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Holemaking Solutions for Today's Manufacturing



Drilling



Reaming



Burnishing



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Specials



Wohlhaupter®

► *BORING*

Modular Tool Holders

WOHLHAUPTER®

SECTION

B10-I

Modular Tool Holders

Wohlhaupter® Modular Tool Holders

Adapter Sleeves | Drill Chucks | Collet Chucks | Milling Arbors | Holding Arbors | Hydraulic Clamping Chucks
Tapping Chucks | Boring Bar Blanks



Clamping Tools with MVS Connection

Wohlhaupter offers a complete range of tool holders that incorporates the MVS connection. Our clamping tools allow for smaller MVS tools to connect and provide a quick and inexpensive alternative to special tooling. The clamping tools also feature coolant-through capabilities.

Your safety and the safety of others is very important. This catalog contains important safety messages. Always read and follow all safety precautions.



This triangle is a safety hazard symbol. It alerts you to potential safety hazards that can cause tool failure and serious injury.

When you see this symbol in the catalog, look for a related safety message that may be near this triangle or referred to in the nearby text.

There are safety signal words also used in the catalog. Safety messages follow these words.

WARNING

WARNING (shown above) means that failure to follow the precautions in this message could result in tool failure and serious injury.

NOTICE means that failure to follow the precautions in this message could result in damage to the tool or machine but not result in personal injury.

NOTE and **IMPORTANT** are also used. These are important that you read and follow but are not safety-related.

Visit www.alliedmachine.com for the most up-to-date information and procedures.

Applicable Industries



Aerospace



Agriculture



Automotive



Firearms



General
Machining



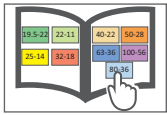
Oil & Gas



Renewable
Energy

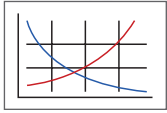
Reference Icons

The following icons will appear throughout the catalog to help you navigate between products.



MVS Connection Color Guide

Detailed instructions and information regarding the MVS connection(s)



Recommended Cutting Data

Speed and feed recommendations for optimum and safe boring



Coolant-Through Option

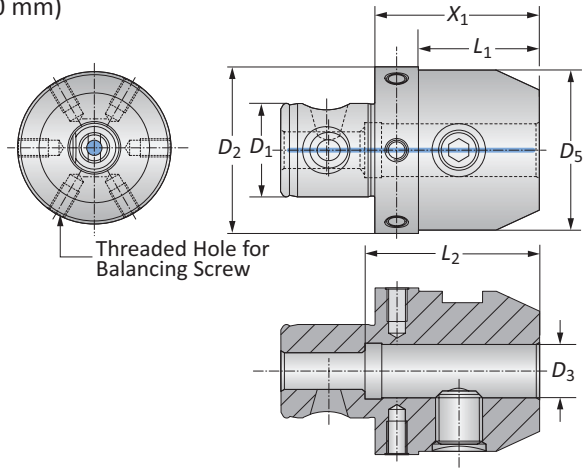
Indicates that the product is coolant through

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Adapter Side Lock for Cylindrical Shanks DIN 1835B

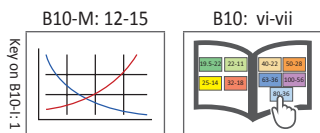
Clamping Diameter Range: 0.236" - 1.575" (6.00 mm - 40.00 mm)



MVS Connection	Clamping Range	Adapter Sleeve				Weight	Balancing Screw	Part No.	
		$D_2 D_1$	D_3	X_1	L_1				L_2
	32 - 18	0.236	1.417	0.906	1.575	0.984	0.441 (lbs)	M5 x .8 x 6	228022
	32 - 18	0.315	1.417	0.906	1.575	1.102	0.441 (lbs)	M5 x .8 x 6	228023
	32 - 18	0.394	1.890	-	1.732	1.378	0.661 (lbs)	M5 x .8 x 6	228024
	40 - 22	0.472	2.047	-	1.929	1.654	1.102 (lbs)	M5 x .8 x 8	228025
	40 - 22	0.551	2.126	-	1.929	1.732	1.323 (lbs)	M5 x .8 x 8	228026
	50 - 28	0.236	1.417	0.906	1.575	0.984	0.882 (lbs)	M6 x 1 x 10	162015
	50 - 28	0.315	1.417	0.906	1.575	1.102	0.882 (lbs)	M6 x 1 x 10	162016
i	50 - 28	0.394	1.732	1.220	1.732	1.378	1.102 (lbs)	M6 x 1 x 10	162017
	50 - 28	0.472	1.732	1.220	1.929	1.654	1.102 (lbs)	M6 x 1 x 10	162018
	50 - 28	0.630	1.929	1.417	2.047	1.890	2.205 (lbs)	M6 x 1 x 10	162019
	50 - 28	0.709	1.929	1.417	2.047	1.890	2.205 (lbs)	M6 x 1 x 10	228014
	50 - 28	0.787	2.362	-	2.126	2.047	2.646 (lbs)	M6 x 1 x 10	162020
	63 - 36	0.787	1.929	1.417	2.126	2.047	2.425 (lbs)	M6 x 1 x 10	161024
	63 - 36	0.984	2.953	-	2.323	2.480	4.189 (lbs)	M6 x 1 x 15	161026
	63 - 36	1.260	2.953	-	2.480	2.835	4.851 (lbs)	M6 x 1 x 15	161027
	80 - 36	1.575	3.346	-	2.874	3.150	5.512 (lbs)	M6 x 1 x 15	161028
	32 - 18	6.00	36.00	23.00	40.00	25.00	0.20 (kg)	M5 x .8 x 6	228022
	32 - 18	8.00	36.00	23.00	40.00	28.00	0.20 (kg)	M5 x .8 x 6	228023
	32 - 18	10.00	48.00	-	44.00	35.00	0.30 (kg)	M5 x .8 x 6	228024
	40 - 22	12.00	52.00	-	49.00	42.00	0.50 (kg)	M5 x .8 x 8	228025
	40 - 22	14.00	54.00	-	49.00	44.00	0.60 (kg)	M5 x .8 x 8	228026
	50 - 28	6.00	36.00	23.00	40.00	25.00	0.40 (kg)	M6 x 1 x 10	162015
	50 - 28	8.00	36.00	23.00	40.00	28.00	0.40 (kg)	M6 x 1 x 10	162016
m	50 - 28	10.00	44.00	31.00	44.00	35.00	0.50 (kg)	M6 x 1 x 10	162017
	50 - 28	12.00	44.00	31.00	49.00	42.00	0.50 (kg)	M6 x 1 x 10	162018
	50 - 28	16.00	49.00	36.00	52.00	48.00	1.00 (kg)	M6 x 1 x 10	162019
	50 - 28	18.00	49.00	36.00	52.00	48.00	1.00 (kg)	M6 x 1 x 10	228014
	50 - 28	20.00	60.00	-	54.00	52.00	1.20 (kg)	M6 x 1 x 10	162020
	63 - 36	20.00	49.00	36.00	54.00	52.00	1.10 (kg)	M6 x 1 x 10	161024
	63 - 36	25.00	75.00	-	59.00	63.00	1.90 (kg)	M6 x 1 x 15	161026
	63 - 36	32.00	75.00	-	63.00	72.00	2.20 (kg)	M6 x 1 x 15	161027
	80 - 36	40.00	85.00	-	73.00	80.00	2.50 (kg)	M6 x 1 x 15	161028

NOTE: Balanced 10 gmm/kg

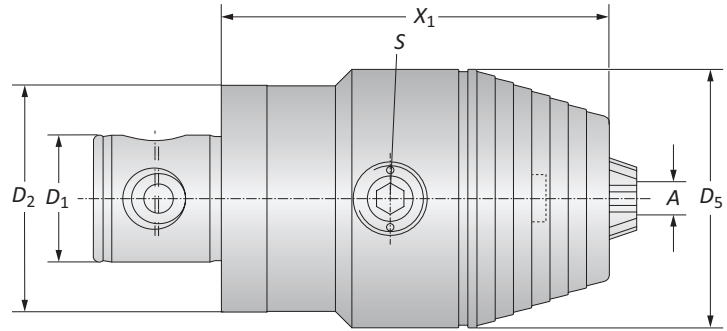
NOTE: When using a ball pressure screw instead of a thread pin, it's similar to DIN 1835E, without axial adjustment. See ball pressure screws on page B10-I: 9.



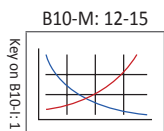
i = Imperial (in)
m = Metric (mm)

Drill Chucks for Clockwise and Counterclockwise Rotation

Clamping Diameter Range: 0.019" - 0.629" (0.50 mm - 16.00 mm)



	MVS Connection	Clamping Range	Drill Chuck			Weight	Part No.
	D_2 D_1		A	X_1	D_5		
i	50 - 28	0.019 - 0.511	3.150	1.969	s6 / B	2.425 (lbs)	209088
	50 - 28	0.098 - 0.629	3.346	2.244	s6 / B	2.866 (lbs)	209089
	63 - 36	0.019 - 0.511	3.150	1.969	s6 / B	2.866 (lbs)	209090
	63 - 36	0.098 - 0.629	3.346	2.244	s6 / B	3.307 (lbs)	209091
m	50 - 28	0.50 - 13.00	80.00	50.00	s6 / B	1.10 (kg)	209088
	50 - 28	2.50 - 16.00	85.00	57.00	s6 / B	1.30 (kg)	209089
	63 - 36	0.50 - 13.00	80.00	50.00	s6 / B	1.30 (kg)	209090
	63 - 36	2.50 - 16.00	85.00	57.00	s6 / B	1.50 (kg)	209091

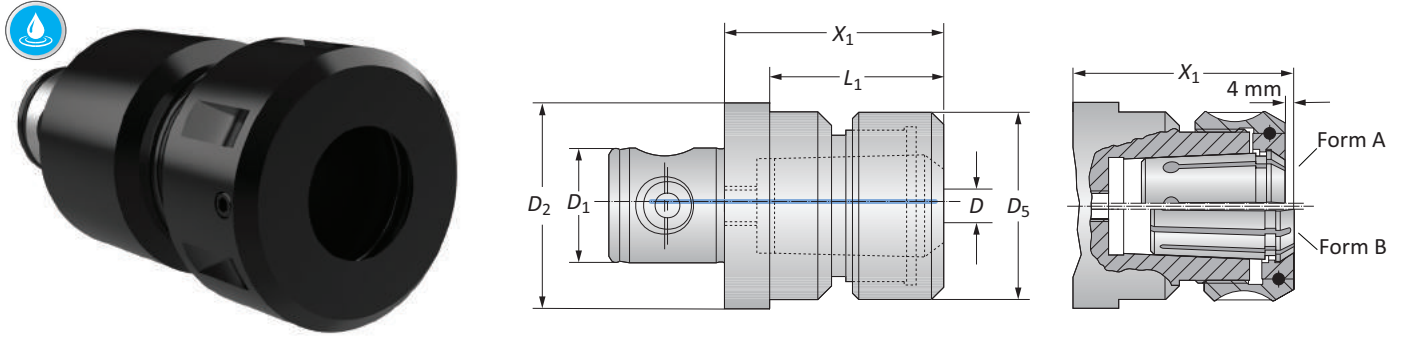


i = Imperial (in)
m = Metric (mm)

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Collet Chucks ISO 10898 (DIN 6388) | ISO 15488 (DIN 6499)

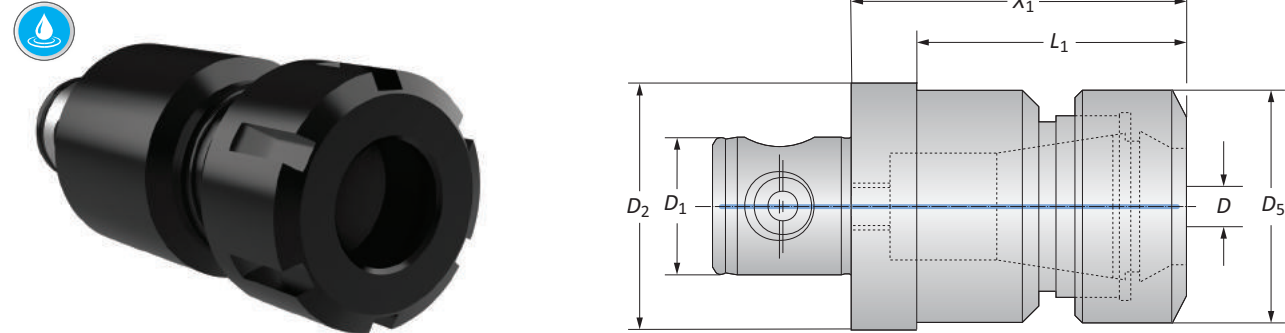
Clamping Diameter Range: 0.078" - 1.259" (2.00 mm - 32.00 mm)



Collet Chucks ISO 10897 (DIN 6388) | Diameter Range: 0.078" - 1.259" (2.00 mm - 32.00 mm)

MVS Connection	Clamping Range	Nominal Size	Collet Chuck			Weight	Part No.	
			D_2 D_1	D	X_1^*			L_1
i	40 - 22	0.078 - 0.629	16	2.520	-	1.693	1.102 (lbs)	209082
	50 - 28	0.078 - 0.629	16	2.480	1.968	1.693	1.984 (lbs)	162011
	50 - 28	0.078 - 0.984	25	2.913	-	2.362	2.205 (lbs)	209083
	63 - 36	0.078 - 0.984	25	2.913	-	2.362	3.087 (lbs)	161016
	63 - 36	0.157 - 1.259	32	3.504	-	2.835	3.969 (lbs)	161098
m	40 - 22	2.00 - 16.00	16	64.00	-	43.00	0.50 (kg)	209082
	50 - 28	2.00 - 16.00	16	63.00	50.00	43.00	0.90 (kg)	162011
	50 - 28	2.00 - 25.00	25	74.00	-	60.00	1.00 (kg)	209083
	63 - 36	2.00 - 25.00	25	74.00	-	60.00	1.40 (kg)	161016
	63 - 36	4.00 - 32.00	32	89.00	-	72.00	1.80 (kg)	161098

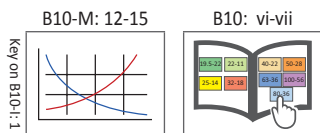
* X_1 Clamping nut with ball-bearing



Collet Chucks ISO 15488 (DIN 6499) | Diameter Range: 0.039" - 1.023" (1.00 mm - 26.00 mm)

MVS Connection	Clamping Range	Nominal Size	Collet Chuck			Weight	Part No.	
			D_2 D_1	D	X_1^*			L_1
i	32 - 18	0.039 - 0.393	ER 16	2.125	1.614	1.102	0.441 (lbs)	228020
	40 - 22	0.078 - 0.629	ER 25	2.953	-	1.654	1.323 (lbs)	228021
	50 - 28	0.078 - 0.629	ER 25	2.953	2.441	1.654	1.764 (lbs)	228003
	50 - 28	0.078 - 0.787	ER 32	2.992	-	1.969	1.764 (lbs)	228004
	63 - 36	0.078 - 0.787	ER 32	2.992	2.480	1.969	2.646 (lbs)	228007
	63 - 36	0.157 - 1.023	ER 40	3.465	-	2.480	2.646 (lbs)	228006
m	32 - 18	1.00 - 10.00	ER 16	54.00	4100	28.00	0.20 (kg)	228020
	40 - 22	2.00 - 16.00	ER 25	75.00	-	42.00	0.60 (kg)	228021
	50 - 28	2.00 - 16.00	ER 25	75.00	62.00	42.00	0.80 (kg)	228003
	50 - 28	2.00 - 20.00	ER 32	76.00	-	50.00	0.80 (kg)	228004
	63 - 36	2.00 - 20.00	ER 32	76.00	63.00	50.00	1.20 (kg)	228007
	63 - 36	4.00 - 26.00	ER 40	88.00	-	63.00	1.20 (kg)	228006

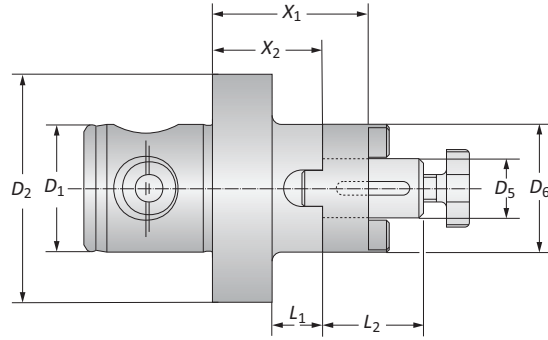
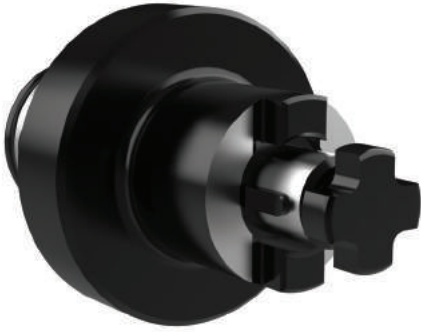
* X_1 Clamping nut with sliding ring



i = Imperial (in)
m = Metric (mm)

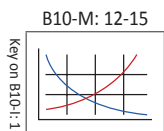
Milling Machine Arbors

For Milling Cutters with Longitudinal or Transverse Drive | Shell Mill Adapter Range: 0.512" - 1.575" (13.00 mm - 40.00 mm)



	MVS Connection	Adapter Range	Milling Arbor					Weight	Part No.
	D ₂ D ₁		D ₅	X ₁	X ₂	L ₁	L ₂		
i	50 - 28	0.512	1.339	0.945	0.433	0.866	1.102	0.882 (lbs)	162002
	50 - 28	0.630	1.575	1.181	0.669	1.063	1.260	1.102 (lbs)	162003
	50 - 28	0.866	1.575	1.102	0.591	1.220	1.575	1.323 (lbs)	162004
	63 - 36	0.630	1.575	1.181	0.669	1.063	1.260	1.764 (lbs)	161002
	63 - 36	0.866	1.575	1.102	0.591	1.220	1.575	1.984 (lbs)	161003
	63 - 36	1.063	1.575	1.102	0.591	1.299	1.890	2.425 (lbs)	161004
	63 - 36	1.260	1.575	1.024	0.512	1.496	2.283	2.866 (lbs)	161005
	80 - 36	1.575	2.087	1.535	-	1.614	2.756*	5.733 (lbs)	161006
m	50 - 28	13.00	34.00	24.00	11.00	22.00	28.00	0.40 (kg)	162002
	50 - 28	16.00	40.00	30.00	17.00	27.00	32.00	0.50 (kg)	162003
	50 - 28	22.00	40.00	28.00	15.00	31.00	40.00	0.60 (kg)	162004
	63 - 36	16.00	40.00	30.00	17.00	27.00	32.00	0.80 (kg)	161002
	63 - 36	22.00	40.00	28.00	15.00	31.00	40.00	0.90 (kg)	161003
	63 - 36	27.00	40.00	28.00	15.00	33.00	48.00	1.10 (kg)	161004
	63 - 36	32.00	40.00	26.00	13.00	38.00	58.00	1.30 (kg)	161005
	80 - 36	40.00	53.00	39.00	-	41.00	70.00*	2.60 (kg)	161006

*Ø 2.756" (70.00 mm) with clutch drive ring

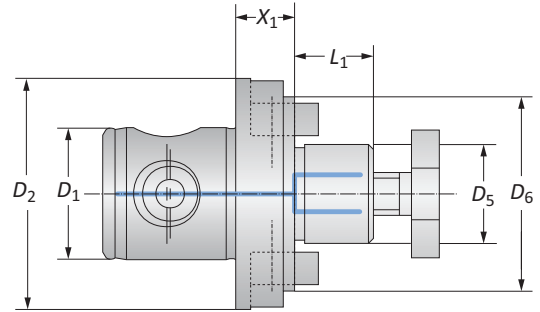
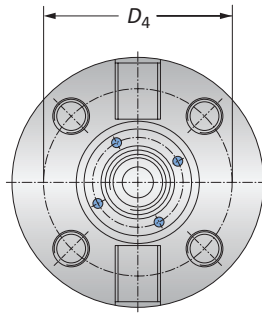


i = Imperial (in)
m = Metric (mm)

