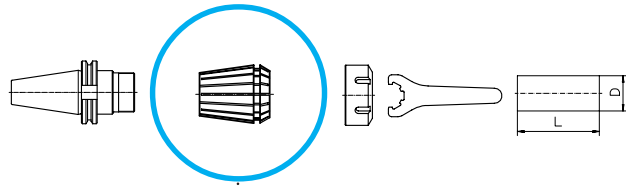


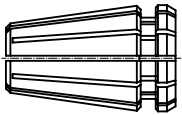
COLLETS



2

ER 8 ER 8-UP

MATCHING PRODUCTS



Clamping Nut	Part No.	Page	Standard	With Friction Bearing	Balanced	For Coolant Through Tools	Collet Locking System	Mini-Nut	Nut with External Thread	Counter Nut	Spanner	Part No.	Page	
	Hi-Q/ERM 8	3508.00000	4-14		▲			■				E 8 M	7113.08000	12-1
	ER 8 MS	3208.50000	4-16		▲			■				E 8 MS	7114.08000	12-1

COLLET SET

ER 8 (STANDARD)

ER 8-UP (ULTRA-PRECISION)

Clamping Capacity [mm]						Set ER 8 Part No.	Set ER 8-UP Part No.
1.0 ... 0.5	1.5 ... 1.0	2.0 ... 1.5	2.5 ... 2.0	3.0 ... 2.5	Wooden Tray ZWT/8	1108.00000	1108.00001
3.0 ... 2.5	3.5 ... 3.0	4.0 ... 3.5	4.5 ... 4.0				
5.0 ... 4.5	-	-	-				

Supplied with:
9 Collets
1 Wooden Tray



ER 8
ER 8-UP

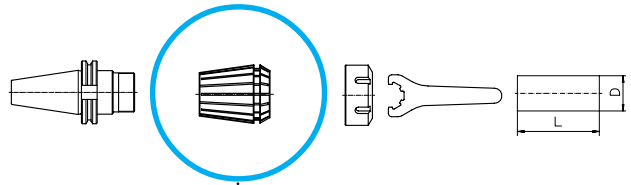
COLLETS

ER 8 (STANDARD)
ER 8-UP (ULTRA-PRECISION)

Clamping Capacity		ø [inch]	ER 8 Part No.	ER 8-UP Part Nr.
[mm]	[inch]			
1.00 ... 0.50	0.0394 ... 0.0197	1/32"	1108.01000	1108.01001
1.50 ... 1.00	0.0591 ... 0.0394		1108.01500	1108.01501
2.00 ... 1.50	0.0787 ... 0.0591	1/16"	1108.02000	1108.02001
2.50 ... 2.00	0.0984 ... 0.0787	3/32"	1108.02500	1108.02501
3.00 ... 2.50	0.1181 ... 0.0984		1108.03000	1108.03001
3.50 ... 3.00	0.1378 ... 0.1181	1/8"	1108.03500	1108.03501
4.00 ... 3.50	0.1575 ... 0.1378	5/32"	1108.04000	1108.04001
4.50 ... 4.00	0.1772 ... 0.1575		1108.04500	1108.04501
5.00 ... 4.50	0.1969 ... 0.1772	3/16"	1108.05000	1108.05001
Wooden Tray ZWT/8			7121.08000	7121.08000

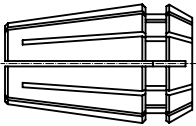
Additional technical information on page 13-2

COLLETS



ER 11 ER 11-UP

MATCHING PRODUCTS



Clamping Nut	Part No.	Page	Standard	With Friction Bearing	Balanced	For Coolant Through Tools	Collet Locking System	Mini-Nut	Nut with External Thread	Counter Nut	Spanner	Part No.	Page	
	Hi-Q/ER 11	3411.00000	4-4	■	▲	☺	☺					GS 17	7112.11000	12-1
	Hi-Q/ERC 11	3411.20300 - 3411.20700	4-8		▲	☺	☺					GS 17	7112.11000	12-1
	Hi-Q/ERM 11	3511.00000	4-12		▲	☺	☺	■				E 11 M	7113.11000	12-1
	Hi-Q/ERMC 11	3511.20300 - 3511.20700	4-14		▲	☺	☺	■				E 11 M	7113.11000	12-1
	ER 11 MS	3211.50000	4-16		▲			■				E 11 MS	7114.11000	12-1
	Hi-Q/ERAX 11	3311.60000	4-18		▲	☺	☺	■				E 11 AX	7117.11000	12-1

COLLET SET

ER 11 (STANDARD)

ER 11-UP (ULTRA-PRECISION)

Clamping Capacity [mm]						Set ER 11 Part No.	Set ER 11-UP Part No.
1.0 ... 0.5	1.5 ... 1.0	2.0 ... 1.5	2.5 ... 2.0	3.0 ... 2.5		1111.00000	1111.00001
3.5 ... 3.0	4.0 ... 3.5	4.5 ... 4.0	5.0 ... 4.5	Wooden Tray			
5.5 ... 5.0	6.0 ... 5.5	6.5 ... 6.0	7.0 ... 6.5	ZWT/11			

**Supplied with:
13 Collets
1 Wooden Tray**



ER 11
ER 11-UP

2

■ COLLETS

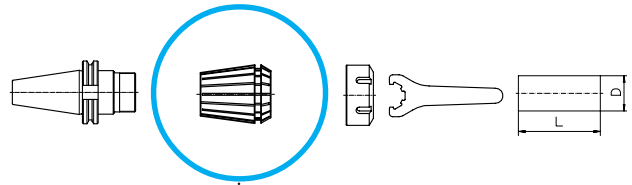
ER 11 (STANDARD)

ER 11-UP (ULTRA-PRECISION)

