TOOLING SYSTEMS

How to choose the right tooling systems

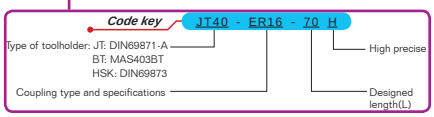
● Classify the tool systems as per shank type

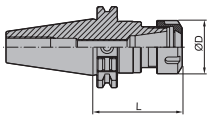
- Shape
- Product name
- Product category

TOOLING SYSTEMS

Spring collet chuck(JT)

- Code key



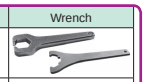


Type	Taper angle	Dimensions(mm) ØD	Dimensions(mm) L	Standard parts Nut	Choose spare parts Precise collet	High precise collet	Mechanical sealed collet	Rigid tapping collet	Wrench	Weight (kg)
JT30-ER16-70H	30	28	70	Hi-Q/ER16	ER16-□□A	ER16-□□UP	ER16-□□DM	ER16-□□GB	E16P	0.50
JT30-ER16-100H	30	28	100	Hi-Q/ER16	ER16-□□A	ER16-□□UP	ER16-□□DM	ER16-□□GB	E16P	0.61
JT30-ER25-60H	30	42	60	Hi-Q/ER25	ER25-□□A	ER25-□□UP	ER25-□□DM	ER25-□□GB	E25	0.51
JT40-ER11-100H	40	19	100	Hi-Q/ER11	ER11-□□A	ER11-□□UP	ER11-□□DM	ER11-□□GB	E11P	1.04
JT40-ER16-70H	40	28	70	Hi-Q/ER16	ER16-□□A	ER16-□□UP	ER16-□□DM	ER16-□□GB	E16P	1.07
JT40-ER16-100H	40	28	100	Hi-Q/ER16	ER16-□□A	ER16-□□UP	ER16-□□DM	ER16-□□GB	E16P	1.18
JT40-ER16-160H	40	28	160	Hi-Q/ER16	ER16-□□A	ER16-□□UP	ER16-□□DM	ER16-□□GB	E16P	1.36
JT40-ER25-70H	40	42	70	Hi-Q/ER25	ER25-□□A	ER25-□□UP	ER25-□□DM	ER25-□□GB	E25	1.15
JT40-ER25-100H	40	42	100	Hi-Q/ER25	ER25-□□A	ER25-□□UP	ER25-□□DM	ER25-□□GB	E25	1.40
JT40-ER25-160H	40	42	160	Hi-Q/ER25	ER25-□□A	ER25-□□UP	ER25-□□DM	ER25-□□GB	E25	1.55
JT40-ER32-70H	40	50	70	Hi-Q/ER32	ER32-□□A	ER32-□□UP	ER32-□□DM	ER32-□□GB	E32	1.17
JT40-ER32-100H	40	50	100	Hi-Q/ER32	ER32-□□A	ER32-□□UP	ER32-□□DM	ER32-□□GB	E32	1.43
JT40-ER32-160H	40	50	160	Hi-Q/ER32	ER32-□□A	ER32-□□UP	ER32-□□DM	ER32-□□GB	E32	1.81
JT40-ER40-80H	40	63	80	Hi-Q/ER40	ER40-□□A	ER40-□□UP	ER40-□□DM	ER40-□□GB	E40	1.41
JT40-ER40-100H	40	63	100	Hi-Q/ER40	ER40-□□A	ER40-□□UP	ER40-□□DM	ER40-□□GB	E40	1.70
JT40-ER40-160H	40	63	160	Hi-Q/ER40	ER40-□□A	ER40-□□UP	ER40-□□DM	ER40-□□GB	E40	2.55
JT50-ER16-100H	50	28	100	Hi-Q/ER16	ER16-□□A	ER16-□□UP	ER16-□□DM	ER16-□□GB	E16P	3.18
JT50-ER16-160H	50	28	160	Hi-Q/ER16	ER16-□□A	ER16-□□UP	ER16-□□DM	ER16-□□GB	E16P	3.47
JT50-ER32-100H	50	50	100	Hi-Q/ER32	ER32-□□A	ER32-□□UP	ER32-□□DM	ER32-□□GB	E32	3.36
JT50-ER32-160H	50	50	160	Hi-Q/ER32	ER32-□□A	ER32-□□UP	ER32-□□DM	ER32-□□GB	E32	4.25
JT50-ER40-100H	50	63	100	Hi-Q/ER40	ER40-□□A	ER40-□□UP	ER40-□□DM	ER40-□□GB	E40	3.62
JT50-ER40-160H	50	63	160	Hi-Q/ER40	ER40-□□A	ER40-□□UP	ER40-□□DM	ER40-□□GB	E40	4.20

- Weight

- Spare parts
  Included standard parts and separately ordered spare parts, pls be careful when order

● Choose spare parts

Name	Precise collet	High precise collet	Mechanical sealed collet	Rigid tapping collet	Wrench
					
Page	D25	D26	D27	D28	D30

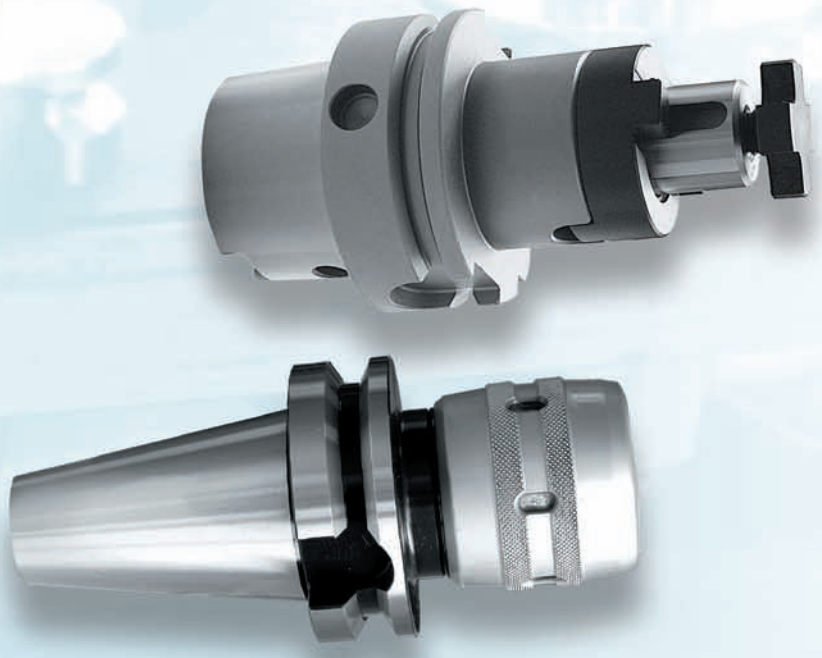
- Page reference for spare parts

- Basic product information
  Taper angle, basic dimensions etc.

- Product type

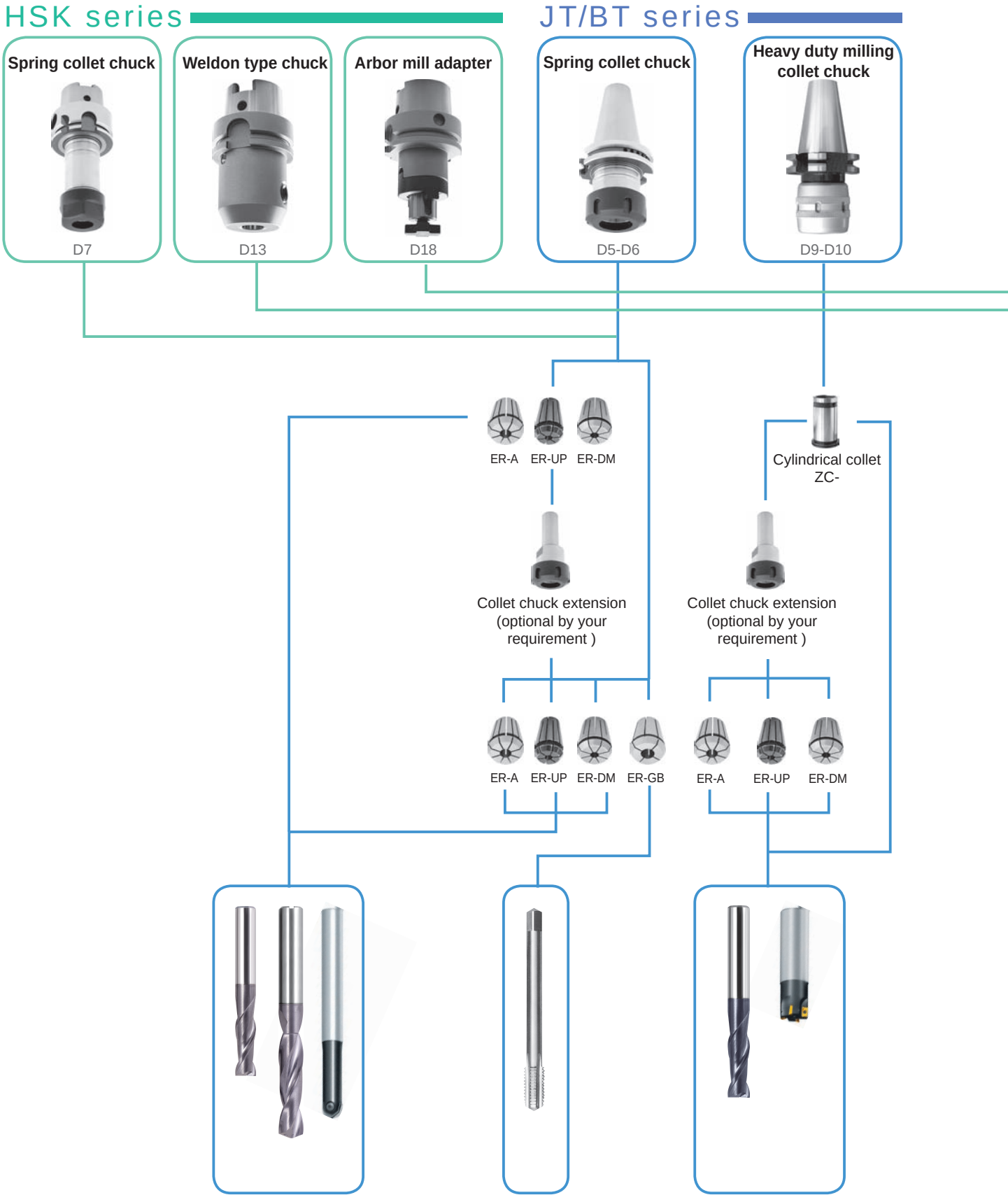
Tooling systems

Tooling systems overview	D2-D3
Spring collet chuck	D4-D7
Collet chuck extension	D8
Heavy duty milling collet chuck	D9-D10
Weldon type chuck	D11-D13
Arbor mill adapter	D14-D18
Adapter for morse taper with flat tail	D19-D20
Adapter for morse taper without flat tail	D21-D22
Side and face milling adapter	D23-D24
Spare parts	D25-D31
Technical information	D32-D38



TOOLING SYSTEMS

Tooling systems overview



TOOLING SYSTEMS

Weldon type chuck

D11-D12

Arbor mill adapter

D14-D17

Morse taper adapter

D19-D20

D21-22

Side and face milling adapter

D23-D24

New upgrade

Spring collet chuck

Precise collet

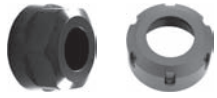
ER-A

ER11
ER16

ER25
ER32
ER40

High precise collet

ER-UP

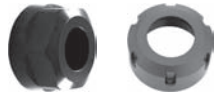


ER11
ER16

ER25
ER32
ER40

Mechanical sealed collet
(for inner-cooling tools)

ER-DM

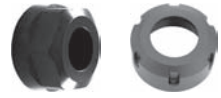


ER11
ER16

ER25
ER32
ER40

Rigid tapping collet

ER-GB



ER11
ER16

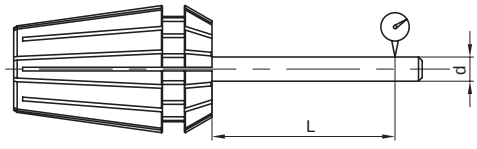
ER25
ER32
ER40

★Selecting varied collets can enlarge the clamping range.
★This shank is suitable for drilling, boring ,reaming and part of milling.