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Holding Arbors for Milling Cutters

Central Coolant Feed | Shell Mill Adapter Range: 0.630" - 1.575" (16.00 mm - 40.00 mm)

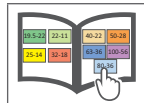
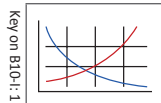


	MVS Connection	Adapter Range	Holding Arbor				Weight	Part No.
	D_2 D_1	D_5	X_1	L_1	D_4	D_6		
i	50 - 28	0.630	0.630	0.669	-	1.575	0.882 (lbs)	162032
	50 - 28	0.866	0.630	0.748	-	1.969	1.102 (lbs)	162033
	63 - 36	1.063	0.630	0.827	-	2.362	1.764 (lbs)	161082
	80 - 36	1.260	0.630	0.945	-	3.071	2.425 (lbs)	209080
	80 - 36	1.575	0.748	1.063	2.626	3.504	3.307 (lbs)	209081
m	50 - 28	16.00	16.00	17.00	-	40.00	0.40 (kg)	162032
	50 - 28	22.00	16.00	19.00	-	50.00	0.50 (kg)	162033
	63 - 36	27.00	16.00	21.00	-	60.00	0.80 (kg)	161082
	80 - 36	32.00	16.00	24.00	-	78.00	1.10 (kg)	209080
	80 - 36	40.00	19.00	27.00	66.70	89.00	1.50 (kg)	209081

NOTE: See page B10-G: 15 for holding arbor with MVS 100 - 56 connection

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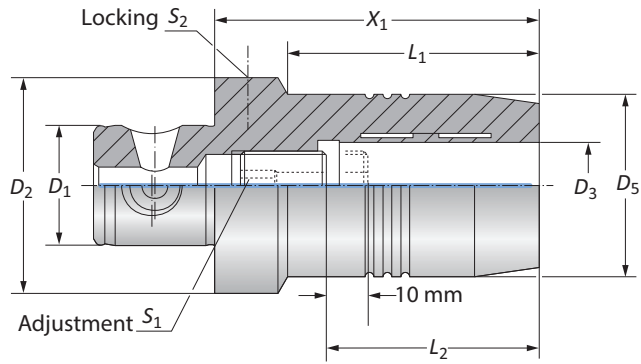
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i = Imperial (in)
m = Metric (mm)

Clamping Chucks | Tapping Chucks

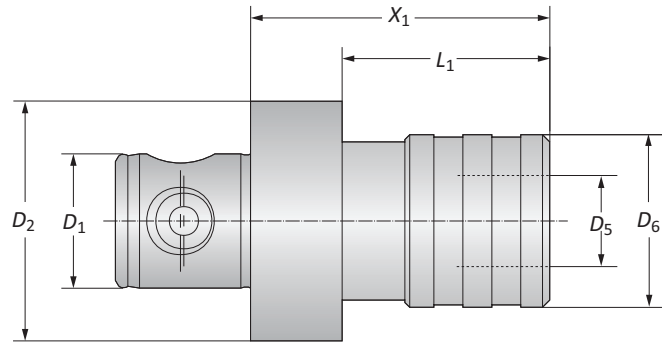
Clamping Range: 0.787" (20.00 mm)



Coolant Through Hydraulic Clamping Chucks

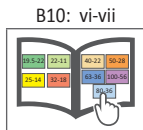
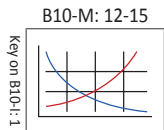
	MVS Connection	Clamping Range	Clamping Chuck						Weight	Part No.
	D ₂ D ₁		D ₃	X ₁	D ₅	L ₁	L ₂	S ₁		
i	50 - 28	0.787	2.953	1.654	2.283	2.008	s6	s5	1.764 (lbs)	209044
	63 - 36	0.787	2.953	1.654	2.087	2.008	s5	s5	2.425 (lbs)	209045
m	50 - 28	20.00	75.00	42.00	58.00	51.00	s6	s5	0.80 (kg)	209044
	63 - 36	20.00	75.00	42.00	53.00	51.00	s5	s5	1.10 (kg)	209045

NOTE: Balanced 10 gmm/kg



Tapping Chucks (Non-Coolant)

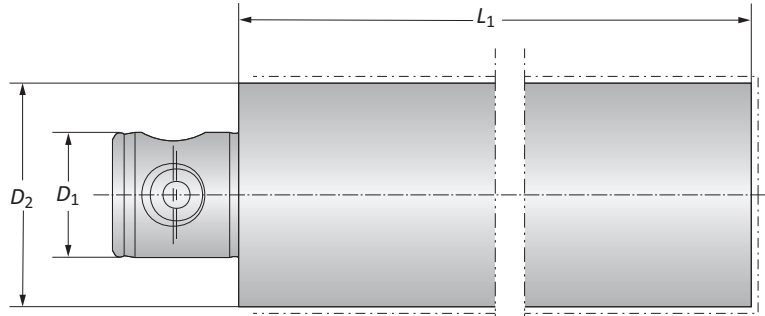
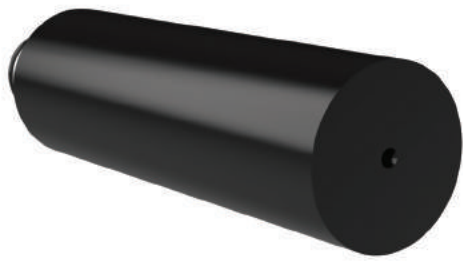
	MVS Connection	Quick Change Adapters		Tapping Chucks				Length Compensation		Weight	Part No.
		For Taps	Nominal Size	X ₁	L ₁	D ₅	D ₆	Pressure	Tension		
i	50 - 28	M 3 - M 12	1	2.441	1.929	0.748	1.634	0.295	0.295	1.543 (lbs)	209098
	50 - 28	M 6 - M 20	2	3.701	-	1.220	2.374	0.394	0.394	2.425 (lbs)	209099
	63 - 36	M 3 - M 12	1	2.205	1.693	0.748	1.634	0.295	0.295	1.764 (lbs)	231005
	63 - 36	M 6 - M 20	2	3.150	2.638	1.220	2.374	0.394	0.394	2.866 (lbs)	231006
	63 - 36	M 14 - M 33	3	5.984	-	1.890	3.386	0.689	0.689	9.040 (lbs)	231007
m	50 - 28	M 3 - M 12	1	62.00	49.00	19.00	41.50	7.50	7.50	0.70 (kg)	209098
	50 - 28	M 6 - M 20	2	94.00	-	31.00	60.30	10.00	10.00	1.10 (kg)	209099
	63 - 36	M 3 - M 12	1	56.00	43.00	19.00	41.50	7.50	7.50	0.80 (kg)	231005
	63 - 36	M 6 - M 20	2	80.00	67.00	31.00	60.30	10.00	10.00	1.30 (kg)	231006
	63 - 36	M 14 - M 33	3	152.00	-	48.00	86.00	17.50	17.50	4.10 (kg)	231007



i = Imperial (in)
m = Metric (mm)

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Boring Bar Blanks

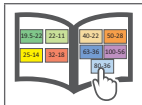
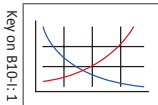


NOTE: The blanks are unhardened and unground in areas marked

	MVS Connection	Boring Bar Blanks		
	$D_2 D_1$	L_1	Weight	Part No.
i	50 - 28	6.299	5.733 (lbs)	166103
	63 - 36	6.299	9.261 (lbs)	166104
	80 - 36	6.299	14.550 (lbs)	166105
m	50 - 28	160.00	2.60 (kg)	166103
	63 - 36	160.00	4.20 (kg)	166104
	80 - 36	160.00	6.60 (kg)	166105

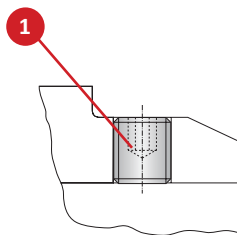
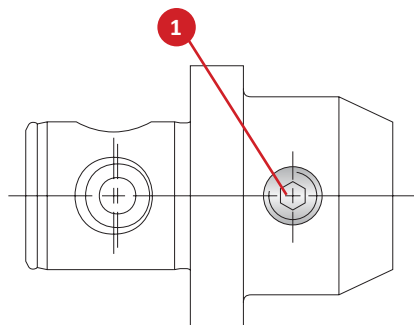
B10-M: 12-15

B10: vi-vii

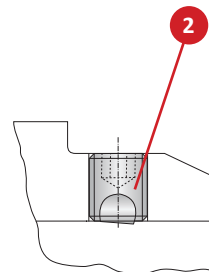


i = Imperial (in)
m = Metric (mm)

Accessories for Adapter Sleeves



DIN 1835B

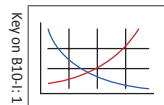


Similar to DIN 1835E*

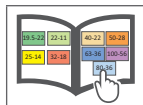
Clamping Diameter	1 Thread Pin		2 Ball Pressure Screw			
	Part No.	Service Key	Part No.	Service Key	Thread	
i	0.236	115680	s3 / B	315788	s3 / B	M6 x 1
	0.315	115681	s4 / B	315789	s4 / B	M8 x 1.25
	0.394	115682	s5 / B	515535	s5 / B	M10 x 1.5
	0.472	115683	s6 / B	315790	s6 / B	M12 x 1.75
	0.551	115683	s6 / B	315790	s6 / B	M12 x 1.75
	0.630	115684	s6 / B	515675	s6 / B	M14 x 2
	0.709	115684	s6 / B	515675	s6 / B	M14 x 2
	0.787	115685	s8 / B	515676	s8 / B	M16 x 2
	0.984	115686	s10 / B	515677	s10 / B	M18 x 2 (2x)
	1.260	115687	s10 / B	515678	s10 / B	M20 x 2 (2x)
1.575	115687	s10 / B	515678	s10 / B	M20 x 2 (2x)	
m	6.00	115680	s3 / B	315788	s3 / B	M6 x 1
	8.00	115681	s4 / B	315789	s4 / B	M8 x 1.25
	10.00	115682	s5 / B	515535	s5 / B	M10 x 1.5
	12.00	115683	s6 / B	315790	s6 / B	M12 x 1.75
	14.00	115683	s6 / B	315790	s6 / B	M12 x 1.75
	16.00	115684	s6 / B	515675	s6 / B	M14 x 2
	18.00	115684	s6 / B	515675	s6 / B	M14 x 2
	20.00	115685	s8 / B	515676	s8 / B	M16 x 2
	25.00	115686	s10 / B	515677	s10 / B	M18 x 2 (2x)
	32.00	115687	s10 / B	515678	s10 / B	M20 x 2 (2x)
40.00	115687	s10 / B	515678	s10 / B	M20 x 2 (2x)	

*Without axial adjustment.

B10-M: 12-15



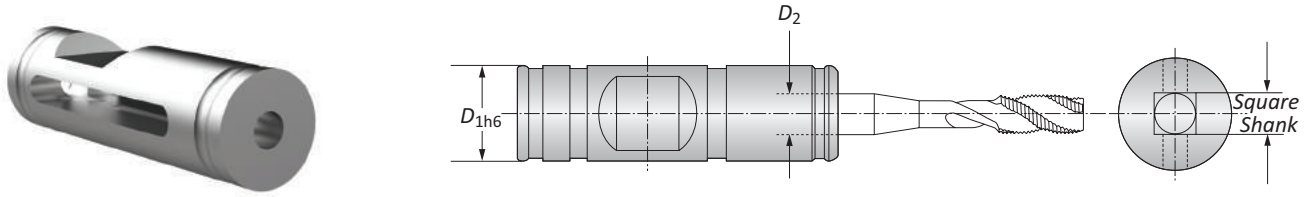
B10: vi-vii



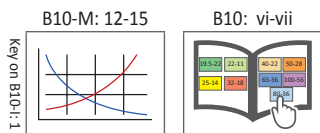
i = Imperial (in)
m = Metric (mm)

Accessories for Adapter Sleeves

Adapter Sleeve for Tap Shanks Suitable for Reduction Sleeves with Shanks to DIN 1835-B



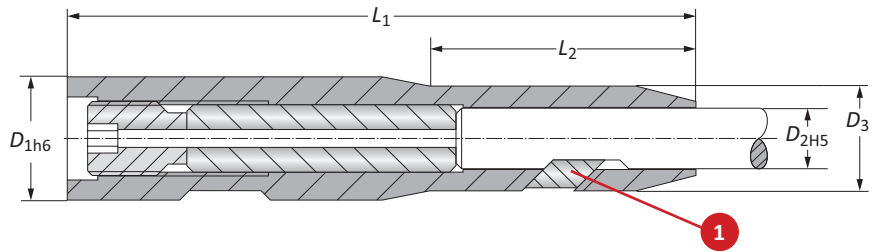
Adapter Sleeves		
D_{1h6}	$D_2 \times$ Square Shank	Part No.
0.315	0.082 x 0.098	271190
0.315	0.082 x 0.110	271191
0.394	0.106 x 0.137	271192
0.394	0.118 x 0.157	271193
0.394	0.133 x 0.177	271194
0.472	0.192 x 0.236	271195
0.551	0.216 x 0.275	271196
0.551	0.244 x 0.314	271197
0.630	0.275 x 0.354	271198
0.630	0.314 x 0.393	271199
i 0.709	0.354 x 0.433	271200
0.787	0.354 x 0.472	271201
0.984	0.433 x 0.551	271202
0.984	0.472 x 0.629	271203
1.260	0.570 x 0.708	271204
1.260	0.629 x 0.787	271205
1.260	0.708 x 0.866	271206
1.575	0.866 x 0.984	271207
1.575	0.866 x 1.102	271208
1.969	0.944 x 1.259	271209
1.969	1.141 x 1.417	271210
1.969	1.259 x 1.574	271211
8.00	2.10 x 2.50	271190
8.00	2.10 x 2.80	271191
10.00	2.70 x 3.50	271192
10.00	3.00 x 4.00	271193
10.00	3.40 x 4.50	271194
12.00	4.90 x 6.00	271195
14.00	5.50 x 7.00	271196
14.00	6.20 x 8.00	271197
16.00	7.00 x 9.00	271198
16.00	8.00 x 10.00	271199
m 18.00	9.00 x 11.00	271200
20.00	9.00 x 12.00	271201
25.00	11.00 x 14.00	271202
25.00	12.00 x 16.00	271203
32.00	14.50 x 18.00	271204
32.00	16.00 x 20.00	271205
32.00	18.00 x 22.00	271206
40.00	20.00 x 25.00	271207
40.00	22.00 x 28.00	271208
50.00	24.00 x 32.00	271209
50.00	29.00 x 36.00	271210
50.00	32.00 x 40.00	271211



i = Imperial (in)
m = Metric (mm)

Accessories for Adapter Sleeves

Micro Clamping Chucks Suitable for Reduction Sleeves with Shanks to DIN 1835-B



Micro Clamping Chuck					1 Clamping Wedge		
	D_{1h6}	D_{2H5}	D_3	L_1	L_2	Part No.	Part No.
i	0.630	0.236	0.472	3.937	1.575	219170	219070
	0.630	0.315	0.551	3.937	1.772	219171	219071
	0.787	0.394	0.669	3.937	1.693	219172	219072
	0.984	0.472	0.787	4.331	1.535	219173	219073
	0.984	0.551	0.866	4.331	1.811	219174	219074
	1.260	0.630	0.984	4.921	1.772	219174	219075
	1.260	0.709	1.063	5.118	2.126	219174	219076
	1.260	0.787	1.181	5.118	2.441	219175	219077
m	16.00	6.00	12.00	100.00	40.00	219170	219070
	16.00	8.00	14.00	100.00	45.00	219171	219071
	20.00	10.00	17.00	100.00	43.00	219172	219072
	25.00	12.00	20.00	110.00	39.00	219173	219073
	25.00	14.00	22.00	110.00	46.00	219174	219074
	32.00	16.00	25.00	125.00	45.00	219174	219075
	32.00	18.00	27.00	130.00	54.00	219174	219076
	32.00	20.00	30.00	130.00	62.00	219175	219077

NOTE: Clamping chucks are used in reduction sleeves for clamping tools with cylindrical shanks to DIN 1835-B (Fig. 1). The chucks' design allows the use of standard tools versus ordering special tools (Fig. 2).

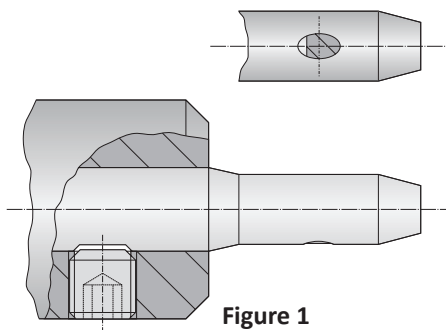


Figure 1

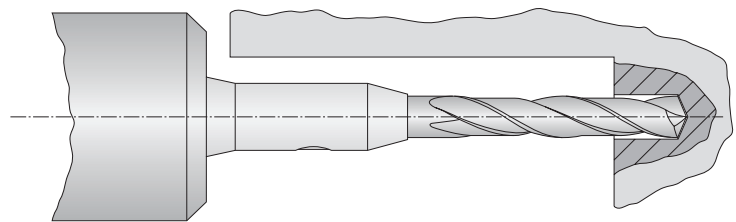
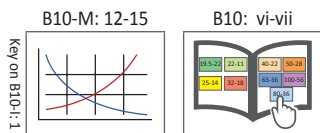


Figure 2



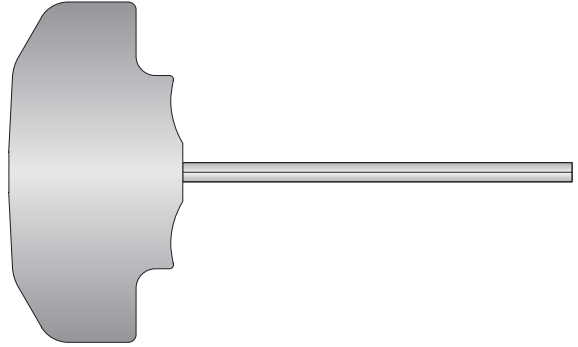
i = Imperial (in)
m = Metric (mm)

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Accessories for Drill Chucks

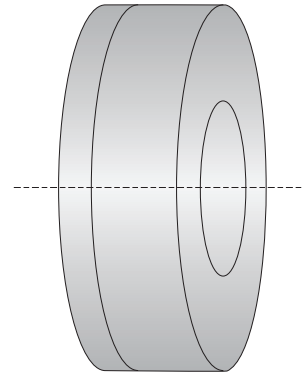
Service Keys for Drill Chucks

Service Key		Tightening Torque Nm	Part No.
Service Key	Type		
2.50	B	15	415577
6.00	B	15	115578



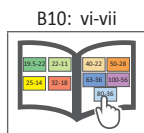
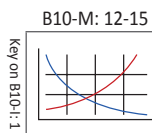
Gaskets for Drill Chucks

	Gasket		Part No.
	Gasket Diameter	Clamping Diameter	
i	0.118 - 0.236	0.019 - 0.511	387113
	0.236 - 0.511	0.019 - 0.511	387114
	0.118 - 0.236	0.098 - 0.629	387115
	0.236 - 0.629	0.098 - 0.629	387116
m	3.00 - 6.00	0.50 - 13.00	387113
	6.00 - 13.00	0.50 - 13.00	387114
	3.00 - 6.00	2.50 - 16.00	387115
	6.00 - 16.00	2.50 - 16.00	387116



