ISO529, ISO529/2283	9.0	7.1	013B-11	023B-04	
DIN371, ISO529	10.0	8.0	011B-08	021B-03	
JIS	10.5		010B-11	020B-06	030B-01
	11.0	9.0	010B-12	020B-07	030B-02
ISO529/2283	11.2		014B-12	024B-05	034B-01
JIS	12.0			020B-08	030B-03
JIS, ISO529/2283	12.5	10.0		020B-09	030B-04
JIS, DIN376	14.0	11.0		020B-11	030B-06
ISO529/2283		11.2		024B-07	034B-03
JIS	15.0	12.0		020B-12	030B-07
DIN376	16.0			022B-07	032B-04
ISO529/2283		12.5		024B-08	034B-04
JIS	17.0	13.0		020B-13	030B-08
JIS, ISO529/2283	18.0	14.0		020B-14	030B-09
DIN376		14.5		022B-08	032B-05
JIS	19.0	15.0		020B-15	030B-10
	20.0				030B-11
DIN376, ISO529/2283		16.0			032B-06
JIS	21.0	17.0			030B-12
	22.0				030B-13
DIN376		18.0			032B-07
ISO529/2283	22.4				034B-07
JIS	23.0	17.0			030B-14
	24.0	19.0			030B-15
	25.0				030B-16
DIN376, ISO529/2283		20.0			032B-08
JIS	26.0	21.0			030B-17
	28.0				030B-18
DIN376		22.0			032B-09

TC快換式絲攻筒夾轉接器

TC Quick Change Tap Collet Reducers

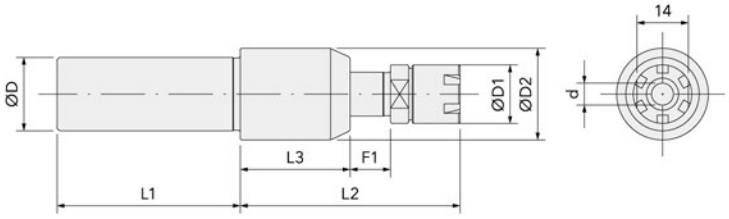


	攻牙範圍 Range
TC820轉TC312	M03~M12
TC1433轉TC820	M08~M20

SCER浮動式滾磨倒角刀

SCER Floating Rotary Chamfering Burr





P97 P100

特性 Features

- 最高轉速限制：10,000 rpm/min。
- 刀具最大直徑：Ø7 mm。
- 筒夾：ER11。
- 張力負荷：3 種彈簧。(強 / 中 / 弱)
- 伸縮範圍：10 mm。
- 使用刀具：滾磨刀。(如圖)

- Max speed: 10,000 rpm/min.
- Max shank diameter of tooling: Ø7 mm.
- Collet: ER11.
- Tension loading: 3 types of springs. (strong / medium / weak)
- Length of Flexibility: 10 mm.
- Tooling used: Rotary burr. (as picture shown)



O



X

單位 Unit：mm。

規格 Part No.	夾持範圍 Ød	ØD	ØD1	ØD2	L1	L2	L3	F1	扳手 Wrench
ST20-SCER11M-Strong	Ø0.5~Ø0.7	20	16	25	50	60	30	10	W-ER11M
ST20-SCER11M-Medium									
ST20-SCER11M-Weak									

- F1：壓縮量。
- F1: Compressed length.

DC快換式鑽孔攻牙夾具組
DC Quick Change Tapping / Drill Chucks & Collets


Fig. 1


Fig. 2


Fig. 3


Fig. 4




P78

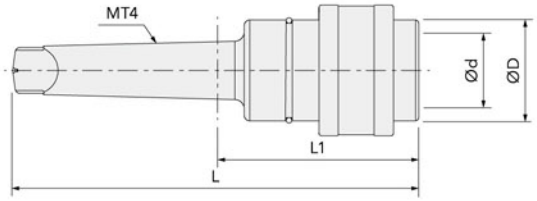

P79


P81


P81

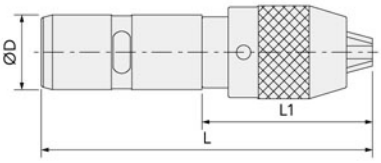
● DC快換式刀柄本體
DC Quick Change Drilling Chucks

Fig. 1



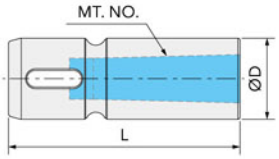
● DC鑽夾頭
DC Drilling Chucks

Fig. 2



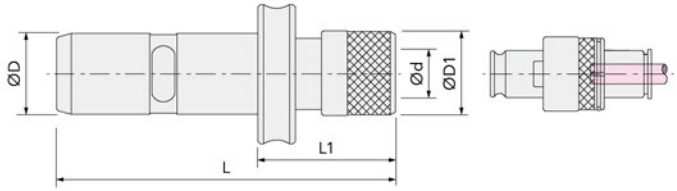
● DC鑽頭套筒
DC Drilling Sleeves

Fig. 3



● DC攻牙夾頭
DC Tapping Chucks

Fig. 4

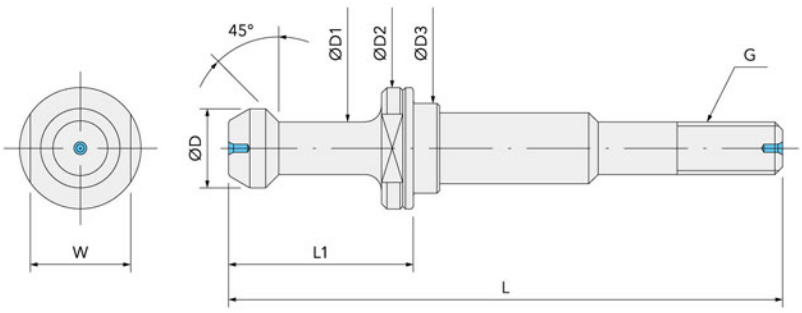


規格 Part No.	Fig.	Ød	ØD	ØD1	L	L1	內錐孔 M.T. No.	夾頭 Chuck
DC-MT4-100	1	40	54	—	218	100	—	—
DC-APU13	2	—	40	—	179	93	—	APU13
DC-APU16								APU16
DC-MT1	3	—	40	—	81	—	MT1	—
DC-MT2					94		MT2	
DC-MT3					114		MT3	
DC-MT4					140		MT4	
DC-SF12	4	19	40	34	136	55	—	TC312L
DC-SF20		31		49	150	69		TC820L

MTB拉桿螺栓 (MAS-403)

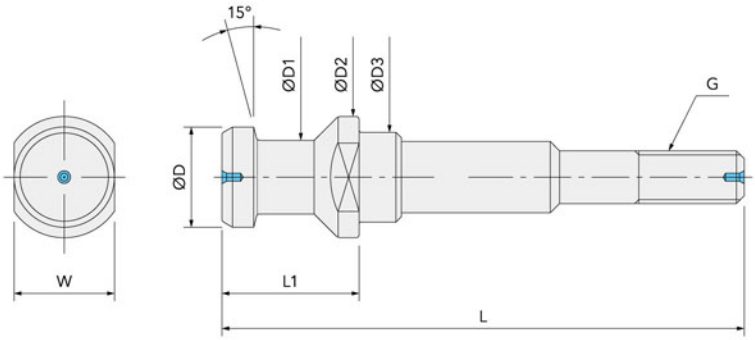
MTB Pull Studs, For Morse Taper Shank Type B (MAS-403)





規格 Part No.	ØD	ØD1	ØD2	ØD3	L	L1	G	W	最大旋緊扭矩 Max. Tighten Torque Kgf- M
P40T-MAS1-MTB2	15	10	23	17	105	35	M10	19	1.6
-MTB3					112		M12		2.3
-MTB4					120		M16		6.0
P50T-MAS1-MTB2	23	17	38	25	155	45	M10	30	1.6
-MTB3					147		M12		2.3
-MTB4					160		M16		6.0
-MTB5					148		M20		16.0





規格 Part No.	ØD	ØD1	ØD2	ØD3	L	L1	G	W	最大旋緊扭矩 Max. Tighten Torque Kgf- M
DIN69872A-SK40-MTB2	19	14	23	17	99	26	M10	19	1.6
-MTB3					106		M12		2.3
-MTB4					114		M16		6.0
DIN69872A-SK50-MTB2	28	21	36	25	147	34	M10	30	1.6
-MTB3					139		M12		2.3
-MTB4					152		M16		6.0
-MTB5					140		M20		16.0

PS拉桿螺栓 (MAS-403)

PS Pull Studs (MAS-403)



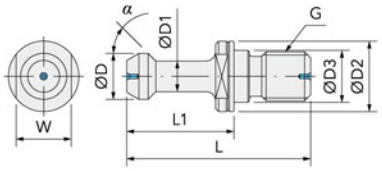


Fig. 1

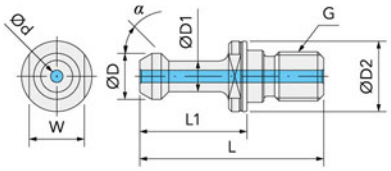


Fig. 2

規格 Part No.	Fig.	ØD	ØD1	ØD2	ØD3	L	L1	α ±15'	G	W	最大旋緊扭矩 Max. Tighten Torque Kgf- M
P30T-MAS1	1	11	7	16.5	12.5	43	23	45°	M12	13	2.0~ 2.5
-MAS2								60°			
-MAS3								90°			
P40T-MAS1		15	10	23	17	60	35	45°	M16	19	6.0~ 8.0
-MAS2								60°			
-MAS3								90°			
P50T-MAS1		23	17	38	25	85	45	45°	M24	30	20.0~25.0
-MAS2								60°			
-MAS3								90°			

規格 Part No.	Fig.	Ød	ØD	ØD1	ØD2	ØD3	L	L1	α ±15'	G	W	最大旋緊扭矩 Max. Tighten Torque Kgf- M
P30T-MAS1-H	2	2.5	11	7	16.5	12.5	43	23	45°	M12	13	2.0~ 2.5
-MAS2-H									60°			
-MAS3-H									90°			
P40T-MAS1-H		4	15	10	23	17	60	35	45°	M16	19	6.0~ 8.0
-MAS2-H									60°			
-MAS3-H									90°			
P50T-MAS1-H		7	23	17	38	25	85	45	45°	M24	30	20.0~25.0
-MAS2-H									60°			
-MAS3-H									90°			

- 注意：只能做軸向輕切削用。
- Caution: These types only can be used at axial direction and light cutting.

PS拉桿螺栓 (DIN69872A)

PS Pull Studs (DIN69872A)



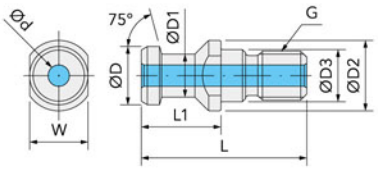


Fig. 1

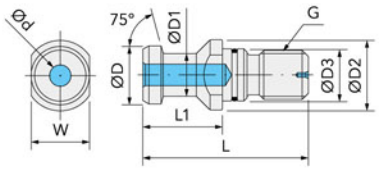


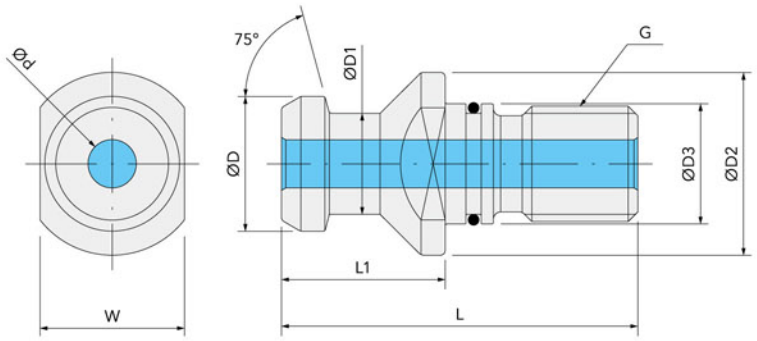
Fig. 2

規格 Part No.	Fig.	Ød	ØD	ØD1	ØD2	ØD3	L	L1	G	W	最大旋緊扭矩 Max. Tighten Torque Kgf- M
DIN69872A-SK30	1	—	13	9	17	13	44	24	M12	14	2.0~ 2.5
-SK40		7	19	14	23	17	54	26	M16	19	6.0~ 8.0
-SK50		11.5	28	21	36	25	74	34	M24	30	20.0~25.0
DIN69872B-SK30	2	—	13	9	17	13	44	24	M12	14	2.0~ 2.5
-SK40		7	19	14	23	17	54	26	M16	19	6.0~ 8.0
-SK50		11.5	28	21	36	25	74	34	M24	30	20.0~25.0

PS拉桿螺栓 (JIS-B6339)

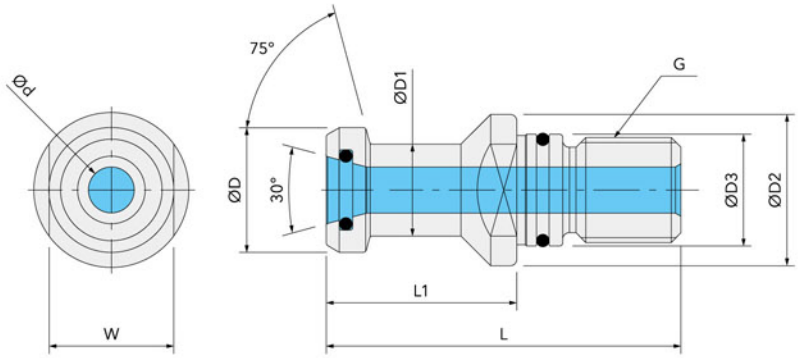
PS Pull Studs (JIS-B6339)