Installing method

Correct

Wrong



ER-A and ER-UP collet run-out comparison table

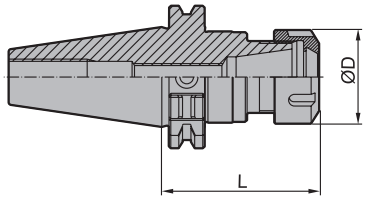
Clamping range(mm)		Max. Run-out(mm)		
d	L	DIN6499/ISO15488 From B	ER-A	ER-UP
1.0~1.6	6.0	0.015	0.010	0.005
1.6~3.0	10.0			
3.0~6.0	16.0			
6.0~10.0	25.0			
10.0~18.0	40.0	0.020	0.010	0.005
18.0~26.0	50.0			
26.0~34.0	60.0	0.025	0.015	0.010

Note: the Max. run-out of ER-A and ER-UP collet both are less than the Max. run-out stated in DIN6499/ISO15488.

Spring collet chuck(JT)

Code key JT40 - ER16 - 70 H

- Type of toolholder: JT: DIN69871-A / BT: MAS403BT / HSK: DIN69873
- Coupling type and specifications
- Designed length(L)
- High precise



Type	Taper angle	Dimensions(mm)		Standard parts	Choose spare parts					Weight (kg)
		ØD	L	Nut	Precise collet	High precise collet	Mechanical sealed collet	Rigid tapping collet	Wrench	
JT30-ER16-70H	30	28	70	Hi-Q/ER16	ER16-□□A	ER16-□□UP	ER16-□□DM	ER16-□□GB	E16P	0.50
JT30-ER16-100H	30	28	100	Hi-Q/ER16	ER16-□□A	ER16-□□UP	ER16-□□DM	ER16-□□GB	E16P	0.61
JT30-ER25-60H	30	42	60	Hi-Q/ER25	ER25-□□A	ER25-□□UP	ER25-□□DM	ER25-□□GB	E25	0.51
JT40-ER11-100H	40	19	100	Hi-Q/ER11	ER11-□□A	ER11-□□UP	ER11-□□DM	ER11-□□GB	E11P	1.04
JT40-ER16-70H	40	28	70	Hi-Q/ER16	ER16-□□A	ER16-□□UP	ER16-□□DM	ER16-□□GB	E16P	1.07
JT40-ER16-100H	40	28	100	Hi-Q/ER16	ER16-□□A	ER16-□□UP	ER16-□□DM	ER16-□□GB	E16P	1.18
JT40-ER16-160H	40	28	160	Hi-Q/ER16	ER16-□□A	ER16-□□UP	ER16-□□DM	ER16-□□GB	E16P	1.36
JT40-ER25-70H	40	42	70	Hi-Q/ER25	ER25-□□A	ER25-□□UP	ER25-□□DM	ER25-□□GB	E25	1.15
JT40-ER25-100H	40	42	100	Hi-Q/ER25	ER25-□□A	ER25-□□UP	ER25-□□DM	ER25-□□GB	E25	1.40
JT40-ER25-160H	40	42	160	Hi-Q/ER25	ER25-□□A	ER25-□□UP	ER25-□□DM	ER25-□□GB	E25	1.55
JT40-ER32-70H	40	50	70	Hi-Q/ER32	ER32-□□A	ER32-□□UP	ER32-□□DM	ER32-□□GB	E32	1.17
JT40-ER32-100H	40	50	100	Hi-Q/ER32	ER32-□□A	ER32-□□UP	ER32-□□DM	ER32-□□GB	E32	1.43
JT40-ER32-160H	40	50	160	Hi-Q/ER32	ER32-□□A	ER32-□□UP	ER32-□□DM	ER32-□□GB	E32	1.81
JT40-ER40-80H	40	63	80	Hi-Q/ER40	ER40-□□A	ER40-□□UP	ER40-□□DM	ER40-□□GB	E40	1.41
JT40-ER40-100H	40	63	100	Hi-Q/ER40	ER40-□□A	ER40-□□UP	ER40-□□DM	ER40-□□GB	E40	1.70
JT40-ER40-160H	40	63	160	Hi-Q/ER40	ER40-□□A	ER40-□□UP	ER40-□□DM	ER40-□□GB	E40	2.55
JT50-ER16-100H	50	28	100	Hi-Q/ER16	ER16-□□A	ER16-□□UP	ER16-□□DM	ER16-□□GB	E16P	3.18
JT50-ER16-160H	50	28	160	Hi-Q/ER16	ER16-□□A	ER16-□□UP	ER16-□□DM	ER16-□□GB	E16P	3.47
JT50-ER32-100H	50	50	100	Hi-Q/ER32	ER32-□□A	ER32-□□UP	ER32-□□DM	ER32-□□GB	E32	3.36
JT50-ER32-160H	50	50	160	Hi-Q/ER32	ER32-□□A	ER32-□□UP	ER32-□□DM	ER32-□□GB	E32	4.25
JT50-ER40-100H	50	63	100	Hi-Q/ER40	ER40-□□A	ER40-□□UP	ER40-□□DM	ER40-□□GB	E40	3.62
JT50-ER40-160H	50	63	160	Hi-Q/ER40	ER40-□□A	ER40-□□UP	ER40-□□DM	ER40-□□GB	E40	4.20

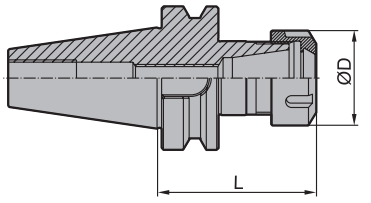
● Choose spare parts

Name	Precise collet	High precise collet	Mechanical sealed collet	Rigid tapping collet	Wrench
Page	D25	D26	D27	D28	D30

Spring collet chuck(BT)

Code key BT40 - ER16 - 70 H

- Type of toolholder: JT: DIN69871-A / BT: MAS403BT / HSK: DIN69873
- Coupling type and specifications
- Designed length(L)
- High precise



Type	Taper angle	Dimensions(mm)		Standard parts	Choose spare parts					Weight (kg)
		ØD	L	Nut	Precise collet	High precise collet	Mechanical sealed collet	Rigid tapping collet	Wrench	
BT30-ER16-80H	30	28	80	Hi-Q/ER16	ER16-□□A	ER16-□□UP	ER16-□□DM	ER16-□□GB	E16P	0.57
BT30-ER16-100H	30	28	100	Hi-Q/ER16	ER16-□□A	ER16-□□UP	ER16-□□DM	ER16-□□GB	E16P	0.67
BT30-ER25-60H	30	42	62.5	Hi-Q/ER25	ER25-□□A	ER25-□□UP	ER25-□□DM	ER25-□□GB	E25	0.57
BT30-ER25-100H	30	42	100	Hi-Q/ER25	ER25-□□A	ER25-□□UP	ER25-□□DM	ER25-□□GB	E25	0.79
BT40-ER11-100H	40	19	100	Hi-Q/ER11	ER11-□□A	ER11-□□UP	ER11-□□DM	ER11-□□GB	E11P	1.16
BT40-ER16-70H	40	28	70	Hi-Q/ER16	ER16-□□A	ER16-□□UP	ER16-□□DM	ER16-□□GB	E16P	1.12
BT40-ER16-100H	40	28	100	Hi-Q/ER16	ER16-□□A	ER16-□□UP	ER16-□□DM	ER16-□□GB	E16P	1.24
BT40-ER16-160H	40	28	160	Hi-Q/ER16	ER16-□□A	ER16-□□UP	ER16-□□DM	ER16-□□GB	E16P	1.33
BT40-ER25-70H	40	42	70	Hi-Q/ER25	ER25-□□A	ER25-□□UP	ER25-□□DM	ER25-□□GB	E25	1.20
BT40-ER25-100H	40	42	100	Hi-Q/ER25	ER25-□□A	ER25-□□UP	ER25-□□DM	ER25-□□GB	E25	1.49
BT40-ER25-160H	40	42	160	Hi-Q/ER25	ER25-□□A	ER25-□□UP	ER25-□□DM	ER25-□□GB	E25	1.54
BT40-ER32-70H	40	50	70	Hi-Q/ER32	ER32-□□A	ER32-□□UP	ER32-□□DM	ER32-□□GB	E32	1.25
BT40-ER32-100H	40	50	100	Hi-Q/ER32	ER32-□□A	ER32-□□UP	ER32-□□DM	ER32-□□GB	E32	1.53
BT40-ER32-160H	40	50	160	Hi-Q/ER32	ER32-□□A	ER32-□□UP	ER32-□□DM	ER32-□□GB	E32	1.74
BT40-ER40-80H	40	63	80	Hi-Q/ER40	ER40-□□A	ER40-□□UP	ER40-□□DM	ER40-□□GB	E40	1.46
BT40-ER40-100H	40	63	100	Hi-Q/ER40	ER40-□□A	ER40-□□UP	ER40-□□DM	ER40-□□GB	E40	1.79
BT40-ER40-160H	40	63	160	Hi-Q/ER40	ER40-□□A	ER40-□□UP	ER40-□□DM	ER40-□□GB	E40	2.66
BT50-ER16-100H	50	28	100	Hi-Q/ER16	ER16-□□A	ER16-□□UP	ER16-□□DM	ER16-□□GB	E16P	3.50
BT50-ER16-160H	50	28	160	Hi-Q/ER16	ER16-□□A	ER16-□□UP	ER16-□□DM	ER16-□□GB	E16P	4.35
BT50-ER32-100H	50	50	100	Hi-Q/ER32	ER32-□□A	ER32-□□UP	ER32-□□DM	ER32-□□GB	E32	4.20
BT50-ER32-160H	50	50	160	Hi-Q/ER32	ER32-□□A	ER32-□□UP	ER32-□□DM	ER32-□□GB	E32	4.95
BT50-ER40-100H	50	63	100	Hi-Q/ER40	ER40-□□A	ER40-□□UP	ER40-□□DM	ER40-□□GB	E40	4.34
BT50-ER40-160H	50	63	100	Hi-Q/ER40	ER40-□□A	ER40-□□UP	ER40-□□DM	ER40-□□GB	E40	5.15

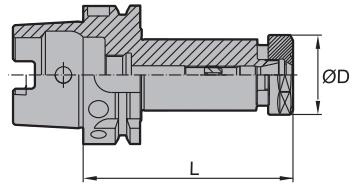
● Choose spare parts

Name	Precise collet	High precise collet	Mechanical sealed collet	Rigid tapping collet	Wrench
Page	D25	D26	D27	D28	D30

Spring collet chuck(HSK)

Code key HSK-A63 - ER16 - 80 H

- HSK-A63: Type of toolholder: JT: DIN69871-A / BT: MAS403BT / HSK: DIN69873
- ER16: Coupling type and specifications
- 80: Designed length(L)
- H: High precise