Clamping Capacity [mm]		Clamping Capacity [inch]	ø [inch]	ER 11 Part No.	ER 11-UP Part No.
1.00 ... 0.50	0.0394 ... 0.0197		1/32"	1111.01000	1111.01001
1.50 ... 1.00	0.0591 ... 0.0394			1111.01500	1111.01501
2.00 ... 1.50	0.0787 ... 0.0591		1/16"	1111.02000	1111.02001
2.50 ... 2.00	0.0984 ... 0.0787		3/32"	1111.02500	1111.02501
3.00 ... 2.50	0.1181 ... 0.0984			1111.03000	1111.03001
3.50 ... 3.00	0.1378 ... 0.1181		1/8"	1111.03500	1111.03501
4.00 ... 3.50	0.1575 ... 0.1378		5/32"	1111.04000	1111.04001
4.50 ... 4.00	0.1772 ... 0.1575			1111.04500	1111.04501
5.00 ... 4.50	0.1969 ... 0.1772		3/16"	1111.05000	1111.05001
5.50 ... 5.00	0.2165 ... 0.1969			1111.05500	1111.05501
6.00 ... 5.50	0.2362 ... 0.2165		7/32"	1111.06000	1111.06001
6.50 ... 6.00	0.2559 ... 0.2362		1/4"	1111.06500	1111.06501
7.00 ... 6.50	0.2756 ... 0.2559			1111.07000	1111.07001
Wooden Tray ZWT/11				7121.11000	7121.11000

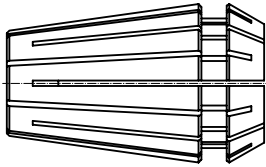
Additional technical information on page 13-2

COLLETS



ER 16 ER 16-UP

MATCHING PRODUCTS



Clamping Nut	Part No.	Page	Standard	With Friction Bearing	Balanced	For Coolant Through Tools	Collet Locking System	Mini-Nut	Nut with External Thread	Counter Nut	Spanner	Part No.	Page	
	Hi-Q/ER 16	3416.00000	4-4	■	▲		🔒					GS 25	7112.16000	12-1
	Hi-Q/ERC 16	3416.20000	4-6		▲	💧	🔒					GS 25	7112.16000	12-1
	Hi-Q/ERB 16	3416.30000	4-10	■	▲		🔒					GS 25	7112.16000	12-1
	Hi-Q/ERBC 16	3416.40000	4-10	■	▲	💧	🔒					GS 25	7112.16000	12-1
	Hi-Q/ERM 16	3516.00000	4-12		▲		🔒	■				E 16 M	7113.16000	12-1
	Hi-Q/ERMC 16	3516.20000	4-12		▲	💧	🔒	■				E 16 M	7113.16000	12-1
	ER 16 MS	3216.50000	4-16		▲			■				E 16 MS	7114.16000	12-1
	Hi-Q/ERAX 16	3316.60000	4-18		▲		🔒	■				E 16 AX	7117.16000	12-1
	Hi-Q/ERAXC 16	3316.70000	4-18		▲	💧	🔒	■				E 16 AX	7117.16000	12-1
	CM/ER 16	3116.90000	12-4						■			E 16	7111.16000	12-1

COLLET SET

ER 16 (STANDARD)

ER 16-UP (ULTRA-PRECISION)

Clamping Capacity [mm]					Set ER 16 Part No.	Set ER 16-UP Part No.
1.0 ... 0.5	2.0 ... 1.0	3.0 ... 2.0	4.0 ... 3.0	5.0 ... 4.0	1116.00000	1116.00001
6.0 ... 5.0	7.0 ... 6.0	8.0 ... 7.0	9.0 ... 8.0	10.0 ... 9.0	Supplied with: 10 Collets 1 Wooden Tray	
Wooden Tray ZWT/16						



ER 16
ER 16-UP

■ COLLETS

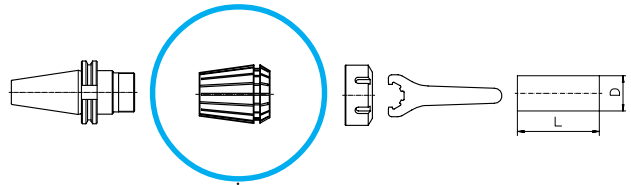
ER 16 (STANDARD)

ER 16-UP (ULTRA-PRECISION)

Clamping Capacity		ø [inch]	ER 16	ER 16-UP
[mm]	[inch]		Part No.	Part No.
1.00 ... 0.50	0.0394 ... 0.0197	1/32"	1116.01000	1116.01001
1.50 ... 1.00	0.0591 ... 0.0394		1116.01500	1116.01501
2.00 ... 1.00	0.0787 ... 0.0394	1/16"	1116.02000	1116.02001
2.50 ... 1.50	0.0984 ... 0.0591	3/32"	1116.02500	1116.02501
3.00 ... 2.00	0.1181 ... 0.0787		1116.03000	1116.03001
3.50 ... 2.50	0.1378 ... 0.0984	1/8"	1116.03500	1116.03501
4.00 ... 3.00	0.1575 ... 0.1181	5/32"	1116.04000	1116.04001
4.50 ... 3.50	0.1772 ... 0.1378		1116.04500	1116.04501
5.00 ... 4.00	0.1969 ... 0.1575	3/16"	1116.05000	1116.05001
5.50 ... 4.50	0.2165 ... 0.1772		1116.05500	1116.05501
6.00 ... 5.00	0.2362 ... 0.1969	7/32"	1116.06000	1116.06001
6.50 ... 5.50	0.2559 ... 0.2165	1/4"	1116.06500	1116.06501
7.00 ... 6.00	0.2756 ... 0.2362		1116.07000	1116.07001
7.50 ... 6.50	0.2953 ... 0.2559	9/32"	1116.07500	1116.07501
8.00 ... 7.00	0.3150 ... 0.2756	5/16"	1116.08000	1116.08001
8.50 ... 7.50	0.3347 ... 0.2953		1116.08500	1116.08501
9.00 ... 8.00	0.3543 ... 0.3150	11/32"	1116.09000	1116.09001
9.50 ... 8.50	0.3740 ... 0.3347		1116.09500	1116.09501
10.00 ... 9.00	0.3937 ... 0.3543	3/8"	1116.10000	1116.10001
Wooden Tray ZWT/16			7121.16000	7121.16000

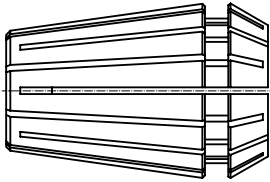
Additional technical information on page 13-2