規格 Part No.	Ød	ØD	ØD1	ØD2	ØD3	L	L1	G	W	最大旋緊扭矩 Max. Tighten Torque Kgf- M
JIS-B6339-P40	7	19	14	23	17	54	29	M16	19	6.0~ 8.0
-P50	10	28	21	38	25	74	34	M24	30	20.0~25.0



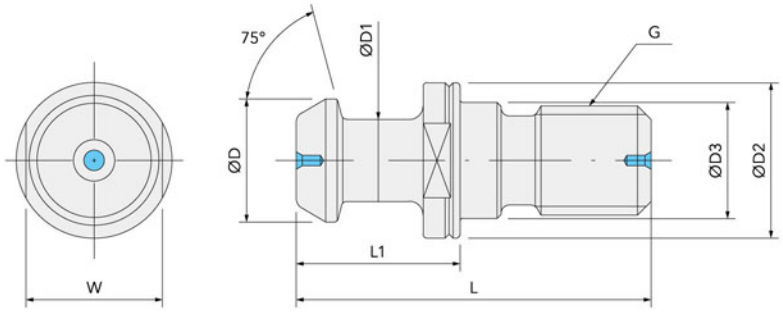


規格 Part No.	Ød	ØD	ØD1	ØD2	ØD3	L	L1	G	W	最大旋緊扭矩 Max. Tighten Torque Kgf- M
JIS-B6339-P40BH	7	19	14	23	17	54	29	M16	19	6.0~8.0

PS拉桿螺栓 (ISO20)

PS Pull Studs (ISO20)



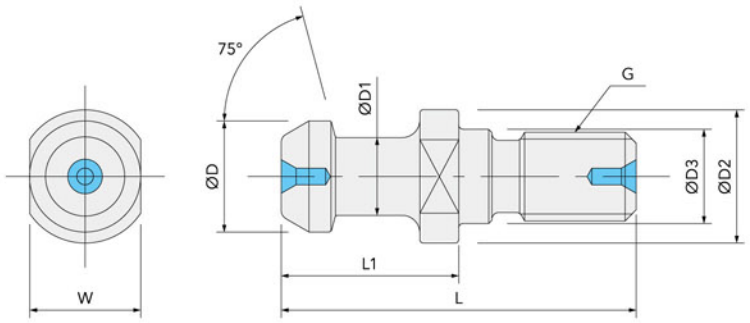


規格 Part No.	ØD	ØD1	ØD2	ØD3	L	L1	G	W	最大旋緊扭矩 Max. Tighten Torque Kgf- M
ISO-20 (7124-61)	9	6	11.4	8.5	26	12	M08	10	0.9~1.2

PS拉桿螺栓 (ISO25)

PS Pull Studs (ISO25)



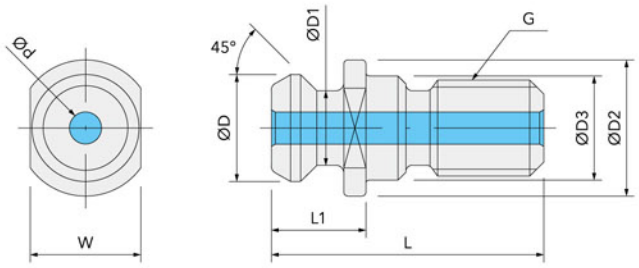


規格 Part No.	ØD	ØD1	ØD2	ØD3	L	L1	G	W	最大旋緊扭矩 Max. Tighten Torque Kgf- M
ISO-25 (7530-64)	10	7	12	8.5	32	16	M08	10	0.9~1.2
ISO-25 (7124-71)	10	7	12	9.0	32	16	M08	10	0.9~1.2

PS拉桿螺栓 (ISO7388/2B)

PS Pull Studs (ISO7388/2B)



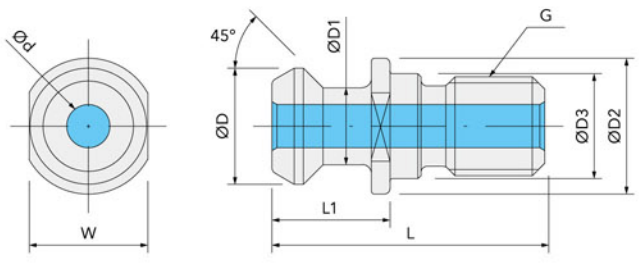


規格 Part No.	Ød	ØD	ØD1	ØD2	ØD3	L	L1	G	W	最大旋緊扭矩 Max. Tighten Torque Kgf- M
ISO7388/2B-SK30	4	13.35	9.3	17	13	34	11.8	M12	14	2.0~ 2.5
-SK40	7.35	18.8	12.8	22	17	44.5	16.25	M16	19	6.0~ 8.0
-SK50	11.5	29.1	19.45	36	25	65.5	25.4	M24	30	20.0~25.0

PS拉桿螺栓 (MAZAK)

PS Pull Studs (MAZAK)





規格 Part No.	Ød	ØD	ØD1	ØD2	ØD3	L	L1	G	W	最大旋緊扭矩 Max. Tighten Torque Kgf- M
MAZAK-BT40	7	18.8	12.45	22	17	44.1	19.1	M16	19	6.0~ 8.0
-BT50	10	29.0	20.83	37	25	65.2	25.2	M24	30	20.0~25.0

STB標準測試棒
STB Standard Test Bars



Fig. 1

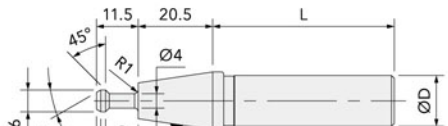
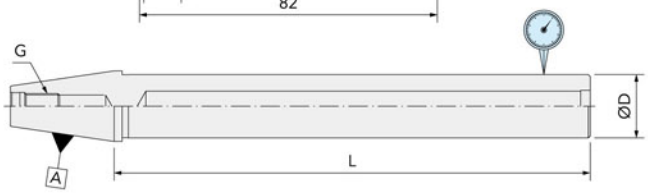




Fig. 2



規格 Part No.	Fig.	ØD	L	G	真圓度 Roundness
ISO10-14-050	1	14	50	—	< 0.003
ISO15-16-075	2	16	75	M06	
ISO20-20-075		20		M08	
ISO25-20-075					
ISO30-32-250		32	250	M12	
ISO40-40-300		40	300	M16	
ISO50-40-300				M24	

- 隨貨附木盒包裝，請直立擺放。
- 錐度密合度 > 85%。
- Supplied with wooden case, vertical storage necessarily.
- Taper contact > 85%.



Fig. 3



規格 Part No.	Fig.	ØD	L	G	真圓度 Roundness
ABT30-32-235	3	32	235	M12	< 0.003
ABT40-50-350		50	350	M16	
ABT50-50-360		50	360	M24	

- 隨貨附木盒包裝，請直立擺放。
- 錐度密合度 > 85%。
- Supplied with wooden case, vertical storage necessarily.
- Taper contact > 85%.



Fig. 4

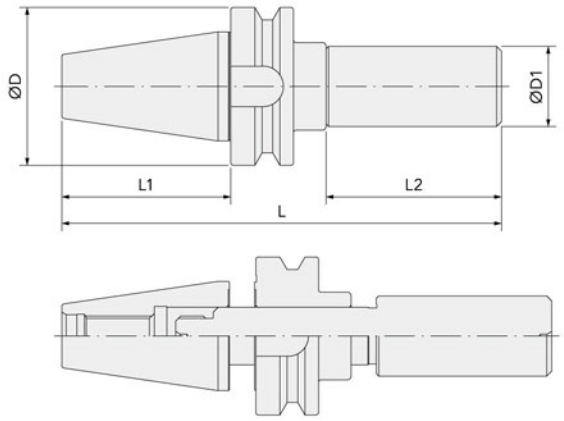


規格 Part No.	Fig.	ØD	L	真圓度 Roundness
HSK25 E-20-150	—	20	150	< 0.003
HSK32A /E-25-200	4	25	200	
HSK40A /E-32-200		32	200	
HSK50A /E-32-250			250	
HSK63A /E-50-200		50	200	
HSK63A /E-40-300		40	300	
HSK100A/E-50-200		50	200	
HSK100A/E-50-350			350	

- 隨貨附木盒包裝，請直立擺放。
- 錐度密合度 > 85%。
- Supplied with wooden case, vertical storage necessarily.
- Taper contact > 85%.

ATC校刀治具
ATC / Spindle Aligners

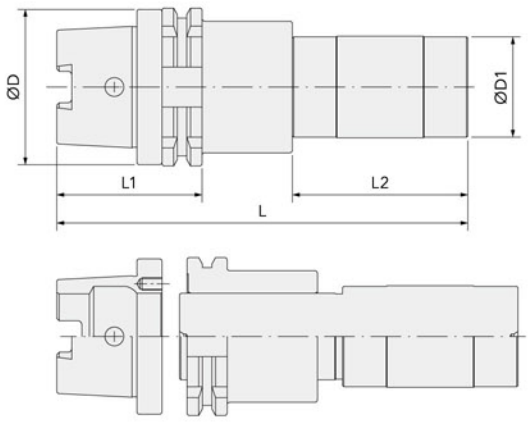




規格 Part No.	ØD	ØD1	L1	L2	L
• ISO25-ATC	37	20	40.5	70	138.5
BT30-ATC	46	25	50.4	74.5	154.9
BT40-ATC	63	32	67.4	70	175.4
BT50-ATC	100	40	104.8	80	231.8
DV30-ATC	50	25	51	74.5	154.3
DV40-ATC	63.5	32	71.45	70	178.25
DV50-ATC	97.45	40	104.8	80	231.6
CV30-ATC	46.05	25	51	74.5	154.3
CV40-ATC	63.5	32	71.45	70	178.25
CV50-ATC	98.42	40	104.8	80	231.6

• 接單生產。 • Customized Production.



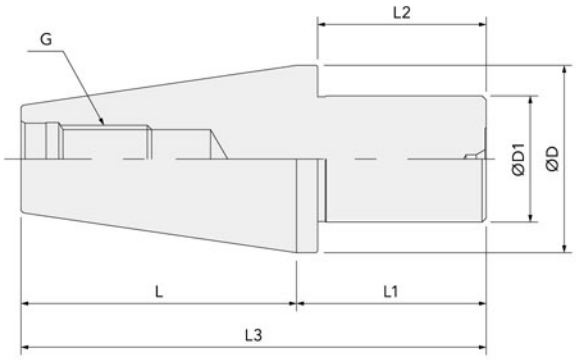


規格 Part No.	ØD	ØD1	L1	L2	L
HSK32A -ATC	32	26	36	57	132
HSK40A -ATC	40	27	40		136
HSK50A -ATC	50	32	51	70	157
HSK63A -ATC	63	40	58		164
HSK100A-ATC	100	64	79	100	217

• HSK-ATC 可 A/E 共用。 • HSK-ATC can be shared by A/E.

ISO-D平衡刀把
ISO-D Balanced Toolholder





規格 Part No.	ØD	ØD1	L	L1	L2	L3	G
ISO30-D30-045	31.75	30	48.4	45	40	93.4	M12*P1.75
ISO40-D30-045	44.45		65.4			110.4	M16*P2.00
ISO50-D40-045	69.85	40	101.8			146.8	M24*P3.00

HSK-D平衡刀把
HSK-D Balanced Toolholder



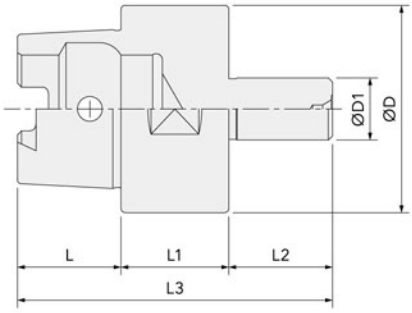


Fig. 1

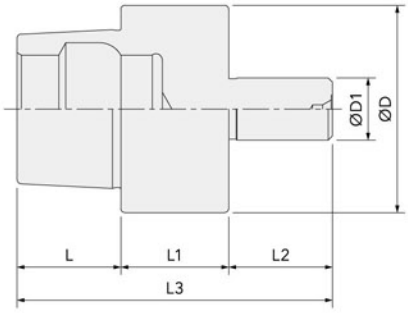


Fig. 2

規格 Part No.	Fig.	ØD	ØD1	L	L1	L2	L3
HSK32A-D15-045	1	15	32	16	20	25	61
HSK40A-D15-045			40	20			65
HSK50A-D15-051			50	25	26		76
HSK63A-D20-056		20	63	32		30	88
HSK100A-D30-069		30	100	50	29	40	119
HSK32E-D15-045	2	15	32	16	20	25	61
HSK40E-D15-045			40	20			65
HSK50E-D15-051			50	25	26		76
HSK63E-D20-056		20	63	32		30	88
HSK100E-D30-069		30	100	50	29	40	119

PD機械式尋邊器
PD Position Detectors (mechanical type)