Type	Dimensions(mm)		Standard parts	Choose spare parts					Weight (kg)
	ØD	L	Nut	Precise collet	High precise collet	Mechanical sealed collet	Rigid tapping collet	Wrench	
HSK-A40-ER16-80H	28	80	Hi-Q/ER16	ER16-□□A	ER16-□□UP	ER16-□□DM	ER16-□□GB	E16P	0.35
HSK-A40-ER25-80H	42	80	Hi-Q/ER25	ER25-□□A	ER25-□□UP	ER25-□□DM	ER25-□□GB	E25	0.51
HSK-A50-ER16-100H	28	100	Hi-Q/ER16	ER16-□□A	ER16-□□UP	ER16-□□DM	ER16-□□GB	E16P	0.69
HSK-A50-ER25-80H	42	80	Hi-Q/ER25	ER25-□□A	ER25-□□UP	ER25-□□DM	ER25-□□GB	E25	068
HSK-A50-ER32-100H	50	100	Hi-Q/ER32	ER32-□□A	ER32-□□UP	ER32-□□DM	ER32-□□GB	E32	0.93
HSK-A63-ER11-100H	19	100	Hi-Q/ER11	ER11-□□A	ER11-□□UP	ER11-□□DM	ER11-□□GB	E11P	0.88
HSK-A63-ER16-80H	28	80	Hi-Q/ER16	ER16-□□A	ER16-□□UP	ER16-□□DM	ER16-□□GB	E16P	0.87
HSK-A63-ER16-100H	28	100	Hi-Q/ER16	ER16-□□A	ER16-□□UP	ER16-□□DM	ER16-□□GB	E16P	0.96
HSK-A63-ER25-80H	42	80	Hi-Q/ER25	ER25-□□A	ER25-□□UP	ER25-□□DM	ER25-□□GB	E25	0.93
HSK-A63-ER25-160H	42	160	Hi-Q/ER25	ER25-□□A	ER25-□□UP	ER25-□□DM	ER25-□□GB	E25	1.37
HSK-A63-ER32-80H	50	80	Hi-Q/ER32	ER32-□□A	ER32-□□UP	ER32-□□DM	ER32-□□GB	E32	1.04
HSK-A63-ER32-100H	50	100	Hi-Q/ER32	ER32-□□A	ER32-□□UP	ER32-□□DM	ER32-□□GB	E32	1.19
HSK-A63-ER32-160H	50	160	Hi-Q/ER32	ER32-□□A	ER32-□□UP	ER32-□□DM	ER32-□□GB	E32	1.53
HSK-A63-ER40-120H	63	120	Hi-Q/ER40	ER40-□□A	ER40-□□UP	ER40-□□DM	ER40-□□GB	E40	1.80
HSK-A63-ER40-160H	63	160	Hi-Q-ER40	ER40-□□A	ER40-□□UP	ER40-□□DM	ER40-□□GB	E40	2.26

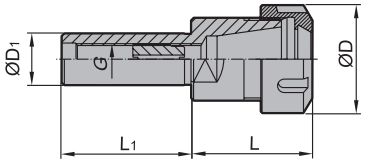
● Choose spare parts

Name	Precise collet	High precise collet	Mechanical sealed collet	Rigid tapping collet	Wrench
Page	D25	D26	D27	D28	D30

Collet chuck extension

Code key G25 - ER25 - 50 H

- G25: Coupling specifications(shank)
- ER25: Coupling type and specifications
- 50: Designed length(L)
- H: High precise



Type	Dimensions(mm)					Standard parts	Choose spare parts	Weight (kg)
	ØD	ØD1	L	L1	G	Nut	Wrench	
G16-ER16-60H	28	16	36.5	60	M8×1	Hi-Q/ER16	E16P	0.18
G20-ER16-50H	28	20	30.5	50	M12×1	Hi-Q/ER16	E16P	0.18
G20-ER16-100H	28	20	30.5	100	M12×1	Hi-Q/ER16	E16P	0.26
G20-ER25-50H	42	20	47.0	50	M12×1	Hi-Q/ER25	E25	0.33
G20-ER25-100H	42	20	47.0	100	M12×1	Hi-Q/ER25	E25	0.42
G25-ER25-50H	42	25	47.0	50	M18×1	Hi-Q/ER25	E25	0.37
G25-ER25-100H	42	25	47.0	100	M18×1	Hi-Q/ER25	E25	0.47
G25-ER32-50H	50	25	54.0	50	M18×1.5	Hi-Q/ER32	E32	0.51

● Choose spare parts

Name	Precise collet	High precise collet	Mechanical sealed collet	Rigid tapping collet	Wrench
Page	D25	D26	D27	D28	D30

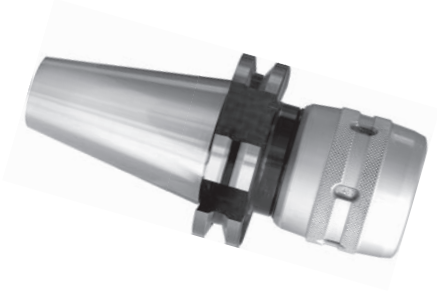
Heavy duty milling collet chuck(JT)

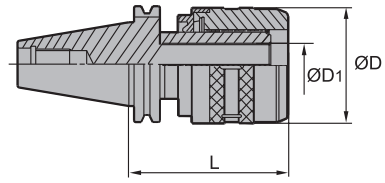
Code key JT40 - ZC20 - 80

Type of toolholder: JT: DIN69871-A
BT: MAS403BT
HSK: DIN69873

Coupling type and specifications

Designed length(L)





Type	Taper angle	Clamping range (mm)	Dimensions(mm)			Choose spare parts		Weight (kg)
			ØD	L	ØD1	Cylindrical collet	Wrench	
JT30-ZC20-90	30	6-20	55	90	20	ZC20-	WZC20-J	1.4
JT40-ZC20-85	40	6-20	55	85	20	ZC20-	WZC20-J	2.2
JT40-ZC20-135	40	6-20	55	135	20	ZC20-	WZC20-J	2.6
JT40-ZC32-105	40	6-32	73	105	32	ZC32-	WZC32-J	2.7
JT40-ZC32-150	40	6-32	73	150	32	ZC32-	WZC32-J	3.8
JT50-ZC20-105	50	6-20	55	105	20	ZC20-	WZC20-J	4.5
JT50-ZC32-110	50	6-32	73	110	32	ZC32-	WZC32-J	5.3
JT50-ZC32-165	50	6-32	73	165	32	ZC32-	WZC32-J	6.9

● Choose spare parts

Name	Cylindrical collet	Wrench
Page	D29	D30

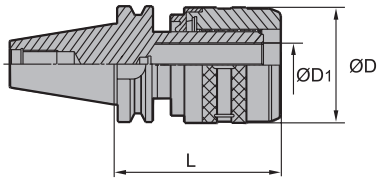
Heavy duty milling collet chuck(BT)

Code key BT40 - ZC20 - 80

Type of toolholder: JT: DIN69871-A
BT: MAS403BT
HSK: DIN69873

Designed length(L)

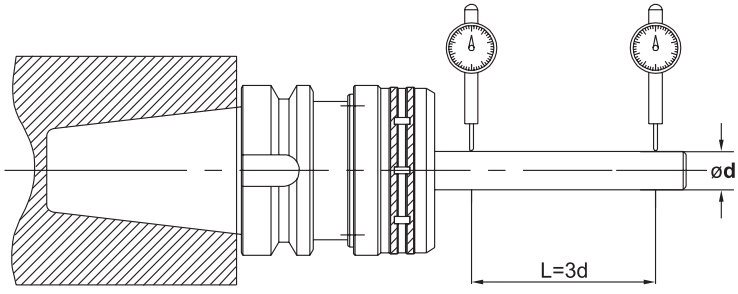
Coupling type and specifications



Type	Taper angle	Clamping range (mm)	Dimensions(mm)			Choose spare parts		Weight (kg)
			ØD	L	ØD1	Cylindrical collet	Wrench	
BT30-ZC20-90	30	6-20	55	90	20	ZC20-	WZC20-J	1.6
BT40-ZC20-80	40	6-20	55	80	20	ZC20-	WZC20-J	2.4
BT40-ZC20-135	40	6-20	55	135	20	ZC20-	WZC20-J	2.9
BT40-ZC32-105	40	6-32	73	105	32	ZC32-	WZC32-J	3.1
BT40-ZC32-150	40	6-32	73	150	32	ZC32-	WZC32-J	4.1
BT50-ZC20-105	50	6-20	55	105	20	ZC20-	WZC20-J	4.9
BT50-ZC32-110	50	6-32	73	110	32	ZC32-	WZC32-J	5.9
BT50-ZC32-165	50	6-32	73	165	32	ZC32-	WZC32-J	7.8

● Choose spare parts

Name	Cylindrical collet	Wrench
Page	D29	D30



Run-out at L=3d≤0.01mm

Weldon type chuck(JT)

Code key JT40 - XP25 - 100

Type of toolholder: JT: DIN69871-A
BT: MAS403BT
HSK: DIN69873

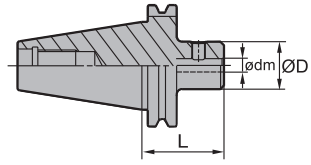
Coupling type and specifications

Designed length(L)

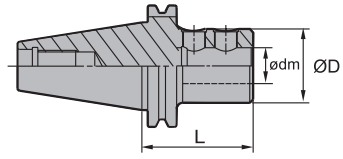
A type

B type

A type



B type



Type	Taper angle	Range of holding ødm	Dimensions(mm)		Standard parts		Type	Weight (kg)
					Screw	Wrench		
			ØD	L	(GB77-85)			
JT30-XP12-50	30	12	42	50	M12×16	WH60L	A	0.60
JT30-XP16-75	30	16	48	75	M14×16	WH60L	A	0.80
JT30-XP20-75	30	20	52	75	M16×16	WH80L	A	0.98
JT40-XP12-50	40	12	42	50	M12×16	WH60L	A	1.05
JT40-XP16-63	40	16	48	63	M14×16	WH60L	A	1.35
JT40-XP20-70	40	20	52	70	M16×16	WH80L	A	1.40
JT40-XP25-100	40	25	62	100	M18(×2)×20	WH80L	B	2.55
JT40-XP32-110	40	32	72	110	M20(×2)×20	WH80L	B	2.70
JT50-XP12-63	50	12	42	63	M12×16	WH60L	A	2.95
JT50-XP16-80	50	16	48	80	M14×16	WH60L	A	3.25
JT50-XP20-80	50	20	52	80	M16×16	WH80L	A	3.35
JT50-XP25-100	50	25	65	100	M18(×2)×20	WH80L	B	4.15
JT50-XP25-140	50	25	65	140	M18(×2)×20	WH80L	B	4.65
JT50-XP32-105	50	32	72	105	M20(×2)×20	WH80L	B	5.85
JT50-XP32-165	50	32	72	165	M20(×2)×20	WH80L	B	6.00
JT50-XP40-120	50	40	80	120	M20(×2)×20	WH80L	B	6.00

Weldon type chuck(BT)

Code key BT40 - XP25 - 100

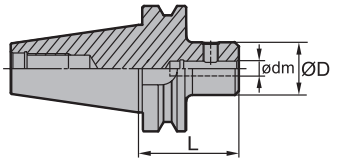
Type of toolholder: JT: DIN69871-A
BT: MAS403BT
HSK: DIN69873

Designed length(L)