COLLETS



ER 20 ER 20-UP

MATCHING PRODUCTS



Clamping Nut	Part No.	Page	Standard	With Friction Bearing	Balanced	For Coolant Through Tools	Collet Locking System	Mini-Nut	Nut with External Thread	Counter Nut	Spanner	Part No.	Page	
	Hi-Q/ER 20	3420.00000	4- 4	■	▲	☐	☐					GS 30	7112.20000	12-1
	Hi-Q/ERC 20	3420.20000	4- 6		▲	☐	☐					GS 30	7112.20000	12-1
	Hi-Q/ERB 20	3420.30000	4-10	■	▲	☐	☐					GS 30	7112.20000	12-1
	Hi-Q/ERBC 20	3420.40000	4-10	■	▲	☐	☐					GS 30	7112.20000	12-1
	Hi-Q/ERM 20	3520.00000	4-12		▲	☐	☐	■				E 20 M	7113.20000	12-1
	Hi-Q/ERMC 20	3520.20000	4-12		▲	☐	☐	■				E 20 M	7113.20000	12-1
	ER 20 MS	3220.50000	4-16		▲			■				E 20 MS	7114.20000	12-1
	Hi-Q/ERAX 20	3320.60000	4-18		▲	☐	☐	■				E 20 AX	7117.20000	12-1
	Hi-Q/ERAXC 20	3320.70000	4-18		▲	☐	☐	■				E 20 AX	7117.20000	12-1
	CM/ER 20	3120.90000	12-4						■			E 20	7111.20000	12-1

COLLET SET

ER 20 (STANDARD)

ER 20-UP (ULTRA-PRECISION)

Clamping Capacity [mm]						Set ER 20	Set ER 20-UP
2.0 ... 1.0	3.0 ... 2.0	4.0 ... 3.0	5.0 ... 4.0	Part No.		Part No.	
2.0 ... 1.0	3.0 ... 2.0	4.0 ... 3.0	5.0 ... 4.0	Wooden Tray	1120.00000	1120.00001	
6.0 ... 5.0	7.0 ... 6.0	8.0 ... 7.0	9.0 ... 8.0	ZWT/20	Supplied with: 12 Collets 1 Wooden Tray		
10.0 ... 9.0	11.0 ... 10.0	12.0 ... 11.0	13.0 ... 12.0				



ER 20
ER 20-UP

2

COLLETS

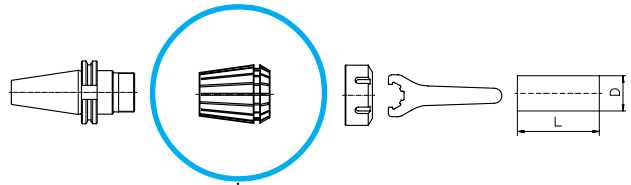
ER 20 (STANDARD)

ER 20-UP (ULTRA-PRECISION)

Clamping Capacity		Clamping Capacity		Ø	ER 20	ER 20-UP
[mm]	[mm]	[inch]	[inch]	[inch]	Part No.	Part No.
1.00 ... 0.50	0.0394 ... 0.0197	1/32"			1120.01000	1120.01001
1.50 ... 1.00	0.0591 ... 0.0394				1120.01500	1120.01501
2.00 ... 1.00	0.0787 ... 0.0394	1/16"			1120.02000	1120.02001
2.50 ... 1.50	0.0984 ... 0.0591	3/32"			1120.02500	1120.02501
3.00 ... 2.00	0.1181 ... 0.0787				1120.03000	1120.03001
3.50 ... 2.50	0.1378 ... 0.0984	1/8"			1120.03500	1120.03501
4.00 ... 3.00	0.1575 ... 0.1181	5/32"			1120.04000	1120.04001
4.50 ... 3.50	0.1772 ... 0.1378				1120.04500	1120.04501
5.00 ... 4.00	0.1969 ... 0.1575	3/16"			1120.05000	1120.05001
5.50 ... 4.50	0.2165 ... 0.1772				1120.05500	1120.05501
6.00 ... 5.00	0.2362 ... 0.1969	7/32"			1120.06000	1120.06001
6.50 ... 5.50	0.2559 ... 0.2165	1/4"			1120.06500	1120.06501
7.00 ... 6.00	0.2756 ... 0.2362				1120.07000	1120.07001
7.50 ... 6.50	0.2953 ... 0.2559	9/32"			1120.07500	1120.07501
8.00 ... 7.00	0.3150 ... 0.2756	5/16"			1120.08000	1120.08001
8.50 ... 7.50	0.3347 ... 0.2953				1120.08500	1120.08501
9.00 ... 8.00	0.3543 ... 0.3150	11/32"			1120.09000	1120.09001
9.50 ... 8.50	0.3740 ... 0.3347				1120.09500	1120.09501
10.00 ... 9.00	0.3937 ... 0.3543	3/8"			1120.10000	1120.10001
10.50 ... 9.50	0.4134 ... 0.3740	13/32"			1120.10500	1120.10501
11.00 ... 10.00	0.4330 ... 0.3937				1120.11000	1120.11001
11.50 ... 10.50	0.4528 ... 0.4134	7/16"			1120.11500	1120.11501
12.00 ... 11.00	0.4724 ... 0.4375	15/32"			1120.12000	1120.12001
12.50 ... 11.50	0.4921 ... 0.4528				1120.12500	1120.12501
13.00 ... 12.00	0.5118 ... 0.4724	1/2"			1120.13000	1120.13001
Wooden Tray ZWT/20					7121.20000	7121.20000

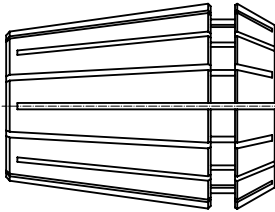
Additional technical information on page 13-2

COLLETS



ER 25 ER 25-UP

MATCHING PRODUCTS



Clamping Nut	Part No.	Page	Standard	With Friction Bearing	Balanced	For Coolant Through Tools	Collet Locking System	Mini-Nut	Nut with External Thread	Counter Nut	Spanner	Part No.	Page	
	Hi-Q/ER 25	3425.00000	4-4	■	▲		🔒					E 25	7111.25000	12-1
	Hi-Q/ERC 25	3425.20000	4-6		▲	💧	🔒					E 25	7111.25000	12-1
	Hi-Q/ERB 25	3425.30000	4-10	■	▲		🔒					E 25	7111.25000	12-1
	Hi-Q/ERBC 25	3425.40000	4-10	■	▲	💧	🔒					E 25	7111.25000	12-1
	Hi-Q/ERM 25	3525.00000	4-12		▲		🔒	■				E 25 M	7113.25000	12-1
	Hi-Q/ERMC 25	3525.20000	4-12		▲	💧	🔒	■				E 25 M	7113.25000	12-1
	Hi-Q/ERAX 25	3325.60000	4-18		▲		🔒	■				E 25 AX	7117.25000	12-1
	Hi-Q/ERAXC 25	3325.70000	4-18		▲	💧	🔒	■				E 25 AX	7117.25000	12-1
	CM/ER 25	3125.90000	12-4								E 25	7111.25000	12-1	

