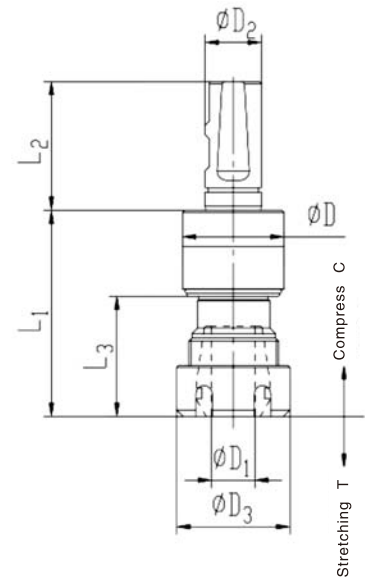




Tool Holder Series





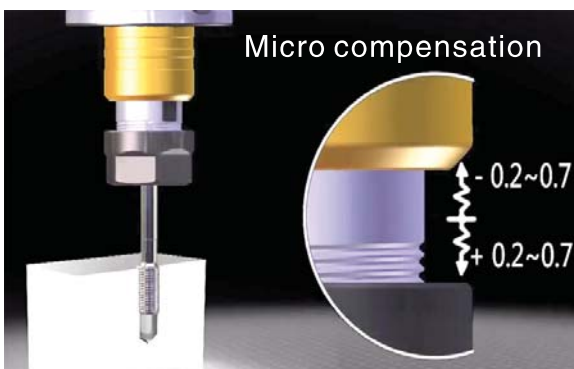
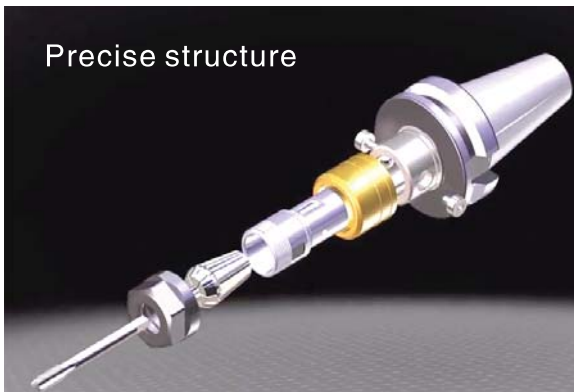
• ERNuts S type for the internal cooling type, A type for the cold type.

Unit: mm

Model	Stock	ERJacket	φ D	φ D1	φ D2	φ D3	L1	L2	L3	C	T	Applicable taps
VLERS20-C25	●	ER20	34	4.5-10	25	34	68	57	45	0.5	0.5	M4-M12 (Nr.8-7/16)
VLERS32-C25	●	ER32	45	4.5-16	25	50	90	57	51	0.5	0.5	

● Stock ○ Available upon Order

Characteristic



- Turning inserts
- External turning
- Internal turning
- Grooving & parting
- Threading
- Milling
- Boring & drilling
- Tool holder**
- Solid carbide end mills
- Solid carbide drill & taps
- Technical information

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

Tool holder

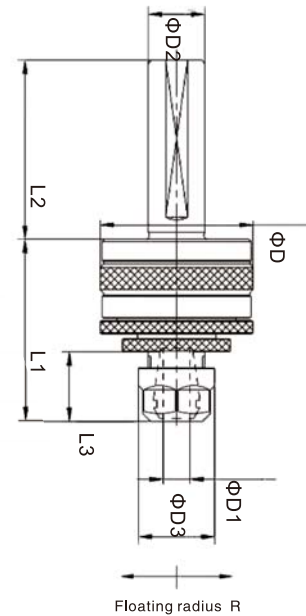
Solid carbide end mills

Solid carbide drill & taps

Technical information

The problem we met usually as below,

- 1 The size of the hole is bigger , the accuracy of the hole dimension doesn't meet the requirements.
- 2 The middle section of the hole is oversized and two ends section are smaller. Cylindricity doesn't meet the requirements
- 3 The roughness of the hole surface finish can not meet the requirements
- 4 The reamer is not durable.
- 5 The straightness of the hole is bad.
- 6 The quality of the hole machined is not stable when mass production



Unit: mm

Model	Stock	ERJacket	$\phi D1$	$\phi D2$	ϕD	$\phi D3$	L1	L2	L3	R (MAX)
SV-FTER20-D25	●	ER20	3-13	25	68	34	80	80	30	0.5

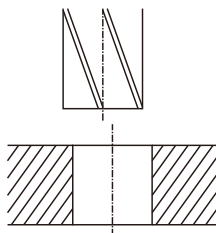
● Stock ○ Available upon Order

Characteristic

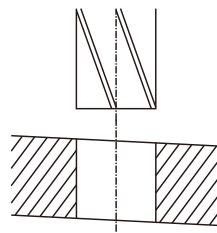
Using "floating reamer holder" , it's special can make the reamer find the center line of the main spindle, by auto floating the reamer in axial and radial direction. by this way the deviation between the center line of the reamer and the center line of the hole to be reamed can be auto compensated.

- A. By using this floating holder, the reamer in the reaming process can complete the reaming task flexibly, smoothly and evenly, the reamed hole roundness and cylindrical degree can reach to 0.002mm, the roughness can reach to Ra0.2 μ m.
- B. The spindle and center of the reamer in the floating range that can keep coincident with the center of the workpieces all the time. All flutes of the reamer cut evenly and no shock. It can make the life of the reamer longer more than 5 times.

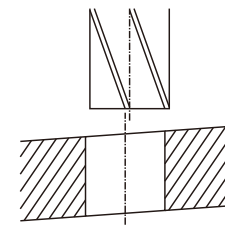
The possible deviation of the reaming process



1、The center line of the pre-processing hole deviated from the center line of the reamer.



2、There is angle between pre-processing hole center and reamer



3、The deviation in picture1 and picture2 are existing at the same time.

Milling Chuck  P238	Apu Drill Chuck Holder  P238	Collet Chuck  P239	SK Collet Chuck  P240
SK Collet Chuck  P241	FMA Face Mill Holder  P242	FMB Mill Holder  P243	SLN Side Lock End Mill Holder  P244
NC  P245	NC  P245	Shrink Chuck  P246	BT Hydraulic Chuck  P247
MX Collet Chuck  P247	TPM  P248	TER  P248	Taper Chuck  P249
SK□-L1  P250	FMB□-L1  P251	SLN□-L1  P252	ER Collet Chuck DIN69893  P253
End Mill Holder Weldon DIN69893  P253	FMB Face Mill Holder  P254	Micro compensation tapping tool holder  P255	Floating knife series  P255

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

Tool holder

Solid carbide end mills

Solid carbide drill & taps

Technical information

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

Tool holder

Solid carbide end mills

Solid carbide drill & taps

Technical information

ER Collet Chuck Holder



P256

ER Collet



P257

Sealed Collet with Slitting



P257

ER Straight Collet



P258

SC Sealed Collet



P258

SKS Collet



P259

MX Collet



P259

BT Pull Studs



P260

JT Pull Studs



P260

ER Clamping Nuts



P261

Clamping Nuts



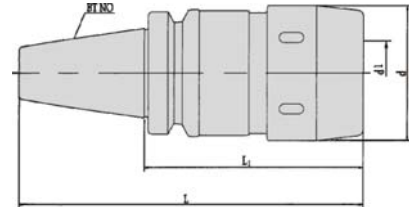
P261

Wrenches



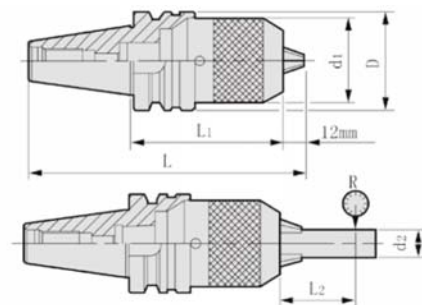
P262

Milling Chuck



Ordering Code		Stock	d1	d	L1	Draw Bar
BT30	GMC16-80	○	16	45	80	M12
	GMC20-75	●	20	50	80	
	GMC25-90	●	25	55	80	
BT40	GMC16-90	○	16	45	90	M16
	GMC20-80	●	20	50	90	
	GMC25-90	●	25	55	90	
BT50	GMC32-105	●	32	72.5	105	M24
	GMC32-110	●	32	72.5	110	
	GMC32-165	●	32	72.5	150	
	GMC32-200	●	32	72.5	200	
	GMC32-250	●	32	72.5	250	
	GMC32-300	●	32	72.5	300	
	GMC42-110	●	42	82	110	
	GMC42-150	●	42	82	150	
	GMC42-200	●	42	82	200	
	GMC42-300	●	42	82	300	

Apu Drill Chuck Holder



Ordering Code	Stock	L	L1	d
BT30-APU08-80	●	128.4	80	37
BT30-APU13-110	●	148.4	100	49
BT30-APU16-110	●	163.4	115	54
BT40-APU08-85	●	150.4	85	37
BT40-APU13-105	●	170.4	105	49
BT40-APU16-110	●	185.4	120	54
BT50-APU08-90	●	196.8	95	37
BT50-APU13-120	●	221.8	120	49
BT50-APU16-130	○	231.8	130	54
BT50-APU16-165	○	266.8	165	54
BT50-APU16-190	●	291.8	190	54