Assembly Tool for Gasket

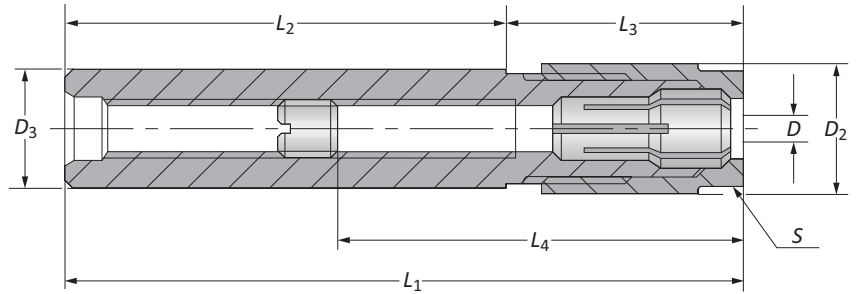
Part No.
387112



i = Imperial (in)
m = Metric (mm)

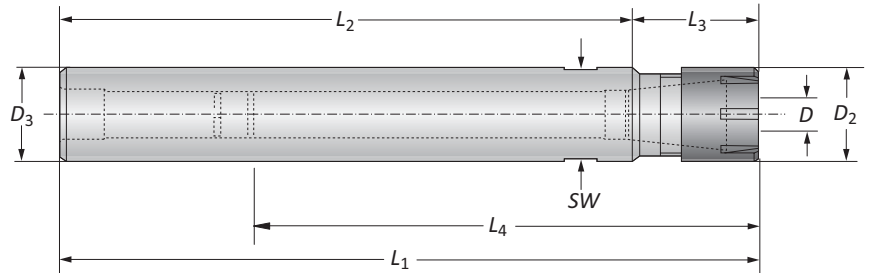
Collet Chucks for Erickson System | Cylindrical Collet Chucks for ISO 15488 (DIN 6499) Collets

Diameter Range: 0.039" - 0.393" (1.00 mm - 10.00 mm)



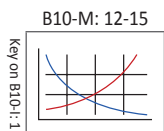
Collet Chucks for Erickson System

	Nominal Size	Clamping Range	Collet Chuck							Service Key	Weight	Part No.
			D	D ₂	D ₃	L ₁	L ₂	L ₃	L ₄ Min			
i	6	0.039 - 0.255	0.551	0.492	4.409	2.992	1.417	1.654	3.976	13	0.441 (lbs)	162080
	6	0.039 - 0.255	0.551	0.492	6.929	5.512	1.417	1.654	4.016	13	0.441 (lbs)	162081
	10	0.039 - 0.393	0.827	0.787	4.724	2.992	1.732	1.535	4.213	19	0.661 (lbs)	162082
	10	0.039 - 0.393	0.827	0.787	7.244	5.512	1.732	1.535	4.685	19	0.661 (lbs)	162083
m	6	1.00 - 6.50	14.00	12.50	112.00	76.00	36.00	42.00	101.00	13	0.20 (kg)	162080
	6	1.00 - 6.50	14.00	12.50	176.00	140.00	36.00	42.00	102.00	13	0.20 (kg)	162081
	10	1.00 - 10.00	21.00	20.00	120.00	76.00	44.00	39.00	107.00	19	0.30 (kg)	162082
	10	1.00 - 10.00	21.00	20.00	184.00	140.00	44.00	39.00	119.00	19	0.30 (kg)	162083



Cylindrical Collet Chucks for ISO 15488 (DIN 6499) Collets

	Nominal Size	Clamping Range	Collet Chuck							Hex Size	Part No.
			D	D ₂	D ₃	L ₁	L ₂	L ₃	L ₄ Min		
i	ER 8	0.039 - 0.196	0.472	0.315	4.961	3.937	1.024	1.437	1.437	09	209054
	ER 8	0.039 - 0.196	0.472	0.472	6.535	5.512	1.024	1.437	1.437	09	209055
	ER 11	0.039 - 0.275	0.630	0.630	4.193	3.150	1.043	0.906	2.559	11	209056
	ER 11	0.039 - 0.275	0.630	0.630	6.555	5.512	1.043	0.906	2.559	11	209057
	ER 16	0.039 - 0.393	0.866	0.787	4.665	3.150	1.516	1.299	4.016	17	209058
	ER 16	0.039 - 0.393	0.866	0.787	7.028	5.512	1.516	1.299	4.843	17	209059
m	ER 8	1.00 - 5.00	12.00	8.00	126.00	100.00	26.00	36.50	36.50	09	209054
	ER 8	1.00 - 5.00	12.00	12.00	166.00	140.00	26.00	36.50	36.50	09	209055
	ER 11	1.00 - 7.00	16.00	16.00	106.50	80.00	26.50	23.00	65.00	11	209056
	ER 11	1.00 - 7.00	16.00	16.00	166.50	140.00	26.50	23.00	65.00	11	209057
	ER 16	1.00 - 10.00	22.00	20.00	118.50	80.00	38.50	33.00	102.00	17	209058
	ER 16	1.00 - 10.00	22.00	20.00	178.50	140.00	38.50	33.00	123.00	17	209059

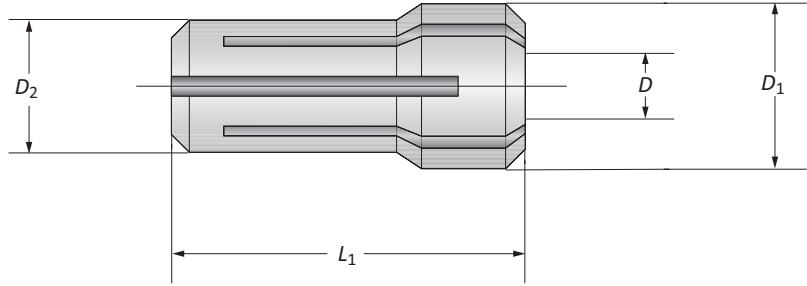
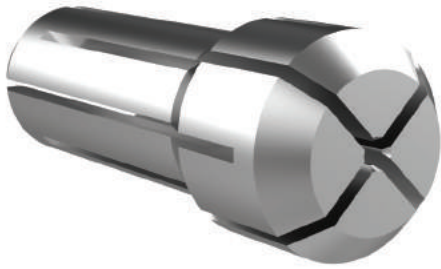


i = Imperial (in)
m = Metric (mm)

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Accessories for Collet Chucks

Diameter Range: 0.019" - 0.393" (0.50 mm - 10.00 mm)



Collet Sets for Erickson System

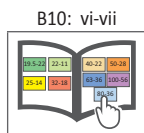
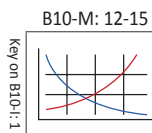
Nominal Size	Standard-No.	Set				Part No.
		D_1	D_2	L_1	D	
6	416 E	0.374	0.300	1.004	0.019 - 0.236	071016
	417 E	0.531	0.450	1.197	0.019 - 0.393	071017
10	416 E	9.50	7.62	25.50	0.50 - 6.00	071016
	417 E	13.50	11.43	30.40	0.50 - 10.00	071017

Collets for Erickson System

Collet Nominal Size	Diameter Range D	Part No.
6	0.020 - 0.039	071355
6	0.039 - 0.059	071356
6	0.059 - 0.079	071357
6	0.079 - 0.098	071358
6	0.098 - 0.118	071359
6	0.118 - 0.138	071360
6	0.138 - 0.157	071361
6	0.157 - 0.177	071362
6	0.177 - 0.197	071363
6	0.197 - 0.217	071364
6	0.217 - 0.236	071365
10	0.020 - 0.039	071368
10	0.039 - 0.059	071369
10	0.059 - 0.079	071370
10	0.079 - 0.098	071371
10	0.098 - 0.118	071372
10	0.118 - 0.138	071373
10	0.139 - 0.157	071374
10	0.157 - 0.177	071375
10	0.177 - 0.197	071376
10	0.197 - 0.217	071377
10	0.217 - 0.236	071378
10	0.236 - 0.256	071379
10	0.256 - 0.276	071380
10	0.276 - 0.295	071381
10	0.295 - 0.315	071382
10	0.315 - 0.335	071383
10	0.335 - 0.354	071384
10	0.354 - 0.374	071385
10	0.374 - 0.394	071681

Collets for Erickson System

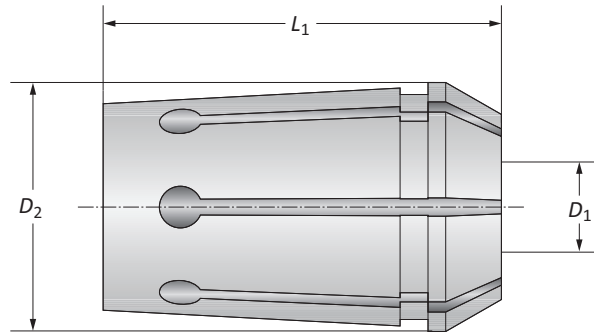
Collet Nominal Size	Diameter Range D	Part No.
6	0.50 - 1.00	071355
6	1.00 - 1.50	071356
6	1.50 - 2.00	071357
6	2.00 - 2.50	071358
6	2.50 - 3.00	071359
6	3.00 - 3.50	071360
6	3.50 - 4.00	071361
6	4.00 - 4.50	071362
6	4.50 - 5.00	071363
6	5.00 - 5.50	071364
6	5.50 - 6.00	071365
10	0.50 - 1.00	071368
10	1.00 - 1.50	071369
10	1.50 - 2.00	071370
10	2.00 - 2.50	071371
10	2.50 - 3.00	071372
10	3.00 - 3.50	071373
10	3.50 - 4.00	071374
10	4.00 - 4.50	071375
10	4.50 - 5.00	071376
10	5.00 - 5.50	071377
10	5.50 - 6.00	071378
10	6.00 - 6.50	071379
10	6.50 - 7.00	071380
10	7.00 - 7.50	071381
10	7.50 - 8.00	071382
10	8.00 - 8.50	071383
10	8.50 - 9.00	071384
10	9.00 - 9.50	071385
10	9.50 - 10.00	071681



i = Imperial (in)
m = Metric (mm)

Accessories for Collet Chucks

ISO 10897-A (DIN 6388-A)



Collet Sets

	Nominal Size	Standard-No.	Set			Part No.
			D_2	L_1	D_1	
i	A 16	410 E	0.891	1.574	0.078 - 0.629	071003
	A 25	444 E	1.295	2.047	0.078 - 0.984	071004
	A 32	450 E	1.625	2.362	0.157 - 1.259	071019
m	A 16	410 E	22.65	40.00	2.00 - 16.00	071003
	A 25	444 E	32.90	52.00	2.00 - 25.00	071004
	A 32	450 E	41.30	60.00	4.00 - 32.00	071019

Collets

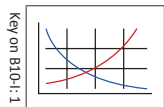
	Nominal Size	Diameter	
		D_1	Part No.
i	A 16	0.079	071140
	A 16	0.098	071141
	A 16	0.118	071142
	A 16	0.138	071143
	A 16	0.157	071144
	A 16	0.177	071145
	A 16	0.197	071146
	A 16	0.217	071147
	A 16	0.236	071148
	A 16	0.256	071149
	A 16	0.276	071150
	A 16	0.295	071151
	A 16	0.315	071152
	A 16	0.335	071153
	A 16	0.354	071154
	A 16	0.374	071155
	A 16	0.394	071156
	A 16	0.413	071157
	A 16	0.433	071158
	A 16	0.453	071159
	A 16	0.472	071160
	A 16	0.492	071161
	A 16	0.512	071162
	A 16	0.531	071163
	A 16	0.551	071164
	A 16	0.571	071165
	A 16	0.591	071166
	A 16	0.610	071167
	A 16	0.630	071168

Collets

	Nominal Size	Diameter	
		D_1	Part No.
m	A 16	2.00	071140
	A 16	2.50	071141
	A 16	3.00	071142
	A 16	3.50	071143
	A 16	4.00	071144
	A 16	4.50	071145
	A 16	5.00	071146
	A 16	5.50	071147
	A 16	6.00	071148
	A 16	6.50	071149
	A 16	7.00	071150
	A 16	7.50	071151
	A 16	8.00	071152
	A 16	8.50	071153
	A 16	9.00	071154
	A 16	9.50	071155
	A 16	10.00	071156
	A 16	10.50	071157
	A 16	11.00	071158
	A 16	11.50	071159
	A 16	12.00	071160
	A 16	12.50	071161
	A 16	13.00	071162
	A 16	13.50	071163
	A 16	14.00	071164
	A 16	14.50	071165
	A 16	15.00	071166
	A 16	15.50	071167
	A 16	16.00	071168

B10-M: 12-15

B10: vi-vii

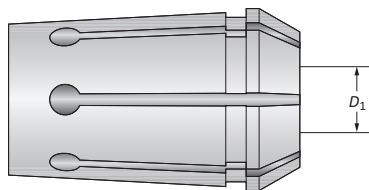


i = Imperial (in)
m = Metric (mm)

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Accessories for Collet Chucks

ISO 10897-A (DIN 6388-A)



Collets

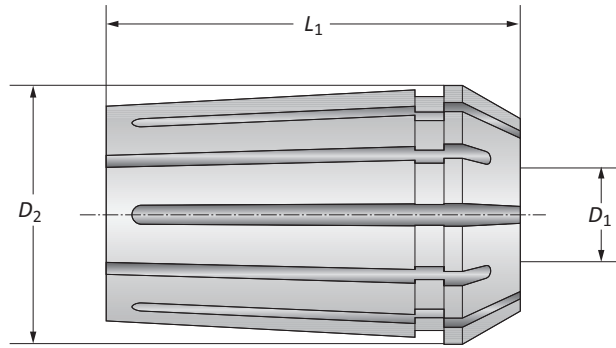
Nominal Size	Diameter D_1	Part No.
A 25	0.078	071169
A 25	0.118	071170
A 25	0.157	071171
A 25	0.196	071172
A 25	0.236	071173
A 25	0.275	071174
A 25	0.315	071175
A 25	0.354	071176
A 25	0.393	071177
A 25	0.433	071178
A 25	0.472	071179
A 25	0.511	071180
A 25	0.551	071181
A 25	0.590	071182
A 25	0.629	071183
A 25	0.669	071184
A 25	0.708	071185
A 25	0.748	071186
A 25	0.787	071187
A 25	0.826	071188
A 25	0.866	071189
A 25	0.905	071190
A 25	0.944	071191
A 25	0.984	071192
A 32	0.157	071612
A 32	0.196	071419
i A 32	0.236	071420
A 32	0.275	071613
A 32	0.315	071421
A 32	0.354	071614
A 32	0.393	071422
A 32	0.433	071666
A 32	0.472	071423
A 32	0.511	071667
A 32	0.551	071668
A 32	0.590	071669
A 32	0.629	071424
A 32	0.669	071670
A 32	0.708	071665
A 32	0.748	071671
A 32	0.787	071416
A 32	0.826	071672
A 32	0.866	071673
A 32	0.905	071674
A 32	0.944	071675
A 32	0.984	071417
A 32	1.023	071676
A 32	1.063	071677
A 32	1.102	071678
A 32	1.141	071679
A 32	1.181	071633
A 32	1.220	071680
A 32	1.259	071418

Collets

Nominal Size	Diameter D_1	Part No.
A 25	2.00	071169
A 25	3.00	071170
A 25	4.00	071171
A 25	5.00	071172
A 25	6.00	071173
A 25	7.00	071174
A 25	8.00	071175
A 25	9.00	071176
A 25	10.00	071177
A 25	11.00	071178
A 25	12.00	071179
A 25	13.00	071180
A 25	14.00	071181
A 25	15.00	071182
A 25	16.00	071183
A 25	17.00	071184
A 25	18.00	071185
A 25	19.00	071186
A 25	20.00	071187
A 25	21.00	071188
A 25	22.00	071189
A 25	23.00	071190
A 25	24.00	071191
A 25	25.00	071192
A 32	4.00	071612
A 32	5.00	071419
m A 32	6.00	071420
A 32	7.00	071613
A 32	8.00	071421
A 32	9.00	071614
A 32	10.00	071422
A 32	11.00	071666
A 32	12.00	071423
A 32	13.00	071667
A 32	14.00	071668
A 32	15.00	071669
A 32	16.00	071424
A 32	17.00	071670
A 32	18.00	071665
A 32	19.00	071671
A 32	20.00	071416
A 32	21.00	071672
A 32	22.00	071673
A 32	23.00	071674
A 32	24.00	071675
A 32	25.00	071417
A 32	26.00	071676
A 32	27.00	071677
A 32	28.00	071678
A 32	29.00	071679
A 32	30.00	071633
A 32	31.00	071680
A 32	32.00	071418

Accessories for Collet Chucks

ISO 10897-B (DIN 6388-B)



Collet Sets

	Nominal Size	Standard-No.	Set			Part No.
			D_2	L_1	D_1	
i	B 16	415 E	0.892	1.575	0.059 - 0.630	071005
	B 25	462 E	1.295	2.047	0.138 - 0.984	071006
	B 32	467 E	1.626	2.362	0.217 - 1.260	071022
m	B 16	415 E	22.65	40.00	1.50 - 16.00	071005
	B 25	462 E	32.90	52.00	3.50 - 25.00	071006
	B 32	467 E	41.30	60.00	5.50 - 32.00	071022

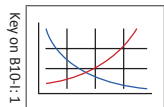
Collets

	Nominal Size	Diameter	Part No.
		D_1	
i	B 16	0.059 - 0.079	071625
	B 16	0.079 - 0.098	071626
	B 16	0.098 - 0.118	071621
	B 16	0.118 - 0.138	071622
	B 16	0.138 - 0.157	071193
	B 16	0.157 - 0.177	071194
	B 16	0.177 - 0.197	071195
	B 16	0.197 - 0.217	071196
	B 16	0.217 - 0.236	071197
	B 16	0.236 - 0.256	071198
	B 16	0.256 - 0.276	071199
	B 16	0.276 - 0.295	071200
	B 16	0.295 - 0.315	071201
	B 16	0.315 - 0.335	071202
	B 16	0.335 - 0.354	071203
	B 16	0.354 - 0.374	071204
	B 16	0.374 - 0.394	071205
	B 16	0.394 - 0.413	071206
	B 16	0.413 - 0.433	071207
	B 16	0.433 - 0.453	071208
	B 16	0.453 - 0.472	071209
	B 16	0.472 - 0.492	071210
	B 16	0.492 - 0.512	071211
	B 16	0.512 - 0.531	071212
	B 16	0.531 - 0.551	071213
	B 16	0.551 - 0.571	071214
	B 16	0.571 - 0.591	071215
	B 16	0.591 - 0.610	071216
B 16	0.610 - 0.630	071217	

Collets

	Nominal Size	Diameter	Part No.
		D_1	
m	B 16	1.50 - 2.00	071625
	B 16	2.00 - 2.50	071626
	B 16	2.50 - 3.00	071621
	B 16	3.00 - 3.50	071622
	B 16	3.50 - 4.00	071193
	B 16	4.00 - 4.50	071194
	B 16	4.50 - 5.00	071195
	B 16	5.00 - 5.50	071196
	B 16	5.50 - 6.00	071197
	B 16	6.00 - 6.50	071198
	B 16	6.50 - 7.00	071199
	B 16	7.00 - 7.50	071200
	B 16	7.50 - 8.00	071201
	B 16	8.00 - 8.50	071202
	B 16	8.50 - 9.00	071203
	B 16	9.00 - 9.50	071204
	B 16	9.50 - 10.00	071205
	B 16	10.00 - 10.50	071206
	B 16	10.50 - 11.00	071207
	B 16	11.00 - 11.50	071208
	B 16	11.50 - 12.00	071209
	B 16	12.00 - 12.50	071210
	B 16	12.50 - 13.00	071211
	B 16	13.00 - 13.50	071212
	B 16	13.50 - 14.00	071213
	B 16	14.00 - 14.50	071214
	B 16	14.50 - 15.00	071215
B 16	15.00 - 15.50	071216	
B 16	15.50 - 16.00	071217	