Coupling type and specifications

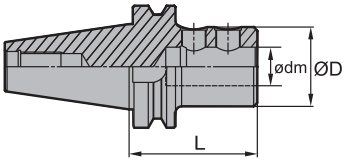
A type

A type



B type

B type



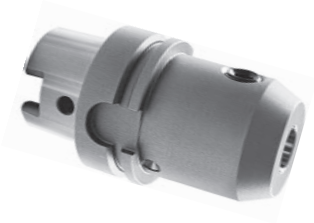
Type	Taper angle	Range of holding ødm	Dimensions(mm)		Standard parts		Type	Weight (kg)
					Screw	Wrench		
			ØD	L	(GB77-85)			
BT30-XP12-50	30	12	42	50	M12×16	WH60L	A	0.67
BT30-XP16-75	30	16	48	75	M14×16	WH60L	A	0.92
BT30-XP20-75	30	20	52	75	M16×16	WH80L	A	1.07
BT40-XP12-63	40	12	42	63	M12×16	WH60L	A	1.22
BT40-XP16-63	40	16	48	63	M14×16	WH60L	A	1.35
BT40-XP20-70	40	20	52	70	M16×16	WH80L	A	1.42
BT40-XP25-90	40	25	62	90	M18(×2)×20	WH80L	B	2.60
BT40-XP32-100	40	32	72	100	M20(×2)×20	WH80L	B	2.75
BT50-XP12-80	50	12	42	80	M12×16	WH60L	A	3.45
BT50-XP16-80	50	16	48	80	M14×16	WH60L	A	4.15
BT50-XP20-80	50	20	52	80	M16×16	WH80L	A	4.25
BT50-XP25-100	50	25	65	100	M18(×2)×20	WH80L	B	4.80
BT50-XP25-165	50	25	65	165	M18(×2)×20	WH80L	B	4.95
BT50-XP32-105	50	32	72	105	M20(×2)×20	WH80L	B	5.10
BT50-XP32-165	50	32	72	165	M20(×2)×20	WH80L	B	6.08
BT50-XP40-120	50	40	80	120	M20(×2)×20	WH80L	B	6.45

Weldon type chuck(HSK)

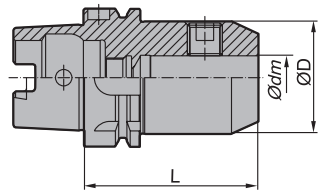
Code key HSK-A50 - XP20 - 80

- HSK-A50: Type of toolholder: JT: DIN69871-A / BT: MAS403BT / HSK: DIN69873
- XP20: Coupling type and specifications
- 80: Designed length(L)

A type

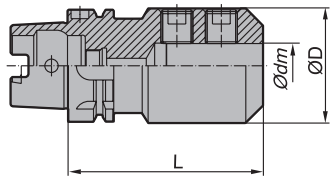


A type



B type

B type



Type	Range of holding ødm	Dimensions(mm)		Standard parts	Type	Weight (kg)
		ØD	L	Wrench		
HSK-A40-XP12-70	12	42	70	WH40L	A	0.61
HSK-A40-XP16-75	16	48	75	WH40L	A	0.64
HSK-A50-XP12-80	12	42	80	WH50L	A	0.90
HSK-A50-XP16-80	16	48	80	WH50L	A	0.97
HSK-A50-XP20-80	20	52	80	WH50L	A	1.68
HSK-A63-XP12-80	12	42	80	WH63L	A	1.15
HSK-A63-XP16-80	16	48	80	WH63L	A	1.29
HSK-A63-XP20-80	20	52	80	WH63L	A	1.36
HSK-A63-XP25-110	25	65	110	WH63L	B	2.29
HSK-A63-XP32-110	32	72	110	WH63L	B	2.58

Arbor mill adapter(JT)

Code key JT40 - XM22 - 60

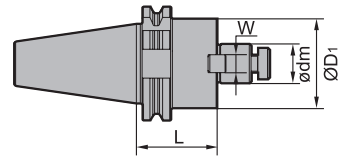
Type of toolholder: JT: DIN69871-A
BT: MAS403BT
HSK: DIN69873

Designed length(L)

Coupling type and specifications

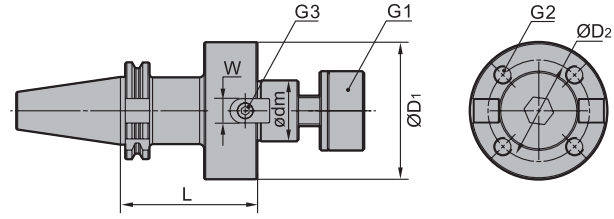
A type

A type



B type

B type



Type	Taper angle	Locating shaft diameter ødm	Dimensions(mm)				Standard parts						Type	Weight (kg)
							Screw G1	Shim	Screw G2 (GB70-85)	Wrench	Key	Screw G3 (GB70-85)		
			ØD1	L	ØD2	W Key width								
JT30-XM22-45	30	22	45	45	-	10	LD22	-	-	WH80L	CJ10	M4×10	A	1.20
JT30-XM27-45	30	27	60	45	-	12	LD27	-	-	WH100L	CJ12	M4×10	A	1.23
JT40-XM22-60	40	22	45	60	-	10	LD22	-	-	WH80L	CJ10	M4×10	A	1.25
JT40-XM22-90	40	22	45	90	-	10	LD22	-	-	WH80L	CJ10	M4×10	A	1.30
JT40-XM27-60	40	27	60	60	-	12	LD27	D27	-	WH100L	CJ12	M4×10	A	1.35
JT40-XM27-90	40	27	60	90	-	12	LD27	D27	-	WH100L	CJ12	M4×10	A	1.40
JT40-XM32-75	40	32	70	75	-	14	LD32	D32	-	WH140L	CJ14	M5×12	A	2.00
JT40-XM40-75	40	40	100	75	66.7	16	LD40	D40	M12×40	WH100L WH170L	CJ16	M6×14	B	3.50
JT50-XM22-75	50	22	50	75	-	10	LD22	-	-	WH80L	CJ10	M4×10	A	3.35
JT50-XM27-60	50	27	60	60	-	12	LD27	D27	-	WH100L	CJ12	M4×10	A	3.50
JT50-XM32-75	50	32	70	75	-	14	LD32	D32	-	WH140L	CJ14	M5×12	A	4.00
JT50-XM40-75	50	40	100	75	66.7	16	LD40	D40	M12×40	WH100L WH170L	CJ16	M6×14	B	5.95
JT50-XM60-75	50	60	137	75	101.6	25.4	-	-	M16×45	WH140L	CJ25.4	M8×20	B	7.60

Arbor mill adapter(BT)

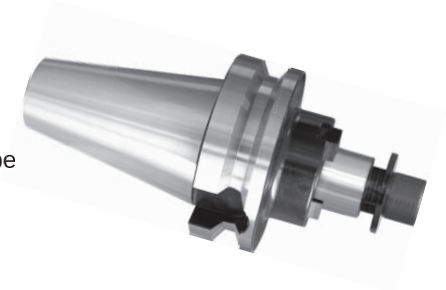
Code key BT40 - XM22 - 60

Type of toolholder: JT: DIN69871-A
BT: MAS403BT
HSK: DIN69873

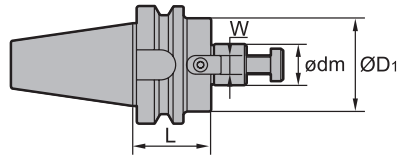
Designed length(L)

Coupling type and specifications

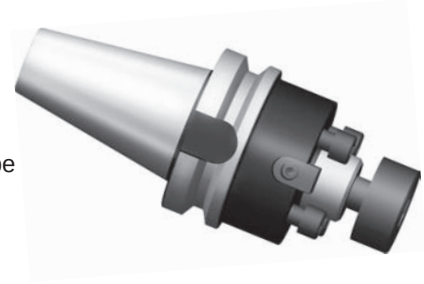
A type



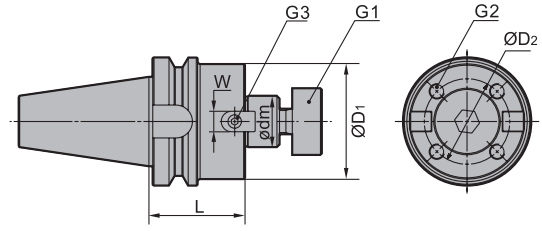
A type



B type



B type



Type	Taper angle	Locating shaft diameter ødm	Dimensions(mm)				Standard parts						Type	Weight (kg)
							Screw G1	Shim	Screw G2 (GB70-85)	Wrench	Key	Screw G3 (GB70-85)		
			ØD1	L	ØD2	W Key width								
BT30-XM22-45	30	22	45	45	-	10	LD22	-	-	WH80L	CJ10	M4×10	A	1.35
BT30-XM27-45	30	27	60	45	-	12	LD27	-	-	WH100L	CJ12	M4×10	A	1.40
BT40-XM22-60	40	22	50	60	-	10	LD22	-	-	WH80L	CJ10	M4×10	A	1.45
BT40-XM22-90	40	22	50	90	-	10	LD22	-	-	WH80L	CJ10	M4×10	A	1.50
BT40-XM27-60	40	27	60	60	-	12	LD27	D27	-	WH100L	CJ12	M4×10	A	1.65
BT40-XM27-90	40	27	60	90	-	12	LD27	D27	-	WH100L	CJ12	M4×10	A	1.79
BT40-XM32-75	40	32	70	75	-	14	LD32	D32	-	WH140L	CJ14	M5×12	A	2.10
BT40-XM40-75	40	40	100	75	66.7	16	LD40	D40	M12×40	WH100L WH170L	CJ16	M6×14	B	3.60
BT50-XM22-75	50	22	50	75	-	10	LD22	-	-	WH80L	CJ10	M4×10	A	4.35
BT50-XM27-60	50	27	60	60	-	12	LD27	D27	-	WH100L	CJ12	M4×10	A	4.50
BT50-XM32-75	50	32	70	75	-	14	LD32	D32	-	WH140L	CJ14	M5×12	A	4.95
BT50-XM40-75	50	40	100	75	66.7	16	LD40	D40	M12×40	WH100L WH170L	CJ16	M6×14	B	6.95
BT50-XM60-75	50	60	137	75	101.6	25.4	-	-	M16×45	WH140L	CJ25.4	M8×20	B	8.60

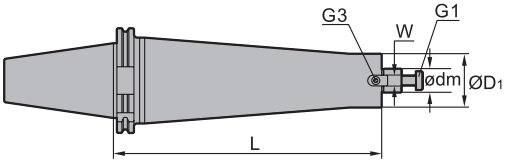
Extended arbor mill adapter(JT)

Code key JT40 - XM22 - 150

Type of toolholder: JT: DIN69871-A
BT: MAS403BT
HSK: DIN69873

Coupling type and specifications

Designed length(L)



Type	Taper angle	Locating shaft diameter ødm	Dimensions(mm)			Standard parts				Weight (kg)
						Screw G1	Wrench	Key	ScrewG3 (GB70-85)	
			ØD1	L	W Key width					
JT40-XM22-120	40	22	45	120	10	LD22	WH80L	CJ10	M4×10	2.30
JT40-XM22-150	40	22	45	150	10	LD22	WH80L	CJ10	M4×10	2.50
JT40-XM22-200	40	22	45	200	10	LD22	WH80L	CJ10	M4×10	4.35
JT50-XM22-120	50	22	45	120	10	LD22	WH80L	CJ10	M4×10	6.35
JT50-XM22-150	50	22	45	150	10	LD22	WH80L	CJ10	M4×10	6.80
JT50-XM22-200	50	22	45	200	10	LD22	WH80L	CJ10	M4×10	7.45
JT50-XM22-250	50	22	45	250	10	LD22	WH80L	CJ10	M4×10	7.80

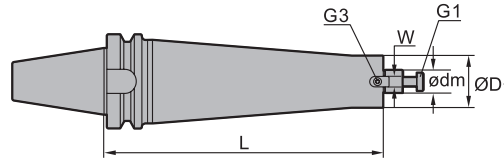
Extended arbor mill adapter(BT)

Code key BT40 - XM22 - 150

Type of toolholder: JT: DIN69871-A
BT: MAS403BT
HSK: DIN69873

Coupling type and specifications

Designed length(L)



Type	Taper angle	Locating shaft diameter ødm	Dimensions(mm)			Standard parts				Weight (kg)
						Screw G1	Wrench	Key	ScrewG3 (GB70-85)	
			ØD1	L	W Key width					
BT40-XM22-120	40	22	50	120	10	LD22	WH80L	CJ10	M4×10	2.43
BT40-XM22-150	40	22	50	150	10	LD22	WH80L	CJ10	M4×10	2.65
BT40-XM22-200	40	22	50	200	10	LD22	WH80L	CJ10	M4×10	4.50
BT50-XM22-120	50	22	50	120	10	LD22	WH80L	CJ10	M4×10	6.55
BT50-XM22-150	50	22	50	150	10	LD22	WH80L	CJ10	M4×10	6.90
BT50-XM22-200	50	22	50	200	10	LD22	WH80L	CJ10	M4×10	7.55
BT50-XM22-250	50	22	50	250	10	LD22	WH80L	CJ10	M4×10	8.15