COLLET SET

ER 25 (STANDARD)

ER 25-UP (ULTRA-PRECISION)

Clamping Capacity [mm]						Set ER 25 Part No.	Set ER 25-UP Part No.
2.0 ... 1.0	3.0 ... 2.0	4.0 ... 3.0	5.0 ... 4.0	6.0 ... 5.0		1125.00000	1125.00001
7.0 ... 6.0	8.0 ... 7.0	9.0 ... 8.0	10.0 ... 9.0	11.0 ... 10.0		Supplied with: 15 Collets 1 Wooden Tray	
12.0 ... 11.0	13.0 ... 12.0	14.0 ... 13.0	15.0 ... 14.0	16.0 ... 15.0			
Wooden Tray ZWT/25							



ER 25 ER 25-UP



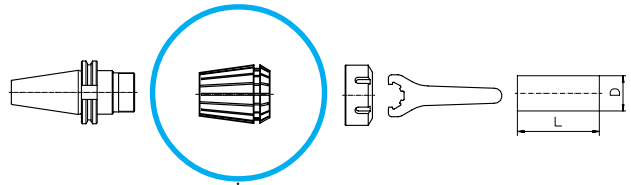
- COLLETS
- ER 25 (STANDARD)
- ER 25-UP (ULTRA-PRECISION)

Clamping Capacity [mm]		Clamping Capacity [inch]		Ø [Zoll]	ER 25 Part No.	ER 25-UP Part No.
1.00 ... 0.50	0.0394 ... 0.0197	1/32"			1125.01000	1125.01001
1.50 ... 1.00	0.0591 ... 0.0394				1125.01500	1125.01501
2.00 ... 1.00	0.0787 ... 0.0394	1/16"			1125.02000	1125.02001
2.50 ... 1.50	0.0984 ... 0.0591	3/32"			1125.02500	1125.02501
3.00 ... 2.00	0.1181 ... 0.0787				1125.03000	1125.03001
3.50 ... 2.50	0.1378 ... 0.0984	1/8"			1125.03500	1125.03501
4.00 ... 3.00	0.1575 ... 0.1181	5/32"			1125.04000	1125.04001
4.50 ... 3.50	0.1772 ... 0.1378				1125.04500	1125.04501
5.00 ... 4.00	0.1969 ... 0.1575	3/16"			1125.05000	1125.05001
5.50 ... 4.50	0.2165 ... 0.1772				1125.05500	1125.05501
6.00 ... 5.00	0.2362 ... 0.1969	7/32"			1125.06000	1125.06001
6.50 ... 5.50	0.2559 ... 0.2165	1/4"			1125.06500	1125.06501
7.00 ... 6.00	0.2756 ... 0.2362				1125.07000	1125.07001
7.50 ... 6.50	0.2953 ... 0.2559	9/32"			1125.07500	1125.07501
8.00 ... 7.00	0.3150 ... 0.2756	5/16"			1125.08000	1125.08001
8.50 ... 7.50	0.3347 ... 0.2953				1125.08500	1125.08501
9.00 ... 8.00	0.3543 ... 0.3150	11/32"			1125.09000	1125.09001
9.50 ... 8.50	0.3740 ... 0.3347				1125.09500	1125.09501
10.00 ... 9.00	0.3937 ... 0.3543	3/8"			1125.10000	1125.10001
10.50 ... 9.50	0.4134 ... 0.3740	13/32"			1125.10500	1125.10501
11.00 ... 10.00	0.4330 ... 0.3937				1125.11000	1125.11001
11.50 ... 10.50	0.4528 ... 0.4134	7/16"			1125.11500	1125.11501
12.00 ... 11.00	0.4724 ... 0.4375	15/32"			1125.12000	1125.12001

Clamping Capacity [mm]		Clamping Capacity [inch]		Ø [Zoll]	ER 25 Part No.	ER 25-UP Part No.
12.50 ... 11.50	0.4921 ... 0.4528				1125.12500	1125.12501
13.00 ... 12.00	0.5118 ... 0.4724	1/2"			1125.13000	1125.13001
13.50 ... 12.50	0.5315 ... 0.4921	17/32"			1125.13500	1125.13501
14.00 ... 13.00	0.5512 ... 0.5118				1125.14000	1125.14001
14.50 ... 13.50	0.5709 ... 0.5315	9/16"			1125.14500	1125.14501
15.00 ... 14.00	0.5905 ... 0.5512				1125.15000	1125.15001
15.50 ... 14.50	0.6102 ... 0.5315	19/32"			1125.15500	1125.15501
16.00 ... 15.00	0.6300 ... 0.5905	5/8"			1125.16000	1125.16001
Wooden Tray ZWT/25					7121.25000	7121.25000

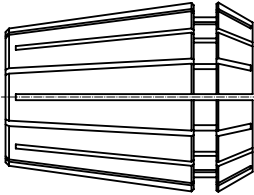
Additional technical information on page 13-2

COLLETS



2

ER 32 ER 32-UP



MATCHING PRODUCTS

Clamping Nut	Part No.	Page	Standard	With Friction Bearing	Balanced	For Coolant Through Tools	Collet Locking System	Mini-Nut	Nut with External Thread	Counter Nut	Spanner	Part No.	Page	
	Hi-Q/ER 32	3432.00000	4-4	■	▲	☐	☐					E 32	7111.32000	12-1
	Hi-Q/ERC 32	3432.20000	4-6		▲	☐	☐					E 32	7111.32000	12-1
	Hi-Q/ERB 32	3432.30000	4-10	■	▲	☐	☐					E 32	7111.32000	12-1
	Hi-Q/ERBC 32	3432.40000	4-10	■	▲	☐	☐					E 32	7111.32000	12-1
	Hi-Q/ERAX 32	3332.60000	4-18		▲	☐	☐	■				E 32 AX	7117.32000	12-1
	Hi-Q/ERAXC 32	3332.70000	4-18		▲	☐	☐	■				E 32 AX	7117.32000	12-1
	CM/ER 32	3132.90000	12-4						■			E 32	7111.32000	12-1