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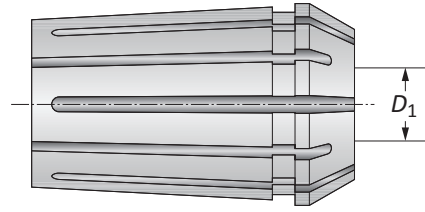


i = Imperial (in)
m = Metric (mm)

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Accessories for Collet Chucks

ISO 10897-B (DIN 6388-B)

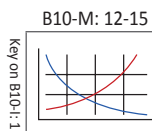


Collets

Nominal Size	Diameter D_1	Part No.
B 25	0.138 - 0.157	071627
B 25	0.157 - 0.177	071628
B 25	0.177 - 0.197	071218
B 25	0.197 - 0.217	071219
B 25	0.217 - 0.236	071220
B 25	0.236 - 0.256	071221
B 25	0.256 - 0.276	071222
B 25	0.276 - 0.295	071223
B 25	0.295 - 0.315	071224
B 25	0.315 - 0.335	071225
B 25	0.335 - 0.354	071226
B 25	0.354 - 0.374	071227
B 25	0.374 - 0.394	071228
B 25	0.394 - 0.413	071229
B 25	0.413 - 0.433	071230
B 25	0.433 - 0.453	071231
B 25	0.453 - 0.472	071232
B 25	0.472 - 0.492	071233
B 25	0.492 - 0.512	071234
B 25	0.512 - 0.531	071235
B 25	0.531 - 0.551	071236
i B 25	0.551 - 0.571	071237
B 25	0.571 - 0.591	071238
B 25	0.591 - 0.610	071239
B 25	0.610 - 0.630	071240
B 25	0.630 - 0.650	071241
B 25	0.650 - 0.669	071242
B 25	0.669 - 0.689	071243
B 25	0.689 - 0.709	071244
B 25	0.709 - 0.728	071245
B 25	0.728 - 0.748	071246
B 25	0.748 - 0.768	071247
B 25	0.768 - 0.787	071248
B 25	0.787 - 0.807	071249
B 25	0.807 - 0.827	071250
B 25	0.827 - 0.846	071251
B 25	0.846 - 0.866	071252
B 25	0.866 - 0.866	071253
B 25	0.866 - 0.906	071254
B 25	0.906 - 0.925	071255
B 25	0.925 - 0.945	071256
B 25	0.945 - 0.965	071257
B 25	0.965 - 0.984	071258

Collets

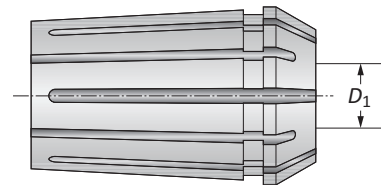
Nominal Size	Diameter D_1	Part No.
B 25	3.50 - 4.00	071627
B 25	4.00 - 4.50	071628
B 25	4.50 - 5.00	071218
B 25	5.00 - 5.50	071219
B 25	5.50 - 6.00	071220
B 25	6.00 - 6.50	071221
B 25	6.50 - 7.00	071222
B 25	7.00 - 7.50	071223
B 25	7.50 - 8.00	071224
B 25	8.00 - 8.50	071225
B 25	8.50 - 9.00	071226
B 25	9.00 - 9.50	071227
B 25	9.50 - 10.00	071228
B 25	10.00 - 10.50	071229
B 25	10.50 - 11.00	071230
B 25	11.00 - 11.50	071231
B 25	11.50 - 12.00	071232
B 25	12.00 - 12.50	071233
B 25	12.50 - 13.00	071234
B 25	13.00 - 13.50	071235
B 25	13.50 - 14.00	071236
m B 25	14.00 - 14.50	071237
B 25	14.50 - 15.00	071238
B 25	15.00 - 15.50	071239
B 25	15.50 - 16.00	071240
B 25	16.00 - 16.50	071241
B 25	16.50 - 17.00	071242
B 25	17.00 - 17.50	071243
B 25	17.50 - 18.00	071244
B 25	18.00 - 18.50	071245
B 25	18.50 - 19.00	071246
B 25	19.00 - 19.50	071247
B 25	19.50 - 20.00	071248
B 25	20.00 - 20.50	071249
B 25	20.50 - 21.00	071250
B 25	21.00 - 21.50	071251
B 25	21.50 - 22.00	071252
B 25	22.00 - 22.50	071253
B 25	22.50 - 23.00	071254
B 25	23.00 - 23.50	071255
B 25	23.50 - 24.00	071256
B 25	24.00 - 24.50	071257
B 25	24.50 - 25.00	071258



i = Imperial (in)
m = Metric (mm)

Accessories for Collet Chucks

ISO 10897-B (DIN 6388-B)



Collets

Nominal Size	Diameter D_1	Part No.
B 32	0.217 - 0.236	071686
B 32	0.236 - 0.256	071687
B 32	0.256 - 0.276	071688
B 32	0.276 - 0.295	071689
B 32	0.295 - 0.315	071690
B 32	0.315 - 0.335	071691
B 32	0.335 - 0.354	071692
B 32	0.354 - 0.374	071693
B 32	0.374 - 0.394	071542
B 32	0.394 - 0.413	071543
B 32	0.413 - 0.433	071544
B 32	0.433 - 0.453	071545
B 32	0.453 - 0.472	071546
B 32	0.472 - 0.492	071547
B 32	0.492 - 0.512	071548
B 32	0.512 - 0.531	071549
B 32	0.531 - 0.551	071550
B 32	0.551 - 0.571	071551
B 32	0.571 - 0.591	071552
B 32	0.591 - 0.610	071553
B 32	0.610 - 0.630	071554
B 32	0.630 - 0.650	071555
B 32	0.650 - 0.669	071556
B 32	0.669 - 0.689	071557
B 32	0.689 - 0.709	071558
B 32	0.709 - 0.728	071559
i B 32	0.728 - 0.748	071560
B 32	0.748 - 0.768	071561
B 32	0.768 - 0.787	071562
B 32	0.787 - 0.807	071563
B 32	0.807 - 0.827	071564
B 32	0.827 - 0.846	071565
B 32	0.846 - 0.866	071566
B 32	0.866 - 0.866	071567
B 32	0.866 - 0.906	071568
B 32	0.906 - 0.925	071569
B 32	0.925 - 0.945	071570
B 32	0.945 - 0.965	071571
B 32	0.965 - 0.984	071572
B 32	0.984 - 1.004	071573
B 32	1.004 - 1.024	071574
B 32	1.024 - 1.043	071575
B 32	1.043 - 1.063	071576
B 32	1.063 - 1.083	071577
B 32	1.083 - 1.102	071578
B 32	1.102 - 1.122	071579
B 32	1.122 - 1.142	071580
B 32	1.142 - 1.161	071581
B 32	1.161 - 1.181	071582
B 32	1.181 - 1.201	071583
B 32	1.201 - 1.220	071584
B 32	1.220 - 1.240	071585
B 32	1.240 - 1.260	071586

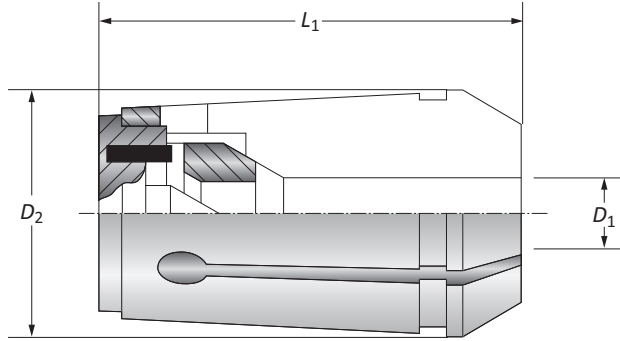
Collets

Nominal Size	Diameter D_1	Part No.
B 32	5.50 - 6.00	071686
B 32	6.00 - 6.50	071687
B 32	6.50 - 7.00	071688
B 32	7.00 - 7.50	071689
B 32	7.50 - 8.00	071690
B 32	8.00 - 8.50	071691
B 32	8.50 - 9.00	071692
B 32	9.00 - 9.50	071693
B 32	9.50 - 10.00	071542
B 32	10.00 - 10.50	071543
B 32	10.50 - 11.00	071544
B 32	11.00 - 11.50	071545
B 32	11.50 - 12.00	071546
B 32	12.00 - 12.50	071547
B 32	12.50 - 13.00	071548
B 32	13.00 - 13.50	071549
B 32	13.50 - 14.00	071550
B 32	14.00 - 14.50	071551
B 32	14.50 - 15.00	071552
B 32	15.00 - 15.50	071553
B 32	15.50 - 16.00	071554
B 32	16.00 - 16.50	071555
B 32	16.50 - 17.00	071556
B 32	17.00 - 17.50	071557
B 32	17.50 - 18.00	071558
B 32	18.00 - 18.50	071559
m B 32	18.50 - 19.00	071560
B 32	19.00 - 19.50	071561
B 32	19.50 - 20.00	071562
B 32	20.00 - 20.50	071563
B 32	20.50 - 21.00	071564
B 32	21.00 - 21.50	071565
B 32	21.50 - 22.00	071566
B 32	22.00 - 22.50	071567
B 32	22.50 - 23.00	071568
B 32	23.00 - 23.50	071569
B 32	23.50 - 24.00	071570
B 32	24.00 - 24.50	071571
B 32	24.50 - 25.00	071572
B 32	25.00 - 25.50	071573
B 32	25.50 - 26.00	071574
B 32	26.00 - 26.50	071575
B 32	26.50 - 27.00	071576
B 32	27.00 - 27.50	071577
B 32	27.50 - 28.00	071578
B 32	28.00 - 28.50	071579
B 32	28.50 - 29.00	071580
B 32	29.00 - 29.50	071581
B 32	29.50 - 30.00	071582
B 32	30.00 - 30.50	071583
B 32	30.50 - 31.00	071584
B 32	31.00 - 31.50	071585
B 32	31.50 - 32.00	071586

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Accessories for Collet Chucks

ISO 10897-A (DIN 6388-A)



Collet Sets for Clarkson System

	Nominal Size	Standard-No.	Sets			Part No.
			D_2	L_1	D_1	
i	A 16	421 E	0.892	1.654	0.236 - 0.472	071013
	A 25	459 E	1.295	2.047	0.236 - 0.984	071014
	A 32	460 E	1.626	2.480	0.236 - 1.260	071020
m	A 16	421 E	22.65	42.00	6.00 - 12.00	071013
	A 25	459 E	32.90	52.00	6.00 - 25.00	071014
	A 32	460 E	41.30	63.00	6.00 - 32.00	071020

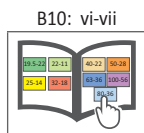
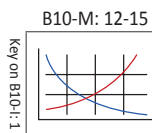
NOTE: Recommended to use clamping nuts with ball-bearings to lock collets

Collets for Clarkson System

Nominal Size	Diameter	
	D_1	Part No.
A 16	0.236	071304
A 16	0.315	071305
A 16	0.394	071306
A 16	0.472	071307
A 25	0.236	071308
A 25	0.315	071309
A 25	0.394	071310
A 25	0.472	071311
A 25	0.630	071312
i A 25	0.787	071313
A 25	0.984	071684
A 32	0.236	071427
A 32	0.315	071428
A 32	0.394	071429
A 32	0.472	071430
A 32	0.630	071431
A 32	0.787	071432
A 32	0.984	071433
A 32	1.260	071685

Collets for Clarkson System

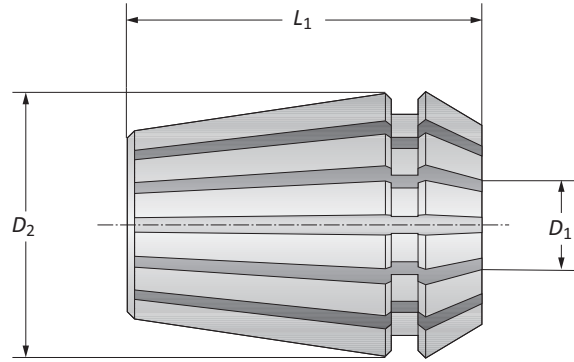
Nominal Size	Diameter	
	D_1	Part No.
A 16	6.00	071304
A 16	8.00	071305
A 16	10.00	071306
A 16	12.00	071307
A 25	6.00	071308
A 25	8.00	071309
A 25	10.00	071310
A 25	12.00	071311
A 25	16.00	071312
m A 25	20.00	071313
A 25	25.00	071684
A 32	6.00	071427
A 32	8.00	071428
A 32	10.00	071429
A 32	12.00	071430
A 32	16.00	071431
A 32	20.00	071432
A 32	25.00	071433
A 32	32.00	071685



i = Imperial (in)
m = Metric (mm)

Accessories for Collet Chucks

ISO 15488-B (DIN 6499-B)



Collet Sets

	Nominal Size	Standard-No.	Diameter		Collet Set		Part No.
			D_1	D_2	L_1		
i	ER 8	4004 E	0.039 - 0.197	0.335	0.531	071034	
	ER 11	4008 E	0.039 - 0.276	0.433	0.709	071028	
	ER 16	426 E	0.020 - 0.394	0.630	1.083	071029	
	ER 25	430 E	0.059 - 0.630	0.984	1.339	071031	
	ER 32	470 E	0.079 - 0.787	1.260	1.575	071032	
	ER 40	472 E	0.118 - 1.024	1.575	1.811	071033	
m	ER 8	4004 E	1.00 - 5.00	8.50	13.50	071034	
	ER 11	4008 E	1.00 - 7.00	11.00	18.00	071028	
	ER 16	426 E	0.50 - 10.00	16.00	27.50	071029	
	ER 25	430 E	1.50 - 16.00	25.00	34.00	071031	
	ER 32	470 E	2.00 - 20.00	32.00	40.00	071032	
	ER 40	472 E	3.00 - 26.00	40.00	46.00	071033	

Collets

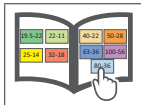
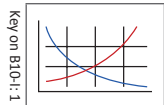
	Nominal Size	Diameter	
		D_1	Part No.
i	ER 8	0.039	071986
	ER 8	0.059	071987
	ER 8	0.079	071988
	ER 8	0.098	071989
	ER 8	0.102 - 0.118	071990
	ER 8	0.122 - 0.138	071991
	ER 8	0.142 - 0.157	071992
	ER 8	0.161 - 0.177	071993
	ER 8	0.181 - 0.197	071994
	ER 11	0.039	071700
	ER 11	0.059	071701
	ER 11	0.079	071702
	ER 11	0.098	071703
	ER 11	0.102 - 0.118	071704
	ER 11	0.122 - 0.138	071705
	ER 11	0.142 - 0.157	071706
	ER 11	0.161 - 0.177	071707
	ER 11	0.181 - 0.197	071708
	ER 11	0.201 - 0.217	071709
	ER 11	0.220 - 0.354	071710
ER 11	0.240 - 0.256	071711	
ER 11	0.260 - 0.276	071712	

Collets

	Nominal Size	Diameter	
		D_1	Part No.
i	ER 8	1.00	071986
	ER 8	1.50	071987
	ER 8	2.00	071988
	ER 8	2.50	071989
	ER 8	2.60 - 3.00	071990
	ER 8	3.10 - 3.50	071991
	ER 8	3.60 - 4.00	071992
	ER 8	4.10 - 4.50	071993
	ER 8	4.60 - 5.00	071994
	m	ER 11	1.00
ER 11		1.50	071701
ER 11		2.00	071702
ER 11		2.50	071703
ER 11		2.60 - 3.00	071704
ER 11		3.10 - 3.50	071705
ER 11		3.60 - 4.00	071706
ER 11		4.10 - 4.50	071707
ER 11		4.60 - 5.00	071708
ER 11		5.10 - 5.50	071709
ER 11		5.60 - 6.00	071710
ER 11		6.10 - 6.50	071711
ER 11	6.60 - 7.00	071712	

B10-M: 12-15

B10: vi-vii

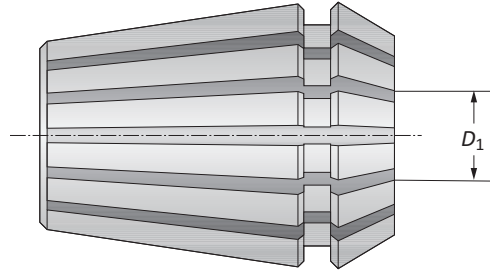


i = Imperial (in)
m = Metric (mm)

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Accessories for Collet Chucks

ISO 15488-B (DIN 6499-B)



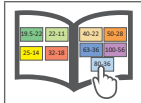
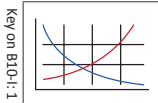
Collets

Nominal Size	Diameter		Part No.
	D_1		
ER 16	0.020 - 0.039		071713
ER 16	0.039 - 0.059		071714*
ER 16	0.039 - 0.079		071715
ER 16	0.079 - 0.098		071716*
ER 16	0.098 - 0.118		071717
ER 16	0.118 - 0.138		071718*
ER 16	0.138 - 0.157		071719
ER 16	0.157 - 0.177		271132*
ER 16	0.157 - 0.197		071720
i ER 16	0.197 - 0.217		271133*
ER 16	0.217 - 0.236		071721
ER 16	0.236 - 0.256		271134*
ER 16	0.236 - 0.276		071722
ER 16	0.276 - 0.295		271135*
ER 16	0.295 - 0.315		071723
ER 16	0.315 - 0.335		271136*
ER 16	0.335 - 0.354		071724
ER 16	0.354 - 0.374		271137*
ER 16	0.354 - 0.394		071725
ER 16	0.50 - 1.00		071713
ER 16	1.00 - 1.50		071714*
ER 16	1.00 - 2.00		071715
ER 16	2.00 - 2.50		071716*
ER 16	2.50 - 3.00		071717
ER 16	3.00 - 3.50		071718*
ER 16	3.50 - 4.00		071719
ER 16	4.00 - 4.50		271132*
m ER 16	4.00 - 5.00		071720
ER 16	5.00 - 5.50		271133*
ER 16	5.50 - 6.00		071721
ER 16	6.00 - 6.50		271134*
ER 16	6.00 - 7.00		071722
ER 16	7.00 - 7.50		271135*
ER 16	7.5 - 8.00		071723
ER 16	8.00 - 8.50		271136*
ER 16	8.50 - 9.00		071724
ER 16	9.00 - 9.50		271137*
ER 16	9.00 - 10.00		071725

*Items not contained in set.