● Stock ○ Available upon Order

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

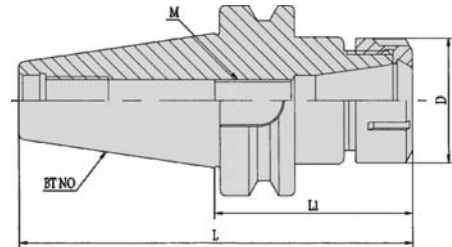
Tool holder

Solid carbide end mills

Solid carbide drill & taps

Technical information

Collet Chuck

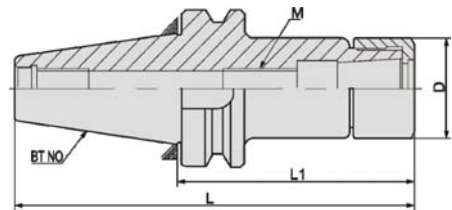


Ordering Code	Stock	Capacity	L	L1	D	Collet	NUT	Wrench
BT30-ER11-60	●	0.5-7	108.4	60	19	ER11	CAN-ER11	W-ER11A
-100			148.4	100	19			
BT30-ER16-60	●	1-10	108.4	60	28	ER16	CAN-ER16	W-ER16A
-100			148.4	100	28			
BT30-ER20-60	●	2-13	108.4	60	34	ER20	CAN-ER20	W-ER20A
-100			148.4	100	34			
BT30-ER25-60	●	2-16	108.4	60	42	ER25	CAUM-ER25	W-ER25UM
-100			148.4	100	42			
BT30-ER32-60	●	3-20	108.4	60	50	ER32	CAUM-ER32	W-ER32UM
-100			148.4	100	50			
BT40-ER11-70	●	0.5-7	135.4	70	19	ER11	CAN-ER11	W-ER11A
-100			165.4	100	19			
BT40-ER16-70	●	1-10	135.4	70	28	ER16	CAN-ER16	W-ER16A
-100			165.4	100	28			
-150			215.4	150	28			
BT40-ER20-70	●	2-13	135.4	70	34	ER20	CAN-ER20	W-ER20A
-100			165.4	100	34			
-150			215.4	150	34			
BT40-ER25-70	●	2-16	135.4	70	42	ER25	CAUM-ER25	W-ER25UM
-100			165.4	100	42			
-150			215.4	150	42			
BT40-ER32-70	●	3-20	135.4	70	50	ER32	CAUM-ER32	W-ER32UM
-100			165.4	100	50			
-150			215.4	150	50			
BT40-ER40-80	●	3-26	135.4	70	63	ER40	CAUM-ER40	W-ER40UM
-100			165.4	100	63			
-150			215.4	150	63			
BT50-ER16-70	●	1-10	171.8	70	28	ER16	CAN-ER16	W-ER16A
-100			201.8	100	28			
-150			251.8	150	28			
BT50-ER20-70	●	2-13	171.8	70	34	ER20	CAN-ER20	W-ER20A
-100			201.8	100	34			
-150			251.8	150	34			
BT50-ER25-70	●	2-16	171.8	70	42	ER25	CAUM-ER25	W-ER25UM
-100			201.8	100	42			
-150			251.8	150	42			
BT50-ER32-70	●	3-20	171.8	70	50	ER32	CAUM-ER32	W-ER32UM
-100			201.8	100	50			
-150			251.8	150	50			
BT50-ER40-80	●	3-26	181.8	80	63	ER40	CAUM-ER40	W-ER40UM
-100			201.8	100	63			
-150			251.8	150	63			
-200			301.8	200	63			

● Stock ○ Available upon Order

SK Collet Chuck BT □-SK□-L1

- BT taper shank is in conformity with AT3 standard
- Concentricity of the inner and outer cone 0.005mm
- Default balancing design



Ordering Code	Stock	Capacity	L	L1	D	Collet	Nut	Wrench
BT30-SK06-60	●	2-6	108.4	60	20	SK06	SK06	OW/SK06 or OB/SK06
-80	●		128.4	80				
BT30-SK10-70	●	2-10	118.4	70	27	SK10	SK10	OW/SK10 or OB/SK10
-95	●		143.4	95				
BT30-SK16-60	●	3-16	108.4	60	40	SK16	SK16	A/38-42 or OB/SK16
-80	●		128.4	80				
-100	●		148.4	100				
BT30-SK25-80	●	6-25.4	128.4	80	54	SK25	SK25	A/45-52 or OB/SK25
BT40-SK06-65	●	2-6	130.4	65	20	SK06	SK06	OW/SK06 or OB/SK06
-85	●		150.4	85				
BT40-SK10-55	●	2-10	120.4	55	27	SK10	SK10	OW/SK10 or OB/SK10
-80	●		145.4	80				
-100	●		165.4	100				
-150	●		215.4	150				
BT40-SK16-55	●	3-16	120.4	55	40	SK16	SK16	A/38-42 or OB/SK16
-80	●		145.4	80				
-100	●		165.4	100				
-150	●		215.4	150				
BT40-SK25-70	●	6-25.4	135.4	70	54	SK25	SK25	A/45-52 or OB/SK25
-95	●		160.4	95				
-110	●		175.4	110				
BT50-SK06-70	●	2-6	171.8	70	20	SK06	SK06	OW/SK06 or OB/SK06
-100	●		201.8	100				
BT50-SK10-100	●	2-10	201.8	100	27	SK10	SK10	OW/SK10 or OB/SK10
-130	●		231.8	130				
-150	●		251.8	150				
BT50-SK16-100	●	3-16	201.8	100	40	SK16	SK16	A/38-42 or OB/SK16
-130	●		231.8	130				
-150	●		251.8	150				
BT50-SK25-100	●	6-25.4	201.8	100	54	Sk25	Sk25	A/45-52 or OB/SK25
-130	●		231.8	130				
-150	●		251.8	150				

● Stock ○ Available upon Order

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

Tool holder

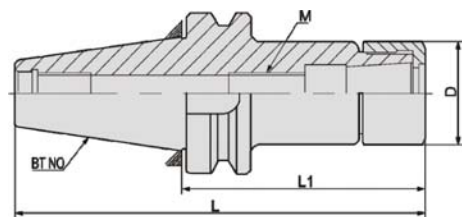
Solid carbide end mills

Solid carbide drill & taps

Technical information

SK Collet Chuck BT □-GSK□-L1

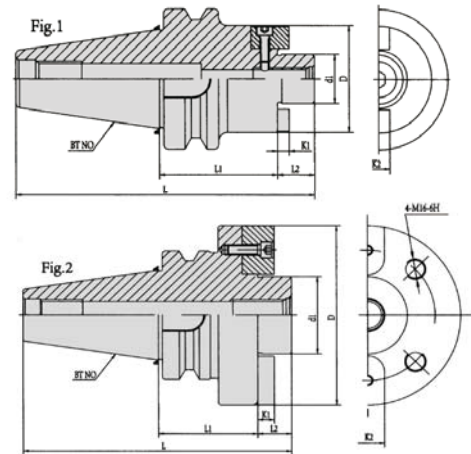
- BT taper shank is in conformity with AT3 standard
- Concentricity of the inner and outer cone 0.005mm
- Default balancing design



Ordering Code	Stock	Capacity	L	L1	D	Collet	Nut	Wrench
BT30-GSK06-60	●	2-6	108.4	60	20	SK06	GSK06	OB/SK06
-80	●		128.4	80				
BT30-GSK10-70	●	2-10	118.4	70	27	SK10	GSK10	OB/SK10
-95	●		143.4	95				
BT30-GSK16-60	●	3-16	108.4	60	40	SK16	GSK16	OB/SK16
-80	●		128.4	80				
-100	●		148.4	100				
-SK25-80	●	6-25.4	128.4	80	54	SK25	GSK25	OB/SK25
BT40-GSK06-65	●	2-6	130.4	65	20	SK06	GSK06	OB/SK06
-85	●		150.4	85				
BT40-GSK10-55	●	2-10	120.4	55	27	SK10	GSK10	OB/SK10
-80	●		145.4	80				
-100	●		165.4	100				
-150	●		215.4	150				
BT40-GSK16-55	●	3-16	120.4	55	40	SK16	GSK16	OB/SK16
-80	●		145.4	80				
-100	●		165.4	100				
-150	●		215.4	150				
BT40-GSK25-70	●	6-25.4	135.4	70	54	SK25	GSK25	OB/SK25
-95	●		160.4	95				
-110	●		175.4	110				
BT50-GSK06-70	●	2-6	171.8	70	20	SK06	GSK06	OB/SK06
-100	●		201.8	100				
BT50-GSK10-100	●	2-10	201.8	100	27	SK10	GSK10	OB/SK10
-130	●		231.8	130				
-150	●		251.8	150				
BT50-GSK16-100	●	3-16	201.8	100	40	SK16	GSK16	OB/SK16
-130	●		231.8	130				
-150	●		251.8	150				
BT50-GSK25-100	●	6-25.4	201.8	100	54	SK25	GSK25	OB/SK25
-130	●		231.8	130				
-150	●		251.8	150				