Fig. 1

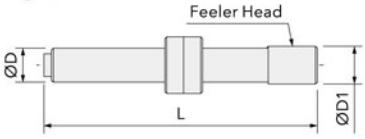
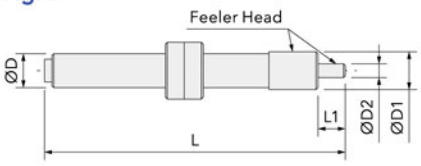
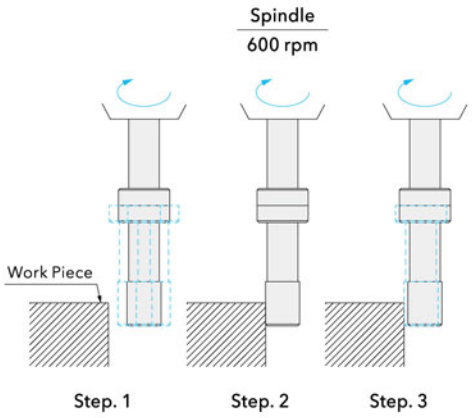


Fig. 2





規格 Part No.	Fig.	ØD	測頭 Feeler Head			L
			ØD1	ØD2	L1	
ATM-10	1	10	10	—	—	84
ATM-10/4	2			4	7.5	92

Z軸設定器
Tool Pre-Setters



Fig. 1

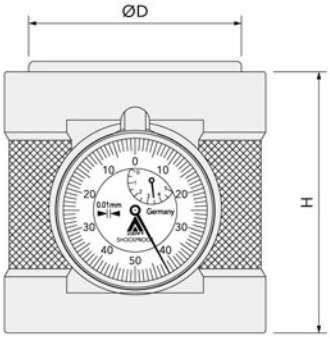


Fig. 1

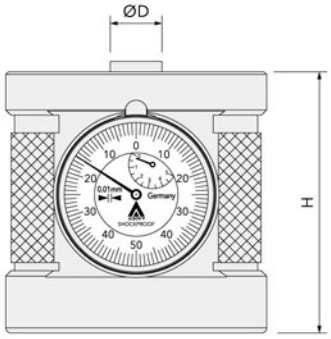


Fig. 2



Fig. 2

規格 Part No.	Fig.	ØD	H	說明 Description
Z-50	1	41	50	精度 ±0.01 mm，底座無磁性。 Accuracy ±0.01 mm, Base w/o magnet.
Z-50M	1			精度 ±0.01 mm，底座有磁性。 Accuracy ±0.01 mm, Base with magnet.
Z-50-A	2	10		精度 ±0.01 mm，底座無磁性。 Accuracy ±0.01 mm, Base w/o magnet.
Z-50M-A	2			精度 ±0.01 mm，底座有磁性。 Accuracy ±0.01 mm, Base with magnet.

鎖刀座
Tool Holder Locking Fixtures



Fig. 1



Fig. 2

規格 Part No.	Fig.	說明 Description
V500.00.30	1	SK30 Taper7/24
V500.00.40		SK40 Taper7/24
V500.00.50		SK50 Taper7/24
V500.00.63A	2	HSK63A

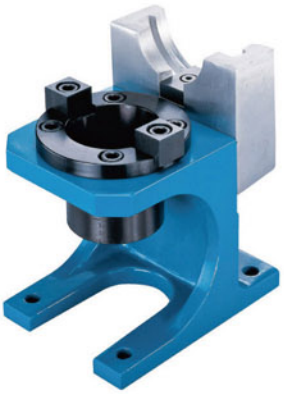


Fig. 3

規格 Part No.	Fig.	說明 Description
4118-411	3	SK30, V+H
4118-011		SK40, V+H
4118-211		SK50, V+H



(Pat.)

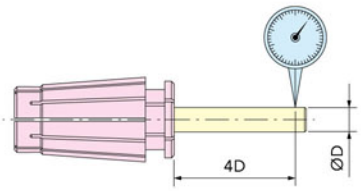
Fig. 4

規格 Part No.	Fig.	說明 Description
THLF-HSK32	4	HSK32
THLF-HSK40		HSK40
THLF-HSK50		HSK50
THLF-HSK63		HSK63

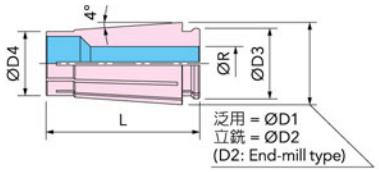
NR高速筒夾刀把配件

Accessories for NR High Speed Precision Collet Chucks





- TIR: AA grade ≤ 0.005 mm;
  A grade ≤ 0.01 mm.



● NR筒夾尺寸
NR Collet Size

規格 Part No.	D1	D2	D3	D4	L
NR06	10.54	10.13	9.2	7.5	25.0
NR10	15.6	15.45	13.17	12.0	30.6
NR13	20.0	19.7	17.0	15.5	39.0
NR16	24.6	24.2	20.66	18.8	45.0
NR20	—	28.7	24.9	22.5	54.15
NR25	—	35.2	30.0	28.9	57.0

● NR泛用精密筒夾
NR Precision Collets

- A 級筒夾：以庫存現況為準。
- A grade collets: May no stock.

夾持範圍 Ø Range	規格 Part No.			
2.75~ 3.0	NR06AA-030	NR10AA-030	NR13AA-030	NR16AA-030
2.75~ 3.175	NR06AA-03175	NR10AA-03175		
3.0 ~ 3.5	NR06AA-035	NR10AA-035	NR13AA-035	NR16AA-035
3.5 ~ 4.0	NR06AA-040	NR10AA-040	NR13AA-040	NR16AA-040
4.0 ~ 4.5	NR06AA-045	NR10AA-045	NR13AA-045	NR16AA-045
4.5 ~ 5.0	NR06AA-050	NR10AA-050	NR13AA-050	NR16AA-050
5.0 ~ 5.5	NR06AA-055	NR10AA-055	NR13AA-055	NR16AA-055
5.5 ~ 6.0	NR06AA-060	NR10AA-060	NR13AA-060	NR16AA-060
6.0 ~ 6.5		NR10AA-065	NR13AA-065	NR16AA-065
6.5 ~ 7.0		NR10AA-070	NR13AA-070	NR16AA-070
7.0 ~ 7.5		NR10AA-075	NR13AA-075	NR16AA-075
7.5 ~ 8.0		NR10AA-080	NR13AA-080	NR16AA-080
8.0 ~ 8.5		NR10AA-085	NR13AA-085	NR16AA-085
8.5 ~ 9.0		NR10AA-090	NR13AA-090	NR16AA-090
9.0 ~ 9.5		NR10AA-095	NR13AA-095	NR16AA-095
9.5 ~10.0		NR10AA-100	NR13AA-100	NR16AA-100
10.0 ~10.5			NR13AA-105	NR16AA-105
10.5 ~11.0			NR13AA-110	NR16AA-110
11.0 ~11.5			NR13AA-115	NR16AA-115
11.5 ~12.0			NR13AA-120	NR16AA-120
12.0 ~12.5			NR13AA-125	NR16AA-125
12.5 ~13.0			NR13AA-130	NR16AA-130
13.0 ~13.5				NR16AA-135
13.5 ~14.0				NR16AA-140
14.0 ~14.5				NR16AA-145
14.5 ~15.0				NR16AA-150
15.0 ~15.5				NR16AA-155
15.5 ~16.0				NR16AA-160

● NR立銑專用筒夾
NR Precision Collets (for end-mill)

- A 級筒夾：以庫存現況為準。
- A grade collets: May no stock.

夾持範圍 Ø Range	規格 Part No.					
3.0	NR06AA-E030	NR10AA-E030	NR13AA-E030	NR16AA-E030		
3.175	NR06AA-E03175	NR10AA-E03175				
4.0	NR06AA-E040	NR10AA-E040	NR13AA-E040	NR16AA-E040		
5.0	NR06AA-E050	NR10AA-E050	NR13AA-E050	NR16AA-E050		
6.0	NR06AA-E060	NR10AA-E060	NR13AA-E060	NR16AA-E060		
8.0		NR10AA-E080	NR13AA-E080	NR16AA-E080		
10.0		NR10AA-E100	NR13AA-E100	NR16AA-E100		
12.0			NR13AA-E120	NR16AA-E120	NR20AA-E120	
14.0				NR16AA-E140	NR20AA-E140	
16.0				NR16AA-E160	NR20AA-E160	NR25AA-E160
18.0					NR20AA-E180	NR25AA-E180
20.0					NR20AA-E200	NR25AA-E200
25.0						NR25AA-E250

NR高速筒夾刀把配件
Accessories for NR High Speed Precision Collet Chucks



● NR立銑中心出水筒夾
NR Precision Coolant Collets

夾持範圍 Ø Range	規格 Part No.					
3.0	NR06OH-E030	NR10OH-E030	NR13OH-E030	NR16OH-E030		
4.0	NR06OH-E040	NR10OH-E040	NR13OH-E040	NR16OH-E040		
5.0	NR06OH-E050	NR10OH-E050	NR13OH-E050	NR16OH-E050		
6.0	NR06OH-E060	NR10OH-E060	NR13OH-E060	NR16OH-E060		
8.0		NR10OH-E080	NR13OH-E080	NR16OH-E080		
10.0		NR10OH-E100	NR13OH-E100	NR16OH-E100		
11.0			NR13OH-E110	NR16OH-E110		
12.0			NR13OH-E120	NR16OH-E120	NR20OH-E120	
13.0				NR16OH-E130		
14.0				NR16OH-E140	NR20OH-E140	
16.0				NR16OH-E160	NR20OH-E160	
18.0					NR20OH-E180	NR25OH-E180
19.0						NR25OH-E190
20.0					NR20OH-E200	NR25OH-E200
22.0						NR25OH-E220
24.0						NR25OH-E240
25.0						NR25OH-E250



● NR絲攻彈性筒夾
NR Precision Tap Collets

絲攻柄尺寸 Tap Shank	規格 Part No.	
5.5*4.5 M5	NR06-T055	NR10-T055
6.0*4.5 M6	NR06-T060	NR10-T060
6.1*5.0 5/16		NR10-T061
6.2*5.0 M8		NR10-T062
7.0*5.5 M10		NR10-T070
8.0*6.2 7/16		NR10-T080
8.5*6.5 M12		NR10-T085

● 裝拆筒夾方法
Attaching & Detaching Collet



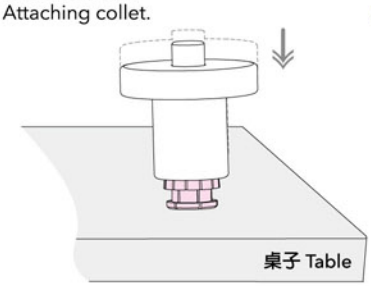
Pat.



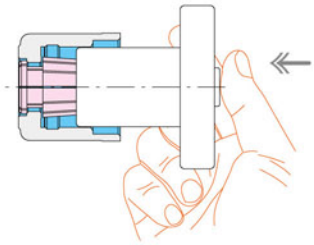
● NR筒夾裝取器
NR Collet Extractors

規格 Part No.	適用筒夾 Collets
NR06E	NR06
NR10E	NR10
NR13E	NR13
NR16E	NR16

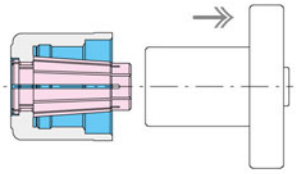
1 裝筒夾於裝取器
Attaching collet.



2 將筒夾置入螺帽定位後推出筒夾
Attaching the collet to correct position of the nut.



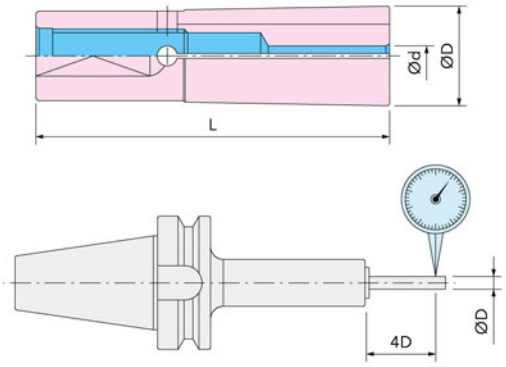
3 收回裝取器
Take extractor out.



- 自螺帽中取出筒夾則依相反順序。
- Detaching: reverse step.

彈性筒夾
Spring Collets





- 同心度 0.005 mm 以內。
- TIR Accuracy < 0.005 mm.