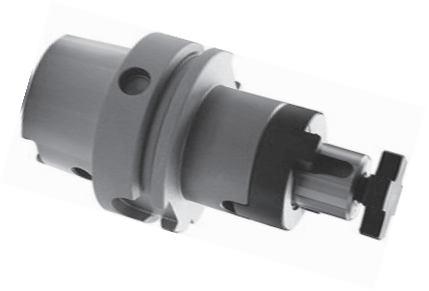
Arbor mill adapter(HSK)

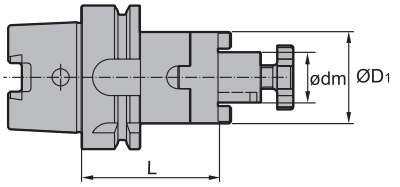
Code key HSK-A40 - XM22 - 50

Type of toolholder: JT: DIN69871-A
BT: MAS403BT
HSK: DIN69873

Coupling type and specifications

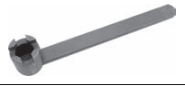
Designed length(L)





Type	Locating shaft diameter ødm	Dimensions(mm)		Choose spare parts	Weight (kg)
		ØD1	L	Wrench	
HSK-A40-XM22-50	22	40	50	FDS22	0.61
HSK-A50-XM22-50	22	40	50	FDS22	0.73
HSK-A50-XM27-65	27	48	65	FDS27	1.03
HSK-A50-XM32-65	32	58	65	FDS32	1.22
HSK-A63-XM22-60	22	40	60	FDS22	1.08
HSK-A63-XM27-60	27	48	60	FDS27	1.28
HSK-A63-XM32-60	32	58	60	FDS32	1.52
HSK-A63-XM40-70	40	70	70	FDS40	2.15

● Choose spare parts

Name	Wrench
	
Page	D30

Adapter for morse taper with flat tail(JT)

Code key JT40 - M1 - 45

Type of toolholder: JT: DIN69871-A
BT: MAS403BT
HSK: DIN69873

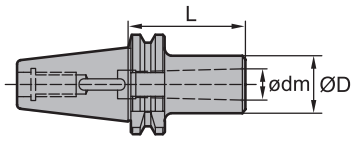
Designed length(L)

Coupling type and specifications

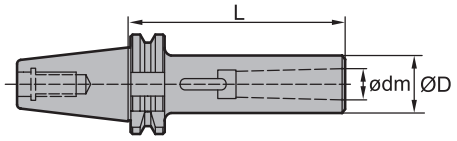
A type

B type

A type



B type



Type	Taper angle	Taper hole	Corresponding drill diameter (mm)	Dimensions(mm)			Type	Weight (kg)
				ØD	Ødm	L		
JT40-M1-45	40	MT1	3-14	25	12.065	45	A	0.90
JT40-M1-120	40	MT1	3-14	25	12.065	120	B	1.20
JT40-M2-60	40	MT2	14-23	32	17.780	60	A	0.90
JT40-M2-120	40	MT2	14-23	32	17.780	120	B	1.30
JT40-M3-75	40	MT3	23-32	40	23.825	75	A	1.11
JT40-M3-135	40	MT3	23-32	40	23.825	135	B	1.71
JT40-M4-95	40	MT4	32-50	50	31.267	95	A	1.42
JT40-M4-165	40	MT4	32-50	50	31.267	165	B	2.40
JT50-M1-45	50	MT1	3-14	25	12.065	45	A	2.71
JT50-M1-120	50	MT1	3-14	25	12.065	120	B	3.01
JT50-M1-180	50	MT1	3-14	25	12.065	180	B	3.20
JT50-M2-45	50	MT2	14-23	32	17.780	45	A	2.71
JT50-M2-135	50	MT2	14-23	32	17.780	135	B	3.30
JT50-M2-180	50	MT2	14-23	32	17.780	180	B	3.51
JT50-M3-75	50	MT3	23-32	40	23.825	75	A	2.90
JT50-M3-150	50	MT3	23-32	40	23.825	150	B	3.70
JT50-M3-180	50	MT3	23-32	40	23.825	180	B	4.01
JT50-M4-75	50	MT4	32-50	50	31.267	75	A	2.90
JT50-M4-180	50	MT4	32-50	50	31.267	180	B	4.50
JT50-M5-105	50	MT5	50-75	70	44.399	105	A	3.70

Adapter for morse taper with flat tail(BT)

Code key BT40 - M1 - 45

Type of toolholder: JT: DIN69871-A
BT: MAS403BT
HSK: DIN69873

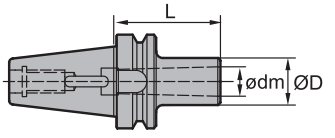
Designed length(L)

Coupling type and specifications

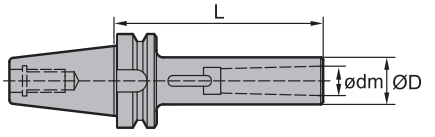
A type

B type

A type



B type



Type	Taper angle	Taper hole	Corresponding drill diameter (mm)	Dimensions(mm)			Type	Weight (kg)
				ØD	Ødm	L		
BT40-M1-45	40	MT1	3-14	25	12.065	45	A	1.01
BT40-M1-120	40	MT1	3-14	25	12.065	120	B	1.30
BT40-M2-60	40	MT2	14-23	32	17.780	60	A	1.11
BT40-M2-120	40	MT2	14-23	32	17.780	120	B	1.40
BT40-M3-75	40	MT3	23-32	40	23.825	75	A	1.21
BT40-M3-135	40	MT3	23-32	40	23.825	135	B	1.80
BT40-M4-95	40	MT4	32-50	50	31.267	95	A	1.11
BT40-M4-165	40	MT4	32-50	50	31.267	165	B	1.70
BT50-M1-45	50	MT1	3-14	25	12.065	45	A	3.60
BT50-M1-120	50	MT1	3-14	25	12.065	120	B	3.91
BT50-M1-180	50	MT1	3-14	25	12.065	180	B	4.21
BT50-M2-45	50	MT2	14-23	32	17.780	45	A	3.60
BT50-M2-135	50	MT2	14-23	32	17.780	135	B	4.20
BT50-M2-180	50	MT2	14-23	32	17.780	180	B	4.41
BT50-M3-75	50	MT3	23-32	40	23.825	75	A	3.70
BT50-M3-150	50	MT3	23-32	40	23.825	150	B	4.50
BT50-M3-180	50	MT3	23-32	40	23.825	180	B	4.80
BT50-M4-75	50	MT4	32-50	50	31.267	75	A	3.51
BT50-M4-180	50	MT4	32-50	50	31.267	180	B	5.20
BT50-M5-107	50	MT5	50-75	70	44.399	107	A	5.90

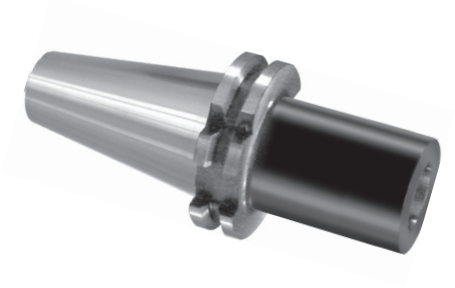
Adapter for morse taper without flat tail(JT)

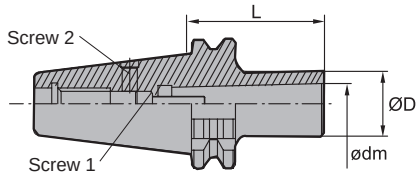
Code key JT40 - MW1 - 45

Type of toolholder: JT: DIN69871-A
BT: MAS403BT
HSK: DIN69873

Coupling type and specifications

Designed length(L)





Type	Taper angle	Taper hole	Corresponding mill diameter (mm)	Dimensions(mm)			Standard parts			Weight (kg)
							Screw 1	Wrench	Screw 2	
				ØD	Ødm	L	(GB70-85)		(GB77-85)	
JT40-MW1-45	40	MT1	6-12	27	12.065	45	M6×30	WH50L	-	0.91
JT40-MW2-50	40	MT2	14-20	32	17.780	50	M10×30	WH80L	-	0.91
JT40-MW3-75	40	MT3	22-36	40	23.825	75	M12×40	WH100L	M5×6	1.10
JT40-MW4-95	40	MT4	32-56	50	31.267	95	M16×40T	WH120L	M5×6	1.40
JT50-MW1-45	50	MT1	6-12	27	12.065	45	M6×30	WH50L	-	2.70
JT50-MW2-60	50	MT2	14-20	32	17.780	60	M10×30	WH50L	-	2.81
JT50-MW3-65	50	MT3	22-36	40	23.825	65	M12×40	WH100L	-	2.90
JT50-MW4-75	50	MT4	32-56	50	31.267	75	M16×40	WH140L	M5×12	2.90
JT50-MW5-105	50	MT5	40-63	78	44.399	105	M20×40	WH170L	M5×12	4.41

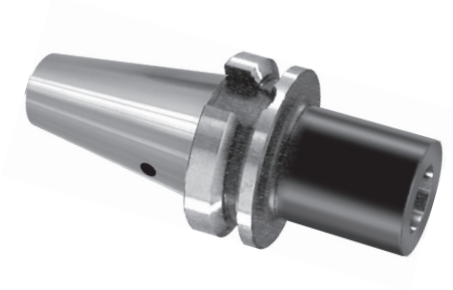
Adapter for morse taper without flat tail(BT)

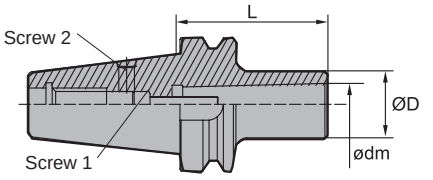
Code key BT40 - MW1 - 50

Type of toolholder: JT: DIN69871-A
BT: MAS403BT
HSK: DIN69873

Coupling type and specifications

Designed length(L)





Type	Taper angle	Taper hole	Corresponding mill diameter (mm)	Dimensions(mm)			Standard parts			Weight (kg)
							Screw1	Wrench	Screw2	
				ØD	Ødm	L	(GB70-85)		(GB77-85)	
BT40-MW1-50	40	MT1	6-12	27	12.065	50	M6×30	WH50L	-	1.02
BT40-MW2-64	40	MT2	14-20	32	17.780	64	M10×30	WH80L	-	1.08
BT40-MW3-76	40	MT3	22-36	40	23.825	76	M12×40	WH100L	M5×6	1.21
BT40-MW4-103	40	MT4	32-56	50	31.267	103	M16×40T	WH120L	M5×6	1.51
BT50-MW1-45	50	MT1	6-12	27	12.065	45	M6×30	WH50L	-	3.60
BT50-MW2-60	50	MT2	14-20	32	17.780	60	M10×30	WH50L	-	3.70
BT50-MW3-65	50	MT3	22-36	40	23.825	65	M12×40	WH100L	-	3.74
BT50-MW4-75	50	MT4	32-56	50	31.267	75	M16×40	WH140L	M5×12	3.82
BT50-MW5-105	50	MT5	40-63	78	44.399	105	M20×40	WH170L	M5×12	4.72

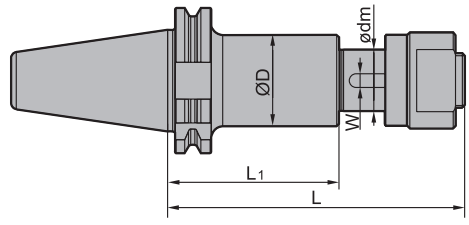
Side and face milling adapter(JT)