COLLET SET

ER 32 (STANDARD)

ER 32-UP (ULTRA-PRECISION)

Clamping Capacity [mm]						ER 32 Part No.	ER 32-UP Part No.
3.0 ... 2.0	4.0 ... 3.0	5.0 ... 4.0	6.0 ... 5.0	7.0 ... 6.0		1132.00000	1132.00001
8.0 ... 7.0	9.0 ... 8.0	10.0 ... 9.0	11.0 ... 10.0	12.0 ... 11.0		Supplied with: 18 Collets 1 Wooden Tray	
13.0 ... 12.0	14.0 ... 13.0	15.0 ... 14.0	16.0 ... 15.0	Wooden Tray			
17.0 ... 16.0	18.0 ... 17.0	19.0 ... 18.0	20.0 ... 19.0	ZWT/32			



ER 32
ER 32-UP



COLLETS

ER 32 (STANDARD)

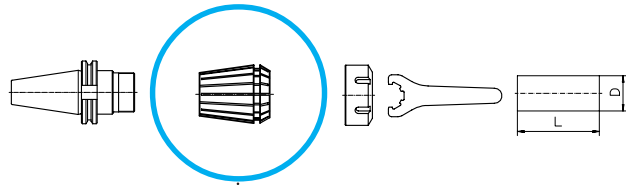
ER 32-UP (ULTRA-PRECISION)

Clamping Capacity		ø [Zoll]	ER 32 Part No.	ER 32-UP Part No.
[mm]	[inch]			
2.00 ... 1.00	0.0787 ... 0.0394	1/16"	1132.02000	1132.02001
2.50 ... 1.50	0.0984 ... 0.0591	3/32"	1132.02500	1132.02501
3.00 ... 2.00	0.1181 ... 0.0787		1132.03000	1132.03001
3.50 ... 2.50	0.1378 ... 0.0984	1/8"	1132.03500	1132.03501
4.00 ... 3.00	0.1575 ... 0.1181	5/32"	1132.04000	1132.04001
4.50 ... 3.50	0.1772 ... 0.1378		1132.04500	1132.04501
5.00 ... 4.00	0.1969 ... 0.1575	3/16"	1132.05000	1132.05001
5.50 ... 4.50	0.2165 ... 0.1772		1132.05500	1132.05501
6.00 ... 5.00	0.2362 ... 0.1969	7/32"	1132.06000	1132.06001
6.50 ... 5.50	0.2559 ... 0.2165	1/4"	1132.06500	1132.06501
7.00 ... 6.00	0.2756 ... 0.2362		1132.07000	1132.07001
7.50 ... 6.50	0.2953 ... 0.2559	9/32"	1132.07500	1132.07501
8.00 ... 7.00	0.3150 ... 0.2756	5/16"	1132.08000	1132.08001
8.50 ... 7.50	0.3347 ... 0.2953		1132.08500	1132.08501
9.00 ... 8.00	0.3543 ... 0.3150	11/32"	1132.09000	1132.09001
9.50 ... 8.50	0.3740 ... 0.3347		1132.09500	1132.09501
10.00 ... 9.00	0.3937 ... 0.3543	3/8"	1132.10000	1132.10001
10.50 ... 9.50	0.4134 ... 0.3740	13/32"	1132.10500	1132.10501
11.00 ... 10.00	0.4330 ... 0.3937		1132.11000	1132.11001
11.50 ... 10.50	0.4528 ... 0.4134	7/16"	1132.11500	1132.11501
12.00 ... 11.00	0.4724 ... 0.4375	15/32"	1132.12000	1132.12001
12.50 ... 11.50	0.4921 ... 0.4528		1132.12500	1132.12501
13.00 ... 12.00	0.5118 ... 0.4724	1/2"	1132.13000	1132.13001
13.50 ... 12.50	0.5315 ... 0.4921	17/32"	1132.13500	1132.13501
14.00 ... 13.00	0.5512 ... 0.5118		1132.14000	1132.14001
14.50 ... 13.50	0.5709 ... 0.5315	9/16"	1132.14500	1132.14501
15.00 ... 14.00	0.5905 ... 0.5512		1132.15000	1132.15001
15.50 ... 14.50	0.6102 ... 0.5315	19/32"	1132.15500	1132.15501

Clamping Capacity		ø [inch]	ER 32 Part No.	ER 32-UP Part No.
[mm]	[inch]			
16.00 ... 15.00	0.6300 ... 0.5905	5/8"	1132.16000	1132.16001
16.50 ... 15.50	0.6496 ... 0.6102		1132.16500	1132.16501
17.00 ... 16.00	0.6693 ... 0.6300	21/32"	1132.17000	1132.17001
17.50 ... 16.50	0.6890 ... 0.6496	11/16"	1132.17500	1132.17501
18.00 ... 17.00	0.7087 ... 0.6693		1132.18000	1132.18001
18.50 ... 17.50	0.7284 ... 0.6890	23/32"	1132.18500	1132.18501
19.00 ... 18.00	0.7480 ... 0.7078		1132.19000	1132.19001
19.50 ... 18.50	0.7677 ... 0.7284	3/4"	1132.19500	1132.19501
20.00 ... 19.00	0.7874 ... 0.7480	25/32"	1132.20000	1132.20001
Wooden Tray ZWT/32			7121.32000	7121.32000

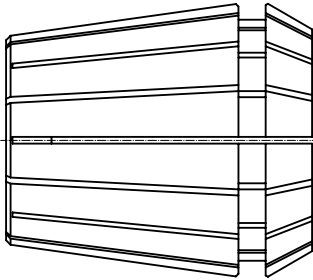
Additional technical information on page 13-2

COLLETS



ER 40 ER 40-UP

MATCHING PRODUCTS



Clamping Nut	Part No.	Page	Standard	With Friction Bearing	Balanced	For Coolant Through Tools	Collet Locking System	Mini-Nut	Nut with External Thread	Counter Nut	Spanner	Part No.	Page	
	Hi-Q/ER 40	3440.00000	4-4	■	▲	☞	☞					E 40	7111.40000	12-1
	Hi-Q/ERC 40	3440.20000	4-6		▲	☞	☞					E 40	7111.40000	12-1
	Hi-Q/ERB 40	3440.30000	4-10	■	▲	☞	☞					E 40	7111.40000	12-1
	Hi-Q/ERBC 40	3440.40000	4-10	■	▲	☞	☞					E 40	7111.40000	12-1
	Hi-Q/ERAX 40	3340.60000	4-18		▲	☞	☞	■				E 40 AX	7117.40000	12-1
	Hi-Q/ERAXC 40	3340.70000	4-18		▲	☞	☞	■				E 40 AX	7117.40000	12-1
	CM/ER 40	3140.90000	13-4						■			E 40	7111.40000	12-1