B10-M: 12-15

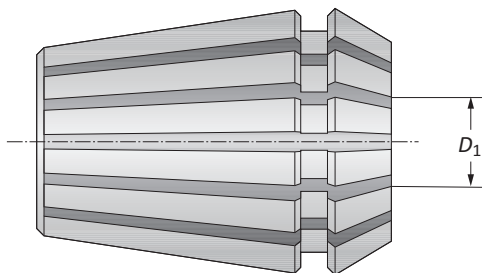
B10: vi-vii



i = Imperial (in)
m = Metric (mm)

Accessories for Collet Chucks

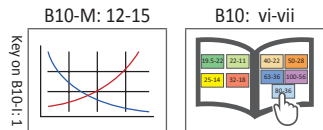
ISO 15488-B (DIN 6499-B)



Collets

Nominal Size	Diameter D_1	Part No.
ER 25	0.059 - 0.079	071743
ER 25	0.079 - 0.098	071744*
ER 25	0.098 - 0.118	071745
ER 25	0.118 - 0.138	271128*
ER 25	0.138 - 0.157	071746
ER 25	0.157 - 0.177	271129*
ER 25	0.177 - 0.197	071747
ER 25	0.197 - 0.217	271130*
ER 25	0.217 - 0.236	071748
ER 25	0.236 - 0.256	271131*
ER 25	0.256 - 0.276	071749
ER 25	0.276 - 0.315	071750
ER 25	0.315 - 0.354	071751
ER 25	0.354 - 0.394	071752
ER 25	0.394 - 0.433	071753
ER 25	0.433 - 0.472	071754
ER 25	0.472 - 0.512	071755
ER 25	0.512 - 0.551	071756
ER 25	0.551 - 0.591	071757
ER 25	0.591 - 0.630	071758
i ER 32	0.079 - 0.118	071761
ER 32	0.118 - 0.157	071762
ER 32	0.157 - 0.197	071763
ER 32	0.197 - 0.236	071764
ER 32	0.236 - 0.276	071765
ER 32	0.276 - 0.315	071766
ER 32	0.315 - 0.354	071767
ER 32	0.354 - 0.394	071768
ER 32	0.394 - 0.433	071769
ER 32	0.433 - 0.472	071770
ER 32	0.472 - 0.512	071771
ER 32	0.512 - 0.551	071772
ER 32	0.551 - 0.591	071773
ER 32	0.591 - 0.630	071774
ER 32	0.630 - 0.669	071775
ER 32	0.669 - 0.709	071776
ER 32	0.709 - 0.748	071777
ER 32	0.748 - 0.787	071778
ER 32	0.669 - 0.709	071776
ER 32	0.709 - 0.748	071777
ER 32	0.748 - 0.787	071778

*Items not contained in set.



Collets

Nominal Size	Diameter D_1	Part No.
ER 25	1.50 - 2.00	071743
ER 25	2.00 - 2.50	071744*
ER 25	2.50 - 3.00	071745
ER 25	3.00 - 3.50	271128*
ER 25	3.50 - 4.00	071746
ER 25	4.00 - 4.50	271129*
ER 25	4.50 - 5.00	071747
ER 25	5.00 - 5.50	271130*
ER 25	5.50 - 6.00	071748
ER 25	6.00 - 6.50	271131*
ER 25	6.50 - 7.00	071749
ER 25	7.00 - 8.00	071750
ER 25	8.00 - 9.00	071751
ER 25	9.00 - 10.00	071752
ER 25	10.00 - 11.00	071753
ER 25	11.00 - 12.00	071754
ER 25	12.00 - 13.00	071755
ER 25	13.00 - 14.00	071756
ER 25	14.00 - 15.00	071757
ER 25	15.00 - 16.00	071758
m ER 32	2.00 - 3.00	071761
ER 32	3.00 - 4.00	071762
ER 32	4.00 - 5.00	071763
ER 32	5.00 - 6.00	071764
ER 32	6.00 - 7.00	071765
ER 32	7.00 - 8.00	071766
ER 32	8.00 - 9.00	071767
ER 32	9.00 - 10.00	071768
ER 32	10.00 - 11.00	071769
ER 32	11.00 - 12.00	071770
ER 32	12.00 - 13.00	071771
ER 32	13.00 - 14.00	071772
ER 32	14.00 - 15.00	071773
ER 32	15.00 - 16.00	071774
ER 32	16.00 - 17.00	071775
ER 32	17.00 - 18.00	071776
ER 32	18.00 - 19.00	071777
ER 32	19.00 - 20.00	071778

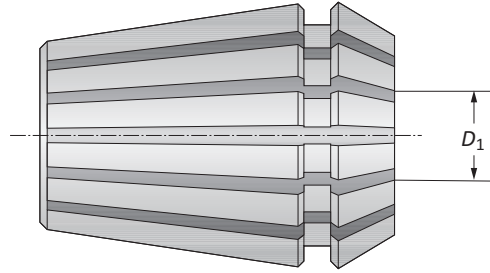
*Items not contained in set.

i = Imperial (in)
m = Metric (mm)

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Accessories for Collet Chucks

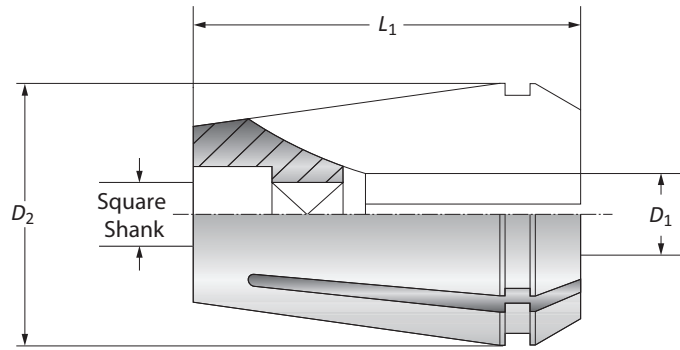
ISO 15488-B (DIN 6499-B)



Nominal Size	Diameter D_1	Part No.
ER 40	0.118 - 0.157	071779
ER 40	0.157 - 0.197	071780
ER 40	0.197 - 0.236	071781
ER 40	0.236 - 0.276	071782
ER 40	0.276 - 0.315	071783
ER 40	0.315 - 0.354	071784
ER 40	0.354 - 0.394	071785
ER 40	0.394 - 0.433	071786
ER 40	0.433 - 0.472	071787
ER 40	0.472 - 0.512	071788
ER 40	0.512 - 0.551	071789
i ER 40	0.551 - 0.591	071790
ER 40	0.591 - 0.630	071791
ER 40	0.630 - 0.669	071792
ER 40	0.669 - 0.709	071793
ER 40	0.709 - 0.748	071794
ER 40	0.748 - 0.787	071795
ER 40	0.787 - 0.827	071796
ER 40	0.827 - 0.866	071797
ER 40	0.866 - 0.906	071798
ER 40	0.906 - 0.945	071799
ER 40	0.945 - 0.984	071800
ER 40	0.984 - 1.024	071801
ER 40	3.00 - 4.00	071779
ER 40	4.00 - 5.00	071780
ER 40	5.00 - 6.00	071781
ER 40	6.00 - 7.00	071782
ER 40	7.00 - 8.00	071783
ER 40	8.00 - 9.00	071784
ER 40	9.00 - 10.00	071785
ER 40	10.00 - 11.00	071786
ER 40	11.00 - 12.00	071787
ER 40	12.00 - 13.00	071788
ER 40	13.00 - 14.00	071789
m ER 40	14.00 - 15.00	071790
ER 40	15.00 - 16.00	071791
ER 40	16.00 - 17.00	071792
ER 40	17.00 - 18.00	071793
ER 40	18.00 - 19.00	071794
ER 40	19.00 - 20.00	071795
ER 40	20.00 - 21.00	071796
ER 40	21.00 - 22.00	071797
ER 40	22.00 - 23.00	071798
ER 40	23.00 - 24.00	071799
ER 40	24.00 - 25.00	071800
ER 40	25.00 - 26.00	071801

Collet Sets for Taps DIN 371/374/376

ISO 15488-B (DIN 6499-B)



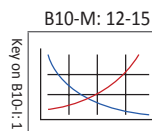
Collet Sets

	Nominal Size	Standard-No.	Clamping Range		Collet Set		Part No.
			D_1	D_2	D_2	L_1	
i	ER 16	426 EGB	0.177 - 0.276	0.630	1.083	071045	
	ER 25	430 EGB	0.177 - 0.472	0.984	1.339	071047	
	ER 32	470 EGB	0.177 - 0.630	1.260	1.575	071048	
	ER 40	472 EGB	0.276 - 0.787	1.575	1.811	071049	
m	ER 16	426 EGB	4.50 - 7.00	16.00	27.50	071045	
	ER 25	430 EGB	4.50 - 12.00	25.00	34.00	071047	
	ER 32	470 EGB	4.50 - 16.00	32.00	40.00	071048	
	ER 40	472 EGB	7.00 - 20.00	40.00	46.00	071049	

NOTE: To lock these collets, we recommend using the clamping nuts with sliding ring for higher clamping forces.

Taps

	Shank		Tap		
	D_1	Square Shank	DIN 371	DIN 374	DIN 376
i	0.177	0.134	M 4	M 6 x...	M 6
	0.217	0.169	-	M 7 x...	M 7
	0.236	0.193	M 4,5/5/6	M 8 x...	M 8
	0.276	0.217	M 7	M 9/10 x...	M 9/10
	0.315	0.244	M 8	M 6 x...	M 11
	0.354	0.276	M 9	M 6 x...	M 12
	0.394	0.315	M 10	-	-
	0.433	0.354	-	M 14 x...	M 14
	0.472	0.354	M 12	M 16 x...	M 16
	0.551	0.433	-	M 18 x...	M 18
0.630	0.472	-	M 20 x...	M 20	
0.709	0.551	-	M 22/24 x...	M 22/24	
0.787	0.630	-	M 27 x...	M 27	
m	4.50	3.40	M 4	M 6 x...	M 6
	5.50	4.30	-	M 7 x...	M 7
	6.00	4.90	M 4,5/5/6	M 8 x...	M 8
	7.00	5.50	M 7	M 9/10 x...	M 9/10
	8.00	6.20	M 8	M 6 x...	M 11
	9.00	7.00	M 9	M 6 x...	M 12
	10.00	8.00	M 10	-	-
	11.00	9.00	-	M 14 x...	M 14
	12.00	9.00	M 12	M 16 x...	M 16
	14.00	11.00	-	M 18 x...	M 18
16.00	12.00	-	M 20 x...	M 20	
18.00	14.00	-	M 22/24 x...	M 22/24	
20.00	16.00	-	M 27 x...	M 27	

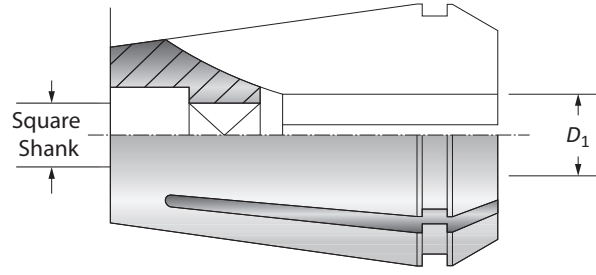
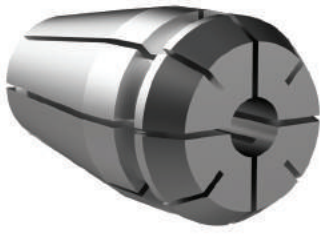


i = Imperial (in)
m = Metric (mm)

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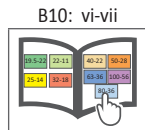
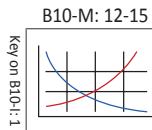
Accessories for Collet Sets for Taps DIN 371/374/376

ISO 15488-B (DIN 6499-B)



Nominal Size	Suitable Taps		Part No.
	D_1	Square Shank	
ER 16	0.177	0.134	071901
ER 16	0.217	0.169	071902
ER 16	0.236	0.193	071903
ER 16	0.276	0.217	071904
ER 25	0.177	0.134	071912
ER 25	0.217	0.169	071913
ER 25	0.236	0.193	071914
ER 25	0.276	0.217	071915
ER 25	0.315	0.244	071916
ER 25	0.354	0.276	071917
ER 25	0.394	0.315	071918
ER 25	0.433	0.354	071919
ER 25	0.472	0.354	071920
ER 32	0.177	0.134	071921
ER 32	0.217	0.169	071922
ER 32	0.236	0.193	071923
ER 32	0.276	0.217	071924
ER 32	0.315	0.244	071925
ER 32	0.354	0.276	071926
ER 32	0.394	0.315	071927
ER 32	0.433	0.354	071928
ER 32	0.472	0.354	071929
ER 32	0.551	0.433	071930
ER 32	0.630	0.472	071931
ER 40	0.276	0.217	071932
ER 40	0.315	0.244	071933
ER 40	0.354	0.276	071934
ER 40	0.394	0.315	071935
ER 40	0.433	0.354	071936
ER 40	0.472	0.354	071937
ER 40	0.551	0.433	071938
ER 40	0.630	0.472	071939
ER 40	0.709	0.571	071940
ER 40	0.787	0.630	071941

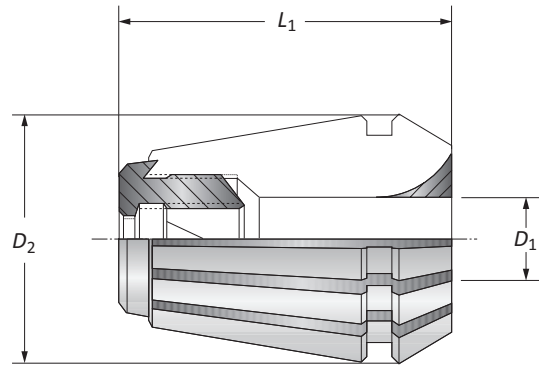
Nominal Size	Suitable Taps		Part No.
	D_1	Square Shank	
ER 16	4.50	3.40	071901
ER 16	5.50	4.30	071902
ER 16	6.00	4.90	071903
ER 16	7.00	5.50	071904
ER 25	4.50	3.40	071912
ER 25	5.50	4.30	071913
ER 25	6.00	4.90	071914
ER 25	7.00	5.50	071915
ER 25	8.00	6.20	071916
ER 25	9.00	7.00	071917
ER 25	10.00	8.00	071918
ER 25	11.00	9.00	071919
ER 25	12.00	9.00	071920
ER 32	4.50	3.40	071921
ER 32	5.50	4.30	071922
ER 32	6.00	4.90	071923
ER 32	7.00	5.50	071924
ER 32	8.00	6.20	071925
ER 32	9.00	7.00	071926
ER 32	10.00	8.00	071927
ER 32	11.00	9.00	071928
ER 32	12.00	9.00	071929
ER 32	14.00	11.00	071930
ER 32	16.00	12.00	071931
ER 40	7.00	5.50	071932
ER 40	8.00	6.20	071933
ER 40	9.00	7.00	071934
ER 40	10.00	8.00	071935
ER 40	11.00	9.00	071936
ER 40	12.00	9.00	071937
ER 40	14.00	11.00	071938
ER 40	16.00	12.00	071939
ER 40	18.00	14.50	071940
ER 40	20.00	16.00	071941



i = Imperial (in)
m = Metric (mm)

Accessories for Collet Chucks: ISO 15488-B (DIN 6499-B)

Collets



Collets for Mill Cutters with Pull Thread System

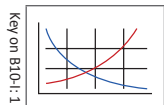
	Nominal Size	Standard-No.	Clamping Range D_2	Collet		Part No.
				L_1	D_1	
i	ER 32	470 ECL	1.260	1.811	0.236 - 0.630	071052
	ER 40	472 ECL	1.575	2.047	0.236 - 0.984	071053
m	ER 32	470 ECL	32.00	46.00	6.00 - 16.00	071052
	ER 40	472 ECL	40.00	52.00	6.00 - 25.00	071053

Collets

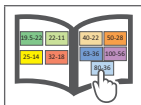
	Collet		Part No.
	Nominal Size	D_1	
i	ER 32	0.236	071826
	ER 32	0.315	071827
	ER 32	0.394	071828
	ER 32	0.472	071829
	ER 32	0.630	071830
	ER 40	0.236	071831
	ER 40	0.315	071832
	ER 40	0.394	071833
	ER 40	0.472	071834
	ER 40	0.630	071835
m	ER 40	0.787	071836
	ER 40	0.984	071837
	ER 32	6.00	071826
	ER 32	8.00	071827
	ER 32	10.00	071828
	ER 32	12.00	071829
	ER 32	16.00	071830
	ER 40	6.00	071831
	ER 40	8.00	071832
	ER 40	10.00	071833
ER 40	12.00	071834	
ER 40	16.00	071835	
ER 40	20.00	071836	
ER 40	25.00	071837	

NOTE: To lock these collets, we recommend using the clamping nuts with sliding ring for higher clamping forces.

B10-M: 12-15



B10: vi-vii



i = Imperial (in)
m = Metric (mm)

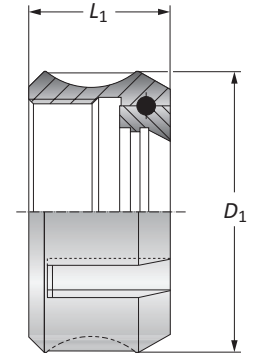
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Accessories for Collet Chucks: ISO 10897 (DIN 6388)

Clamping Nuts

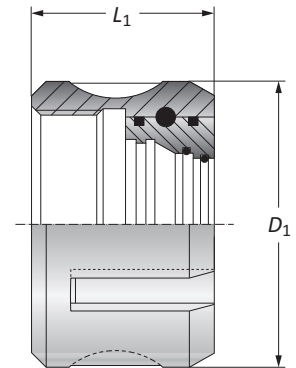
Clamping Nuts: DIN 6388 / ISO 10897 - 1:10

	Nominal Size	Clamping Nut				Part No.
		D_1	L_1	Clamping Range	Torque	
i	16	1.693	0.945	0.079 - 0.630	73.8 lb-ft	068048
	25	2.362	1.181	0.079 - 0.984	123.8 lb-ft	068052
	32	2.835	1.319	0.157 - 1.260	162.3 lb-ft	161099
m	16	43.00	24.00	2.00 - 16.00	100 Nm	068048
	25	60.00	30.00	2.00 - 25.00	180 Nm	068052
	32	72.00	33.50	4.00 - 32.00	220 Nm	161099



Clamping Nuts for Sealing Discs: DIN 6388 / ISO 10897 - 1:10

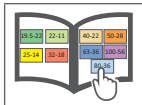
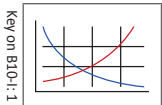
	Nominal Size	Clamping Nut				Part No.
		D_1	L_1	Clamping Range	Torque	
i	16	1.693	1.240	0.079 - 0.591	73.8 lb-ft	275001
	25	2.362	1.496	0.079 - 0.984	123.8 lb-ft	275003
	32	2.835	1.654	0.157 - 1.260	162.3 lb-ft	276001
m	16	43.00	31.50	2.00 - 16.00	100 Nm	275001
	25	60.00	38.00	2.00 - 25.00	180 Nm	275003
	32	72.00	42.00	4.00 - 32.00	220 Nm	276001



NOTE: with ball-bearing, for use with sealing discs

B10-M: 12-15

B10: vi-vii



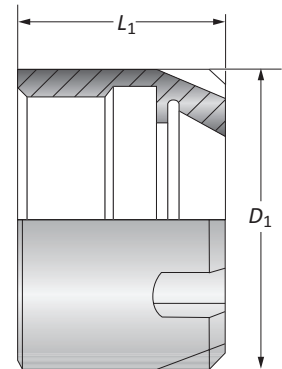
i = Imperial (in)
m = Metric (mm)

Accessories for Collet Chucks: ISO 10897 (DIN 6388)

Clamping Nuts

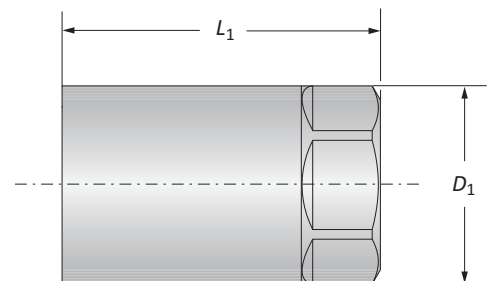
Mini Clamping Nuts

	Nominal Size	Clamping Nut				Part No.
		D_1	L_1	Clamping Range	Torque	
i	ER 08	0.472	0.425	0.039 - 0.157	5.9 lb-ft	415357
	ER 11	0.630	0.472	0.039 - 0.276	11.8 lb-ft	415358
	ER 16	0.866	0.709	0.039 - 0.394	18.4 lb-ft	415359
m	ER 08	12.00	10.80	1.00 - 4.00	8 Nm	415357
	ER 11	16.00	12.00	1.00 - 7.00	16 Nm	415358
	ER 16	22.00	18.00	1.00 - 10.00	25 Nm	415359