● Stock ○ Available upon Order

FMA Face Mill Holder



Ordering Code	Stock	Type	d1	D	L	L1	L2	K1	K2
BT30-FMA25.4-45	●	Fig.1	25.40	50	113.4	45	20	4.52	9.52
-60					128.4	60			
BT30-FMA31.75-45	●	Fig.1	31.75	60	115.4	45	22	6.70	12.70
BT40-FMA25.4-45	●	Fig.1	25.40	50	130.4	45	20	4.52	9.52
-60					145.4	60			
-90					175.4	90			
-105					190.4	105			
BT40-FMA31.75-45	●	Fig.1	31.75	60	132.4	45	22	6.70	12.70
-75					162.4	75			
-90					177.4	90			
BT40-FMA38.1-60	●	Fig.1	38.10	75	150.4	60	25	8.87	15.87
BT40-FMA50.8-60	●	Fig.1	50.80	98	161.4	60	36	9.75	19.05
BT50-FMA25.4-45	●	Fig.1	25.40	50	166.8	45	20	4.52	9.52
-90					211.8	90			
-150					271.8	150			
BT50-FMA31.75-45	●	Fig.1	31.75	60	168.8	45	22	6.70	12.70
-75					198.8	75			
-105					228.8	105			
BT50-FMA38.10-45	●	Fig.1	38.10	80	171.8	45	25	8.87	15.87
-75					201.8	75			
BT50-FMA50.80-45	●	Fig.1	50.80	98	182.8	45	36	9.75	19.05
-75					212.8	75			
BT50-FMA47.62-75	●	Fig.1	47.62	128.75	208.8	75	32	12.50	25.40

● Stock ○ Available upon Order

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

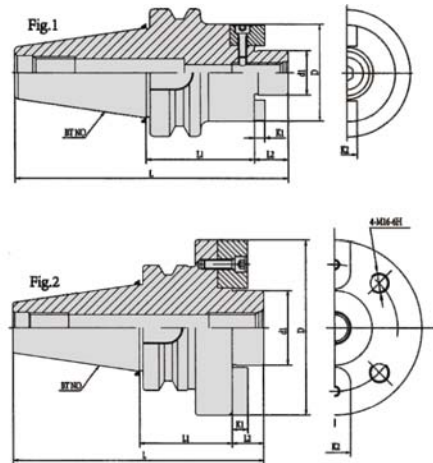
Tool holder

Solid carbide end mills

Solid carbide drill & taps

Technical information

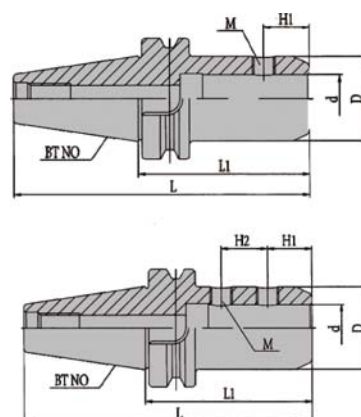
FMB Mill Holder



Ordering Code	Stock	Type	d1	d2	D	L	L1	L2	K1	K2	T
BT30-FMB22-45	●	Fig.1	22	26	45	109.9	45	16.5	4.8	10	M10x30
-60	124.9					60					
BT30-FMB27-45	●	Fig.1	27	33	54	111.9	45	18.5	5.8	12	M12x30
-60	126.9					60					
BT30-FMB32-60	●	Fig.1	32	41	58	130.4	60	22	6.8	14	M16x35
BT40-FMB22-45	●	Fig.1	22	26	48	126.9	45	16.5	4.8	10	M10x30
-60						141.9	60				
-100						181.9	100				
-150						231.9	150				
BT40-FMB27-45	●	Fig.1	27	33	60	128.9	45	18.5	5.8	12	M12x30
-60						143.9	60				
-100						183.9	100				
-150						233.9	150				
-200						283.9	200				
BT40-FMB32-60	●	Fig.1	32	41	62	147.9	60	22	6.8	14	M16x35
-100						187.4	100				
-150						237.4	150				
-200						287.4	200				
BT40-FMB40-60	●	Fig.1	40	48	80	150.4	60	25	8	16	M16x35
-100						190.4	100				
-150						240.4	150				
-200						290.4	200				
BT50-FMB22-60	●	Fig.1	22	26	48	178.3	60	16.5	4.8	10	M10x30
-100						218.3	100				
-150						268.3	150				
-200						318.3	200				
BT50-FMB27-60	●	Fig.1	27	33	60	180.3	60	18.5	5.8	12	M12x30
-100						220.3	100				
-150						270.3	150				
-200						320.3	200				
BT50-FMB32-60	●	Fig.1	32	41	73	183.8	60	22	6.8	14	M16x35
-100						223.8	100				
-150						273.8	150				
-200						323.8	200				
BT50-FMB40-60	●	Fig.1	40	48	80	186.8	60	25	8	16	M16x35
-100						226.8	100				
-150						276.8	150				
-200						326.8	200				
BT50-FMB60-75	●	Fig.1	60	-	140	201.8	75	25	12.5	25.4	
-100						226.8	100				

● Stock ○ Available upon Order

SLN Side Lock End Mill Holder



Ordering Code	Stock	Type	L	L1	H1	H2	M	D	d				
BT30-SLN6-60	●	Fig.1	108.4	60	18	/	M6	25	6				
BT30-SLN8-60	●	Fig.1			M8		28	8					
BT30-SLN10-60	●	Fig.1			20		M10	35	10				
BT30-SLN12-60	●	Fig.1			22.5		M12	42	12				
BT30-SLN16-75	●	Fig.1	123.4	75	24		M14	48	16				
BT30-SLN20-63	●	Fig.1	111.4	63	25		M16	52	20				
BT30-SLN20-75	●	Fig.1	123.4	75									
BT30-SLN25-80	●	Fig.2	128.4	80	24		25	M18	65	25			
BT30-SLN25-90	●	Fig.2	138.4	90									
BT30-SLN25-100	●	Fig.2	148.4	100									
BT40-SLN6-50	●	Fig.1	115.4	50	18	/	M6	25	6				
BT40-SLN8-50	●	Fig.1			M8		28	8					
BT40-SLN10-63	●	Fig.1			20		M10	35	10				
BT40-SLN12-63	●	Fig.1			22.5		M12	42	12				
BT40-SLN16-63	●	Fig.1			24		M14	48	16				
BT40-SLN20-63	●	Fig.1			25		M16	52	20				
BT40-SLN25-90	●	Fig.2	155.4	90	24		25	M18	65	25			
BT40-SLN25-100	●	Fig.2	165.4	100									
BT40-SLN32-100	●	Fig.2	170.4	105	30	32	M20	72	32				
BT40-SLN40-105	●	Fig.2						80	40				
BT40-SLN42-105	●	Fig.2						82	42				
BT50-SLN6-63	●	Fig.1						164.8	63	18	/	M6	25
BT50-SLN8-63	●	Fig.1	M8	28	8								
BT50-SLN10-63	●	Fig.1	20	M10	35	10							
BT50-SLN12-80	●	Fig.1	22.5	M12	42	12							
BT50-SLN16-80	●	Fig.1	181.8	80	24	25	M14	48	16				
BT50-SLN20-80	●	Fig.1								M16		52	20
BT50-SLN25-100	●	Fig.2								201.8		100	24
BT50-SLN32-105	●	Fig.2	206.8	105	30	32	M20	72	32				
BT50-SLN40-115	●	Fig.2	216.8	115				80	40				
BT50-SLN42-100	●	Fig.2	221.8	120				82	42				

● Stock ○ Available upon Order

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

Tool holder

Solid carbide end mills

Solid carbide drill & taps

Technical information

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

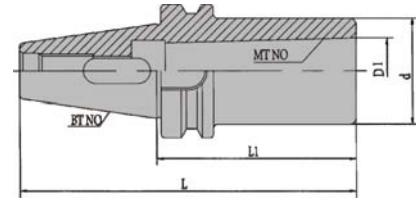
Tool holder

Solid carbide end mills

Solid carbide drill & taps

Technical information

NC Morse Taper Holder(A Type)



Ordering Code	Stock	L	L1	D1	D
BT40-MTA1-45	●	110.4	45	12.065	25
-120	●	185.4	120		
BT40-MTA2-16	●	125.4	60	17.78	32
-120	●	185.4	120		
BT40-MTA3-75	●	140.4	75	23.825	40
-135	●	200.4	135		
BT40-MTA4-95	●	160.4	95	31.267	48
-165	●	230.4	165		
BT50-MTA1-45	●	146.8	45	12.065	25
-120	●	221.8	120		
BT50-MTA2-60	●	161.8	60	17.78	32
-135	●	236.8	135		
BT50-MTA3-75	●	176.8	75	23.825	40
-150	●	251.8	150		
BT50-MTA4-90	●	191.8	90	31.267	48
-180	●	281.8	180		
BT50-MTA5-105	●	211.8	110	44.399	63
-210	●	311.8	210		

NC Morse Taper Holder(B Type)