COLLET SET

ER 40 (STANDARD)

ER 40-UP (ULTRA-PRECISION)

Clamping Capacity [mm]					Set ER 40 Part No.	Set ER 40-UP Part No.
4.0 ... 3.0	5.0 ... 4.0	6.0 ... 5.0	7.0 ... 6.0	8.0 ... 7.0	1140.00000	1140.00001
9.0 ... 8.0	10.0 ... 9.0	11.0 ... 10.0	12.0 ... 11.0	13.0 ... 12.0	Supplied with: 23 Collets 1 Wooden Tray	
14.0 ... 13.0	15.0 ... 14.0	16.0 ... 15.0	17.0 ... 16.0	18.0 ... 17.0		
19.0 ... 18.0	20.0 ... 19.0	21.0 ... 20.0	22.0 ... 21.0	Wooden Tray		
23.0 ... 22.0	24.0 ... 23.0	25.0 ... 24.0	26.0 ... 25.0	ZWT/40		



ER 40 ER 40-UP



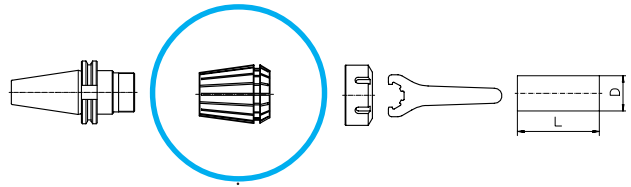
- COLLETS
- ER 40 (STANDARD)
- ER 40-UP (ULTRA-PRECISION)

Clamping Capacity		ø [Zoll]	ER 40 Part No.	ER 40-UP Part No.
[mm]	[inch]			
3.00 ... 2.00	0.1181 ... 0.0787	3/32"	1140.03000	1140.03001
3.50 ... 2.50	0.1378 ... 0.0984	1/8"	1140.03500	1140.03501
4.00 ... 3.00	0.1575 ... 0.1181	5/32"	1140.04000	1140.04001
4.50 ... 3.50	0.1772 ... 0.1378		1140.04500	1140.04501
5.00 ... 4.00	0.1969 ... 0.1575	3/16"	1140.05000	1140.05001
5.50 ... 4.50	0.2165 ... 0.1772		1140.05500	1140.05501
6.00 ... 5.00	0.2362 ... 0.1969	7/32"	1140.06000	1140.06001
6.50 ... 5.50	0.2559 ... 0.2165	1/4"	1140.06500	1140.06501
7.00 ... 6.00	0.2756 ... 0.2362		1140.07000	1140.07001
7.50 ... 6.50	0.2953 ... 0.2559	9/32"	1140.07500	1140.07501
8.00 ... 7.00	0.3150 ... 0.2756	5/16"	1140.08000	1140.08001
8.50 ... 7.50	0.3347 ... 0.2953		1140.08500	1140.08501
9.00 ... 8.00	0.3543 ... 0.3150	11/32"	1140.09000	1140.09001
9.50 ... 8.50	0.3740 ... 0.3347		1140.09500	1140.09501
10.00 ... 9.00	0.3937 ... 0.3543	3/8"	1140.10000	1140.10001
10.50 ... 9.50	0.4134 ... 0.3740	13/32"	1140.10500	1140.10501
11.00 ... 10.00	0.4330 ... 0.3937		1140.11000	1140.11001
11.50 ... 10.50	0.4528 ... 0.4134	7/16"	1140.11500	1140.11501
12.00 ... 11.00	0.4724 ... 0.4375	15/32"	1140.12000	1140.12001
12.50 ... 11.50	0.4921 ... 0.4528		1140.12500	1140.12501
13.00 ... 12.00	0.5118 ... 0.4724	1/2"	1140.13000	1140.13001
13.50 ... 12.50	0.5315 ... 0.4921	17/32"	1140.13500	1140.13501
14.00 ... 13.00	0.5512 ... 0.5118		1140.14000	1140.14001
14.50 ... 13.50	0.5709 ... 0.5315	9/16"	1140.14500	1140.14501
15.00 ... 14.00	0.5905 ... 0.5512		1140.15000	1140.15001
15.50 ... 14.50	0.6102 ... 0.5315	19/32"	1140.15500	1140.15501
16.00 ... 15.00	0.6300 ... 0.5905	5/8"	1140.16000	1140.16001
16.50 ... 15.50	0.6496 ... 0.6102		1140.16500	1140.16501

Clamping Capacity		ø [inch]	ER 40 Part No.	ER 40-UP Part No.
[mm]	[inch]			
17.00 ... 16.00	0.6693 ... 0.6300	21/32"	1140.17000	1140.17001
17.50 ... 16.50	0.6890 ... 0.6496	11/16"	1140.17500	1140.17501
18.00 ... 17.00	0.7087 ... 0.6693		1140.18000	1140.18001
18.50 ... 17.50	0.7284 ... 0.6890	23/32"	1140.18500	1140.18501
19.00 ... 18.00	0.7480 ... 0.7078		1140.19000	1140.19001
19.50 ... 18.50	0.7677 ... 0.7284	3/4"	1140.19500	1140.19501
20.00 ... 19.00	0.7874 ... 0.7480	25/32"	1140.20000	1140.20001
20.50 ... 19.50	0.8071 ... 0.7677		1140.20500	1140.20501
21.00 ... 20.00	0.8268 ... 0.7874	13/16"	1140.21000	1140.21001
21.50 ... 20.50	0.8465 ... 0.8071	27/32"	1140.21500	1140.21501
22.00 ... 21.00	0.8661 ... 0.8268		1140.22000	1140.22001
22.50 ... 21.50	0.8858 ... 0.8465	7/8"	1140.22500	1140.22501
23.00 ... 22.00	0.9055 ... 0.8661		1140.23000	1140.23001
23.50 ... 22.50	0.9252 ... 0.8858	29/32"	1140.23500	1140.23501
24.00 ... 23.00	0.9449 ... 0.9055	15/16"	1140.24000	1140.24001
24.50 ... 23.50	0.9646 ... 0.9252		1140.24500	1140.24501
25.00 ... 24.00	0.9843 ... 0.9449	31/32"	1140.25000	1140.25001
25.50 ... 24.50	1.0039 ... 0.9646	1"	1140.25500	1140.25501
26.00 ... 25.00	1.0236 ... 0.9843		1140.26000	1140.26001
27.00 ... 26.00	1.0630 ... 1.0236	1-1/16"	1140.27000	1140.27001
28.00 ... 27.00	1.1024 ... 1.0630	1-3/32"	1140.28000	1140.28001
29.00 ... 28.00	1.1417 ... 1.1024	1-1/8"	1140.29000	1140.29001
30.00 ... 29.00	1.1811 ... 1.1417	1-5/32"	1140.30000	1140.30001
Wooden Tray ZWT/40			7121.40000	7121.40000