Code key JT40 - XS32 - 90

Type of toolholder: JT: DIN69871-A
BT: MAS403BT
HSK: DIN69873

Coupling type and specifications

Designed length(L)



Type	Taper angle	Dimensions(mm)					Standard parts			Weight (kg)
		ØD	Ødm	L1	L	W Key width	Nut	Key	Shim	
JT40-XS27-75	40	40	27	75	130	6	LM24	A6×21	K27	1.79
JT40-XS27-120	40	40	27	120	175	6	LM24	A6×21	K27	2.23
JT40-XS32-90	40	46	32	90	150	8	LM30	A8×22	K32	2.38
JT50-XS27-90	50	40	27	90	145	6	LM24	A6×21	K27	3.85
JT50-XS-27-135	50	40	27	135	190	6	LM24	A6×21	K27	4.29
JT50-XS32-90	50	46	32	90	150	8	LM30	A8×22	K32	4.29
JT50-XS32-135	50	46	32	135	195	8	LM30	A8×22	K32	4.88
JT50-XS40-90	50	55	40	90	156	10	LM36	A10×23	K40	5.00
JT50-XS40-135	50	55	40	135	201	10	LM36	A10×23	K40	5.82
JT50-XS50-100	50	63	50	100	150	12	LM48	A12×23	K50	6.43
JT50-XS50-140	50	63	50	140	210	12	LM48	A12×23	K50	7.50

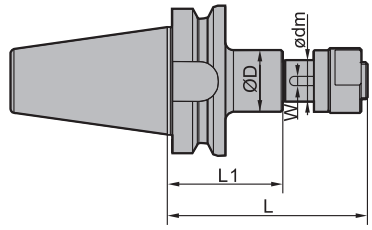
Side and face milling adapter(BT)

Code key BT40 - XS32 - 90

Type of toolholder: JT: DIN69871-A
BT: MAS403BT
HSK: DIN69873

Designed length(L)

Coupling type and specifications



Type	Taper angle	Dimensions(mm)					Standard parts			Weight (kg)
		ØD	Ødm	L_1	L	W Key width	Nut	Key	Shim	
BT40-XS27-75	40	40	27	75	130	6	LM24	A6×21	K27	4.49
BT40-XS27-120	40	40	27	120	175	6	LM24	A6×21	K27	4.93
BT40-XS32-90	40	40	32	90	150	8	LM30	A8×22	K32	5.01
BT50-XS27-90	50	40	27	90	145	6	LM24	A6×21	K27	4.66
BT50-XS27-135	50	40	27	135	190	6	LM24	A6×21	K27	5.08
BT50-XS32-90	50	46	32	90	150	8	LM30	A8×22	K32	4.95
BT50-XS32-135	50	46	32	135	195	8	LM30	A8×22	K32	5.59
BT50-XS40-90	50	55	40	90	156	10	LM36	A10×23	K40	5.47
BT50-XS40-135	50	55	40	135	201	10	LM36	A10×23	K40	6.42
BT50-XS50-100	50	63	50	100	150	12	LM48	A12×23	K50	6.94
BT50-XS50-140	50	63	50	140	210	12	LM48	A12×23	K50	8.01

ER collet(precise)

ER11-□□A		ER16-□□A		ER25-□□A	
Clamping range(mm)	Type	Clamping range(mm)	Type	Clamping range(mm)	Type
1.00-0.50	**ER11-1A**	1.00-0.50	**ER16-1A**	2.00-1.00	**ER25-2A**
2.00-1.50	**ER11-2A**	2.00-1.00	**ER16-2A**	3.00-2.00	**ER25-3A**
3.00-2.50	**ER11-3A**	3.00-2.00	**ER16-3A**	4.00-3.00	**ER25-4A**
4.00-3.50	**ER11-4A**	4.00-3.00	**ER16-4A**	5.00-4.00	**ER25-5A**
5.00-4.50	**ER11-5A**	5.00-4.00	**ER16-5A**	6.00-5.00	**ER25-6A**
6.00-5.50	**ER11-6A**	6.00-5.00	**ER16-6A**	7.00-6.00	**ER25-7A**
7.00-6.50	**ER11-7A**	7.00-6.00	**ER16-7A**	8.00-7.00	**ER25-8A**
		8.00-7.00	**ER16-8A**	9.00-8.00	**ER25-9A**
		9.00-8.00	**ER16-9A**	10.00-9.00	**ER25-10A**
		10.00-9.00	**ER16-10A**	11.00-10.00	**ER25-11A**
				12.00-11.00	**ER25-12A**
				13.00-12.00	**ER25-13A**
				14.00-13.00	**ER25-14A**
				15.00-14.00	**ER25-15A**
				16.00-15.00	**ER25-16A**

ER32-□□A							
Clamping range(mm)	Type	Clamping range(mm)	Type	Clamping range(mm)	Type	Clamping range(mm)	Type
3.00-2.00	**ER32-3A**	8.00-7.00	**ER32-8A**	13.00-12.00	**ER32-13A**	18.00-17.00	**ER32-18A**
4.00-3.00	**ER32-4A**	9.00-8.00	**ER32-9A**	14.00-13.00	**ER32-14A**	19.00-18.00	**ER32-19A**
5.00-4.00	**ER32-5A**	10.00-9.00	**ER32-10A**	15.00-14.00	**ER32-15A**	20.00-19.00	**ER32-20A**
6.00-5.00	**ER32-6A**	11.00-10.00	**ER32-11A**	16.00-15.00	**ER32-16A**		
7.00-6.00	**ER32-7A**	12.00-11.00	**ER32-12A**	17.00-16.00	**ER32-17A**		

ER40-□□A							
Clamping range(mm)	Type	Clamping range(mm)	Type	Clamping range(mm)	Type	Clamping range(mm)	Type
4.00-3.00	**ER40-4A**	10.00-9.00	**ER40-10A**	16.00-15.00	**ER40-16A**	22.00-21.00	**ER40-22A**
5.00-4.00	**ER40-5A**	11.00-10.00	**ER40-11A**	17.00-16.00	**ER40-17A**	23.00-22.00	**ER40-23A**
6.00-5.00	**ER40-6A**	12.00-11.00	**ER40-12A**	18.00-17.00	**ER40-18A**	24.00-23.00	**ER40-24A**
7.00-6.00	**ER40-7A**	13.00-12.00	**ER40-13A**	19.00-18.00	**ER40-19A**	25.00-24.00	**ER40-25A**
8.00-7.00	**ER40-8A**	14.00-13.00	**ER40-14A**	20.00-19.00	**ER40-20A**	26.00-25.00	**ER40-26A**
9.00-8.00	**ER40-9A**	15.00-14.00	**ER40-15A**	21.00-20.00	**ER40-21A**		

ER collet(high precise)

ER11-□□UP		ER16-□□UP		ER25-□□UP	
Clamping range(mm)	Type	Clamping range(mm)	Type	Clamping range(mm)	Type
1.00-0.50	**ER11-1UP**	1.00-0.50	**ER16-1UP**	2.00-1.00	**ER25-2UP**
2.00-1.50	**ER11-2UP**	2.00-1.00	**ER16-2UP**	3.00-2.00	**ER25-3UP**
3.00-2.50	**ER11-3UP**	3.00-2.00	**ER16-3UP**	4.00-3.00	**ER25-4UP**
4.00-3.50	**ER11-4UP**	4.00-3.00	**ER16-4UP**	5.00-4.00	**ER25-5UP**
5.00-4.50	**ER11-5UP**	5.00-4.00	**ER16-5UP**	6.00-5.00	**ER25-6UP**
6.00-5.50	**ER11-6UP**	6.00-5.00	**ER16-6UP**	7.00-6.00	**ER25-7UP**
7.00-6.50	**ER11-7UP**	7.00-6.00	**ER16-7UP**	8.00-7.00	**ER25-8UP**
		8.00-7.00	**ER16-8UP**	9.00-8.00	**ER25-9UP**
		9.00-8.00	**ER16-9UP**	10.00-9.00	**ER25-10UP**
		10.00-9.00	**ER16-10UP**	11.00-10.00	**ER25-11UP**
				12.00-11.00	**ER25-12UP**
				13.00-12.00	**ER25-13UP**
				14.00-13.00	**ER25-14UP**
				15.00-14.00	**ER25-15UP**
				16.00-15.00	**ER25-16UP**

ER32-□□UP							
Clamping range(mm)	Type	Clamping range(mm)	Type	Clamping range(mm)	Type	Clamping range(mm)	Type
3.00-2.00	**ER32-3UP**	8.00-7.00	**ER32-8UP**	13.00-12.00	**ER32-13UP**	18.00-17.00	**ER32-18UP**
4.00-3.00	**ER32-4UP**	9.00-8.00	**ER32-9UP**	14.00-13.00	**ER32-14UP**	19.00-18.00	**ER32-19UP**
5.00-4.00	**ER32-5UP**	10.00-9.00	**ER32-10UP**	15.00-14.00	**ER32-15UP**	20.00-19.00	**ER32-20UP**
6.00-5.00	**ER32-6UP**	11.00-10.00	**ER32-11UP**	16.00-15.00	**ER32-16UP**		
7.00-6.00	**ER32-7UP**	12.00-11.00	**ER32-12UP**	17.00-16.00	**ER32-17UP**		

ER40-□□UP							
Clamping range(mm)	Type	Clamping range(mm)	Type	Clamping range(mm)	Type	Clamping range(mm)	Type
4.00-3.00	**ER40-4UP**	10.00-9.00	**ER40-10UP**	16.00-15.00	**ER40-16UP**	22.00-21.00	**ER40-22UP**
5.00-4.00	**ER40-5UP**	11.00-10.00	**ER40-11UP**	17.00-16.00	**ER40-17UP**	23.00-22.00	**ER40-23UP**
6.00-5.00	**ER40-6UP**	12.00-11.00	**ER40-12UP**	18.00-17.00	**ER40-18UP**	24.00-23.00	**ER40-24UP**
7.00-6.00	**ER40-7UP**	13.00-12.00	**ER40-13UP**	19.00-18.00	**ER40-19UP**	25.00-24.00	**ER40-25UP**
8.00-7.00	**ER40-8UP**	14.00-13.00	**ER40-14UP**	20.00-19.00	**ER40-20UP**	26.00-25.00	**ER40-26UP**
9.00-8.00	**ER40-9UP**	15.00-14.00	**ER40-15UP**	21.00-20.00	**ER40-21UP**		

Mechanical sealed collet(ER－DM)

For inner-cooling tools

ER16-□□DM		ER25-□□DM		ER32-□□DM	
Clamping range(mm)	Type	Clamping range(mm)	Type	Clamping range(mm)	Type
3.00-2.50	**ER16-3DM**	6.00-5.50	**ER25-6DM**	6.00-5.50	**ER32-6DM**
4.00-3.50	**ER16-4DM**	8.00-7.50	**ER25-8DM**	8.00-7.50	**ER32-8DM**
5.00-4.50	**ER16-5DM**	10.00-9.50	**ER25-10DM**	10.00-9.50	**ER32-10DM**
6.00-5.50	**ER16-6DM**	12.00-11.50	**ER25-12DM**	12.00-11.50	**ER32-12DM**
7.00-6.50	**ER16-7DM**	14.00-13.50	**ER25-14DM**	14.00-13.50	**ER32-14DM**
8.00-7.50	**ER16-8DM**	16.00-15.50	**ER25-16DM**	16.00-15.50	**ER32-16DM**
9.00-8.50	**ER16-9DM**			18.00-17.50	**ER32-18DM**
10.00-9.50	**ER16-10DM**			20.00-19.50	**ER32-20DM**

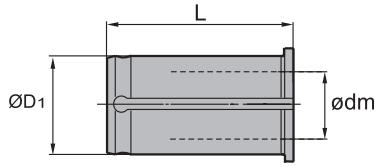
Rigid tapping collet(ER－GB)