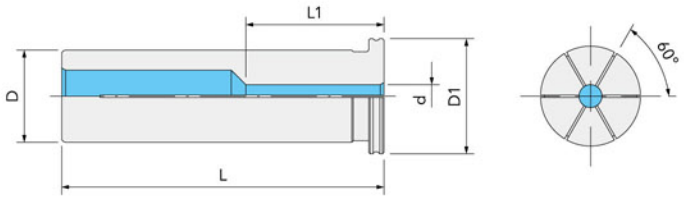
HC - 彈性筒夾 - AA級
HC High Precision Spring Collets - AA Grade

規格 Part No.	夾持範圍 Ø Range	ØD	L
HC06AA-XXX	3.0~ 6.0	9.6	36.1
HC10AA-XXX	3.0~10.0	15.0	52.5
HC16AA-XXX	6.0~16.0	21.6	64.2

夾持範圍 Ø Range	規格 Part No.		
3.0	HC06AA-030	HC10AA-030	
3.175	HC06AA-03175	HC10AA-03175	
4.0	HC06AA-040	HC10AA-040	
5.0	HC06AA-050	HC10AA-050	
6.0	HC06AA-060	HC10AA-060	HC16AA-060
7.0		HC10AA-070	
8.0		HC10AA-080	HC16AA-080
10.0		HC10AA-100	HC16AA-100
12.0			HC16AA-120
14.0			HC16AA-140
16.0			HC16AA-160

HEC12彈性筒夾
HEC12 Spring Collets

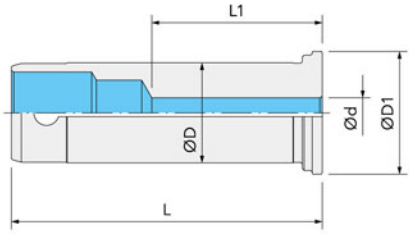




規格 Part No.	ØD	ØD1	L	L1
HEC-12-030	12	15	42	18
HEC-12-040				
HEC-12-050				20
HEC-12-060				20.5

ARH彈性筒夾
ARH Spring Collets





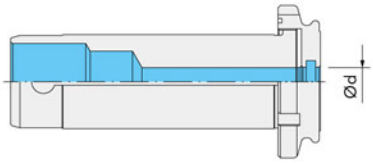
規格 Part No.	L	ØD	ØD1
ARH-20-***	62	20	24.5
ARH-25-***	64	25	29.5
ARH-32-***	71	32	38

規格 Part No.			Ød	L1
ARH20	ARH25	ARH32		
ARH-20-060	ARH-25-060	ARH-32-060	6	34
ARH-20-080	ARH-25-080	ARH-32-080	8	36
ARH-20-100	ARH-25-100	ARH-32-100	10	38
ARH-20-120	ARH-25-120	ARH-32-120	12	40
ARH-20-140	ARH-25-140	ARH-32-140	14	46
ARH-20-160	ARH-25-160	ARH-32-160	16	48
	ARH-25-180	ARH-32-180	18	50
		*ARH-32-190	19	50
	ARH-25-200	ARH-32-200	20	52
		ARH-32-220	22	54
		*ARH-32-240	24	56
		ARH-32-250	25	56

- "*" 期貨。
- "*" Upon request.

ARHJOH止水型彈性筒夾
ARHJOH Coolant Collets

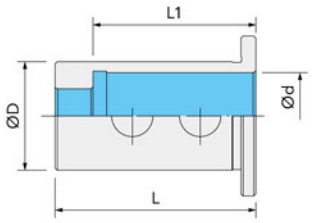




規格 Part No.			Ød
ARH20	ARH25	ARH32	
ARHJOH-20-060	ARHJOH-25-060	ARHJOH-32-060	6
ARHJOH-20-080	ARHJOH-25-080	ARHJOH-32-080	8
ARHJOH-20-100	ARHJOH-25-100	ARHJOH-32-100	10
ARHJOH-20-120	ARHJOH-25-120	ARHJOH-32-120	12
ARHJOH-20-140	ARHJOH-25-140	ARHJOH-32-140	14
ARHJOH-20-160	ARHJOH-25-160	ARHJOH-32-160	16
	ARHJOH-25-180	ARHJOH-32-180	18
	ARHJOH-25-200	ARHJOH-32-200	20
		ARHJOH-32-250	25

OSL套筒
OSL Reduction Sleeves



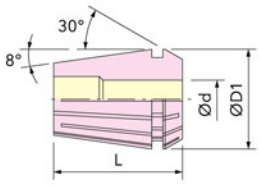


規格 Part No.	Ød	ØD	L	L1
OSL25-160	16	25	60	48
-200	20			50
OSL32-160	16	32	64	56
-200	20			
-250	25			
OSL40-250		40	74	60
-320	32			

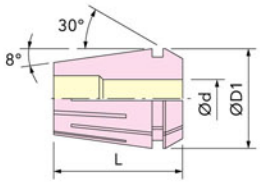
彈性筒夾 / SUS ER不鏽鋼彈性筒夾

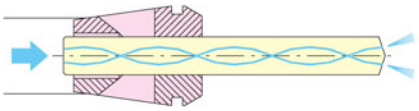
Spring Collets (DIN6499)

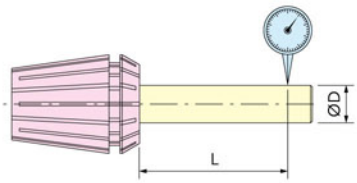


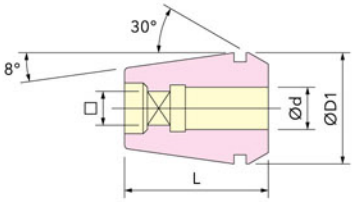












ER彈性筒夾
ER Spring Collets (DIN6499)

規格 Part No.	夾持範圍 Ø Range	ØD1	L	間隔尺寸 Stepped
ER08-XXX	0.5~ 5.0	8.5	13.5	0.5
*ER11-XXX	0.5~ 7.0	11.5	18.0	
*ER16-XXX	0.5~10.0	17.0	27.0	0.5
*ER20-XXX	1.0~13.0	21.0	31.0	
*ER25-XXX	1.0~16.0	26.0	35.0	1.0
*ER32-XXX	2.0~20.0	33.0	40.0	
ER40-XXX	2.5~26.0	41.0	46.0	
ER50-XXX	10.0~34.0	52.0	60.0	2.0

- SUS ER 筒夾最小孔徑：Ø3 mm。
- 符號 ★：有 SUS ER 不鏽鋼彈性筒夾尺寸 (間隔尺寸為 0.5 mm)。
- Smallest diameter of SUS ER: Ø3 mm.
- Symbol ★ : With SUS ER stainless spring collet size. (Stepped: 0.5 mm)

ER-OH止水型彈性筒夾
ER-OH Coolant Collets (DIN6499)

規格 Part No.	夾持範圍 Ø Range	ØD1	L	間隔尺寸 Stepped
ER16OH-XXX	4.0~10.0	16.7	27.0	1.0
ER20OH-XXX	4.0~13.0	20.7	31.0	
ER25OH-XXX	4.0~16.0	25.7	35.0	
ER32OH-XXX	4.0~20.0	32.7	40.0	
ER40OH-XXX	4.0~26.0	40.7	46.0	

- 單一筒夾夾持範圍：≤ 0.10 mm。
- Clamping Range: ≤ 0.10 mm.

ER夾持直徑
ER Clamping Diameter (DIN6499)

夾持直徑 ØD	檢測長度 L	S級精度 TIR	A級精度 TIR	AA級精度 TIR
1.0~ 1.6	6	0.015	0.010	0.005
1.6~ 3.0	10			
3.0~ 6.0	16			
6.0~10.0	25			
10.0~18.0	40	0.020	0.015	0.010
18.0~26.0	50			
26.0~34.0	60			

- A級筒夾：可訂購。
- A Grade Collets: upon request.

ER-GB絲攻彈性筒夾
ER-GB Tap Collets (DIN6499)

規格 Part No.	夾持範圍 Ød Range	ØD1	L
ER16GB-XXX	M04~M10	16.7	27.0
ER20GB-XXX	M04~M12	20.7	31.0
ER25GB-XXX	M06~M16	25.7	35.0
ER32GB-XXX	M06~M20	32.7	40.0
ER40GB-XXX	M08~M30	40.7	46.0

規格 Part No.					絲攻筒夾 Tap Standard			絲攻柄尺寸 Tap Shank	
ER16GB	ER20GB	ER25GB	ER32GB	ER40GB	DIN	JIS		柄徑 Shank ØD	四方孔 Square □
117GB160400	117GB200400					M3		4.0	3.2
117GB160450	117GB200450	117GB250450	117GB320450		M6			4.5	3.4
117GB160500	117GB200500	117GB250500	117GB320500			M4	#8	5.0	4.0
117GB160550	117GB200550	117GB250550	117GB320550			M5	#10	5.5	4.5
117GB160600	117GB200600	117GB250600	117GB320600	117GB400600		M6	1/4U	6.0	
117GB160601	117GB200601	117GB250601	117GB320601	117GB400601	M8				4.9
117GB160610	117GB200610	117GB250610	117GB320610	117GB400610			5/16U	6.1	5.0
117GB160620	117GB200620	117GB250620	117GB320620	117GB400620		M8		6.2	
117GB160700	117GB200700	117GB250700	117GB320700	117GB400700	M10	M10	3/8U	7.0	5.5
117GB160800	117GB200800	117GB250800	117GB320800	117GB400800	M8		7/16U	8.0	6.2
117GB160850	117GB200850	117GB250850	117GB320850	117GB400850		M12		8.5	6.5
	117GB200900	117GB250900	117GB320900	117GB400900	M12		1/2U	9.0	7.1
	117GB201000	117GB251000	117GB321000	117GB401000				10.0	8.0
		117GB251050	117GB321050	117GB401050		M14	9/16U	10.5	
		117GB251100	117GB321100	117GB401100	M14			11.0	9.0
		117GB251200	117GB321200	117GB401200	M16		5/8U	12.0	
		117GB251250	117GB321250	117GB401250		M16		12.5	10.0
			117GB321400	117GB401400	M18	M18	3/4U	14.0	11.0
			117GB321500	117GB401500		M20		15.0	12.0
			117GB321600	117GB401600	M20			16.0	
			117GB321700	117GB401700		M22	7/8U	17.0	13.0
				117GB401800	M22			18.0	14.5
				117GB401900		M24		19.0	15.0
				117GB402000		M27	1"U	20.0	
				117GB402001	M27				16.0
				117GB402200	M30			22.0	18.0

- 包裝用大型紙箱、木箱、鐵箱等等必須另外訂購。
- Large carton, wooden box or steel case must be ordered separately.

螺帽
Clamping Nuts



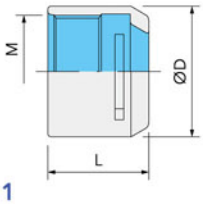


Fig. 1

● ER-MS M型螺帽
ER-MS Mini Type Clamping Nuts

規格 Part No.	Fig.	M	ØD	L
ER16MS	1	M19*P1.00	22	18
ER20MS		M24*P1.00	28	19



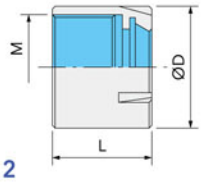


Fig. 2

● ER-M M型螺帽
ER-M Mini Type Clamping Nuts

規格 Part No.	Fig.	M	ØD	L
ER08M	2	M10*P0.75	12	10.8
ER11M		M13*P0.75	16	12
ER16M		M19*P1.00	22	18
ER20M		M24*P1.00	28	19



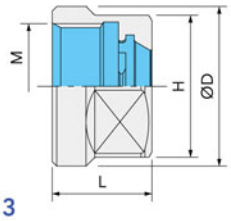


Fig. 3

● ER-SH高速平衡螺帽
ER-SH High Speed Balanced Clamping Nuts

規格 Part No.	Fig.	M	ØD	L	H
ER11SH	3	M14*P0.75	19	11.3	17
ER16SH		M22*P1.50	28	17.5	25
ER20SH		M25*P1.50	34	19	30
ER25SH	4	M32*P1.50	42	20	—
ER32SH		M40*P1.50	50	22.5	
ER40SH		M50*P1.50	63	25.5	



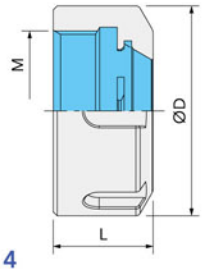


Fig. 4



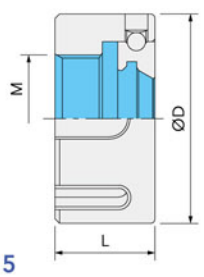


Fig. 5

● ER-GM強力型鋼珠螺帽
ER-GM Power Ball Bearing Clamping Nuts

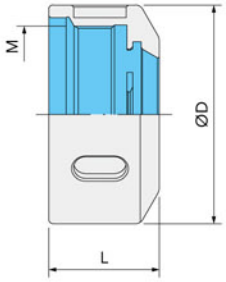
規格 Part No.	Fig.	M	ØD	L
ER11GM	5	M14*P0.75	23	11
ER16GM		M22*P1.50	30	15
ER20GM		M25*P1.50	34	19
ER25GM		M32*P1.50	42	20
ER32GM		M40*P1.50	50	22.5
ER40GM		M50*P1.50	63	25.5

- 平衡等級 G6.3/15,000 rpm。
- Balanced to G6.3/15,000 rpm.