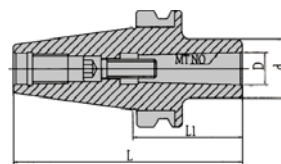


Fig 1

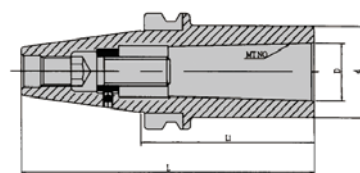


Fig 2

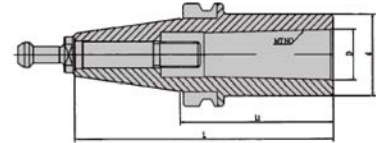
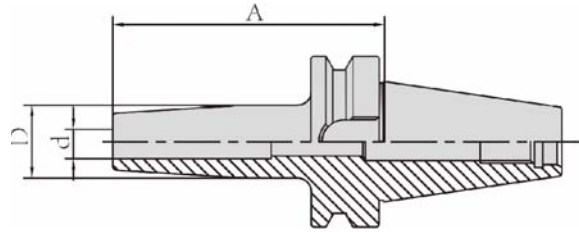


Fig 3

Ordering Code	Stock	Type	L	L1	D	d
BT40-MTB1-45	●	Fig.1	110.4	45	12.065	25
BT40-MTB2-50	●	Fig.1	115.4	50	17.78	32
BT40-MTB3-75	●	Fig.1,3	140.4	75	23.825	40
BT40-MTB4-90	●	Fig.3	155.4	90	31.267	48
BT40-MTB4-95	●	Fig.2	160.4	95	31.267	48
BT50-MTB1-45	●	Fig.1	146.8	45	12.065	25
BT50-MTB2-45	●	Fig.1	146.8	45	17.78	32
BT50-MTB3-60	●	Fig.1	161.8	60	23.825	40
BT50-MTB4-90	●	Fig.1	191.8	90	31.267	48
BT50-MTB5-120	●	Fig.2	221.8	120	44.399	63

● Stock ○ Available upon Order

Shrink Chuck



Ordering Code	Stock	d	A	D	D1	l1	l2
BT30-SRC6-90	○	6	90	24	32	41	10
BT30-SRC8-90	○	8	90	24	32	47	10
BT30-SRC10-90	○	10	90	27	34	47	10
BT30-SRC12-90	○	12	90	27	34	50	10
BT30-SRC14-90	○	14	90	33	42	50	10
BT30-SRC16-90	○	16	90	33	42	52	10
BT40-SRC6-90	●	6	90	21	27	36	10
BT40-SRC8-90	●	8	90	21	27	36	10
BT40-SRC10-90	●	10	90	24	32	41	10
BT40-SRC12-90	●	12	90	24	32	47	10
BT40-SRC14-90	●	14	90	27	34	47	10
BT40-SRC16-90	●	16	90	27	34	50	10
BT40-SRC18-90	●	18	90	33	42	50	10
BT40-SRC20-90	○	20	90	33	42	52	10
BT40-SRC25-100	○	25	100	44	53	58	10
BT40-SRC32-100	○	32	100	44	53	58	10
BT50-SRC4-100	○	4	100	14	22	20	5
BT50-SRC5-100	○	5	100	16	22	20	5
BT50-SRC6-100	○	6	100	21	27	36	10
BT50-SRC8-100	○	8	100	21	27	36	10
BT50-SRC10-100	○	10	100	24	32	41	10
BT50-SRC12-100	○	12	100	24	32	47	10
BT50-SRC14-100	○	14	100	27	34	47	10
BT50-SRC16-100	○	16	100	27	34	50	10
BT50-SRC18-110	○	18	110	33	42	50	10
BT50-SRC20-110	○	20	110	33	42	52	10
BT50-SRC25-120	○	25	120	44	53	58	10
BT50-SRC32-120	○	32	120	44	53	62	10

● Stock ○ Available upon Order

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

Tool holder

Solid carbide end mills

Solid carbide drill & taps

Technical information

Turning inserts

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Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

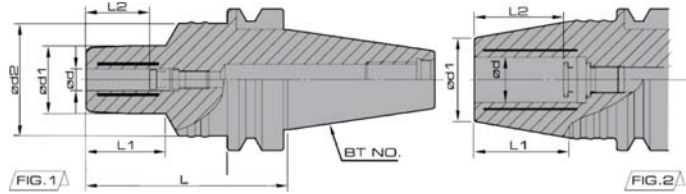
Tool holder


Solid carbide end mills

Solid carbide drill & taps

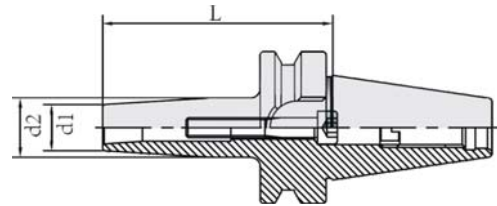
Technical information


BT Hydraulic Chuck



Ordering Code	Stock	Size(mm)					
		dm	D1	D2	L1	L	
BT30-HC06-80	○	06	28	50	35	80	-
BT30-HC08-80	○	08	30	50	35	80	-
BT30-HC10-80	○	10	32	50	35	80	-
BT30-HC12-90	●	12	35	50	43	90	HC12
BT30-HC16-95	●	16	38	50	51	95	-
BT30-HC20-95	●	20	42	50	52	95	HC20
BT40-HC06-85	○	06	28	50	35	85	-
BT40-HC08-85	○	08	30	50	35	85	-
BT40-HC10-85	○	10	32	50	35	85	-
BT40-HC12-90	●	12	35	50	43	90	HC12
BT40-HC16-95	●	16	38	50	51	95	-
BT40-HC20-95	●	20	42	50	52	95	HC20
BT40-HC25-115	●	25	57	70	63	115	-
BT50-HC12-100	●	12	35	50	43	100	HC12
BT50-HC16-105	●	16	38	50	51	105	-
BT50-HC20-105	●	20	42	50	52	105	HC20
BT50-HC25-120	●	25	57	70	63	120	-
BT50-HC32-120	●	32	64	70	65	120	HC32

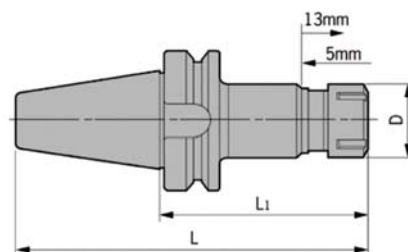
MX Collet Chuck



Ordering Code	Stock	Clamping Range	L	L1	D	
BT30-MX8-90	○	2-8	90	36	20	MX8
BT30-MX12-105	○	4-12	105	35	30	MX12
BT40-MX8-85	○	2-8	85	36	20	MX8
BT40-MX8-120	○	2-8	120	43	20	MX8
BT40-MX12-90	○	4-12	90	35	30	MX12
BT50-MX8-105	○	2-8	105	40	20	MX8
BT50-MX8-135	○	2-8	135	43	20	MX8
BT50-MX8-165	○	2-8	165	43	20	MX8
BT50-MX12-105	○	4-12	105	35	30	MX12

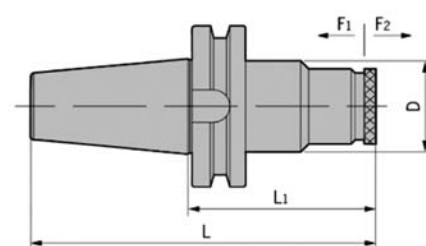
● Stock ○ Available upon Order

TER Tension And Compression Taper Holder BT □-TER □-L1



Ordering Code	Stock	L	L1	D	Range	Suitable Collet
BT30-TER16-75	●	123.4	75	28	M3-M10	ER16
BT30-TER20-90	●	138.4	90	34	M3-M10	ER20
BT40-TER16-120	●	185.4	120	28	M3-M10	ER16
BT40-TER20-100	●	165.4	100	34	M3-M17	ER20
BT40-TER32-120	●	185.4	120	50	M3-M20	ER32
BT50-TER16-120	●	221.8	120	28	M3-M10	ER16
BT50-TER20-100	●	201.8	100	24	M3-M17	ER20
BT50-TER32-120	●	221.8	120	50	M3-M20	ER32

TPM Quick Change Tension And Compression Taper Holder BT □-TPM □



Ordering Code	Stock	L	L1	d	Range	Expansion Capaci	
						F1	F2
BT30-TPM316	●	162	111.6	50	M3-16	6	12
BT40-TPM316	●	168	101	50	M3-16	6	12
BT40-TPM830	○	208	141	66	M8-M30	12.5	12.5
BT50-TPM316	●	222.8	118	50	M3-16	6	12
BT50-TPM830	●	235	130.2	66	M8-M30	12.5	12.5