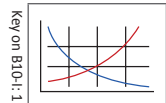


Clamping Nuts for Erickson Collet Chuck System

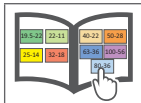
	Nominal Size	Clamping Nut			Part No.
		D_1	L_1	Clamping Range	
i	6	0.551	1.102	0.039 - 0.256	162095
	10	0.827	1.417	0.039 - 0.394	162093
m	6	14.00	28.00	1.00 - 6.50	162095
	10	21.00	36.00	1.00 - 10.00	162093



B10-M: 12-15



B10: vi-vii



i = Imperial (in)
m = Metric (mm)

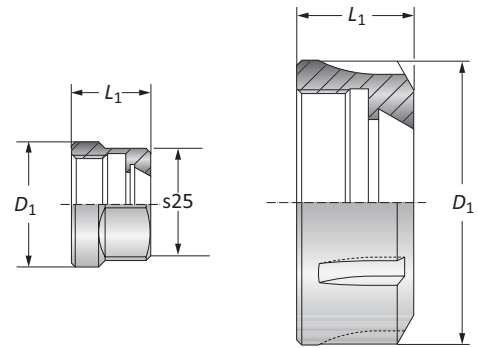
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Accessories for Collet Chucks: ISO 15488 (DIN 6499)

Clamping Nuts

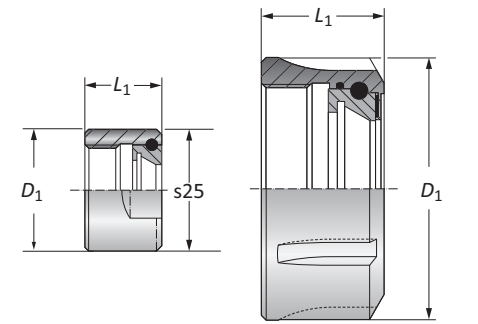
One Piece Clamping Nuts: DIN 6499 / ISO 15488 - 8°

	Nominal Size	Clamping Nut				Part No.
		D_1	L_1	Clamping Range	Torque	
i	ER 16	1.102	0.689	0.039 - 0.394	44.3 lb-ft	215922
	ER 25	1.654	0.787	0.079 - 0.630	73.8 lb-ft	215924
	ER 32	1.969	0.886	0.079 - 0.787	103.3 lb-ft	215925
	ER 40	2.480	1.004	0.157 - 1.024	132.8 lb-ft	215926
m	ER 16	28.00	17.50	1.00 - 10.00	60Nm	215922
	ER 25	42.00	20.00	2.00 - 16.00	100Nm	215924
	ER 32	50.00	22.50	2.00 - 20.00	140Nm	215925
	ER 40	63.00	25.50	4.00 - 26.00	180Nm	215926



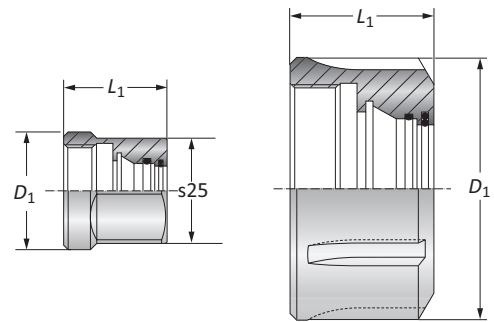
Clamping Nuts with Sliding Ring: DIN 6499 / ISO 15488 - 8°

	Nominal Size	Clamping Nut				Part No.
		D_1	L_1	Clamping Range	Torque	
i	ER 16	1.102	0.984	0.039 - 0.394	44.3 lb-ft	315015
	ER 25	1.654	1.083	0.079 - 0.630	73.8 lb-ft	315016
	ER 32	1.969	1.201	0.079 - 0.787	103.3 lb-ft	315017
	ER 40	2.480	1.339	0.157 - 1.024	132.8 lb-ft	315018
m	ER 16	28.00	20.30	1.00 - 10.00	60Nm	315015
	ER 25	42.00	22.40	2.00 - 16.00	100Nm	315016
	ER 32	50.00	25.00	2.00 - 20.00	140Nm	315017
	ER 40	63.00	28.30	4.00 - 26.00	180Nm	315018



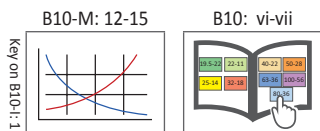
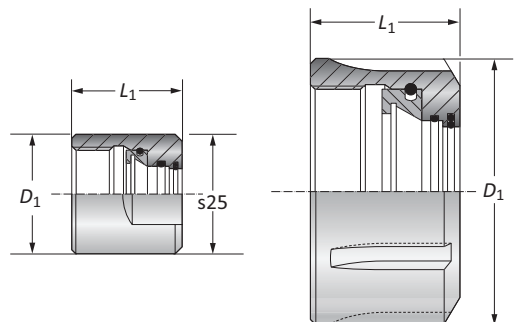
One Piece Clamping Nuts for use with Sealing Disks: DIN 6499 / ISO 15488 - 8°

	Nominal Size	Clamping Nut				Part No.
		D_1	L_1	Clamping Range	Torque	
i	ER 16	1.102	0.984	0.039 - 0.394	44.3 lb-ft	277001
	ER 25	1.654	1.083	0.079 - 0.630	73.8 lb-ft	277005
	ER 32	1.969	1.201	0.079 - 0.787	103.3 lb-ft	277007
	ER 40	2.480	1.339	0.157 - 1.024	132.8 lb-ft	278001
m	ER 16	28.00	25.00	1.00 - 10.00	60Nm	277001
	ER 25	42.00	27.50	2.00 - 16.00	100Nm	277005
	ER 32	50.00	30.50	2.00 - 20.00	140Nm	277007
	ER 40	63.00	34.00	4.00 - 26.00	180Nm	278001



Clamping Nuts with Sliding Ring for use with Sealing Disks: DIN 6499 / ISO 15488 - 8°

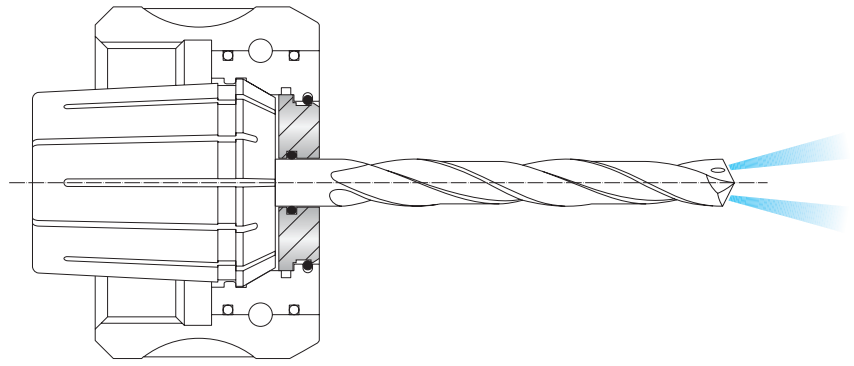
	Nominal Size	Clamping Nuts : ISO 15488 (DIN 6499)				Part No.
		D_1	L_1	Clamping Range	Torque	
i	ER 16	1.102	0.984	0.039 - 0.394	44.3 lb-ft	277002
	ER 25	1.654	1.122	0.079 - 0.630	73.8 lb-ft	277006
	ER 32	1.969	1.240	0.079 - 0.787	103.3 lb-ft	277008
	ER 40	2.480	1.378	0.157 - 1.024	132.8 lb-ft	278002
m	ER 16	28.00	25.00	1.00 - 10.00	60Nm	277002
	ER 25	42.00	28.50	2.00 - 16.00	100Nm	277006
	ER 32	50.00	31.50	2.00 - 20.00	140Nm	277008
	ER 40	63.00	35.00	4.00 - 26.00	180Nm	278002



i = Imperial (in)
m = Metric (mm)

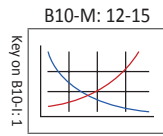
Sealing Disks for Collet Chucks: ISO 10897 (DIN 6388)

Imperial



Nominal Size	Sealing Disk		Sealing Disk		Sealing Disk		Sealing Disk	
	Diameter	Part No.	Diameter	Part No.	Diameter	Part No.	Diameter	Part No.
16	0.098 - 0.118	275010	0.236 - 0.256	275017	0.374 - 0.394	275024	0.512 - 0.531	275031
16	0.118 - 0.138	275011	0.256 - 0.276	275018	0.394 - 0.413	275025	0.531 - 0.551	275032
16	0.138 - 0.157	275012	0.276 - 0.295	275019	0.413 - 0.433	275026	0.551 - 0.571	275033
16	0.157 - 0.177	275013	0.295 - 0.315	275020	0.433 - 0.453	275027	0.571 - 0.591	275034
16	0.177 - 0.197	275014	0.315 - 0.335	275021	0.453 - 0.472	275028	0.591 - 0.610	275035
16	0.197 - 0.217	275015	0.335 - 0.354	275022	0.472 - 0.492	275029	0.610 - 0.630	275036
16	0.217 - 0.236	275016	0.354 - 0.374	275023	0.492 - 0.512	275030	-	-
25	0.098 - 0.118	275040	0.335 - 0.354	275052	0.571 - 0.591	275064	0.807 - 0.827	275076
25	0.118 - 0.138	275041	0.354 - 0.374	275053	0.591 - 0.610	275065	0.807 - 0.846	275077
25	0.138 - 0.157	275042	0.374 - 0.394	275054	0.610 - 0.630	275066	0.846 - 0.866	275078
25	0.157 - 0.177	275043	0.394 - 0.413	275055	0.630 - 0.650	275067	0.866 - 0.886	275079
25	0.177 - 0.197	275044	0.413 - 0.433	275056	0.650 - 0.669	275068	0.886 - 0.906	275080
25	0.197 - 0.217	275045	0.433 - 0.453	275057	0.669 - 0.689	275069	0.906 - 0.925	275081
25	0.217 - 0.236	275046	0.453 - 0.472	275058	0.689 - 0.709	275070	0.925 - 0.945	275082
25	0.236 - 0.256	275047	0.472 - 0.492	275059	0.709 - 0.728	275071	0.945 - 0.965	275083
25	0.256 - 0.276	275048	0.492 - 0.512	275060	0.728 - 0.748	275072	0.965 - 0.984	275084
25	0.276 - 0.295	275049	0.512 - 0.531	275061	0.748 - 0.768	275073	-	-
25	0.295 - 0.315	275050	0.531 - 0.551	275062	0.768 - 0.787	275074	-	-
25	0.315 - 0.335	275051	0.551 - 0.571	275063	0.787 - 0.807	275075	-	-
32	0.138 - 0.157	276005	0.433 - 0.453	276020	0.728 - 0.748	276035	1.024 - 1.043	276050
32	0.157 - 0.177	276006	0.453 - 0.472	276021	0.748 - 0.768	276036	1.043 - 1.063	276051
32	0.177 - 0.197	276007	0.472 - 0.492	276022	0.768 - 0.787	276037	1.063 - 1.102	276052
32	0.197 - 0.217	276008	0.492 - 0.512	276023	0.787 - 0.807	276038	1.063 - 1.102	276053
32	0.217 - 0.236	276009	0.512 - 0.531	276024	0.807 - 0.827	276039	1.102 - 1.102	276054
32	0.236 - 0.256	276010	0.531 - 0.551	276025	0.827 - 0.846	276040	1.122 - 1.142	276055
32	0.256 - 0.276	276011	0.551 - 0.571	276026	0.846 - 0.866	276041	1.142 - 1.161	276056
32	0.276 - 0.295	276012	0.571 - 0.591	276027	0.866 - 0.886	276042	1.161 - 1.181	276057
32	0.295 - 0.315	276013	0.591 - 0.610	276028	0.886 - 0.906	276043	1.181 - 1.201	276058
32	0.315 - 0.335	276014	0.610 - 0.630	276029	0.906 - 0.925	276044	1.201 - 1.220	276059
32	0.335 - 0.354	276015	0.630 - 0.650	276030	0.925 - 0.945	276045	1.220 - 1.240	276060
32	0.354 - 0.374	276016	0.650 - 0.669	276031	0.945 - 0.965	276046	1.240 - 1.260	276061
32	0.374 - 0.394	276017	0.669 - 0.689	276032	0.965 - 0.984	276047	-	-
32	0.394 - 0.413	276018	0.669 - 0.709	276033	0.984 - 1.004	276048	-	-
32	0.413 - 0.433	276019	0.709 - 0.728	276034	1.004 - 1.024	276049	-	-

i

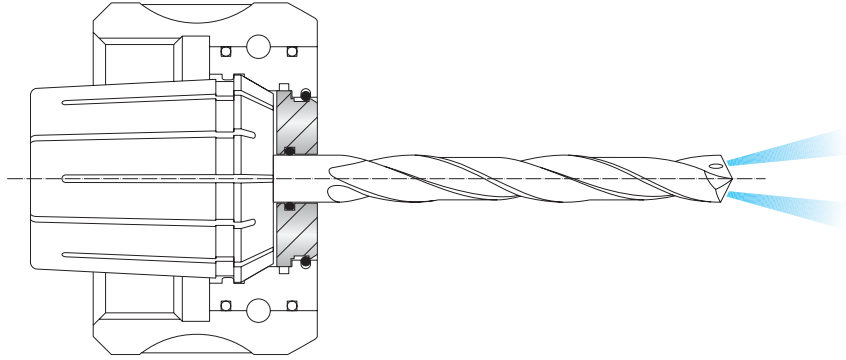


i = Imperial (in)
m = Metric (mm)

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Sealing Disks for Collet Chucks: ISO 10897 (DIN 6388)

Metric



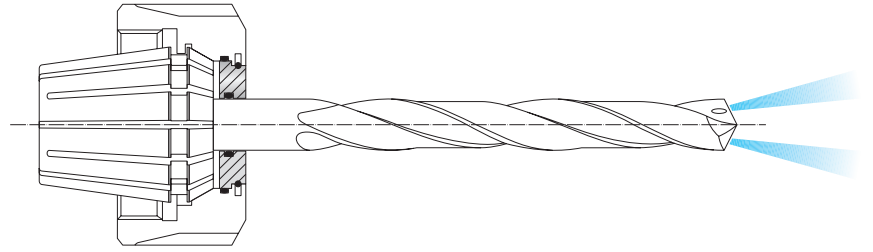
Nominal Size	Sealing Disk		Sealing Disk		Sealing Disk		Sealing Disk	
	Diameter	Part No.	Diameter	Part No.	Diameter	Part No.	Diameter	Part No.
16	2.50 - 3.00	275010	6.00 - 6.50	275017	9.50 - 10.00	275024	13.00 - 13.50	275031
16	3.00 - 3.50	275011	6.50 - 7.00	275018	10.00 - 10.50	275025	13.50 - 14.00	275032
16	3.50 - 4.00	275012	7.00 - 7.50	275019	10.50 - 11.00	275026	14.00 - 14.50	275033
16	4.00 - 4.50	275013	7.50 - 8.00	275020	11.00 - 11.50	275027	14.50 - 15.00	275034
16	4.50 - 5.00	275014	8.00 - 8.50	275021	11.50 - 12.00	275028	15.00 - 15.50	275035
16	5.00 - 5.50	275015	8.50 - 9.00	275022	12.00 - 12.50	275029	15.50 - 16.00	275036
16	5.50 - 6.00	275016	9.00 - 9.50	275023	12.50 - 13.00	275030	-	-
25	2.50 - 3.00	275040	8.50 - 9.00	275052	14.50 - 15.00	275064	20.50 - 21.00	275076
25	3.00 - 3.50	275041	9.00 - 9.50	275053	15.00 - 15.50	275065	21.00 - 21.50	275077
25	3.50 - 4.00	275042	9.50 - 10.00	275054	15.50 - 16.00	275066	21.50 - 22.00	275078
25	4.00 - 4.50	275043	10.00 - 10.50	275055	16.00 - 16.50	275067	22.00 - 22.50	275079
25	4.50 - 5.00	275044	10.50 - 11.00	275056	16.50 - 17.00	275068	22.50 - 23.00	275080
25	5.00 - 5.50	275045	11.00 - 11.50	275057	17.00 - 17.50	275069	23.00 - 23.50	275081
25	5.50 - 6.00	275046	11.50 - 12.00	275058	17.50 - 18.00	275070	23.50 - 24.00	275082
25	6.00 - 6.50	275047	12.00 - 12.50	275059	18.00 - 18.50	275071	24.00 - 24.50	275083
25	6.50 - 7.00	275048	12.50 - 13.00	275060	18.50 - 19.00	275072	24.50 - 25.00	275084
25	7.00 - 7.50	275049	13.00 - 13.50	275061	19.00 - 19.50	275073	-	-
25	7.50 - 8.00	275050	13.50 - 14.00	275062	19.50 - 20.00	275074	-	-
25	8.00 - 8.50	275051	14.00 - 14.50	275063	20.00 - 20.50	275075	-	-
32	3.50 - 4.00	276005	11.00 - 11.50	276020	18.50 - 19.00	276035	26.00 - 26.50	276050
32	4.00 - 4.50	276006	11.50 - 12.00	276021	19.00 - 19.50	276036	26.50 - 27.00	276051
32	4.50 - 5.00	276007	12.00 - 12.50	276022	19.50 - 20.00	276037	27.50 - 28.00	276052
32	5.00 - 5.50	276008	12.50 - 13.00	276023	20.00 - 20.50	276038	27.50 - 28.00	276053
32	5.50 - 6.00	276009	13.00 - 13.50	276024	20.50 - 21.00	276039	28.00 - 28.50	276054
32	6.00 - 6.50	276010	13.50 - 14.00	276025	21.00 - 21.50	276040	28.50 - 29.00	276055
32	6.50 - 7.00	276011	14.00 - 14.50	276026	21.50 - 22.00	276041	29.00 - 29.50	276056
32	7.00 - 7.50	276012	14.50 - 15.00	276027	22.00 - 22.50	276042	29.50 - 30.00	276057
32	7.50 - 8.00	276013	15.00 - 15.50	276028	22.50 - 23.00	276043	30.00 - 30.50	276058
32	8.00 - 8.50	276014	15.50 - 16.00	276029	23.00 - 23.50	276044	30.50 - 31.00	276059
32	8.50 - 9.00	276015	16.00 - 16.50	276030	23.50 - 24.00	276045	31.00 - 31.50	276060
32	9.00 - 9.50	276016	16.50 - 17.00	276031	24.00 - 24.50	276046	31.50 - 32.00	276061
32	9.50 - 10.00	276017	17.00 - 17.50	276032	24.50 - 25.00	276047	-	-
32	10.00 - 10.50	276018	17.50 - 18.00	276033	25.00 - 25.50	276048	-	-
32	10.50 - 11.00	276019	18.00 - 18.50	276034	25.50 - 26.00	276049	-	-

B10-M: 12-15 B10: vi-vii

i = Imperial (in)
m = Metric (mm)

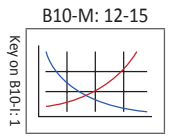
Sealing Disks Collet Chucks: ISO 15488 (DIN 6499)