螺帽
Clamping Nuts



Fig. 6

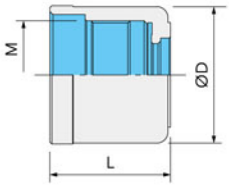


● SGER-SX高速平衡螺帽
SGER-SX High Speed Balanced Clamping Nuts

規格 Part No.	Fig.	M	ØD	L
SGER16SX	6	M24*P1.00	34	20.90
SGER20SX		M28*P1.00	38	22.80
SGER25SX		M34*P1.00	44	24.10
SGER32SX		M42*P1.00	52	26.30
SGER40SX		M52*P1.00	62	29.50



Fig. 7

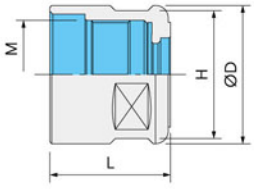


● NR螺帽
NR Clamping Nuts

規格 Part No.	Fig.	M	ØD	L
NR06N	7	M15.5*P1.00	19.5	21
NR10N		M21.5*P1.00	27.0	24
NR13N		M27.0*P1.00	34.0	28
NR16N		M32.0*P1.50	40.0	31



Fig. 8

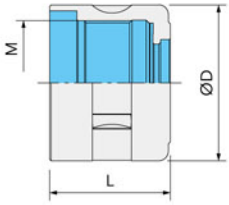


● NR-WD螺帽
NR-WD Clamping Nuts

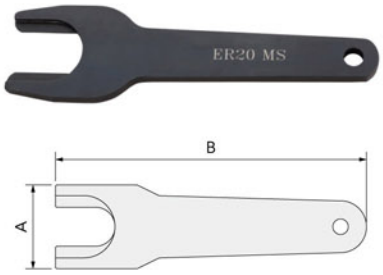
規格 Part No.	Fig.	M	ØD	L	H
NR06WD	8	M15.5*P1.00	19.5	21	18.0
NR10WD		M21.5*P1.00	27.5	24	25.4
NR13WD	9	M27.0*P1.00	34.0	28	—
NR16WD		M32.0*P1.50	40.0	31	
NR20WD		M40.0*P1.00	48.5	24	
NR25WD		M45.0*P1.50	55.0	30	



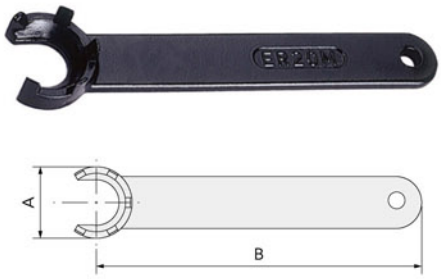
Fig. 9



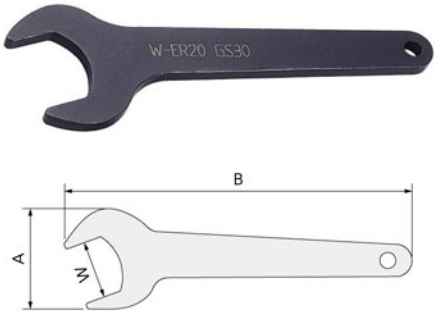
扳手
Wrenches



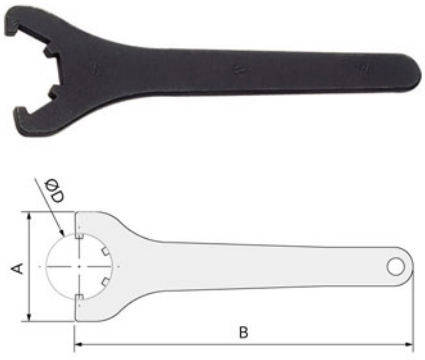
規格 Part No.	A	B	適用螺帽 Nuts
W-ER16MS	32	120	ER16MS
W-ER20MS	38	150	ER20MS



規格 Part No.	A	B	適用螺帽 Nuts
W-ER08M	12.8	75	ER08M
W-ER11M	16.8	90	ER11M
W-ER16M	22.8	110	ER16M
W-ER20M	29	120	ER20M

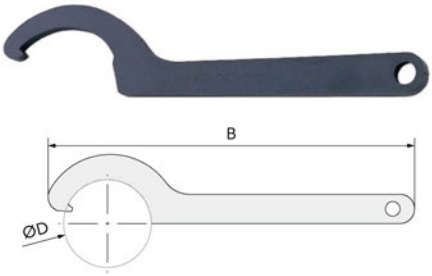


規格 Part No.	A	B	W	適用螺帽 Nuts
W-ER11	32	95	17	ER11SH
W-ER16	44	145	25	ER16SH
W-ER20	52	170	30	ER20SH
W-NR06WD	32	95	18	NR06WD
W-NR10WD	52	170	1"	NR10WD

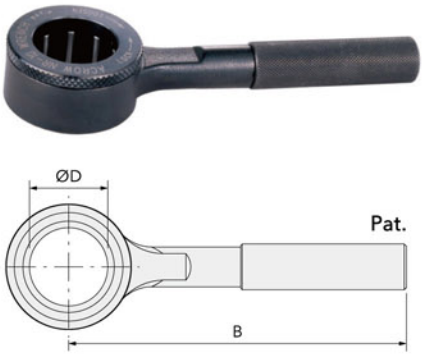


規格 Part No.	ØD	A	B	適用螺帽 Nuts
W-ER25	42	65	210	ER25
W-ER32	50	75	250	ER32
W-ER40	63	90	290	ER40
W-ER50	80	110	355	ER50

扳手
Wrenches



規格 Part No.	ØD	B	適用螺帽 Nuts
W-FK04	30~33	135	ER16GM
W-FK05	34~37	160	ER20GM/NR13WD/SGER16SX
W-FK06	38~43	170	ER25SH/NR16WD/SGER20SX
W-FK07	44~49	195	ER25GM/NR20WD/SGER25SX
W-FK08	50~57	210	C20/ER32SH/ER32GM/NR25WD/SGER32SX
W-FK09	58~67	230	C25/ER40SH/SGER40SX
W-FK10	68~79	245	C32
W-FK11	80~93	270	—

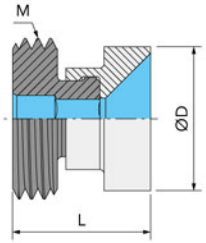


● 高速刀桿扳手
High Speed Tooling Wrenches

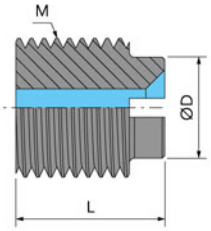
規格 Part No.	ØD	B	適用螺帽 Nuts
W-D19.5	19.5	105	NR06
W-D27	27.1	115	NR10
W-D34	34	125	NR13
W-D40	40	155	NR16
W-D48	48	212	C20H
W-D55	55	212	C25H
W-D68	68	251	C32H

止動螺絲
Back-up Screws



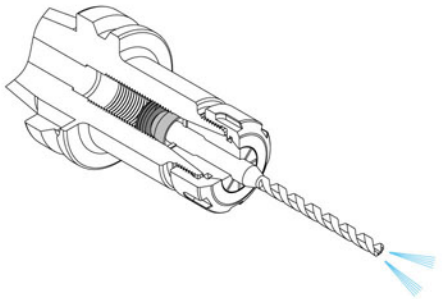






● 止水帽型止動螺絲
Back-up Screws

規格 Part No.	M	ØD	L	適用刀把 Shanks
ERCBK-ER16	M11*P1.00	9.5	12.5	ER16/SGER16
ERCBK-ER20	M14*P1.00	12.5	14.5	ER20/NR13/SGER20
ERCBK-ER25	M18*P1.50	16.0	16.3	ER25/NR16/SGER25
ERCBK-ER32	M24*P1.50	21.8	18.8	ER32/SGER32
NRCBK-NR10	M12*P1.75	9.9	12.5	NR10



● 一般型止動螺絲
Back-up Screws

規格 Part No.	M	ØD	L	適用刀把 Shanks
ARCBK-ER11	M08*P1.00	6	10	ER11
ARCBK-ER16	M11*P1.00	8	12	ER16/SGER16
ARCBK-ER20	M14*P1.00	11	13	ER20/NR13/SGER20
ARCBK-ER25	M18*P1.50	15	14	ER25/NR16/SGER25
ARCBK-ER32	M24*P1.50	20	16	ER32/SGER32
ARCBK-ER40	M28*P1.50	25	18	ER40/NR25WD/SGER40

拉力計
Grip Pull Force Gauges







油壓機械式結構，高穩定性
Oil Pressure Mechanical Structure, High Stability.

- 確認拉力計上的拉桿螺栓規格是否與主軸夾爪的規格相對應。
- 量測環境溫度須控制在室溫 25±1°C 內。
- 將拉力計及主軸前端錐度部分擦拭乾淨後，夾持拉力計即可。

- Check the specification of pull studs on the pull force gauges should correspond the specification of pull stud clamping unit.
- Measuring environment's temperature should be controlled within 25±1°C.
- Clean the pull force gauges and front-end taper parts and then clamp the pull force gauge.

- 為確保量測數值的正確性，拉力計須在有預拉的情況下使用 (如左下方錶圖)。
- ISO 拉力計使用前：請將拉桿螺拴鎖緊，完成預壓 (鎖緊即可)。
- HSK 拉力計使用前：請將六角扳手置入錐度內底部六角孔，順時針鎖緊至指針外圈一格 (如左下方錶圖) 即可。
- 實測拉力：以指針所指外圈之數值 × 10，即為實測拉力 (kg-f)。

- To ensure the accuracy of the pull force measurement, gauge has to be used in the pre-pull condition (as shown in the left below picture).
- Before using the ISO force gauge, please lock the pull stud to be at pre-pull condition (not lock too tight).
- Before using the HSK force gauge, please put the hexagon wrench into the hexagonal hole at the bottom of the taper, then lock clockwise till the indicator moved one scale in the outer ring (as shown in the left below picture).
- The finger indicated the value of the outer ring × 10; the value is pull force measured.

規格 Part No.	量測範圍 Measuring Range
ISO20	0~ 40 kg/cm²
ISO25	0~ 40 kg/cm²
ISO30	0~ 60 kg/cm²
ISO40	0~160 kg/cm²
ISO50	0~350 kg/cm²
HSK32	0~160 kg/cm²
HSK40	0~160 kg/cm²
HSK50	0~350 kg/cm²
HSK63	0~350 kg/cm²
HSK100	0~600 kg/cm²

中心出水壓力計
Coolant Through Pressure Gauges

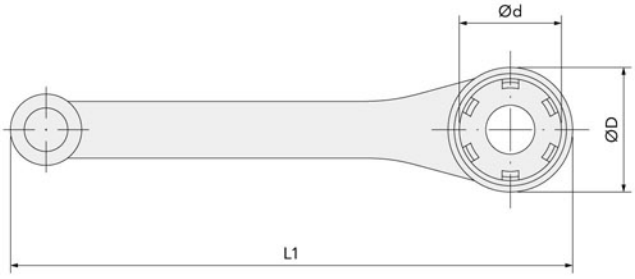


- 實測壓力：以指針所指外圈之數值，即為實測壓力 (kg-f)。
- The finger indicated the value of the outer ring; the value is coolant through pressure measured.

規格 Part No.	量測範圍 Measuring Range
ISO40	0~40 kg/cm²
ISO50	0~60 kg/cm²
HSK63	0~40 kg/cm²
HSK100	0~60 kg/cm²

棘輪扳手
Ratchet Wrenches





規格 Part No.	ØD	L1	適用螺帽 Nuts
WRT-ER11M	19	110	ER11M
WRT-ER16M	24	130	ER16M
WRT-ER20M	33	155	ER20M

TQW扭矩扳手
TQW Torque Wrenches



規格 Part No.	扭矩範圍 Torque Range	□ (mm)
TQW3A-2N02M	20~100 NM, TPR handle	14×18
TQW4B-1N02M	40~200 NM, TPR handle	

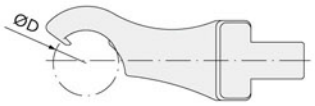
特性 Features

- 精度：順時針 ±3%，逆時針 ±5%。
- 特殊設計可於按下按鈕時，配件自動插入。
- 輕量、簡易調整的節能設計。
- 合金鋼製成之本體，硬性良好。
- 重負荷及精確機構設計，適用於工業用途。

- Accuracy: CW±3%, CCW±5%.
- Special design, insert tools shoot automatically when press the button.
- Low weight and smooth adjusting design for energy saving.
- The tube made of alloy steel with good performance of hardenability.
- Heavy-duty & accurate mechanism for industrial use.