Additional technical information on page 13-2

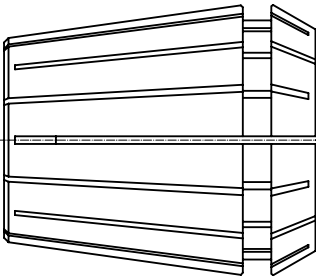
COLLETS



2

ER 50 ER 50-UP

MATCHING PRODUCTS



Clamping Nut	Part No.	Page	Standard	With Friction Bearing	Balanced	For Coolant Through Tools	Collet Locking System	Mini-Nut	Nut with External Thread	Counter Nut	Spanner	Part No.	Page	
	Hi-Q/ER 50	3450.00000	4-4	■	▲	☺	☺					E 50	7111.50000	12-1
	Hi-Q/ERB 50	3450.30000	4-10	■	▲	☺	☺					E 50	7111.50000	12-1

COLLET SET

ER 50 (STANDARD)

ER 50-UP (ULTRA-PRECISION)

Clamping Capacity [mm]						Set ER 50 Part No.	Set ER 50-UP Part No.
12.0 ... 10.0	14.0 ... 12.0	16.0 ... 14.0	18.0 ... 16.0		Wooden Tray	1150.00000	1150.00001
20.0 ... 18.0	22.0 ... 20.0	24.0 ... 22.0	26.0 ... 24.0		ZWT/50	Supplied with: 12 Collets 1 Wooden Tray	
28.0 ... 26.0	30.0 ... 28.0	32.0 ... 30.0	34.0 ... 32.0				



ER 50
ER 50-UP

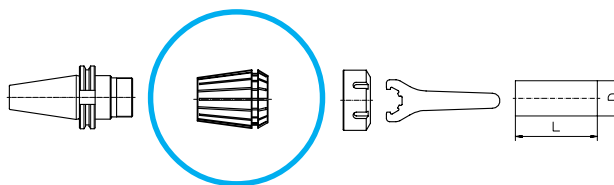
COLLETS

ER 50 (STANDARD)

ER 50-UP (ULTRA-PRECISION)

Clamping Capacity		ø [inch]	ER 50 Part No.	ER 50-UP Part No.
[mm]	[inch]			
6.00 ... 4.00	0.2362 ... 0.1575	3/16"	1150.06000	1150.06001
8.00 ... 6.00	0.3150 ... 0.2362	1/4"	1150.08000	1150.08001
10.00 ... 8.00	0.3937 ... 0.3150	3/8"	1150.10000	1150.10001
12.00 ... 10.00	0.4724 ... 0.3937	7/16"	1150.12000	1150.12001
14.00 ... 12.00	0.5512 ... 0.4724	1/2"	1150.14000	1150.14001
16.00 ... 14.00	0.6300 ... 0.5512	5/8"	1150.16000	1150.16001
18.00 ... 16.00	0.7087 ... 0.6300	11/16"	1150.18000	1150.18001
20.00 ... 18.00	0.7874 ... 0.7087	3/4"	1150.20000	1150.20001
22.00 ... 20.00	0.8661 ... 0.7874	13/16"	1150.22000	1150.22001
24.00 ... 22.00	0.9449 ... 0.8661	7/8"	1150.24000	1150.24001
25.00 ... 23.00	0.9843 ... 0.9055	31/32"	1150.25000	1150.25001
26.00 ... 24.00	1.0236 ... 0.9449	1"	1150.26000	1150.26001
28.00 ... 26.00	1.1024 ... 1.0236	1-1/16"	1150.28000	1150.28001
30.00 ... 28.00	1.1811 ... 1.1024	1-1/8"	1150.30000	1150.30001
32.00 ... 30.00	1.2598 ... 1.1811	1-1/4"	1150.32000	1150.32001
34.00 ... 32.00	1.3386 ... 1.2598	1-5/16"	1150.34000	1150.34001
Wooden Tray ZWT/50			7121.50000	7121.50000

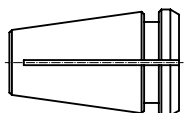
Additional technical information on page 13-2



ER-MB

2

■ MICROBORE COLLETS PER DIN STD 6499



The ER/MB microbore collet from **REGO-FIX®** is designed especially for clamping small drill and cutter shanks. Microbore collets do not have a clamping range. Therefore, only nominal diameters can be clamped.

■ MATCHING PRODUCTS

Clamping Nut	Part No.	Page	Standard	With Friction Bearing	Balanced	For Coolant Through Tools	Collet Locking System	Mini-Nut	Nut with External Thread	Counter Nut	Spanner	Part No.	Page	
	Hi-Q/ERM 8	3508.00000	4-12		▲			■				E 8 M	7113.08000	12-1
	ER 8 MS	3208.50000	4-16		▲			■				E 8 MS	7114.08000	12-1
	Hi-Q/ER 11	3411.00000	4-4	■	▲		🔒					GS 17	7112.11000	12-1
	Hi-Q/ERM 11	3511.00000	4-12		▲		🔒	■				E 11 M	7113.11000	12-1
	ER 11 MS	3211.50000	4-16		▲			■				E 11 MS	7114.11000	12-1
	Hi-Q/ERAX 11	3311.60000	4-18		▲		🔒	■	■			E 11 AX	7117.11000	12-1