ER16-□□GB				ER25-□□GB			
Type	Tapper shank diamter (mm)	Square size of tapper shank (mm)	Applicable standard	Type	Tapper shank diamter (mm)	Square size of tapper shank (mm)	Applicable standard
ER16-4GB	4.0	3.0	ISO,JIS	**ER25-4GB**	4.0	3.0	ISO,JIS
ER16-5GB	5.0	4.0	ISO,JIS	**ER25-5GB**	5.0	4.0	ISO,JIS
ER16-6GB	6.0	4.9	DIN	**ER25-6GB**	6.0	4.9	DIN
ER16-7GB	7.0	5.5	DIN,JIS	**ER25-7GB**	7.0	5.5	DIN,JIS
ER16-8GB	8.0	6.2/6.3	DIN,ISO	**ER25-8GB**	8.0	6.2/6.3	DIN,ISO
ER16-9GB	9.0	7.0/7.1	DIN,ISO	**ER25-9GB**	9.0	7.0/7.1	DIN,ISO
				ER25-10GB	10.0	8.0	DIN,ISO
				ER25-11GB	11.0	9.0	DIN
				ER25-12GB	12.0	9.0	DIN
				ER25-14GB	14.0	11.0/12.0	DIN,ISO,JIS
				ER25-15GB	15.0	12.0	JIS
				ER25-16GB	16.0	12.0	DIN

ER32-□□GB				ER40-□□GB			
Type	Tapper shank diamter (mm)	Square size of tapper shank (mm)	Applicable standard	Type	Tapper shank diamter (mm)	Square size of tapper shank (mm)	Applicable standard
ER32-4GB	4.0	3.0	ISO,JIS	**ER40-6GB**	6.0	4.9	DIN
ER32-5GB	5.0	4.0	ISO,JIS	**ER40-7GB**	7.0	5.5	DIN,JIS
ER32-6GB	6.0	4.9	DIN	**ER40-8GB**	8.0	6.2/6.3	DIN,ISO
ER32-7GB	7.0	5.5	DIN,JIS	**ER40-9GB**	9.0	7.0/7.1	DIN,ISO
ER32-8GB	8.0	6.2/6.3	DIN,ISO	**ER40-10GB**	10.0	8.0	DIN,ISO
ER32-9GB	9.0	7.0/7.1	DIN,ISO	**ER40-11GB**	11.0	9.0	DIN
ER32-10GB	10.0	8.0	DIN,ISO	**ER40-12GB**	12.0	9.0	DIN
ER32-11GB	11.0	9.0	DIN	**ER40-14GB**	14.0	11.0/12.0	DIN,ISO,JIS
ER32-12GB	12.0	9.0	DIN	**ER40-15GB**	15.0	12.0	JIS
ER32-14GB	14.0	11.0/11.2	DIN,ISO,JIS	**ER40-16GB**	16.0	12.0	DIN
ER32-15GB	15.0	12.0	JIS	**ER40-17GB**	17.0	13.0	JIS
ER32-16GB	16.0	12.0	DIN	**ER40-18GB**	18.0	14.0/14.5	DIN,ISO
ER32-17GB	17.0	13.0	JIS	**ER40-20GB**	20.0	16.0	DIN,ISO
ER32-18GB	18.0	14.0/14.5	DIN,ISO				
ER32-20GB	20.0	16.0	DIN,ISO				

Note: the ER-GB rigid tapping collets mainly adopt DIN as standard, please confirm the shank diameter and square size of tapper shank when ordering

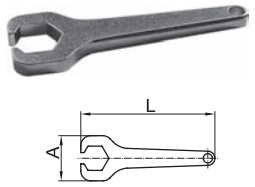
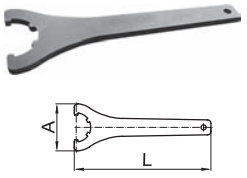
Cylindrical collet for heavy duty milling



ZC20-□□			
Clamping diameter ødm(mm)	Type	Dimensions(mm)	
		ØD1	L
6	**ZC20-6**	20	52.5
8	**ZC20-8**	20	52.5
10	**ZC20-10**	20	52.5
12	**ZC20-12**	20	52.5
16	**ZC20-16**	20	52.5
20	Clamping directly		
25			
32			

ZC32-□□			
Clamping diameter ødm(mm)	Type	Dimensions(mm)	
		ØD1	L
6	**ZC32-6**	32	67.5
8	**ZC32-8**	32	67.5
10	**ZC32-10**	32	67.5
12	**ZC32-12**	32	67.5
16	**ZC32-16**	32	67.5
20	**ZC32-20**	32	67.5
25	**ZC32-25**	32	67.5
Clamping directly			

Wrench for spring collet chuck

Shape	Type	Dimensions(mm)	
		A	L
	**E11P**	32	95
	E16P	44	145
	**E25**	65	210
	E32	75	250
	E40	90	290

Wrench for arbor mill adapter

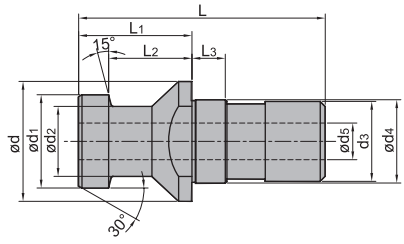
Shape	Type	Locating shaft diameter
	FDS22	22
	FDS27	27
	FDS32	32
	FDS40	40

Wrench for heavy duty milling collet chuck

Shape	Type	Nut diameter	L
	WZC20-J	55-60	253
	WZC32-J	80-90	272

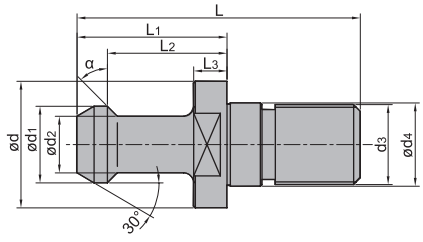
Pull studs DIN69872

Internal coolant



Type	Dimensions(mm)										Weight (kg)
	L	L_1	L_2	L_3	d	d_1	d_2	d_3	d_4	d_5	
JT40-A	54	26	20	7	23	19	14	M16	17	7	0.07
JT50-A	74	34	25	10	36	28	21	M24	25	11.5	0.2

Pull studs MAS403-1975



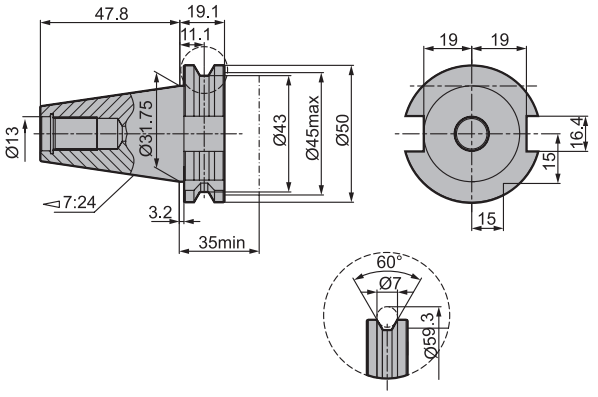
Type	Dimensions(mm)										Weight (kg)
	L	L_1	L_2	L_3	d	d_1	d_2	d_3	d_4	α	
BT40-45°	60	35	28	6	23	15	10	M16	17	45°	0.06
BT40-60°	60	35	28	6	23	15	10	M16	17	60°	0.06
BT40-90°	60	35	28	6	23	15	10	M16	17	90°	0.06
BT50-45°	85	45	35	10	38	23	17	M24	25	45°	0.26
BT50-60°	85	45	35	10	38	23	17	M24	25	60°	0.26
BT50-90°	85	45	35	10	38	23	17	M24	25	90°	0.26

- Common products without coolant hole
- If need internal coolant product, please indicate it when ordering. Ordering guide: BT40-45oW 1 pc
- Other type pull studs can be ordered by your requirement.

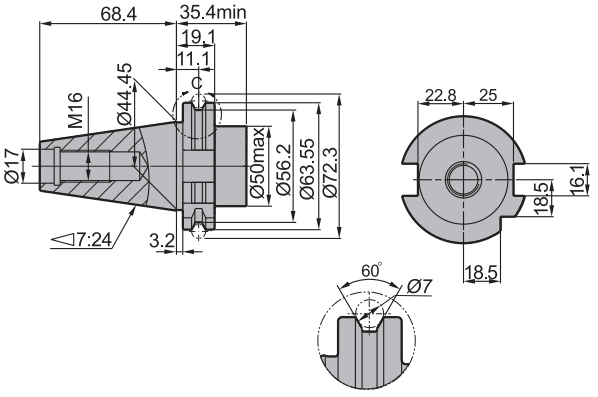
Holder standard

Type of holder DIN69871-A

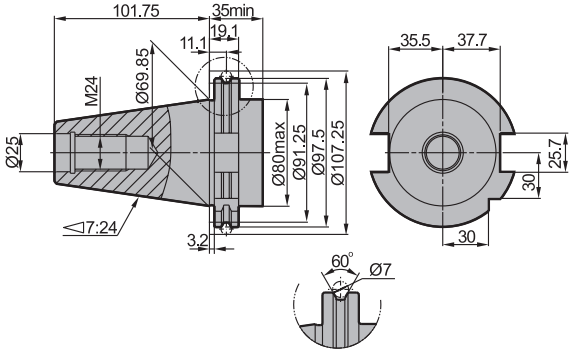
JT30



JT40

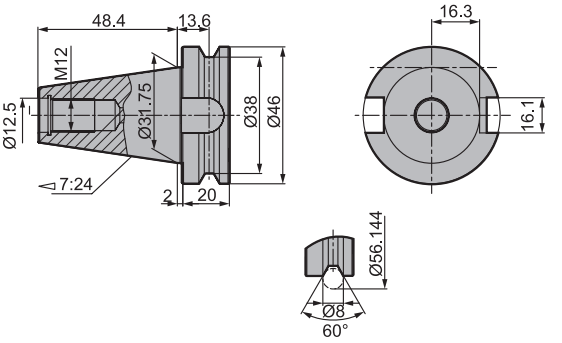


JT50

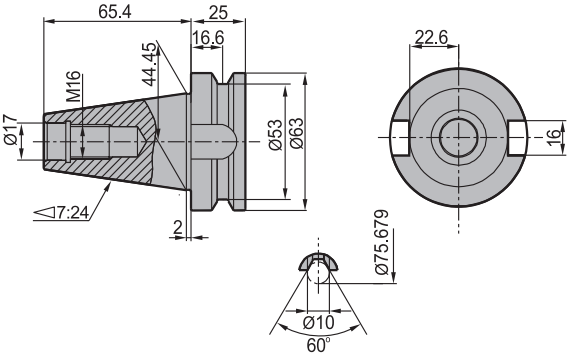


Type of holder MAS403BT

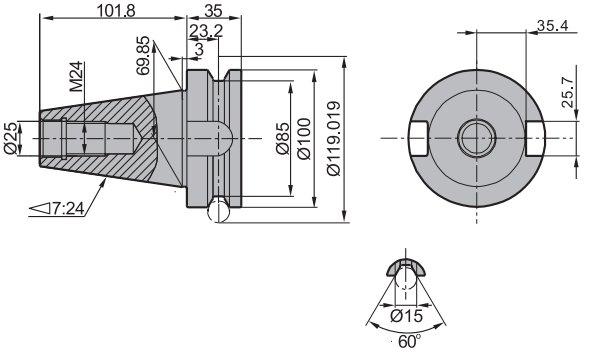
BT30



BT40

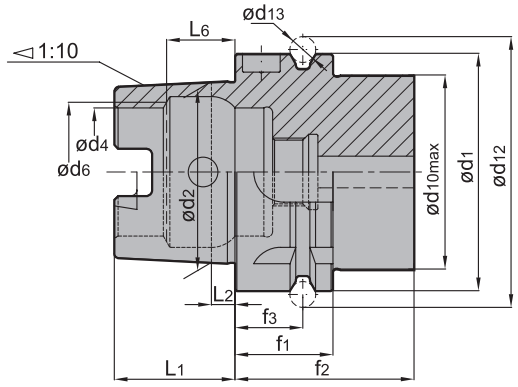


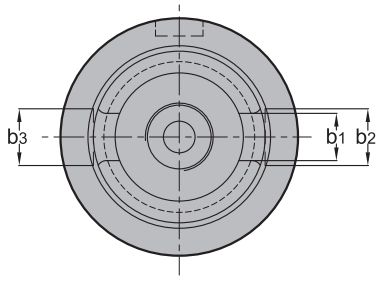
BT50



Holder standard

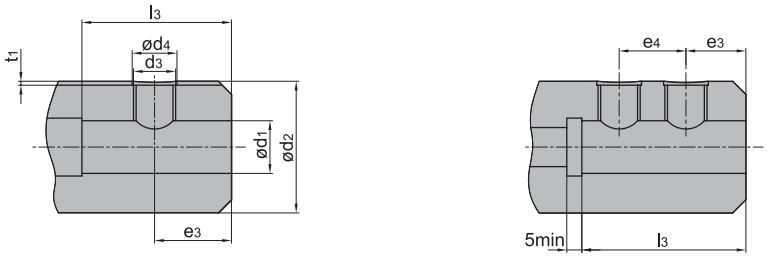
HSK short taper holder A type (DIN69893A)