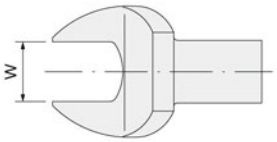
TQW扭矩扳手配件
TQW Torque Wrench Accessories





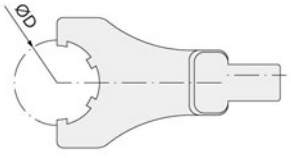
規格 Part No.	ØD	□ (mm)
TQW-D32	32 [±5 mm]	14×18
TQW-D43	43 [±5 mm]	
TQW-D50	50 [±5 mm]	
TQW-D60	60 [±5 mm]	
TQW-D63	63 [±5 mm]	
TQW-D72	72 [±5 mm]	
TQW-D82	82 [±5 mm]	





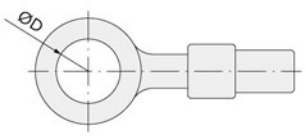
規格 Part No.	W	適用螺帽 Nuts	□ (mm)
TQW-ER11	17	ER11SH	14×18
TQW-ER16	25	ER16SH	
TQW-ER20	30	ER20SH	
TQW-NR06WD	18	NR06WD	
TQW-NR10WD	1"	NR10WD	





規格 Part No.	ØD	適用螺帽 Nuts	□ (mm)
TQW-ER25	42	ER25	14×18
TQW-ER32	50	ER32	
TQW-ER40	63	ER40	





規格 Part No.	ØD	適用螺帽 Nuts	□ (mm)
TQW-D19.5	19.5	NR06	14×18
TQW-D27	27.1	NR10	
TQW-D34	34	NR13	
TQW-D40	40	NR16	
TQW-D48	48	C20H	
TQW-D55	55	C25H	
TQW-D68	68	C32H	

NCC中心頂針
NCC Live Center



Fig. 1

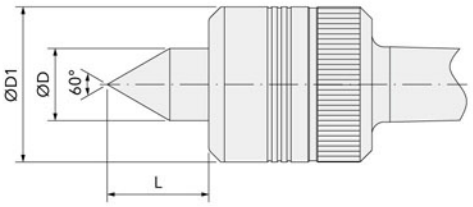




Fig. 2

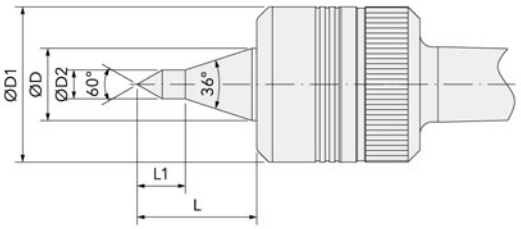
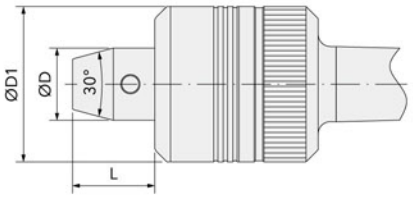




Fig. 3



規格 Shanks	M.T.	Fig.	ØD	ØD1	ØD2	L	L1
NCC4-D	No. 4	1	30	64.5	—	42.2	—
NCC4-S		2			12	49.7	20
NCC4-C		3			—	34.2	—
NCC5-D	No. 5	1	30	64.5	—	42.2	—
NCC5-S		2			12	49.7	20
NCC5-C		3			—	34.2	—

頂針頭
Center Head

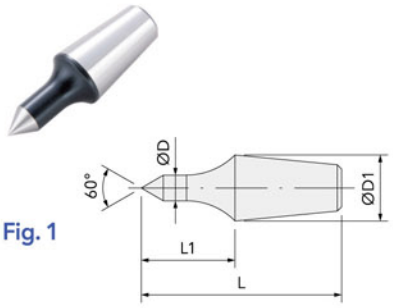


Fig. 1

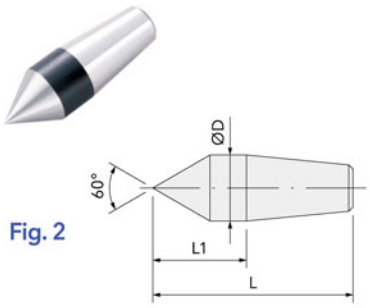


Fig. 2

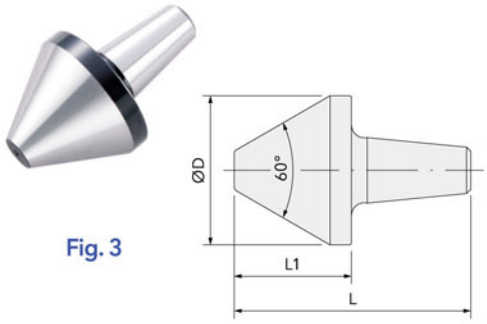


Fig. 3

規格 Shanks	Fig.	ØD	ØD1	L	L1
C306	1	6	15.5	47	22
C308		8			
C310		10			
C312		12			
C316	2	15.5	—		
C335	3	35	—	55.5	27.5

DV刀把 (DIN69871A)
DV Shanks (DIN69871A)



- BSD 精搪組
- BSD Fine Boring Systems



- C-H 高速強力型精密銑刀夾頭
- C-H High Speed Precision Power Milling Chucks



- BSH 雙刃搪刀組
- BSH Twin-cutter Boring Systems



- WF 快換式攻牙刀把－伸縮型
- WF Quick Change Tapping Chucks (with length compensation)



- SLN 側固式刀把
- SLN Weldon Chucks



- APU 鑽夾刀把
- APU CNC Drill Chucks



- ER 彈性筒夾刀把
- ER Collet Chucks



- SM 殼型銑刀把
- SM Shell Mill Holders



- SF 快換式攻牙刀把－剛性
- SF Quick Change Tapping Chucks (rigid type)



- MT 莫式錐度刀把
- MT Morse Taper Holders



- NR 高速精密筒夾刀把
- NR High Speed Precision Collet Chucks

主軸拉刀夾爪
Grippers / Clamping Units



- MAS 403 拉刀夾爪
- MAS 403 Pull Stud Type Clamping Units



- OTT 拉刀夾爪
- OTT Pull Stud Type Clamping Units



- CAT 拉刀夾爪
- CAT Pull Stud Type Clamping Units



- DIN69872 拉刀夾爪
- DIN69872 Pull Stud Type Clamping Units



- BT 倍力拉刀夾爪
- BT Pull Stud Type Clamping Units



- HSK 拉刀爪
- HSK Clamping Units



- ISO 拉刀夾爪
- ISO Pull Stud Type Clamping Units



- BT 拉刀夾爪單元
- BT Pull Stud Type Clamping Units



- HSK Sensor 定位用治具
- HSK Gauge for Sensor Position



- 調整治具
- Adjustment Gauge



- 冷卻液迴轉接頭
- Rotating Coolant Unions



- 主軸鬆刀量具
- Tool Ejection Path Instruments



- 主軸錐度規
- Tapper Gauges



- 定位座
- Pallet Clamping Systems



- 鑽頭研磨機
- Drill Grinding Machines



- 牙攻去除機
- Tap Remover



- 快削型端銑刀
- End Mill



- TRS 型 R 角端銑刀
- End Mill



- 拉桿螺栓扳手
- Special Wrenches for Pull Stud



- 45° 平面銑刀
- Face Mill



- 45° 高速平面殼型銑刀
- Face Mill



- 直角平面銑刀
- Face Mill



- 90° 平面銑刀
- Face Mill

MC雙倍力增壓 / 角固式精密虎鉗

MC Dual Force Pressure Increasing / Precision Angle Lock Vise

雙倍力增壓設計 + 角固下壓原理，無漏油失壓之慮，工件不上浮。

Dual Force Pressure Increasing Design + Angle Lock Pressing Down Theory.
No Leakage of Pressure and Oil. Work-Piece not Float up.



- **Model:**

TVA 1015 4"	TVA 1631 6"L
TVA 1320 5"	TVA 2031 8"
TVA 1624 6"	TVA 2041 8"L

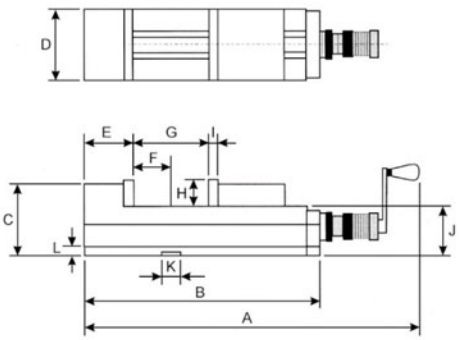
特性 Features

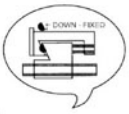
- 採用 FCD-60 高級鑄鐵，滑軸經硬化熱處理後，精密研磨一體成型高剛性、高精度。
- 壓力缸採雙倍力設計，不失壓、零故障、無漏油之慮。

- Vise material: nodular graphite cast iron FCD60kg/cm².
- Vise bed being heat treatment (HRC45°) to high rigidity, high precision.
- Angle lock pressing down theory. No leakage of pressure and oil. Work-piece not float up.
- The vise adopts 4 base level design.
- The side-clamping and vertical-clamping operation.
- Due to dual force cylinder design, no leakage of pressure, oil and breakdown.
- It is highly rigid, compact and durable.

- **標準配件**
  Standard Accessories



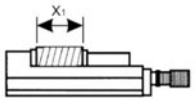




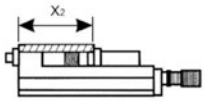
- 角固原理
- Angle Lock Theory



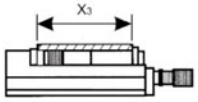
- 雙倍力設計
- Dual Force Design



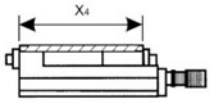
4"-145	5"-200
6"-245	8"-310



4"-210	5"-265
6"-325	8"-400



4"-231	5"-292
6"-375	8"-435



4"-296	5"-357
6"-450	8"-525

編號 Model	A	B	C	D	E	F	G	H	I	J	K	L	N.W (kg)	G.W (kg)
TVA 1015 4"	475	370	130	100	77	45	150	47	12	85	16		27	28
TVA 1320 5"	535	430	144	130	83		205	50		94			40	41
TVA 1624 6"	620	515		160	95	65	245	60	15		18	22	50	52
TVA 1631 6"L	685	580	160				310			100			59	61
TVA 2031 8"	700	595		200	108	92		63	18				67	75
TVA 2041 8"L	800	695					410						85	92

MC空壓式精密虎鉗
MC-Cobra Pneumatic Power Vise

全平面設計，容易清削

安全、高壓、快速、方便、精密、堅固

- 標準配件
  Standard Accessories

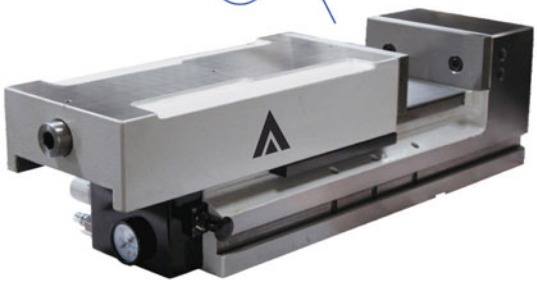


- 高精密 / 高夾持力，快速夾持工件僅需 0.5 秒。
- High precision / High clamping power.
  Only 0.5 second for work-piece clamping.

- **Model:**
  TVB 1212







- **Model:**
  TVB 1621

特性 Features

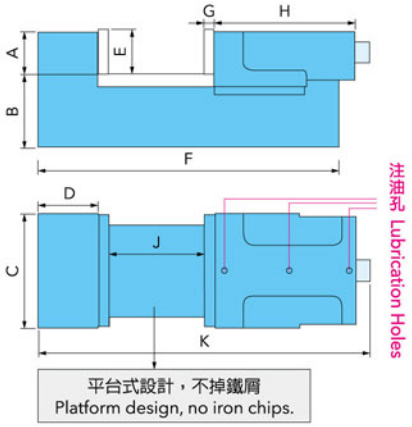
- **安全**：快速夾持並安裝逆止閥，即使風管斷裂也不致失壓；安全性佳。
- **高壓**：特殊五倍增壓缸+槓桿增壓設計。
- **快速**：夾持工作僅需 0.5 秒。
- **方便**：工作面採平台式設計，無間隙；不掉鐵屑，工作放置超方便。
- **精密**：滑動面經熱處理 HRC50° 以上，高精密研磨加工，堅固又耐用。
- **堅固**：整台虎鉗材質採用 FCD65kg/cm² 高級球狀石磨化延展性鑄鐵，高剛性，值得信賴的產品。

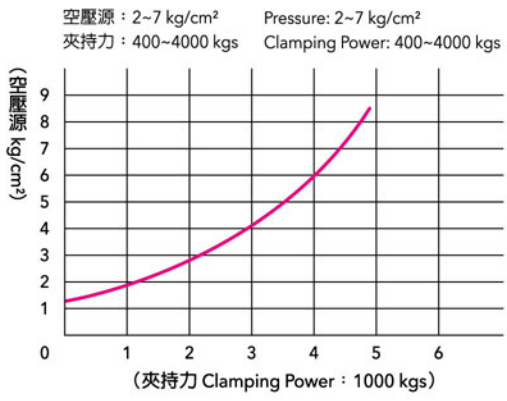
- **Safe:** fast clamping and safe with check valve for no losing pressure of air leakage.
- **High Pressure:** special quintuple pressure boost plus lever design of pressure increasing.
- **Rapid:** only 0.5 second for work-piece clamping.
- **Convenient:** platform design for working surface with no gap or residue occurred, easy to locate anywhere.
- **Precise:** heat treatment for slice surface more than HRC50°. High precise polish, strong and durable.
- **Solid:** nodular graphite cast iron FCD65kg/cm² used. High rigidity and reliable products.

注意事項及保養 Caution and Maintenance

- 三處注油孔請每週加潤滑油。
- 空壓源請加裝三點組合，以免水氣造成增壓缸生鏽腐蝕。
- 虎鉗開口速度快，距離為 5 mm，手部請勿深入鉗口內、以保安全。

- Lubricating into 3 Lubrication holes weekly.
- To avoid pressure boost rust or corroding, adding F.R.L combination on pressure source.
- Clamping fast for vise and clamping distance is only 5 mm. For safety, don't put fingers on vise.