● Stock ○ Available upon Order

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

Tool holder

Solid carbide end mills

Solid carbide drill & taps

Technical information

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

Tool holder

Solid carbide end mills

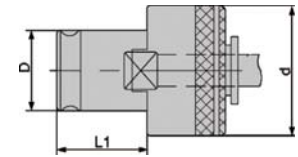
Solid carbide drill & taps

Technical information

Taper Chuck BT □-L1 □-C

Technical specifications

Model	Stock	d	D	L1	Range
TPM316	●	32	19	21.5	M3-M16
TPM830	●	51.5	31	36	M8-M22



Taper chuck specifications table

TPC316

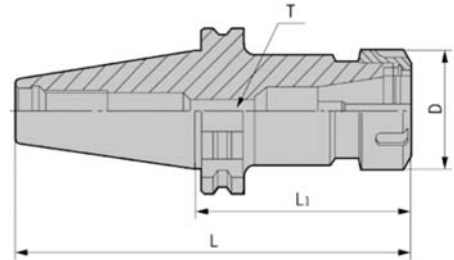
JIS	Φd	□	ISO	Φd	□	DIN371	Φd	□	DIN376	Φd	□
TPC316 M03 W1/8	4	3.2	TPC316 M03	3.15	2.5	TPC316 M03	3.5	2.7	TPC316 M03	2.2	-
TPC316 M04	5	4	TPC316 M04	4	3.15	TPC316 M04	4.5	3.4	TPC316 M04	2.8	2.1
TPC316 M05 W3/16	5.5	4.5	TPC316 M05	5	4	TPC316 M05	6	4.9	TPC316 M05	3.5	2.7
TPC316 M06 W1/4	6	4.5	TPC316 M06	6.3	5	TPC316 M06	6	4.9	TPC316 M06	4.5	3.4
TPC316 M08	6.2	5	TPC316 M08	8	6.3	TPC316 M08	8	6.2	TPC316 M08	6	4.9
TPC316 M10 W3/8	7	5.5	TPC316 M10	10	8	TPC316 M10	10	8	TPC316 M10	7	5.5
TPC316 M12	8.5	6.5	TPC316 M12	9	7.1				TPC316 M12	9	7
TPC316 M14	10.5	8	TPC316 M14	11.2	9				TPC316 M14	11	9
TPC316 M16	12.5	10	TPC316 M16	12.5	10				TPC316 M16	12	9
TPC316 W5/16	6.1	5									
TPC316 W7/16 PT1/8	8	6									
TPC316 W1/2	9	7									
TPC316 W5/8	12	9									
TPC316 PT1/4	11	9									

TPC830

JIS	Φd	□	ISO	Φd	□	DIN371	Φd	□	DIN376	Φd	□
TPC830 M08	6.2	5	TPC830 M08	8		TPC830 M08	8	6.2	TPC830 M08	6	4.9
TPC830 M10 W3/8	7	5.5	TPC830 M10	10		TPC830 M10	10	8	TPC830 M10	7	5.5
TPC830 M12	8.5	6	TPC830 M12	9					TPC830 M12	9	7
TPC830 M14	10.5	8	TPC830 M14	11.2					TPC830 M14	11	9
TPC830 M16	12.5	10	TPC830 M16	12.5					TPC830 M16	12	9
TPC830 M18 W3/4 PT3/8	14	11	TPC830 M18	14					TPC830 M18	14	11
TPC830 M20	15	12	TPC830 M20	14					TPC830 M20	16	12
TPC830 M22 W7/8	17	13	TPC830 M22	16					TPC830 M22	18	14.5
TPC830 M24	19	15	TPC830 M24	18					TPC830 M24	18	14.5
TPC830 M27 W1 PT5/8	20	15	TPC830 M27	20					TPC830 M27	20	16
TPC830 M30 PT3/4	23	17	TPC830 M30	20					TPC830 M30	22	18
TPC830 W5/16	6.1	5	TPC830 PT1/2	16							
TPC830 W7/16 PT1/8	8	6									
TPC830 M1/2	9	7									
TPC830 W5/8	12	9									
TPC830 PT1/4	11	9									
TPC830 PT1/2	18	14									

● Stock ○ Available upon Order

Stock Collet Chuck BT □-SK□-L1



Ordering Code	Stock	Capacity	L	L1	D	Collet	Nut	Wrench
SK40-ER11-70	●	0.5-7	138.4	70	19	ER11	ER11-A	OW/ER11
-100	●		168.4	100	19			
SK40-ER16-70	●	1-10	138.4	70	28	ER16	ER16-A	OW/ER16
-100	●		168.4	100	28			
-150	●		218.4	150	28			
SK40-ER20-70	●	2-13	138.4	70	34	ER20	ER20-A	OW/ER20
-100	●		168.4	100	34			
-150	●		218.4	150	34			
SK40-ER25-70	●	2-16	138.4	70	42	ER25	ER25-UM	UW/ER25
-100	●		168.4	100	42			
-150	●		218.4	150	42			
SK40-ER32-70	●	3-20	138.4	70	50	ER32	ER32-UM	UW/ER32
-100	●		168.4	100	50			
-150	●		218.4	150	50			
SK40-ER40-80	●	3-26	148.4	80	63	ER40	ER40-UM	UW/ER40
-100	●		168.4	100	63			
-150	●		218.4	150	63			
SK50-ER16-70	●	1-10	171.8	70	28	ER16	ER16-A	OW/ER16
-100	●		201.8	100	28			
-150	●		251.8	150	28			
SK50-ER20-70	●	2-13	171.8	70	34	ER20	ER20-A	OW/ER20
-100	●		201.8	100	34			
-150	●		251.8	150	34			
SK50-ER25-70	●	2-16	171.8	70	42	ER25	ER25-UM	UW/ER25
-100	●		201.8	100	42			
-150	●		251.8	150	42			
SK50-ER32-70	●	3-20	171.8	70	50	ER32	ER32-UM	UW/ER32
-100	●		201.8	100	50			
-150	●		251.8	150	50			
SK50-ER40-80	●	3-26	171.8	80	63	ER40	ER40-UM	UW/ER40
-100	●		201.8	100	63			
-150	●		251.8	150	63			
-200	●		301.8	200	63			

● Stock ○ Available upon Order

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

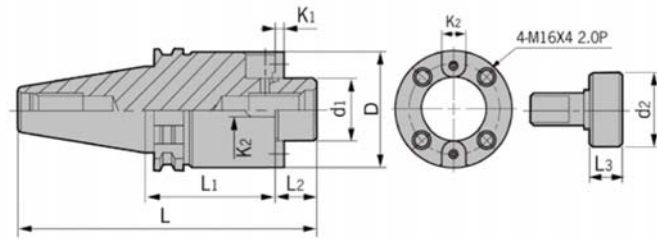
Tool holder

Solid carbide end mills

Solid carbide drill & taps

Technical information

SK Shank Face Mill Holder SK □-FMB□-L1



Ordering Code	Stock	d1	d2	D	L	L1	L2	K1	K2	T
SK40-FMB22-45	●	22	26	48	129.9	45	16.5	4.8	10	M10X30
-60	●				144.9	60				
-100	●				184.9	100				
-150	●				234.9	150				
SK40-FMB27-45	●	27	33	60	131.9	45	18.5	5.8	12	M12X30
-60	●				146.9	60				
-100	●				186.9	100				
-150	●				236.9	150				
SK40-FMB32-60	●	32	41	62	150.4	60	22	6.8	14	M16X35
-100	●				190.4	100				
-150	●				240.4	150				
-200	●				290.4	200				
SK40-FMB40-60	●	40	48	80	153.4	60	25	8	16	M16X35
-100	●				193.4	100				
-150	●				243.4	150				
-200	●				293.4	200				
SK50-FMB22-60	●	22	26	48	178.25	60	16.5	4.8	10	M10X30
-100	●				218.25	100				
-150	●				268.25	150				
-200	●				318.25	200				
SK50-FMB27-60	●	27	33	60	180.25	60	18.5	5.8	12	M12X30
-100	●				220.25	100				
-150	●				270.25	150				
-200	●				320.25	200				
SK50-FMB32-60	●	32	41	73	183.75	60	22	6.8	14	M16X35
-100	●				223.75	100				
-150	●				273.75	150				
-200	●				333.75	200				
SK50-FMB40-60	●	40	48	80	186.75	60	25	8	16	M16X35
-100	●				226.75	100				
-150	●				276.75	150				
-200	●				326.75	200				

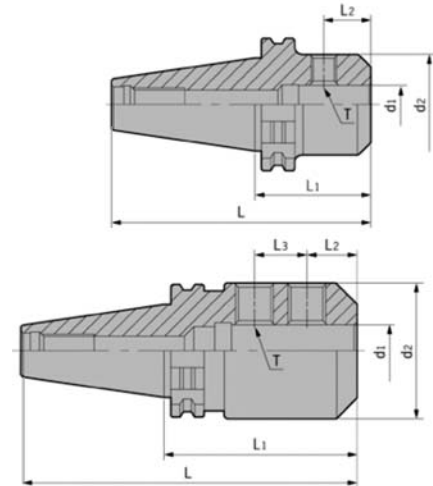
Note: 1. When order center cooling or flange cooling, please specify.