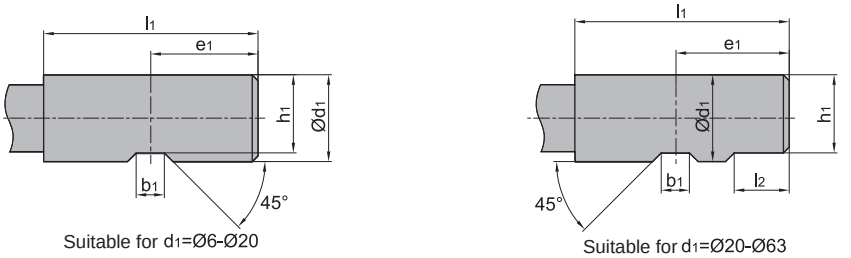
	b_1	b_2	b_3	d_1	d_2	d_4	d_6	d_{10}	d_{12}	d_{13}	f_1	f_2	f_3	L_1	L_2	L_6
HSK32	7.05	7	9	32	24	17	19	26	37	4	20	35	16	16	3.2	8.92
HSK40	8.05	9	11	40	30	21	23	34	45	4	20	35	16	20	4	11.42
HSK50	10.54	12	14	50	38	26	29	42	59.3	7	26	42	18	25	5	14.13
HSK63	12.54	16	18	63	48	34	37	53	72.3	7	26	42	18	32	6.3	18.13
HSK100	20.02	20	22	100	75	53	58	88	109.75	7	29	45	20	50	10	28.56

Weldon type chuck



d_1(H5)	d_2(0-1)	d_3(6H)	d_4(min)	e_3(01)	e_4(±0.5)	l_3(±1)	t_1
6	25	M6	8	18.0	3.5	8.5	1.5
8	28	M8	10	17	4.5	10	2.5
10	35	M10	12	20	5.0	15	4.0
12	42	M12	14	20	6.0	20	5.0
14	44	M12	14	25	-	21	6.0
16	48	M14	16				
18	50	M14	16				
20	52	M16	18				
25	65	M18×2	20				
32	72	M20×2	22				

Weldon shank of tool

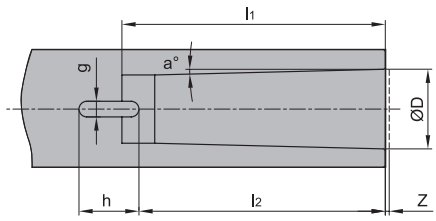


Suitable for d_1=Ø6-Ø20

Suitable for d_1=Ø20-Ø63

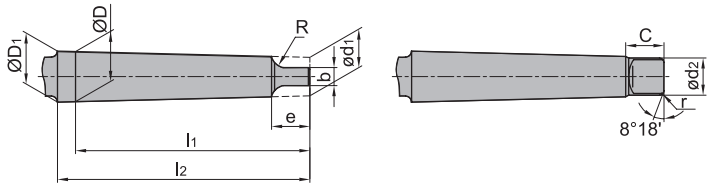
d_1(h_6)	l_1($^{+2}_{0}$)	b_1($^{+0.05}_{0}$)	l_2($^{+1}_{0}$)	e_1($^{0}_{-1}$)	h_1(h_{11})
6	36	4.2	-	18.0	5.1
8	36	5.5	-	18.0	6.9
10	40	7.0	-	20.0	8.5
12	45	8.0	-	22.5	10.4
14	45	8.0	-	22.5	12.7
16	48	10.0	-	24.0	14.2
18	48	10.0	-	24.0	16.2
20	50	11.0	-	25.0	18.2
25	56	12.0	17	32.0	23.0
32	60	14.0	19	35.0	30.0

Adapter for morse taper with flat tail



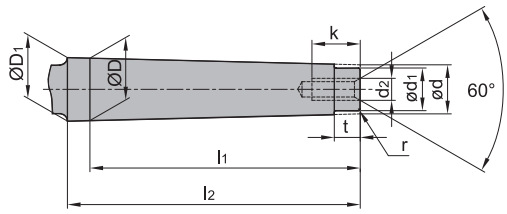
Taper angle	Taper angle		α°	ØD	l_1(min)	l_2	g	h	z	Corresponding drill diameter(mm)
MT1	1/20.047	0.04988	1°25'43"	12.065	56	52	5.4	19	1	3.00-14.00
MT2	1/20.047	0.04988	1°25'50"	17.780	67	62	6.6	22	1	14.00-23.00
MT3	1/20.047	0.04988	1°26'16"	23.825	84	78	8.2	27	1	23.00-32.00
MT4	1/20.047	0.04988	1°29'15"	31.267	107	98	12.2	32	1.5	32.00-50.00
MT5	1/20.047	0.04988	1°30'26"	44.399	135	125	16.2	38	1.5	50.00-75.00

Adapter for morse taper with flat tail



Taper angle	D	D_1	d_1	d_2	l_1	l_2	b	c	e	R	r	Corresponding drill diameter(mm)
MT1	12.065	12.240	8.972	8.7	62.0	65.5	5.2	8.5	13.5	5	1.2	3.00-14.00
MT2	17.780	18.030	14.034	13.5	75.0	80.0	6.3	10.0	16.0	6	1.6	14.25-23.00
MT3	23.825	24.076	19.107	18.5	94.0	99.0	7.9	13.0	20.0	7	2	23.25-31.75
MT4	31.267	31.605	25.164	24.5	117.5	124.0	11.9	16.0	24.0	8	2.5	32.00-50.50
MT5	44.399	44.741	36.531	35.7	149.5	156.0	15.9	19.0	29.0	10	3	51.00-76.00

Adapter for morse taper without flat tail

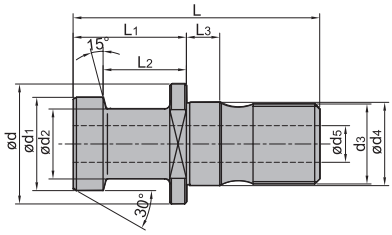


Taper angle	D	D_1	d	d_1	l_1	l_2	t	r	d_2	K	Corresponding mill diameter (mm)
MT1	12.065	12.240	9.396	9	53.5	57	5	0.2	M6	16	6.00-12.00
MT2	17.780	18.030	14.583	14	64	69	5	0.2	M10	24	14.00-20.00
MT3	23.825	24.076	19.759	19	81	86	7	0.6	M12	28	22.00-36.00
MT4	31.267	31.605	25.943	25	102.5	109	9	1.0	M16	32	32.00-56.00
MT5	44.399	44.741	37.584	25.7	129.5	136	9	2.5	M20	40	40.00-71.00

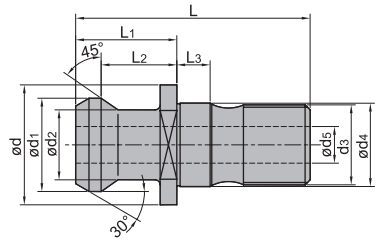
Pull stud standard

Pull stud ISO7388/2

A Type

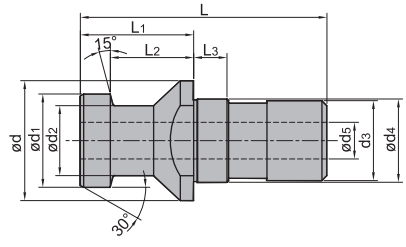


B Type



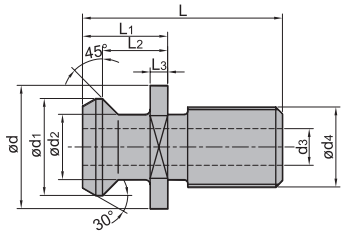
Dimensions (mm)										Weight(kg)
L	L_1	L_2	L_3	d	d_1	d_2	d_3	d_4	d_5	
44	24	19	5	17	12	8	M12	13	-	0.05
54	26	20	7	23	19	14	M16	17	7.0	0.07
74	34	25	10	36	28	21	M24	25	11.5	0.22
27	11.8	8.1	5	17	13.3	9.3	M12	13	-	0.05
44.5	16.40	11.15	7	22.5	18.95	12.95	M16	17	7.0	0.07
65.5	25.55	17.95	10	36.0	29.10	19.60	M24	25	11.5	0.22

Pull stud DIN69872



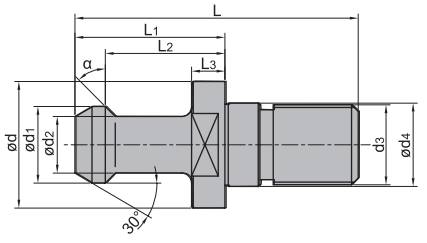
Dimensions (mm)										Weight(kg)
L	L_1	L_2	L_3	d	d_1	d_2	d_3	d_4	d_5	
44	24	19	5	17	13	9	M12	13	-	0.05
54	26	20	7	23	19	14	M16	17	7.0	0.07
74	34	25	10	36	28	21	M24	25	11.5	0.20

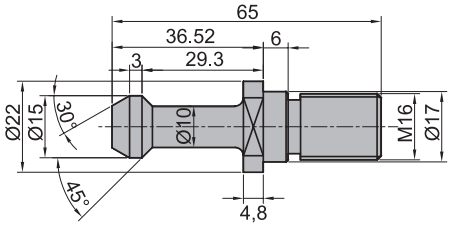
USA standard ANSI B5.50



Dimensions(mm)									Weight(kg)
L	L_1	L_2	L_3	d	d_1	d_2	d_3	d_4	
29	11.80	8.15	2.75	16.5	13.55	9.30	M12	4.15	0.02
39	16.40	11.15	3.25	22.5	18.95	12.95	M16	7.35	0.07
60	25.55	17.95	5.25	37.0	29.10	19.60	M24	11.55	0.20

Japan standard MAS403—1975



Dimensions(mm)										Weight(kg)
L	L_1	L_2	L_3	d	d_1	d_2	d_3	d_4	α	
43	23	18	5	16.5	11	7	M12	12.5	45°	0.03
43	23	18	5	16.5	11	7	M12	12.5	30°	0.03
60	35	28	6	23	15	10	M16	17	45°	0.06
60	35	28	6	23	15	10	M16	17	60°	0.06
85	45	35	10	38	23	17	M24	25	45°	0.20
85	45	35	10	38	23	17	M24	25	60°	0.20

Special pull stud JDY40