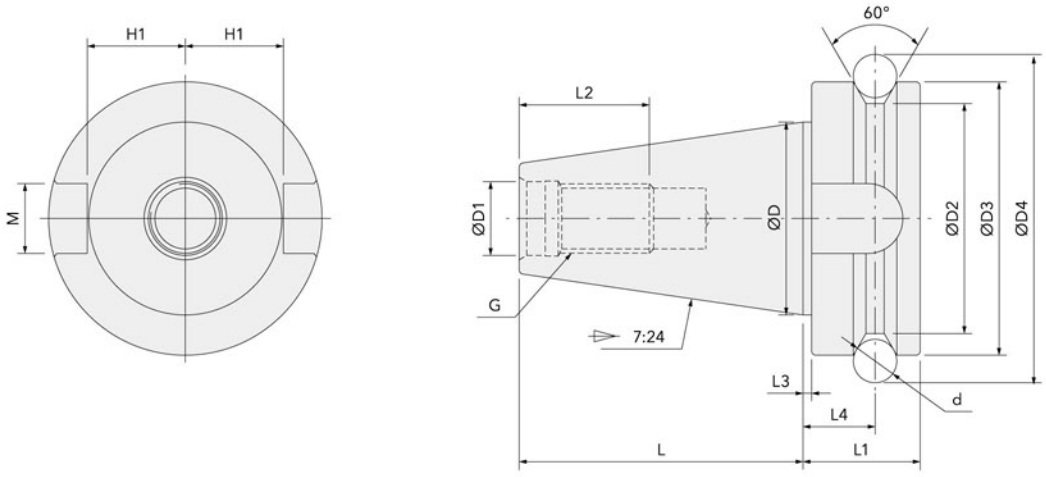




編號 Model	夾持力 Clamping Power	開口伸縮距離 Clamping Distance	A	B	C	D	E	F	G	H	J	K	N.W (kg)	G.W (kg)
TVB 1212	200~3000 kg	5 mm	50	105	120	60	53	410	15	190	127	Max 450	35	38
TVB 1621	400~4000 kg	5 mm	60	105	160	85	60	480	15	335	210	Max 685	55	60

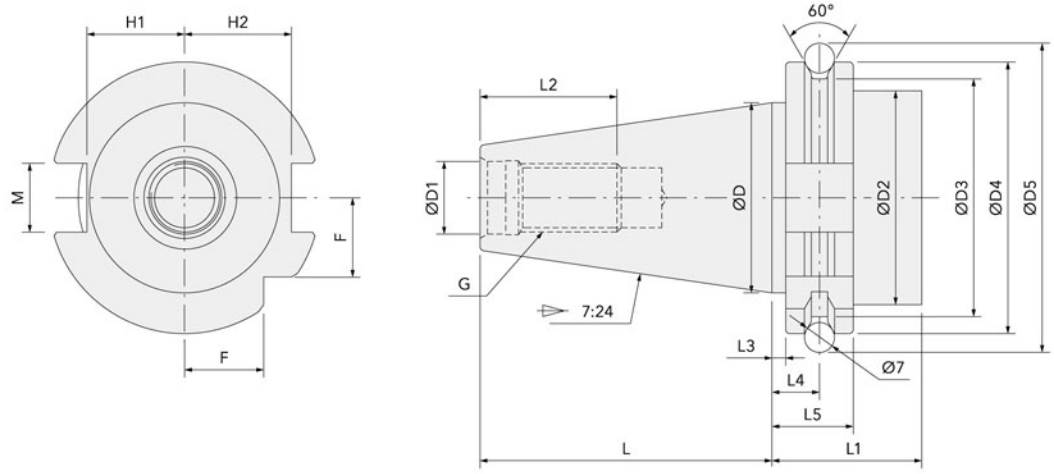
刀把規範
Technical Data

BT刀把
BT JIS6339 Shank Dimensions



規格 Part No.	L ±0.2	L1	L2 min.	L3	L4 ±0.1	ØD	ØD1 H8	ØD2	ØD3 h8	ØD4	H1 +0 −0.2	M H12	d	G 6H
BT30	48.4	22	24	2	13.6	31.75	12.5	38	46	56.144	16.3	16.1	8	M12*P1.75
BT40	65.4	27	30		16.6	44.45	17.0	53	63	75.679	22.6		10	M16*P2.00
BT50	101.8	38	45	3	23.2	69.85	25.0	85	100	119.02	35.4	25.7	15	M24*P3.00

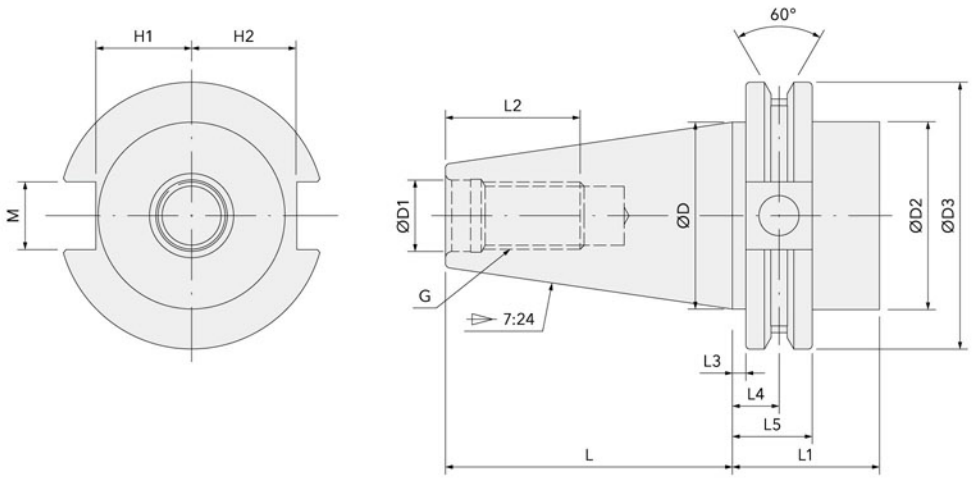
DIN刀把
DIN 69871A Shank Dimensions



規格 Part No.	L +0 −0.3	L1 min.	L2 min.	L3	L4 ±0.1	L5 +0 −0.1	ØD	ØD1 H7	ØD2 max.	ØD3 +0 −0.5	ØD4 +0 −0.1	ØD5 ±0.05	H1 +0 −0.4	H2 +0 −0.4	F +0 −0.3	M H12	G 6H
DV30	47.8	35	24	3.2	11.1	19.1	31.75	13	45	44.3	50.0	59.30	16.4	19.0	15.0	16.1	M12*P1.75
DV40	68.4		32				44.45	17	50	56.25	63.55	72.30	22.8	25.0	18.5		M16*P2.00
DV50	101.75		47				69.85	25	80	91.25	97.5	107.25	35.5	37.7	30.0	25.7	M24*P3.00

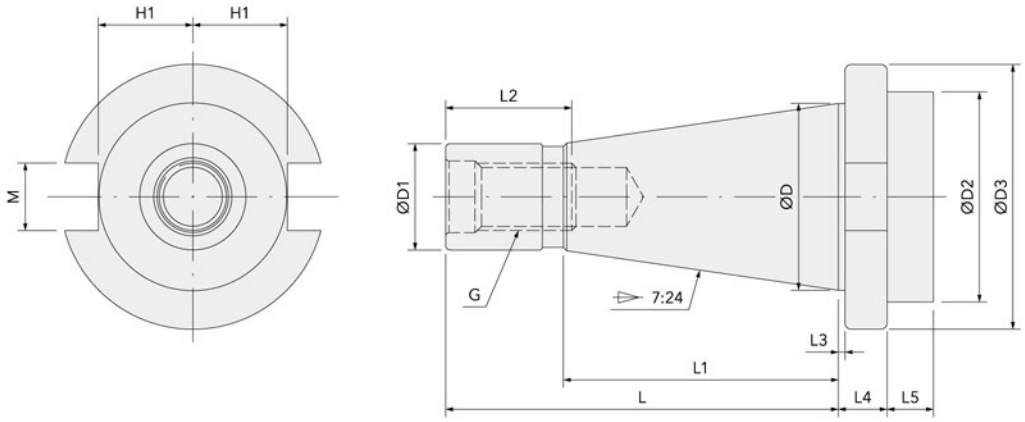
刀把規範
Technical Data

ANSI / CAT刀把
ANSI / CAT Shank Dimensions



規格 Part No.	L	L1	L2	L3	L4	L5	ØD	ØD1	ØD2	ØD3	H1	H2	M	G
CV30	47.63	34.93	25.40	3.2	11.1	19.05	31.75	13.11	31.75	46.05	16.26	18.67	16.38	1/2"-13
CV40	68.25		28.45				44.45	16.28	44.45	63.50	22.61	25.02		5/8"-11
CV50	101.6		44.45				69.85	26.19	69.85	98.42	35.31	37.72	25.91	1"- 8

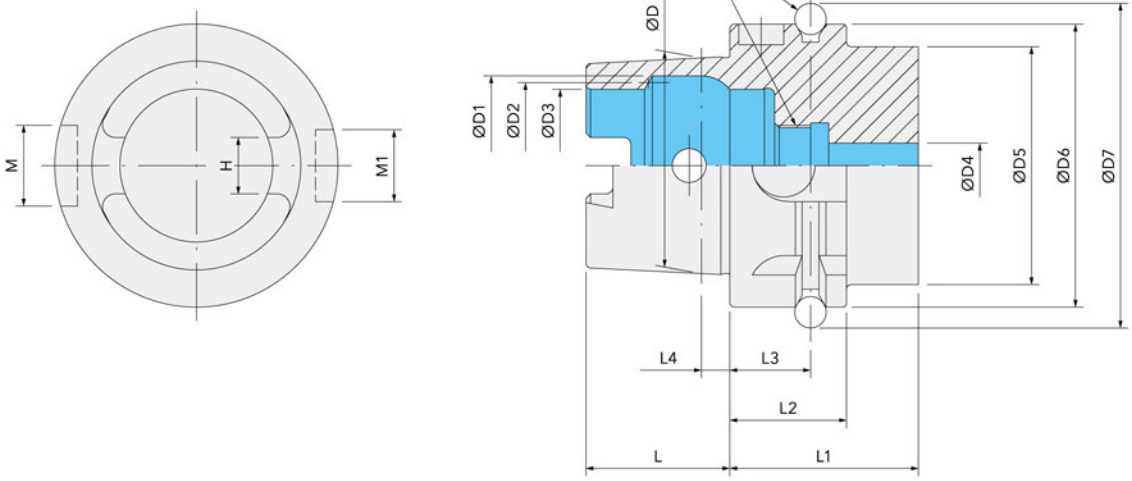
NT刀把
NT Shank Dimensions



規格 Part No.	L	L1	L2	L3	L4	L5 min.	ØD	ØD1	ØD2 max.	ØD3	H1	M	G
NT30	68.4	48.4	24.0	1.6	9.6	9.0	31.75	17.4	36	50.0	16.2	16.1	1/2"-13 or M12*P1.75
NT40	93.4	65.4	32.0		11.6	11.0	44.45	25.3	50	63.0	22.5		5/8"-11 or M16*P2.00
NT50	126.8	101.8	47.0	3.2	15.2	16.0	69.85	39.6	78	97.5	35.3	25.7	1"- 8 or M24*P3.00

刀把規範
Technical Data

HSK刀把
HSK Shank Dimensions (DIN69893)



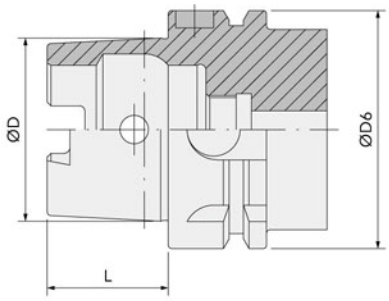
規格 Part No.	ØD6 h10	L +0 −0.2	L1 min.	L2 +0 −0.1	L3 ±0.1	L4	ØD	ØD1 H11	ØD2
HSK32	32	16	35	20	16	3.2	24 +0.007 +0.005	21.0	19
HSK40	40	20				4.0	30 +0.007 +0.005	25.5	23
HSK50	50	25	42	26	18	5.0	38 +0.009 +0.006	32.0	29
HSK63	63	32				6.3	48 +0.011 +0.007	40.0	37
HSK80	80	40				8.0	60 +0.013 +0.008	50.0	46
HSK100	100	50	45	29	20	10.0	75 +0.015 +0.009	63.0	58

規格 Part No.	ØD3 H10	ØD4 max.	ØD5 max.	ØD7 +0 −0.1	H ±0.04	M H10	M1 H10	d	G
HSK32	17	4.2	26	37.00	7.05	9	7	4	M10*P1.00
HSK40	21	5.0	34	45.00	8.05	11	9		M12*P1.00
HSK50	26	6.8	42	59.30	10.54	14	12	7	M16*P1.00
HSK63	34	8.4	53	72.30	12.54	18	16		M18*P1.00
HSK80	42	10.2	67	88.80	16.04	20	18		M20*P1.50
HSK100	53	12.0	85	109.75	20.02	22	20		M24*P1.50

刀把規範
Technical Data

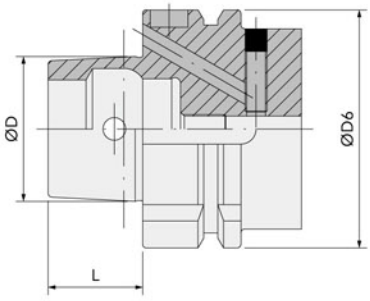
HSK刀把
HSK Shank Dimensions

HSK-A



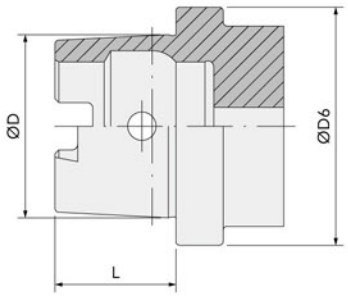
	D6	D	L
HSK32	32	24	16
HSK40	40	30	20
HSK50	50	38	25
HSK63	63	48	32
HSK80	80	60	40
HSK100	100	75	50