● Stock ○ Available upon Order

SK Shank SLN Side Lock End Mill Holder SK □-SLN□-L1

- ◎ SK taper shank is in conformity with At3 standard
- ◎ Tolerance H5 for inner bore d
- ◎ Default balancing design

DIN68971/DIN1835



Ordering Code	Stock	Type	L	L1	H1	H2	M	D	d
SK30-SLN6-50	●	Fig.1	97.8	50	18	-	M6	25	6
SK30-SLN8-50	●	Fig.1			20		M8	28	8
SK30-SLN10-50	●	Fig.1			22.5		M10	35	10
SK30-SLN12-50	●	Fig.1					M12	42	12
SK30-SLN16-63	●	Fig.1	110.8	63		-	M14	48	16
SK30-SLN20-63	●	Fig.1					M16	52	20
SK40-SLN6-50	●	Fig.1	118.4	50	18	-	M6	25	6
SK40-SLN8-50	●	Fig.1			20		M8	28	8
SK40-SLN10-50	●	Fig.1			22.5		M10	35	10
SK40-SLN12-50	●	Fig.1					M12	42	12
SK40-SLN16-63	●	Fig.1	131.4	63	24	-	M14	48	16
SK40-SLN20-63	●	Fig.1			25		M16	52	20
SK40-SLN25-100	●	Fig.2	168.4	100	24	25	M18	65	25
SK40-SLN32-100	●	Fig.2			24	28	M20	72	32
SK50-SLN6-63	●	Fig.1	164.75	63	18	-	M6	25	6
SK50-SLN8-63	●	Fig.1			20		M8	28	8
SK50-SLN10-63	●	Fig.1			22.5		M10	35	10
SK50-SLN12-63	●	Fig.1					M12	42	12
SK50-SLN16-63	●	Fig.1					M14	48	16
SK50-SLN20-63	●	Fig.1					M16	52	20
SK50-SLN25-80	●	Fig.2	181.75	80	24	25	M18	65	25
SK50-SLN32-100	●	Fig.2	201.75	100		28	M20	72	32
SK50-SLN40-100	●	Fig.2			30	32	M20	90	40
SK50-SLN42-100	●	Fig.2			30	32	M20	100	42

Note:1.We can provide dynamic balabce G6.3/12000rpm,Price would be advanced.

● Stock ○ Available upon Order

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

Tool holder

Solid carbide end mills

Solid carbide drill & taps

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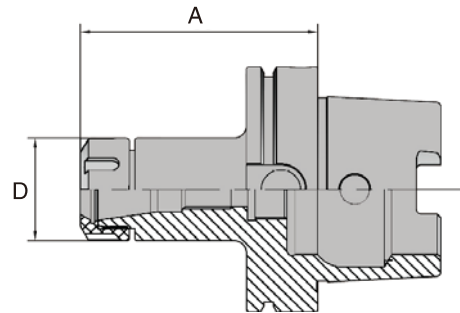
Tool holder


Solid carbide end mills

Solid carbide drill & taps

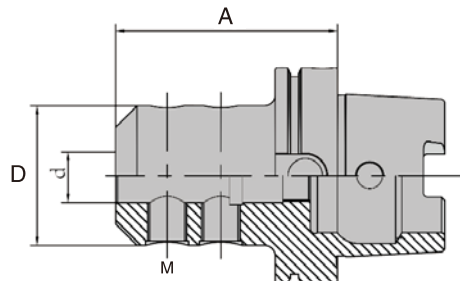
Technical information

ER Collet Chuck DIN69893



Ordering Code	Stock	Capacity	A	D	
HSK63A-ER16-100	●	1-10	100	32	ER16
HSK63A-ER20-100	●	1-12	100	38	ER20
HSK63A-ER25-100	●	2-16	100	42	ER25
HSK63A-ER32-100	●	2-20	100	50	ER32
HSK63A-ER16-160	●	1-10	160	32	ER16
HSK63A-ER20-160	●	1-12	160	38	ER20
HSK63A-ER25-160	●	2-16	160	42	ER25
HSK63A-ER32-160	●	2-20	160	50	ER32
HSK100A-ER32-100	●	2-20	100	50	ER32

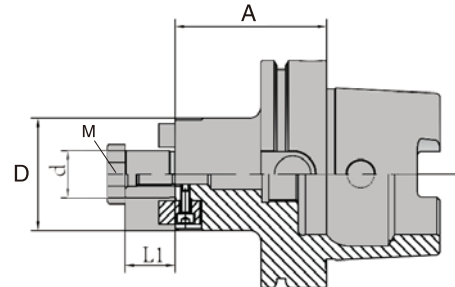
End Mill Holder Weldon DIN69893



Ordering Code	Stock	d	A	D	M
HSK63A-SLA16-80	●	16	80	48	M14
HSK63A-SLA20-80	●	20	80	52	M16
HSK63A-SLA25-110	●	25	110	65	M18
HSK63A-SLA32-110	●	32	110	72	M20
HSK63A-SLA40-125	●	40	125	80	M20
HSK100A-SLA16-100	●	16	100	48	M14
HSK100A-SLA20-100	●	20	100	52	M16
HSK100A-SLA25-100	●	25	100	65	M18
HSK100A-SLA32-100	●	32	100	72	M20
HSK100A-SLA40-105	●	40	105	80	M20

● Stock ○ Available upon Order

FMB Face Mill Holder



Ordering Code	Stock	d	A	L1	D	M
HSK50-FMB16-50	●	16	50	17	38	M8X30
HSK50-FMB22-60	●	22	60	19	48	M10X30
HSK50-FMB27-60	●	27	60	21	58	M12X30
HSK50-FMB32-60	●	32	60	24	78	M16X35
HSK63-FMB16-50	●	16	50	17	38	M8X30
HSK63-FMB22-50	●	22	50	19	48	M10X30
HSK63-FMB27-60	●	27	60	21	58	M12X30
HSK63-FMB32-60	●	32	60	24	78	M16X35
HSK63-FMB40-60	●	40	60	27	88	M16X35
HSK63-FMB16-100	●	16	100	17	38	M8X30
HSK63-FMB22-100	●	22	100	19	48	M10X30
HSK63-FMB27-100	●	27	100	21	58	M12X30
HSK63-FMB32-100	●	32	100	24	78	M16X35
HSK63-FMB40-100	●	40	100	27	88	M16X35
HSK80-FMB22-50	●	22	50	19	48	M10X30
HSK80-FMB27-50	●	27	50	21	58	M12X30
HSK80-FMB32-60	●	32	60	24	78	M16X35
HSK80-FMB40-60	●	40	60	27	88	M16X35
HSK100-FMB22-50	●	22	50	19	48	M10X30
HSK100-FMB27-50	●	27	50	21	58	M12X30
HSK100-FMB32-50	●	32	60	24	78	M16X35
HSK100-FMB40-60	●	40	60	27	88	M16X35
HSK100-FMB60-70	●	60	70	40	130	M16X35

● Stock ○ Available upon Order

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

Tool holder

Solid carbide end mills

Solid carbide drill & taps

Technical information

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

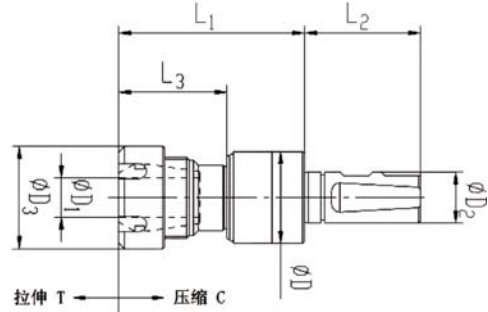
Tool holder

Solid carbide end mills

Solid carbide drill & taps

Technical information

Micro compensation tapping tool holder series

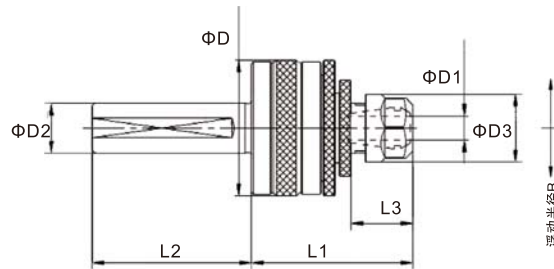


• ERNuts S type for the internal cooling type, A type for the cold type.