Imperial



Nominal Size	Sealing Disk		Sealing Disk		Sealing Disk		Sealing Disk	
	Diameter	Part No.	Diameter	Part No.	Diameter	Part No.	Diameter	Part No.
ER 16	0.098 - 0.118	277010	0.177 - 0.197	277014	0.256 - 0.276	277018	0.335 - 0.354	277022
ER 16	0.117 - 0.138	277011	0.197 - 0.217	277015	0.276 - 0.295	277019	0.354 - 0.374	277023
ER 16	0.138 - 0.157	277012	0.217 - 0.236	277016	0.295 - 0.315	277020	0.374 - 0.394	277024
ER 16	0.157 - 0.177	277013	0.236 - 0.256	277017	0.315 - 0.335	277021	–	–
ER 25	0.098 - 0.118	277025	0.236 - 0.256	277032	0.374 - 0.394	277039	0.512 - 0.531	277046
ER 25	0.118 - 0.138	277026	0.256 - 0.276	277033	0.394 - 0.413	277040	0.531 - 0.551	277047
ER 25	0.138 - 0.157	277027	0.276 - 0.295	277034	0.413 - 0.433	277041	0.551 - 0.571	277048
ER 25	0.157 - 0.177	277028	0.295 - 0.315	277035	0.433 - 0.453	277042	0.571 - 0.591	277049
ER 25	0.177 - 0.197	277029	0.315 - 0.335	277036	0.453 - 0.472	277043	0.591 - 0.610	277050
ER 25	0.197 - 0.217	277030	0.335 - 0.354	277037	0.472 - 0.492	277044	0.610 - 0.630	277051
ER 25	0.217 - 0.236	277031	0.354 - 0.374	277038	0.492 - 0.512	277045	–	–
ER 32	0.098 - 0.118	277055	0.276 - 0.295	277064	0.453 - 0.472	277073	0.630 - 0.650	277082
ER 32	0.118 - 0.138	277056	0.295 - 0.315	277065	0.472 - 0.492	277074	0.650 - 0.669	277083
ER 32	0.138 - 0.157	277057	0.315 - 0.335	277066	0.492 - 0.512	277075	0.669 - 0.689	277084
ER 32	0.157 - 0.177	277058	0.335 - 0.354	277067	0.512 - 0.531	277076	0.689 - 0.709	277085
ER 32	0.177 - 0.197	277059	0.354 - 0.374	277068	0.531 - 0.551	277077	0.709 - 0.728	277086
ER 32	0.197 - 0.217	277060	0.374 - 0.394	277069	0.551 - 0.571	277078	0.728 - 0.748	277087
ER 32	0.217 - 0.236	277061	0.394 - 0.413	277070	0.571 - 0.591	277079	0.748 - 0.768	277088
ER 32	0.236 - 0.256	277062	0.413 - 0.433	277071	0.591 - 0.610	277080	0.768 - 0.787	277089
ER 32	0.256 - 0.276	277063	0.433 - 0.453	277072	0.610 - 0.630	277081	–	–
ER 40	0.098 - 0.118	278005	0.335 - 0.354	278017	0.571 - 0.591	278029	0.807 - 0.827	278041
ER 40	0.118 - 0.138	278006	0.354 - 0.374	278018	0.591 - 0.610	278030	0.827 - 0.846	278042
ER 40	0.138 - 0.157	278007	0.374 - 0.394	278019	0.610 - 0.630	278031	0.846 - 0.866	278043
ER 40	0.157 - 0.177	278008	0.394 - 0.413	278020	0.630 - 0.650	278032	0.866 - 0.886	278044
ER 40	0.177 - 0.197	278009	0.413 - 0.433	278021	0.650 - 0.669	278033	0.866 - 0.906	278045
ER 40	0.197 - 0.217	278010	0.433 - 0.453	278022	0.669 - 0.689	278034	0.906 - 0.925	278046
ER 40	0.217 - 0.236	278011	0.453 - 0.472	278023	0.689 - 0.709	278035	0.925 - 0.945	278047
ER 40	0.236 - 0.256	278012	0.472 - 0.492	278024	0.709 - 0.728	278036	0.945 - 0.965	278048
ER 40	0.256 - 0.276	278013	0.492 - 0.512	278025	0.728 - 0.748	278037	0.965 - 0.984	278049
ER 40	0.276 - 0.295	278014	0.512 - 0.531	278026	0.748 - 0.768	278038	0.984 - 1.004	278050
ER 40	0.295 - 0.315	278015	0.531 - 0.551	278027	0.768 - 0.787	278039	1.004 - 1.024	278051
ER 40	0.315 - 0.335	278016	0.551 - 0.571	278028	0.787 - 0.807	278040	–	–

i

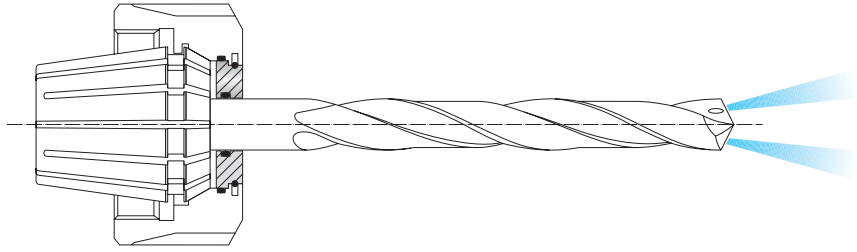


i = Imperial (in)
m = Metric (mm)

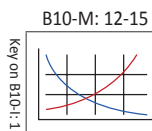
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Sealing Disks Collet Chucks: ISO 15488 (DIN 6499)

Metric



Nominal Size	Sealing Disk		Sealing Disk		Sealing Disk		Sealing Disk	
	Diameter	Part No.	Diameter	Part No.	Diameter	Part No.	Diameter	Part No.
ER 16	2.50 - 3.00	277010	4.50 - 5.00	277014	6.50 - 7.00	277018	8.50 - 9.00	277022
ER 16	3.00 - 3.50	277011	5.00 - 5.50	277015	7.00 - 7.50	277019	9.00 - 9.50	277023
ER 16	3.50 - 4.00	277012	5.50 - 6.00	277016	7.50 - 8.00	277020	9.50 - 10.00	277024
ER 16	4.00 - 4.50	277013	6.00 - 6.50	277017	8.00 - 8.50	277021	-	-
ER 25	2.50 - 3.00	277025	6.00 - 6.50	277032	9.50 - 10.00	277039	13.00 - 13.50	277046
ER 25	3.00 - 3.50	277026	6.50 - 7.00	277033	10.00 - 10.50	277040	13.50 - 14.00	277047
ER 25	3.50 - 4.00	277027	7.00 - 7.50	277034	10.50 - 11.00	277041	14.00 - 14.50	277048
ER 25	4.00 - 4.50	277028	7.50 - 8.00	277035	11.00 - 11.50	277042	14.50 - 15.00	277049
ER 25	4.50 - 5.00	277029	8.00 - 8.50	277036	11.50 - 12.00	277043	15.00 - 15.50	277050
ER 25	5.00 - 5.50	277030	8.50 - 9.00	277037	12.00 - 12.50	277044	15.50 - 16.00	277051
ER 25	5.50 - 6.00	277031	9.00 - 9.50	277038	12.50 - 13.00	277045	-	-
ER 32	2.50 - 3.00	277055	7.00 - 7.50	277064	11.50 - 12.00	277073	16.00 - 16.50	277082
ER 32	3.00 - 3.50	277056	7.50 - 8.00	277065	12.00 - 12.50	277074	16.50 - 17.00	277083
ER 32	3.50 - 4.00	277057	8.00 - 8.50	277066	12.50 - 13.00	277075	17.00 - 17.50	277084
ER 32	4.00 - 4.50	277058	8.50 - 9.00	277067	13.00 - 13.50	277076	17.50 - 18.00	277085
^m ER 32	4.50 - 5.00	277059	9.00 - 9.50	277068	13.50 - 14.00	277077	18.00 - 18.50	277086
ER 32	5.00 - 5.50	277060	9.50 - 10.00	277069	14.00 - 14.50	277078	18.50 - 19.00	277087
ER 32	5.50 - 6.00	277061	10.00 - 10.50	277070	14.50 - 15.00	277079	19.00 - 19.50	277088
ER 32	6.00 - 6.50	277062	10.50 - 11.00	277071	15.00 - 15.50	277080	19.50 - 20.00	277089
ER 32	6.50 - 7.00	277063	11.00 - 11.50	277072	15.50 - 16.00	277081	-	-
ER 40	2.50 - 3.00	278005	8.50 - 9.00	278017	14.50 - 15.00	278029	20.50 - 21.00	278041
ER 40	3.00 - 3.50	278006	9.00 - 9.50	278018	15.00 - 15.50	278030	21.00 - 21.50	278042
ER 40	3.50 - 4.00	278007	9.50 - 10.00	278019	15.50 - 16.00	278031	21.50 - 22.00	278043
ER 40	4.00 - 4.50	278008	10.00 - 10.50	278020	16.00 - 16.50	278032	22.00 - 22.50	278044
ER 40	4.50 - 5.00	278009	10.50 - 11.00	278021	16.50 - 17.00	278033	22.50 - 23.00	278045
ER 40	5.00 - 5.50	278010	11.00 - 11.50	278022	17.00 - 17.50	278034	23.00 - 23.50	278046
ER 40	5.50 - 6.00	278011	11.50 - 12.00	278023	17.50 - 18.00	278035	23.50 - 24.00	278047
ER 40	6.00 - 6.50	278012	12.00 - 12.50	278024	18.00 - 18.50	278036	24.00 - 24.50	278048
ER 40	6.50 - 7.00	278013	12.50 - 13.00	278025	18.50 - 19.00	278037	24.50 - 25.00	278049
ER 40	7.00 - 7.50	278014	13.00 - 13.50	278026	19.00 - 19.50	278038	25.00 - 25.50	278050
ER 40	7.50 - 8.00	278015	13.50 - 14.00	278027	19.50 - 20.00	278039	25.50 - 26.00	278051
ER 40	8.00 - 8.50	278016	14.00 - 14.50	278028	20.00 - 20.50	278040	-	-

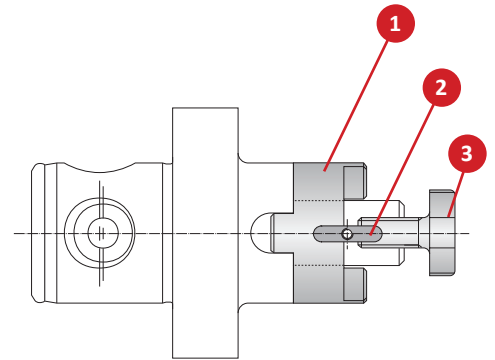


ⁱ = Imperial (in)
^m = Metric (mm)

Accessories for Milling Machine Arbors

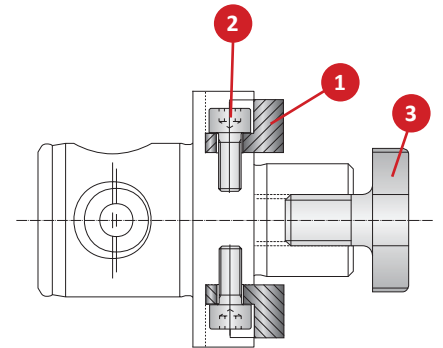
Accessories for Milling Machine Arbors

Shell-Mill Adapter	Part No.		
	1 Clutch Drive Ring	2 Axial Drive Key	3 Retaining Screw
13	115708	115709	115707
16	115696	215608	115697
22	115341	215609	115345
27	115342	215610	115346
32	115343	215611	115347
40	115344	215612	115348



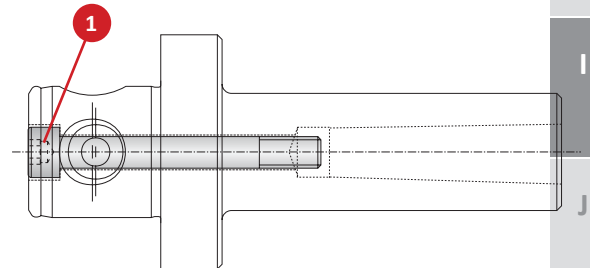
Accessories for Milling Machine Arbors

Shell-Mill Adapter	Part No.		
	1 Drive Key	2 Cap Screw	3 Retaining Screw
16	215701	115566	115697
22	215702	108109	115345
27	215703	108109	115346
32	215704	115147	115347
40	215705	116152	115348
60	115643	115237	-

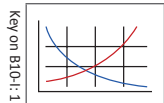


Accessories for Holding Arbors

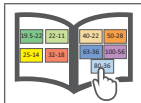
Adapter Sleeves	Part No.	
	1 Cap Screw	Service Key
209022	115929	s5
209023	115930	s7
209024	115932	s8
209025	115933	s5
209026	115169	s8
209027	115934	s10
209028	115936	s12



B10-M: 12-15



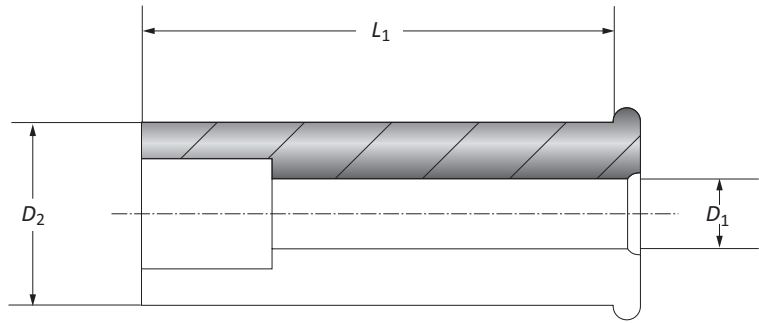
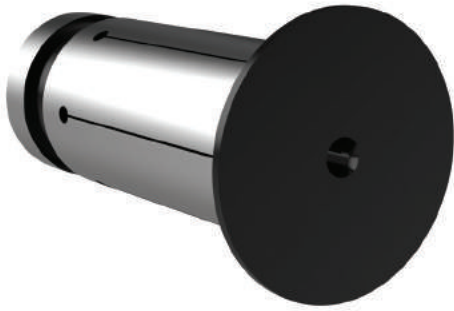
B10: vi-vii



i = Imperial (in)
m = Metric (mm)

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Reducing Sleeves for Hydraulic Clamping Chucks



	Nominal Size	Reducing Sleeve		Part No.
	D_2	D_1	L_1	
	0.787	0.118	1.988	271045
	0.787	0.157	1.988	271046
	0.787	0.197	1.988	271047
	0.787	0.236	1.988	271070
	0.787	0.276	1.988	271049
	0.787	0.315	1.988	271004
	0.787	0.354	1.988	271050
	0.787	0.394	1.988	271005
	0.787	0.433	1.988	271051
	0.787	0.472	1.988	271073
	0.787	0.512	1.988	271052
	0.787	0.551	1.988	271074
	0.787	0.591	1.988	271018
	0.787	0.630	1.988	271008
<hr/>				
	20.00	3.00	50.50	271045
	20.00	4.00	50.50	271046
	20.00	5.00	50.50	271047
	20.00	6.00	50.50	271070
	20.00	7.00	50.50	271049
	20.00	8.00	50.50	271004
	20.00	9.00	50.50	271050
	20.00	10.00	50.50	271005
	20.00	11.00	50.50	271051
	20.00	12.00	50.50	271073
	20.00	13.00	50.50	271052
	20.00	14.00	50.50	271074
	20.00	15.00	50.50	271018
	20.00	16.00	50.50	271008

NOTE: For cylindrical shanks with shank tolerance h6 for clamping diameter 3 mm and 8 mm and with shank tolerance h7 for clamping diameter 10 mm - 32 mm.
NOTE: Reduction sleeve with adjustable stop.

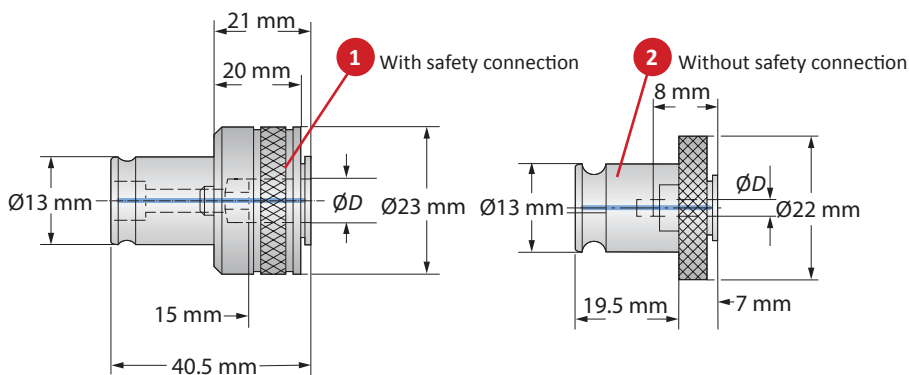
B10-M: 12-15 B10: vi-vii

Key on B10-I: 1

i = Imperial (in)
m = Metric (mm)



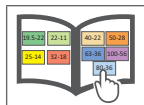
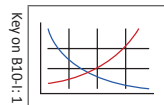
Quick Change Adapters



Shank Dimensions		Quick Change Adapter								Part No.		
Nominal Size	D x Square Shank	DIN 352	DIN 353	DIN 371	DIN 374	DIN 376	DIN 2182	DIN 2183	Torque Setting	1	2	
i	0	0.083 x 0.098	M 1	–	M 1	–	M 3.5	1/16"	–	1.5 - 2	233070	K24358
	0	0.083 x 0.110	M 2	–	M 2	M 4	M 4	3/32"	5/32"	2 - 3	233071	K24276
	0	0.106 x 0.138	M 3	–	M 3	M 5	M 5	1/8"	–	4 - 6	233072	K24277
	0	0.118 x 0.157	M 3.5	–	M 3.5	–	–	–	–	1.5 - 2	233073	K24278
	0	0.138 x 0.177	M 4	–	M 4	M 6	M 6	5/32"	1/4"	6 - 9	233074	K24279
	0	0.193 x 0.236	M 8	–	–	M 8	M 8	–	–	16 - 21	233075	K24280
	0	0.217 x 0.276	M 10	G 1/8"	–	M 10	M 10	1/4"	3/8"	27 - 32	233076	K24281
	0	0.244 x 0.315	–	–	M 8	–	–	5/16"	7/16"	16 - 21	233077	K24391
m	0	2.10 x 2.50	M 1	–	M 1	–	M 3.5	1/16"	–	1.5 - 2	233070	K24358
	0	2.10 x 2.80	M 2	–	M 2	M 4	M 4	3/32"	5/32"	2 - 3	233071	K24276
	0	2.70 x 3.50	M 3	–	M 3	M 5	M 5	1/8"	–	4 - 6	233072	K24277
	0	3.00 x 4.00	M 3.5	–	M 3.5	–	–	–	–	1.5 - 2	233073	K24278
	0	3.40 x 4.50	M 4	–	M 4	M 6	M 6	5/32"	1/4"	6 - 9	233074	K24279
	0	4.90 x 6.00	M 8	–	–	M 8	M 8	–	–	16 - 21	233075	K24280
	0	5.50 x 7.00	M 10	G 1/8"	–	M 10	M 10	1/4"	3/8"	27 - 32	233076	K24281
	0	6.20 x 8.00	–	–	M 8	–	–	5/16"	7/16"	16 - 21	233077	K24391

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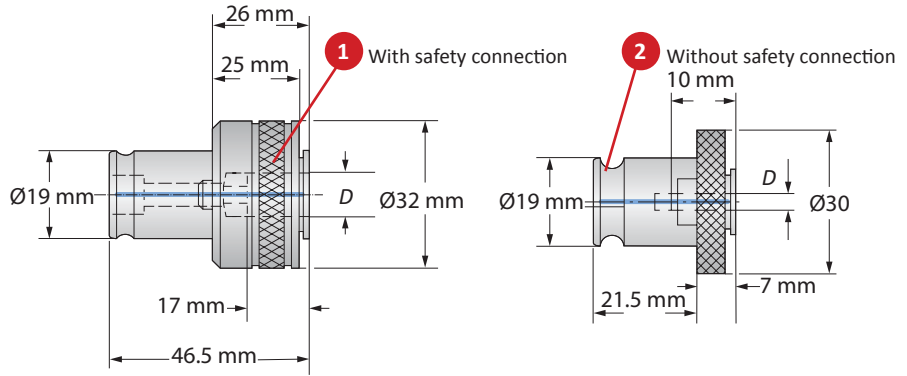
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i = Imperial (in)
m = Metric (mm)