HSK-B



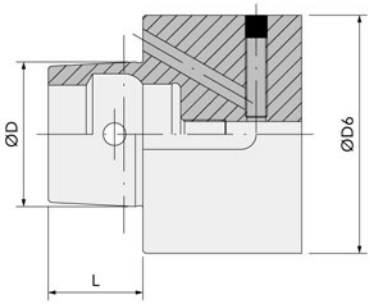
	D6	D	L
HSK40	40	24	16
HSK50	50	30	20
HSK63	63	38	25
HSK80	80	48	32
HSK100	100	60	40
—	—	—	—

HSK-C



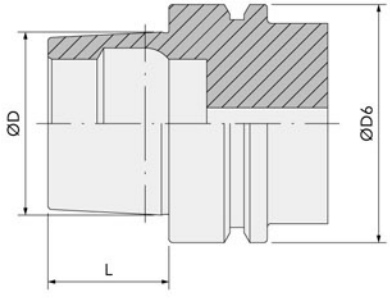
	D6	D	L
HSK32	32	24	16
HSK40	40	30	20
HSK50	50	38	25
HSK63	63	48	32
HSK80	80	60	40
HSK100	100	75	50

HSK-D



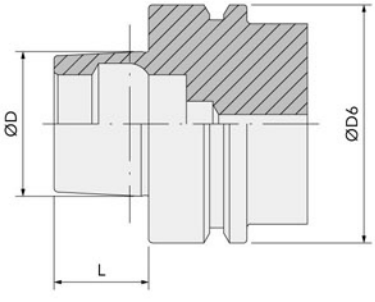
	D6	D	L
HSK40	40	24	16
HSK50	50	30	20
HSK63	63	38	25
HSK80	80	48	32
HSK100	100	60	40
—	—	—	—

HSK-E



	D6	D	L
HSK32	32	24	16
HSK40	40	30	20
HSK50	50	38	25
HSK63	63	48	32

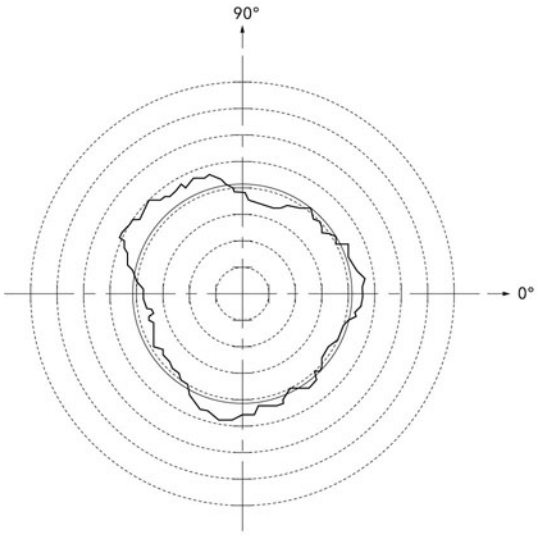
HSK-F



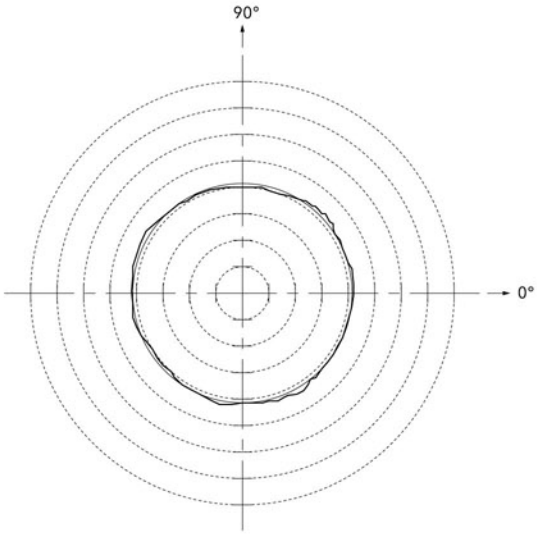
	D6	D	L
HSK50	50	30	20
HSK63	63	38	25
HSK80	80	48	32
—	—	—	—

TR-1000中心孔研磨機
TR-1000 Center Hole Grinding Machine

● 沒磨中心孔真圓度
Roundness Without Center Hole Grinding



● 有磨中心孔真圓度
Roundness With Center Hole Grinding





編號 Model	尺寸 Dimension	重量 Weight	電壓 Voltage
TR-1000	80 × 80 × 170 (H) cm	約 500 kg	3Φ，220V

偏擺檢查儀
Run Out Checking Fixture

- 採用高剛性主軸。
- 口徑端偏擺精度為1μ內。
- 偏擺精度口徑端1μ內，300mm為3μ內。



主軸固定裝置



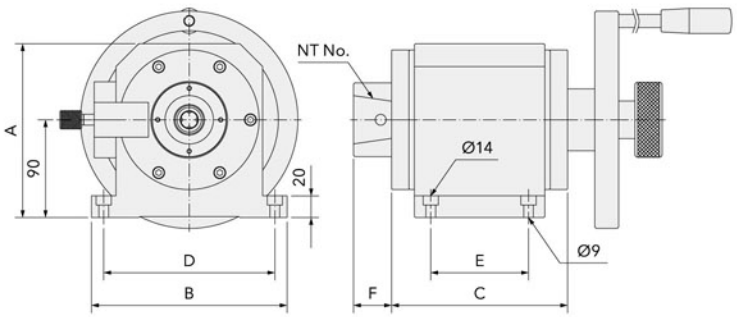
旋轉手輪

● 使用範例









NT No.	A	B	C	D	E	F	重量 Weight
ISO20	160	180	162	157.5	90	35	27 kg
ISO25	160	180	162	157.5	90	35	27 kg
BT30	160	180	162	157.5	90	35	27 kg
BT40	160	180	162	157.5	90	35	27 kg
BT50	160	180	162	157.5	90	71	28 kg
DIN30	160	180	162	157.5	90	35	27 kg
DIN40	160	180	162	157.5	90	35	27 kg
DIN50	160	180	162	157.5	90	71	28 kg
CAT30	160	180	162	157.5	90	35	27 kg
CAT40	160	180	162	157.5	90	35	27 kg
CAT50	160	180	162	157.5	90	71	28 kg
HSK25	160	180	162	157.5	90	35	27 kg
HSK32	160	180	162	157.5	90	35	27 kg
HSK40	160	180	162	157.5	90	35	27 kg
HSK50	160	180	162	157.5	90	35	27 kg
HSK63	160	180	162	157.5	90	35	27 kg
HSK100	160	180	162	157.5	90	96	30 kg

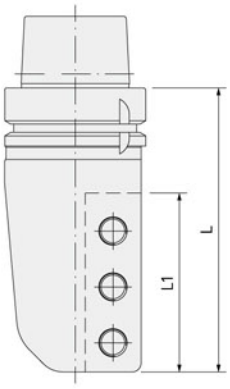
- HSK：A/E 共用。

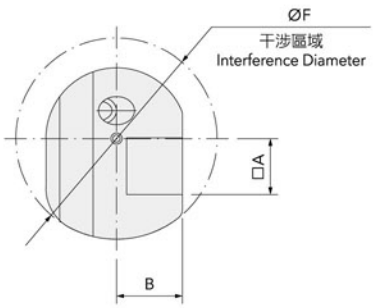
HSK63T角車刀用刀把180°型
HSK63T Square Toolholder 180° Type

可用於外徑加工、溝槽加工、螺牙車削等，加工用途廣泛。

Wide machining applications, including OD machining, groove machining, thread turning, etc.







規格 Part No.	方向 Direction	□A	B	L	L1	ØF
HSK63T-180-TB25R-127	R	25	29.5	127	80	90
-TB25L-127	L					

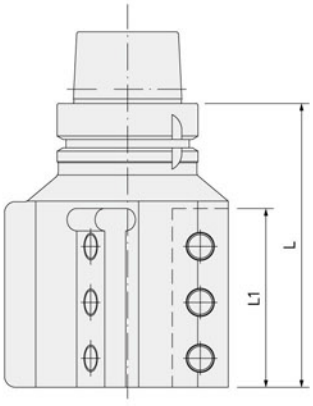
- R = 右手車削，L = 左手車削。
- R = Right hand, L = Left hand.

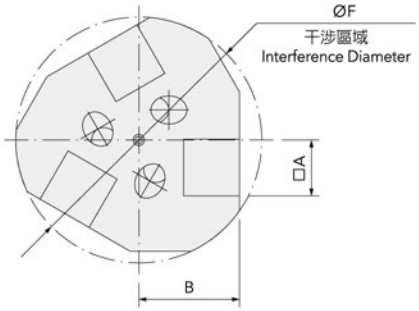
HSK63T角車刀用刀把180°多用途型
HSK63T Square Toolholder 180° Multi-purpose Type

可用於外徑加工、溝槽加工、螺牙車削等，加工用途廣泛。

Wide machining applications, including OD machining, groove machining, thread turning, etc.







- 使用 3 支車刀，可有效縮短 ATC 自動換刀時間。
- ATC automatic tool change time could be reduced by using 3 tools.

注意：機械主軸必須可進行 60° 的定位。
Caution: Necessary of 60° indexing capability for the machine spindle.

規格 Part No.	方向 Direction	□A	B	L	L1	ØF
HSK63T-180-3TB25R-127	R	25	45	127	80	110
-3TB25L-127	L					

- R = 右手車削，L = 左手車削。
- R = Right hand, L = Left hand.

HSK63T搪刀桿用側固式刀把

HSK63T Side Lock Toolholder for Boring Bar

刀把用途：內徑搪孔、螺牙車削。

Toolholder purpose: ID boring, thread turning.



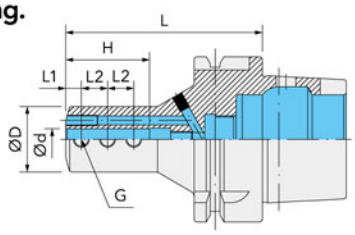


Fig. 1

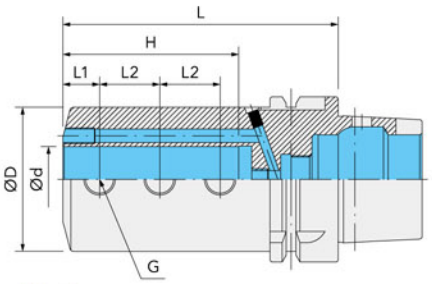
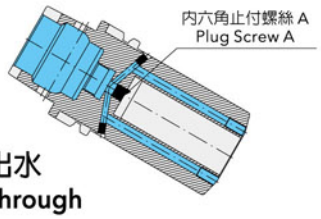


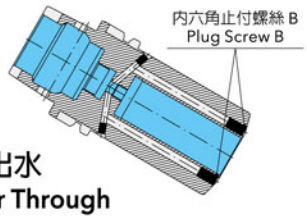
Fig. 2

規格 Part No.	Fig.	Ød	ØD	L	L1	L2	H	G
HSK63T-TSL06-070	1	6	23	70	5	8	24	M05*P0.80
-TSL08-075		8	25	75	6	10	32	M06*P1.00
-TSL10-080		10	29	80	8	12	40	M08*P1.00
-TSL12-085		12	34	85		16	45	
*-TSL16-080		16	40	80	10	21	41	M10*P1.25
-100				100			60	
*-TSL20-080	2	20	50	80	12	20	41	
-100				100			60	
*-TSL25-085		25	55	85	14	23	47	M12*P1.50
-105				105			67	
*-TSL32-090		32	64	90	16	26	49	
-115				115			74	
*-TSL40-105		40	80	105	18	32	61	M16*P1.50
-145				145			91	

- 帶 * 符號規格：因僅有 2 個固定螺絲，故無法使用 TSL 套筒。
- Symbol * : Can not use the TSL Sleeve because it is with two fixed screws only.



● 端面出水
Side Through



● 中心出水
Center Through

- 透過內六角止付螺絲裝置位置不同，可切換中心出水與端面出水。
- By the different pulg screw position, user could switch coolant flow (center through or side through).

規格 Part No.	內六角止付螺絲 A Plug Screw A	內六角止付螺絲 B Plug Screw B
TSL06	M05*P0.80	M04*P0.70
08	M06*P1.00	
10		M05*P0.80
12		M06*P1.00
16		
20		
25	M08*P1.25	
32		
40		

TSL套筒

TSL Reduction Sleeves

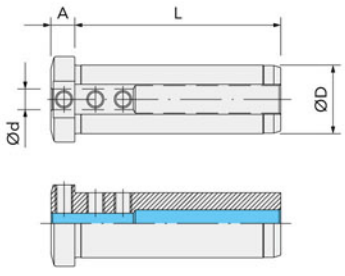


Fig. 1

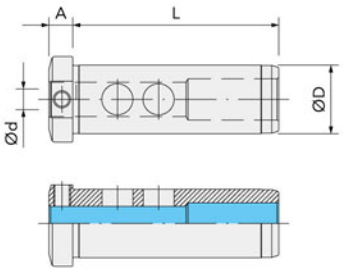


Fig. 2

規格 Part No.	Fig.	Ød	ØD	L	A
TSL20-06	1	6	20	60	7
-08		8			
-10	2	10			
-12		12			
-16		16			
TSL32-10	1	10	32	75	9
-12		12			
-16	2	16			
-20		20			

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