Unit: mm

Ordering Code	Stock	ERJacket	ϕD	ϕD_1	ϕD_2	ϕD_3	L1	L2	L3	C	T	Applicable taps
VLERS20-C25	●	ER20	34	4.5-10	25	34	68	57	45	0.5	0.5	M4-M12 (Nr.8-7/16)
VLERS32-C25	●	ER32	45	4.5-16	25	50	90	57	51	0.5	0.5	

Floating knife series

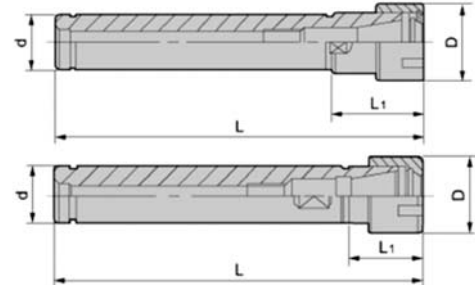


Unit: mm

Ordering Code	Stock	ERJacket	ϕD_1	ϕD_2	ϕD	ϕD_3	L1	L2	L3	R (MAX)
SV-FTER20-D25	●	ER20	3-13	25	68	34	80	80	30	0.5

● Stock ○ Available upon Order

ER Collet Chuck Holder



Ordering Code	Stock	D	d	L1	L	Nut	Wrench	Collet
C8-ER8M-55	●	12	8	24	79	CNM-ER08	ER08	ER08
C10-ER8M-180	●	12	10	17	197			
C12-ER8M-120	●	12	12	17	137			
C12-ER8M-180	●			17	197			
C12-ER11M-80	●	16	12	26.5	106.5	CNM-ER11	ER11M	ER11
C16-ER11M-100	●	0	16	18.5	118.5			
C16-ER11M-140	●	0	16	18.5	158.5			
C16-ER16M-80	●	23	16	37	117	CNM-ER16	ER16M	ER16
C20-ER16M-100	●	23	20	25	125			
C20-ER16M-160	●	23	20	25	185			
C20-ER20M-100	●	28	20	40	140	CNM-ER20	ER20M	ER20
C20-ER20M-150	●	28	20	40	190			
C20-ER20M-180	●	28	20	40	220			
C25-ER20M-140	●	28	25	28	168			
C20-ER25M-100	●	35	20	40	140	CNM-ER25	ER25M	ER25
C20-ER16-100	●	28	20	30	130	CAN-ER16	ER16A	ER16
C20-ER16-150	●	28	20	30	180			
C20-ER20-100	●	34	20	36	136			
C20-ER20-150	●	34	20	36	186	CAN-ER20	ER20A	ER20
C20-ER20-170	●	34	20	36	206			
C20-ER25-100	●	42	20	46	146			
C20-ER25-150	●	42	20	46	196	CAN-ER25	ER25UM	ER25
C25-ER16-100	●	28	25	30	130	CAN-ER16	ER16A	ER16
C25-ER16-150	●	28	25	30	180			
C25-ER20-150	●	34	25	36	186			
C25-ER25-100	●	42	25	46	146	CAN-ER25	ER25UM	ER25
C25-ER25-150	●	42	25	46	196			
C25-ER32-80	●	50	25	54	134			
C32-ER25-60	●	42	32	46	106	CAUM-ER25	ER25UM	ER25
C32-ER32-100	●	50	32	54	154	CAUM-ER32	ER32UM	ER32
C32-ER40-100	●	63	32	55	155	CAUM-ER40	ER40UM	ER40
C40-ER32-100	●	50	40	54	154	CAUM-ER32	ER32UM	ER32
C40-ER40-100	●	63	40	55	155	CAUM-ER40	ER40UM	ER40

● Stock ○ Available upon Order

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

Tool holder

Solid carbide end mills

Solid carbide drill & taps

Technical information

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

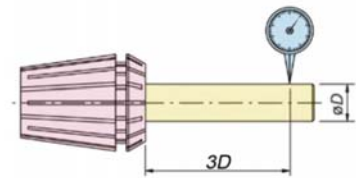
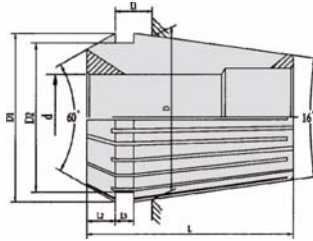
Tool holder

Solid carbide end mills

Solid carbide drill & taps

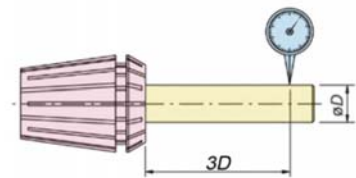
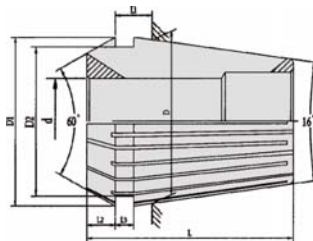
Technical information

ER Collet



Ordering Code	Stock	DH7	D	D1	D2	L	L1	L2	L3	Elastic shrinkage
ER8	●	1.0-5.0	8	8.45	6.5	13.5	2.98	1.5	1.2	0.5
ER11	●	1.0-7.0	11	11.5	9.5	18	3.8	2.5	2	0.5
ER16	●	1.0-2.5	16	17	13.8	27.5	27.5	4	2.7	0.5
		2.5-10.0	16	17	13.8	27.5	27.5	4	2.7	1
ER20	●	1.0-2.5	20	21	17.4	31.5	31.5	4.8	2.8	0.5
		2.5-13.0	20	21	17.4	31.5	31.5	4.8	2.8	1
ER25	●	1.0-2.5	25	26	22	34	34	5	3.1	0.5
		2.5-16.0	25	26	22	34	34	5	3.1	1
ER32	●	2.0-2.5	32	33	29.2	40	40	5.5	3.6	0.5
		2.5-20.0	32	33	29.2	40	40	5.5	3.6	1
ER40	●	3.0-26.0	40	41	36.2	46	46	7	4.1	1
ER50	●	6.0-10.0	50	52	46	60	60	8.5	5.5	1
		10.0-34.0	50	52	46	60	60	8.5	5.5	2

Sealed Collet with Slitting



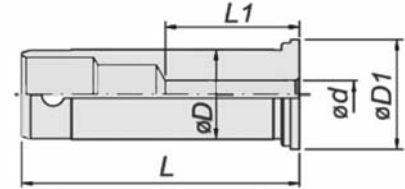
Ordering Code	Stock	DH7	D	D1	D2	L	L1	L2	L3	Elastic shrinkage
SER16	●	3.0-10.0	16	17	13.8	27.5	27.5	4	2.7	1
SER20	●	3.0-13.0	20	21	17.4	31.5	31.5	4.8	2.8	1
SER25	●	3.0-16.0	25	26	22	34	34	5	3.1	1
SER32	●	3.0-20.0	32	33	29.2	40	40	5.5	3.6	1
SER40	●	3.0-26.0	40	41	36.2	46	46	7	4.1	1

Clamping diameter	At the 4*D times the diameter of the clamping tool accuracy class			
J02308	ER	ER-A	ER-AA	ER-AA
J02311	0.02	0.01	0.006	0.003

According to the model number when ordering requirements plus accuracy class;
example: ER32-**AA

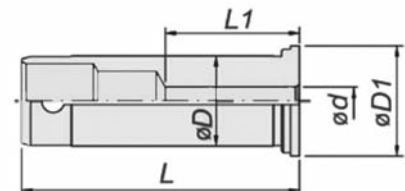
● Stock ○ Available upon Order

ER Straight Collet



Ordering Code	Stock	Size(mm)		Model	Stock	Size(mm)		Ordering Code	Stock	Size(mm)	
		D	d			D	d			D	d
C20-06	●	20	6	C32-06	●	32	6	C42-06	●	42	6
C20-08	●		8	C32-08	●		8	C42-08	●		8
C20-10	●		10	C32-10	●		10	C42-10	●		10
C20-12	●		12	C32-12	●		12	C42-12	●		12
C20-16	●		16	C32-16	●		16	C42-16	●		16
	●			C32-20	●		20	C42-20	●		20
	●		C32-25	●	25	C42-25	●	25			
	●			●				C42-32	●	32	

SC Sealed Collet



Ordering Code	Stock	Size(mm)		Model	Stock	Size(mm)		Ordering Code	Stock	Size(mm)	
		D	d			D	d			D	d
SC20-06	●	20	6	SC32-06	●	32	6	SC42-06	●	42	6
SC20-08	●		8	SC32-08	●		8	SC42-08	●		8
SC20-10	●		10	SC32-10	●		10	SC42-10	●		10
SC20-12	●		12	SC32-12	●		12	SC42-12	●		12
SC20-16	●		16	SC32-16	●		16	SC42-16	●		16
	●			SC32-20	●		20	SC42-20	●		20
	●		SC32-25	●	25	SC42-25	●	25			
	●			●				SC42-32	●	32	

● Stock ○ Available upon Order

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

Tool holder

Solid carbide end mills

Solid carbide drill & taps

Technical information

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

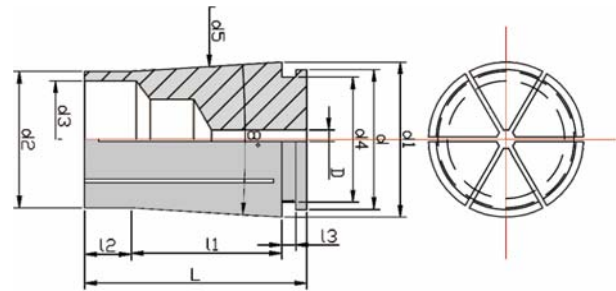
Tool holder

Solid carbide end mills

Solid carbide drill & taps

Technical information

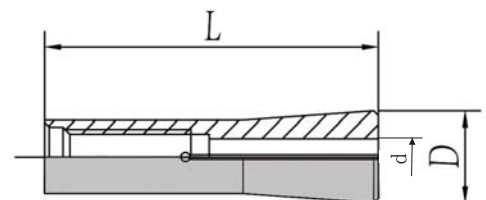
SKS Collet



Ordering Code	Stock	L	l1	l2	l3	d	d1	d2	d3	d4	d5
SK06	●	25.7	17.5	4	2.4	9.26	10.5	7.5	6	7.8	9.964
SK10	●	32	22	5	2.5	13.7	15.6	12	10	12	15.013
SK16	●	46	32	8	2.8	21	24.6	18.8	16	19	23.939
SK25	●	58	43	8.5	3.6	31	35.6	28.9	25.5	28.2	35.029