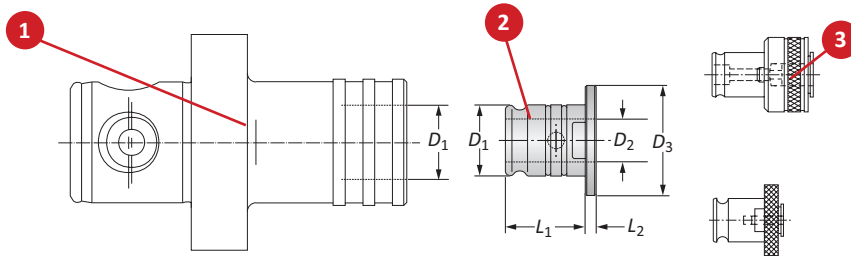
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Quick Change Adapters



Quick Change Adapters

Shank Dimensions		Quick Change Adapter								Part No.	
Nominal Size	D x Square Shank	DIN 352	DIN 353	DIN 371	DIN 374	DIN 376	DIN 2182	DIN 2183	Torque Setting	1	2
1	0.083 x 0.110	M 2	-	M 2.8	M 4	M 4	3/32"	5/32"	2 - 3	K17847	K23259
1	0.106 x 0.138	M 3	-	M 3.5	M 5	M 5	1/8"	-	4 - 6	233001	K18455
1	0.118 x 0.157	M 3.5	-	M 3.5	-	-	-	-	1.5 - 2	233002	K22439
1	0.134 x 0.177	M 4	-	M 4	M 6	M 6	5/32"	1/4"	6 - 9	233003	K16414
1	0.193 x 0.236	M 8	-	-	M 8	M 8	-	-	16 - 21	233004	K16415
1	0.217 x 0.276	M 10	-	-	M 10	M 10	1/4"	3/8"	27 - 32	233005	K16418
1	0.244 x 0.315	-	G 7/8"	M 8	-	-	5/16"	7/16"	16 - 21	233006	K16416
1	0.276 x 0.354	M 12	-	-	M 12	M 12	3/8"	1/2"	37 - 44	233007	K18454
1	0.315 x 0.394	-	-	M 10	-	-	-	-	27 - 32	233008	K16417
1	0.354 x 0.433	M 14	G 1"	-	M 14	M 14	-	9/16"	50 - 53	233009	K22440
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1	2.10 x 2.80	M 2	-	M 2.8	M 4	M 4	3/32"	5/32"	2 - 3	K17847	K23259
1	2.70 x 3.50	M 3	-	M 3.5	M 5	M 5	1/8"	-	4 - 6	233001	K18455
1	3.00 x 4.00	M 3.5	-	M 3.5	-	-	-	-	1.5 - 2	233002	K22439
1	3.40 x 4.50	M 4	-	M 4	M 6	M 6	5/32"	1/4"	6 - 9	233003	K16414
1	4.90 x 6.00	M 8	-	-	M 8	M 8	-	-	16 - 21	233004	K16415
1	5.50 x 7.00	M 10	-	-	M 10	M 10	1/4"	3/8"	27 - 32	233005	K16418
1	6.20 x 8.00	-	G 7/8"	M 8	-	-	5/16"	7/16"	16 - 21	233006	K16416
1	7.00 x 9.00	M 12	-	-	M 12	M 12	3/8"	1/2"	37 - 44	233007	K18454
1	8.00 x 10.00	-	-	M 10	-	-	-	-	27 - 32	233008	K16417
1	9.00 x 11.00	M 14	G 1"	-	M 14	M 14	-	9/16"	50 - 53	233009	K22440

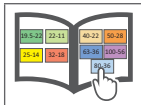
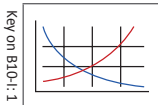


Reducers for Quick Change Adapters

1 Tapping Chuck		2 Quick Change Adapter		3. Reducer						Weight	Part No.
Nominal Size	D ₁	Nominal Size	D ₁	D ₁	D ₂	D ₃	L ₁	L ₂			
1	0.748	0	0.512	0.748	0.512	1.181	0.846	0.157	0.264 (lbs)	161038	
2	1.220	1	0.748	1.220	0.748	1.890	1.378	0.197	1.058 (lbs)	162094	
<hr/>											
1	19.00	0	13.00	19.00	13.00	30.00	21.50	4.00	0.12 (kg)	161038	
2	31.00	1	19.00	31.00	19.00	48.00	35.00	5.00	0.48 (kg)	162094	

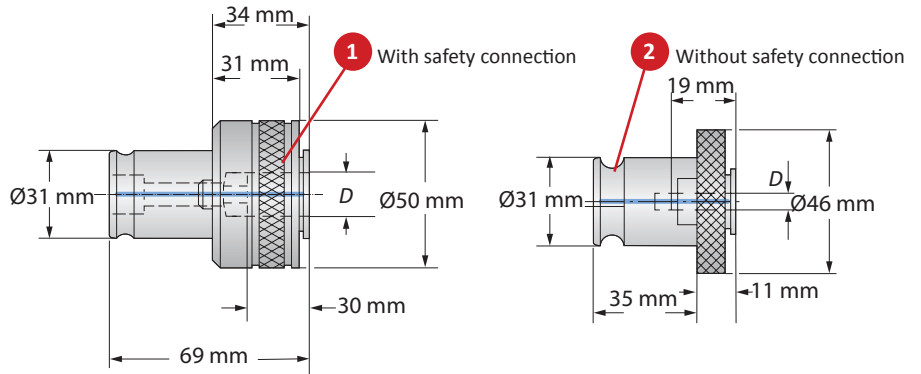
B10-M: 12-15

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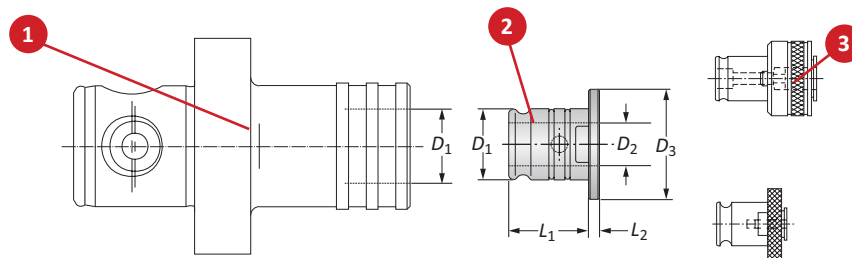
i = Imperial (in)
m = Metric (mm)

Quick Change Adapters



Quick Change Adapters

Shank Dimensions		Quick Change Adapter								Part No.		
Nominal Size	D x Square Shank	DIN 352	DIN 353	DIN 371	DIN 374	DIN 376	DIN 2182	DIN 2183	Torque Setting	1	2	
i	2	0.217 x 0.276	M 10	G 1/8"	-	M 10	M 10	1/4"	3/8"	24 - 32	233020	K15282
	2	0.244 x 0.315	-	-	M 8	-	-	5/16"	7/16"	16 - 21	233021	K15283
	2	0.276 x 0.354	M 12	-	-	M 12	M 12	3/8"	1/2"	37 - 44	233022	K15284
	2	0.315 x 0.394	-	-	M 10	-	-	-	-	27 - 32	233023	K18456
	2	0.354 x 0.433	M 14	G 1/4"	-	M 14	M 14	-	9/16"	50 - 53	233024	K16419
	2	0.354 x 0.472	M 16	G 3/8"	-	M 16	M 16	-	5/8"	55 - 58	233025	K15285
	2	0.433 x 0.551	M 18	-	-	M 18	M 18	-	1 1/16"	85 - 90	233026	K16420
	2	0.472 x 0.630	M 20	G 1/2"	-	M 20	M 20	-	1 3/16"	110 - 115	233027	K15286
2	0.571 x 0.709	M 24	-	-	M 24	M 24	-	1 5/16"	110 - 115	233028	K18457	
m	2	5.50 x 7.00	M 10	G 1/8"	-	M 10	M 10	1/4"	3/8"	24 - 32	233020	K15282
	2	6.20 x 8.00	-	-	M 8	-	-	5/16"	7/16"	16 - 21	233021	K15283
	2	7.00 x 9.00	M 12	-	-	M 12	M 12	3/8"	1/2"	37 - 44	233022	K15284
	2	8.00 x 10.00	-	-	M 10	-	-	-	-	27 - 32	233023	K18456
	2	9.00 x 11.00	M 14	G 1/4"	-	M 14	M 14	-	9/16"	50 - 53	233024	K16419
	2	9.00 x 12.00	M 16	G 3/8"	-	M 16	M 16	-	5/8"	55 - 58	233025	K15285
	2	11.00 x 14.00	M 18	-	-	M 18	M 18	-	1 1/16"	85 - 90	233026	K16420
	2	12.00 x 16.00	M 20	G 1/2"	-	M 20	M 20	-	1 3/16"	110 - 115	233027	K15286
2	14.50 x 18.00	M 24	-	-	M 24	M 24	-	1 5/16"	110 - 115	233028	K18457	

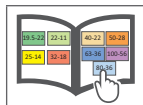
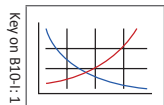


Reducers for Quick Change Adapters

	1 Tapping Chuck		2 Quick Change Adapter		3 Reducer					Weight	Part No.
	Nominal Size	D ₁	Nominal Size	D ₁	D ₁	D ₂	D ₃	L ₁	L ₂		
i	1	0.748	0	0.512	0.748	0.512	1.181	0.846	0.157	0.264 (lbs)	161038
	2	1.220	1	0.748	1.220	0.748	1.890	1.378	0.197	1.058 (lbs)	162094
m	1	19.00	0	13.00	19.00	13.00	30.00	21.50	4.00	0.12 (kg)	161038
	2	31.00	1	19.00	31.00	19.00	48.00	35.00	5.00	0.48 (kg)	162094

B10-M: 12-15

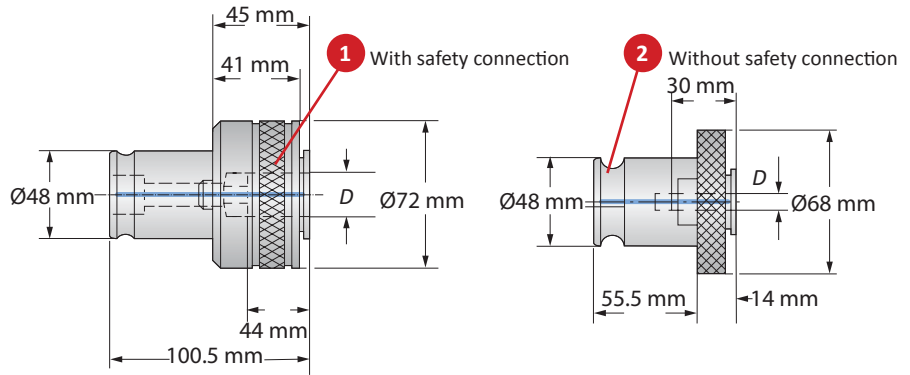
B10: vi-vii



i = Imperial (in)
m = Metric (mm)

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Quick Change Adapters



Shank Dimensions		Quick Change Adapters									Part No.	
Nominal Size	D x Square Shank	DIN 352	DIN 353	DIN 371	DIN 374	DIN 376	DIN 2182	DIN 2183	Torque Setting	1	2	
i	3	0.354 x 0.433	M 14	G 1/4"	-	M 14	M 14	-	9/18"	50 - 53	233040	K22434
	3	0.354 x 0.472	M 16	G 3/8"	-	M 16	M 16	-	5/8"	55 - 58	233041	K22435
	3	0.433 x 0.551	M 18	-	-	M 18	M 18	-	11/16"	85 - 90	233042	K22436
	3	0.472 x 0.630	M 20	G 1/2"	-	M 20	M 20	-	13/18"	100 - 106	233043	K22437
	3	0.571 x 0.709	M 24	-	-	M 24	M 24	-	15/16"	140 - 150	233044	K16421
	3	0.650 x 0.787	M 27	G 3/4"	-	M 27	M 27	-	1"	150 - 160	233045	K16422
	3	0.709 x 0.866	M 30	G 7/8"	-	M 30	M 30	-	1 1/8"	240 - 250	233046	K16423
	3	0.866 x 0.984	M 33	G 1"	-	M 33	M 33	-	1 1/4"	260 - 270	233047	K16424
	3	0.866 x 1.102	M 36	G 1 1/8"	-	M 36	M 36	-	1 3/8"	260 - 270	233048	K22438
m	3	9.00 x 11.00	M 14	G 1/4"	-	M 14	M 14	-	9/18"	50 - 53	233040	K22434
	3	9.00 x 12.00	M 16	G 3/8"	-	M 16	M 16	-	5/8"	55 - 58	233041	K22435
	3	11.00 x 14.00	M 18	-	-	M 18	M 18	-	11/16"	85 - 90	233042	K22436
	3	12.00 x 16.00	M 20	G 1/2"	-	M 20	M 20	-	13/18"	100 - 106	233043	K22437
	3	14.50 x 18.00	M 24	-	-	M 24	M 24	-	15/16"	140 - 150	233044	K16421
	3	16.50 x 20.00	M 27	G 3/4"	-	M 27	M 27	-	1"	150 - 160	233045	K16422
	3	18.00 x 22.00	M 30	G 7/8"	-	M 30	M 30	-	1 1/8"	240 - 250	233046	K16423
	3	22.00 x 25.00	M 33	G 1"	-	M 33	M 33	-	1 1/4"	260 - 270	233047	K16424
	3	22.00 x 28.00	M 36	G 1 1/8"	-	M 36	M 36	-	1 3/8"	260 - 270	233048	K22438

B10-M: 12-15

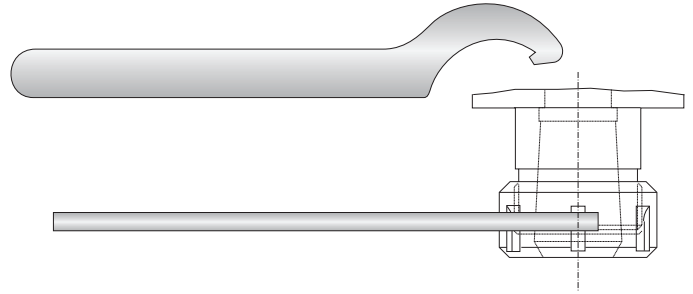
B10: vi-vii

i = Imperial (in)
m = Metric (mm)

Service Keys for Collet Systems

Service Keys for ISO 10897 (DIN 6388) Collet Chuck Systems

Service Key			
Nominal Size	Size	Type	Part No.
16	40 - 43	S	068179
25	58 - 62	S	068182
32	68 - 75	S	115867



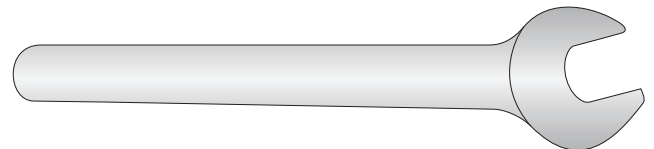
Service Keys for ISO 15488 (DIN 6499) Collet Chuck Systems

Service Key				
Nominal Size	Size	Service Key	Type	Part No.
ER 08 Mini	9.0	-	X	415373
ER 11 Mini	12.0	-	X	415374
ER 16 Mini	17.5	-	X	415375
ER 16	-	25	P	215927
ER 25	42.0	-	T	215929
ER 32	50.0	-	T	215930
ER 40	63.0	-	T	215931

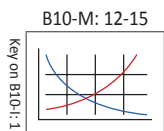
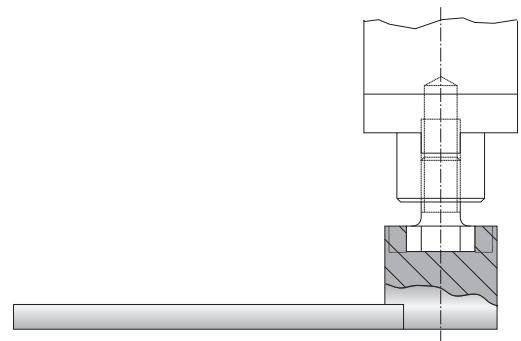


Service Keys for Erickson Collet Chuck Systems

Service Key		
Service Key	Type	Part No.
13	P	315689
19	P	315691



Service Keys	
Service Key	Part No.
13	115785
16	115699
22	115660
27	115661
32	115662
40	115663
60	315637



i = Imperial (in)
m = Metric (mm)

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Guaranteed Test / Demo Application Form

Distributor PO # _____

The following must be filled out completely before your test will be considered

IMPORTANT: For processing, send Purchase Order to your Allied Field Sales Engineer (FSE). Please clearly mark the paperwork as "Test Order."

Distributor Information

Company Name: _____
 Contact: _____
 Account Number: _____
 Phone: _____
 Email: _____

End User Information

Company Name: _____
 Contact: _____
 Industry: _____
 Phone: _____
 Email: _____

Current Process List all tooling, coatings, substrates, speeds and feeds, tool life, and any problems you are experiencing

Test Objective List what would make this a successful test (i.e. penetration rate, finish, tool life, hole size, etc.)

Application Information

Hole Diameter: _____ in/mm	Tolerance: _____	Material: _____ (4150 / A36 / Cast Iron / etc.)
Preexisting Diameter: _____ in/mm	Depth of Cut: _____ in/mm	Hardness: _____ (BHN / Rc)
Required Finish: _____ RMS	State: _____	(Casting / Hot rolled / Forging)

Machine Information

Machine Type: _____ (Lathe / Screw machine / Machine center / etc.)	Builder: _____ (Haas, Mori Seiki, etc.)	Model #: _____
Shank Required: _____ (CAT50 / Morse taper, etc.)		Power: _____ HP/KW
Rigidity: _____	Orientation: _____	Tool Rotating: _____
<input type="checkbox"/> Excellent	<input type="checkbox"/> Vertical	<input type="checkbox"/> Yes
<input type="checkbox"/> Good	<input type="checkbox"/> Horizontal	<input type="checkbox"/> No
<input type="checkbox"/> Poor		Thrust: _____ lbs/N

Coolant Information

Coolant Delivery: _____ (Through tool / Flood)	Coolant Pressure: _____ PSI / bar
Coolant Type: _____ (Air mist, oil, synthetic, water soluble, etc.)	Coolant Volume: _____ GPM / LPM

Requested Tooling

QTY	Item Number

QTY	Item Number



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Warranty Information



Allied Machine & Engineering ("Allied Machine") warrants to original equipment manufacturers, distributors, industrial and commercial users of its products for one year from the original date of sale that each new product manufactured or supplied by Allied Machine shall be free from defects in material and workmanship.

Allied Machine's sole and exclusive obligation under this warranty is limited to, at its option, without additional charge, replacing or repairing this product or issuing a credit. For this warranty to be applied, the product must be returned freight prepaid to the plant designated by an Allied Machine representative and which, upon inspection, is determined by Allied Machine to be defective in material and workmanship.

Complete information as to operating conditions, machine, setup, and the application of cutting fluid should accompany any product returned for inspection. This warranty shall not apply to any Allied Machine products which have been subjected to misuse, abuse, improper operating conditions, improper machine setup or improper application of cutting fluid or which have been repaired or altered if such repair or alteration, in the judgement of Allied Machine, would adversely affect the performance of the product.

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