Ordering Code	D
SK06	2,2.5,3,3.5,4,4.5,5,5.5,6
SK10	2,2.5,3,3.5,4,4.5,5,5.5,6,6.5,7,7.5,8,8.5,9,9.5,10
SK16	3,3.5,4,4.5,5,5.5,6,6.5,7,7.5,8,8.5,9,9.5,10,10.5,11,11.5,12,12.5,13,13.5,14,14.5,15,15.5,16
SK25	6,8,10,12,14,16,16.5,17,17.5,18,18.5,19,19.5,20,20.5,21,21.5,22,22.5,23,23.5,24,24.5,25

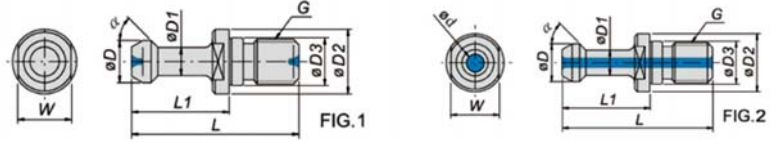
MX Collet



Ordering Code	Stock	d	Standard	P Class	D	L
MX6-2,3,4,5,6,3,175	●	2-6	0.005	0.003	9.6	36
MX8-3,4,5,6,8	●	3-8	0.005	0.003	15	45
MX10-3,4,5,6,8,10	●	3-10	0.005	0.003	16	52
MX12-3,4,5,8,10,12	●	3-12	0.005	0.003	22	57

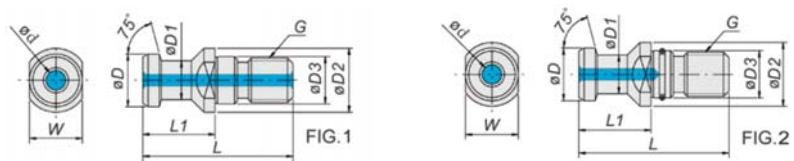
● Stock ○ Available upon Order

BT Pull Studs



Ordering Code	Figure	Stock	D	D1	D2	D3	L	L1	a	G	W
BT30-45°	Fig.1	●	11	7	16.5	12.5	43	23	45°	M12	13
BT30-60°		●							60°		
BT40-45°		●	15	10	23	17	60	35	45°	M16	19
BT40-60°		●							60°		
BT40-90°		●							90°		
BT50-45°		●	23	17	38	25	85	45	45°	M24	30
BT50-60°		●									
BT50-90°		●									
BT40-45° -S	Fig.2	●	15	10	23	17	60	35	45°	M16	19
BT40-60° -S		●							60°		
BT40-90° -S		●							90°		
BT50-45° -S		●	23	17	38	25	85	45	45°	M24	30
BT50-60° -S		●									
BT50-90° -S		●									

JT Pull Studs



Ordering Code	Figure	Stock	D	D1	D2	D3	d	L	L1	W	G
SK40-A	Fig.1	●	19	14	23	17	7	54	26	19	M16
SK50-A		●	28	21	36	25	11.5	74	34	30	M24
SK40-B	Fig.2	●	19	14	23	17	7	54	26	19	M16
SK50-B		●	28	21	36	25	11.5	74	34	30	M24

● Stock ○ Available upon Order

Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

Tool holder

Solid carbide end mills

Solid carbide drill & taps

Technical information

Turning inserts

External turning

Internal turning

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Threading

Milling

Boring & drilling

Tool holder

Solid carbide end mills

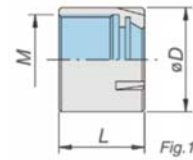
Solid carbide drill & taps

Technical information

ER Clamping Nuts(DIN6499)

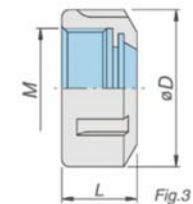
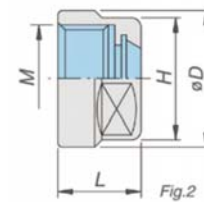
ER-M M Type Clamping Nuts

Part NO.	M	Fig.	∅D	L	Max.Tightening Torque Nm
CNM-ER08	M10*0.75P	1	12	10.8	10
CNM-ER11	M13*0.75P		16	12	30
CNM-ER16	M19*1.00P		22	18	70
CNM-ER20	M24*1.00P		28	19	100



ER-SH High Speed Balanced Clamping Nuts

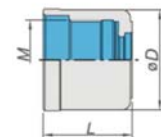
Part NO.	M	Fig.	∅D	L	H	Max.Tightening Torque Nm
CAN-ER11	M14*0.75P	2	19	11.3	17	30
CAN-ER16	M22*1.50P		28	17.5	25	70
CAN-ER20	M25*1.50P		34	19	30	100
CAUM-ER16	M22*1.50P	3	32	17	-	70
CAUM-ER20	M25*1.50P		35	19		100
CAUM-ER25	M32*1.50P		42	20		130
CAUM-ER32	M40*1.50P		50	23		170
CAUM-ER40	M50*1.50P		63	25		220



Clamping Nuts

NR Nuts

Part NO.	M	∅D	L	Max.Tightening Torque Nm
GSK 06	M15.5*1.00P	20.0	21.5	30
GSK 10	M21.5*1.00P	27.1	24	40
GSK 16	M32.0*1.50P	40.0	31	60
GSK 25	M45.0*1.50P	55.0	37.5	100

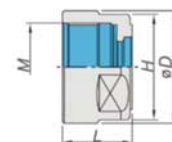


Pat.



NR-WD Nuts

Part NO.	M	∅D	H	L	Max.Tightening Torque Nm
SK 10M	M21.5*1.00P	27.5	25.4	17	40
SK 16M	M32.0*1.50P	40.0	-	24	60



Pat.



Wrenches

Part N0.	A	B	Nuts
W-ER 8M	12.8	75	CNM-ER08
W-ER 11M	16.8	90	CNM-ER11
W-ER 16M	22.8	110	CNM-ER16
W-ER 20M	29	120	CNM-ER20

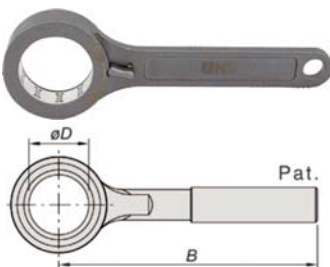
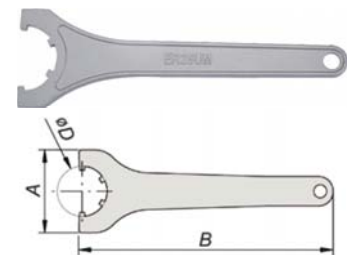
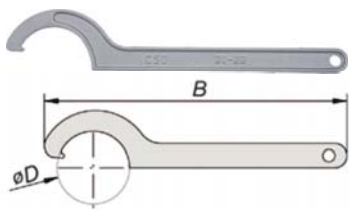
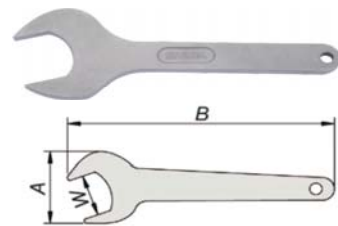
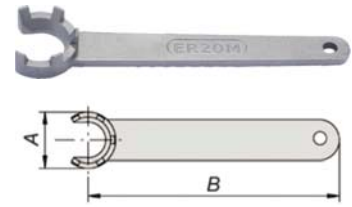
Part N0.	A	B	W	Nuts
W-ER 11A	32	95	17	CAN-ER11
W-ER 16A	44	145	25	CAN-ER16
W-ER 20A	52	170	30	CAN-ER20

Part N0.	∅D	B	Nuts
W-FK 04	∅30-∅33	135	ER16GM
W-FK 05	∅34-∅36	160	ER20GM
W-FK 06	∅40-∅42	170	NR16/ER25SH/NR16WD
W-FK 07	∅44-∅49	195	ER25GM
W-FK 08	∅52-∅55	210	C20/ER32SH
W-FK 09	∅58-∅62	230	CTH25/ER40SH/C25
W-FK 10	∅68-∅75	245	CTH32/C32
W-FK 11	∅80-∅93	270	ARH42

Part N0.	∅D	A	B	Nuts
W-ER 25UM	42	65	210	CAUM-ER25
W-ER 32UM	50	75	250	CAUM-ER32
W-ER 40UM	63	90	290	CAUM-ER40
W-ER 50UM	80	110	355	CAUM-ER50

High Speed Tooling Wrenches

Part N0.	∅D	B	Nuts
W-SK06	19.7	118	SK06
W-SK10	27.7		SK10
W-SK16	40	155	SK16
W-SK20	48	212	SK20
W-SK25	55		SK25



Turning inserts

External turning

Internal turning

Grooving & parting

Threading

Milling

Boring & drilling

Tool holder

Solid carbide end mills

Solid carbide drill & taps

Technical information