ER 8-MB
ER 11-MB

2

MICROBORE COLLETS
ER 8-MB

\varnothing h7		ER 8-MB Part No.
[mm]	[inch]	
0.2	0.0079	1308.00200
0.3	0.0118	1308.00300
0.4	0.0157	1308.00400
0.5	0.0197	1308.00500
0.6	0.0236	1308.00600
0.7	0.0276	1308.00700
0.8	0.0315	1308.00800
0.9	0.0354	1308.00900

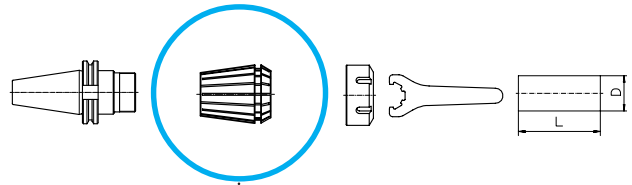
Additional technical information on page 13-3

MICROBORE COLLETS
ER 11-MB

\varnothing h7		ER 11-MB Part No.
[mm]	[inch]	
0.2	0.0079	1311.00200
0.3	0.0118	1311.00300
0.4	0.0157	1311.00400
0.5	0.0197	1311.00500
0.6	0.0236	1311.00600
0.7	0.0276	1311.00700
0.8	0.0315	1311.00800
0.9	0.0354	1311.00900

Additional technical information on page 13-3

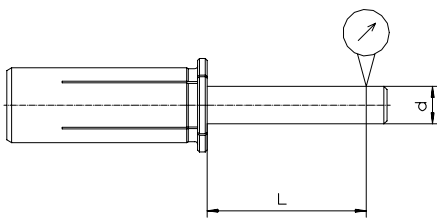
COLLETS



HS

2

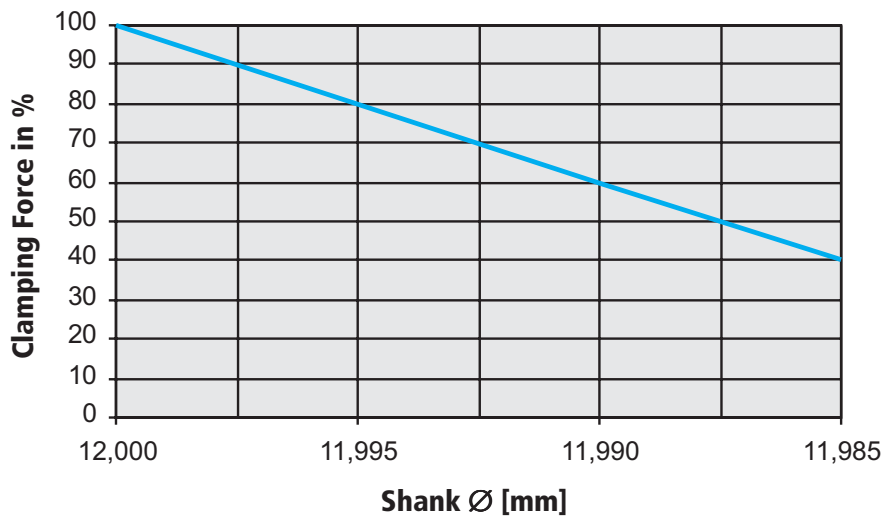
CONCENTRICITY (T.I.R.) OF HS TYPE REDUCTION SLEEVES



Clamping Diameter

Above d [mm]	Up to d [mm]	L [mm]	T.I.R. [mm]
3.0	6.0	16.0	0.003
6.0	10.0	25.0	0.003
10.0	18.0	40.0	0.003
18.0	26.0	50.0	0.003

CLAMPING FORCE DIAGRAM



Influence of shank diameter on clamping force of hydraulic expansion holders.

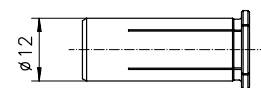


HS

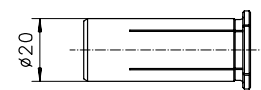
2

REDUCTION SLEEVES HS

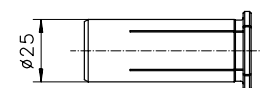
bore		Ø	HS 12	HS 20	HS 25	HS 32
[mm]	["]	["]				
3.000	0.1181		1912.03000	1920.03000	1925.03000	—
3.175	0.1250	1/8"	1912.03181	1920.03181	1925.03181	—
4.000	0.1545		1912.04000	1920.04000	1925.04000	—
4.763	0.1875	3/16"	1912.04761	1920.04761	1925.04761	1932.04761
5.000	0.1969		1912.05000	1920.05000	1925.05000	—
6.000	0.2362		1912.06000	1920.06000	1925.06000	1932.06000
6.350	0.2500	1/4"	1912.06351	1920.06351	1925.06351	1932.06351
7.000	0.2756		1912.07000	1920.07000	1925.07000	1932.07000
7.938	0.3125	5/16"	1912.07941	1920.07941	1925.07941	1932.07941
8.000	0.3150		1912.08000	1920.08000	1925.08000	1932.08000
9.000	0.343		1912.09000	1920.09000	1925.09000	1932.09000
9.525	0.3750	3/8"	1912.09521	1920.09521	1925.09521	1932.09521
10.000	0.3937		1912.10000	1920.10000	1925.10000	1932.10000
11.000	0.4331		—	1920.11000	—	1932.11000
11.112	0.4375	7/16"	—	1920.11111	1925.11111	1932.11111
12.000	0.4724		—	1920.12000	1925.12000	1932.12000
12.700	0.5000	1/2"	—	1920.12701	1925.12701	1932.12701
13.000	0.5118		—	1920.13000	—	1932.13000
14.000	0.5512		—	1920.14000	1925.14000	1932.14000
14.288	0.5625	9/16"	—	1920.14291	1925.14291	1932.14291
15.000	0.5906		—	1920.15000	—	1932.15000
15.875	0.6250	5/8"	—	1920.15881	1925.15881	1932.15881
16.000	0.6300		—	1920.16000	1925.16000	1932.16000
17.000	0.6693		—	—	—	1932.17000
17.461	0.6875	11/16"	—	—	1925.17461	1932.17461
18.000	0.7087		—	—	1925.18000	1932.18000
19.000	0.7480		—	—	—	1932.19000
19.050	0.7500	3/4"	—	—	1925.19051	1932.19051
20.000	0.7875		—	—	1925.20000	1932.20000
20.638	0.8125	13/16"	—	—	—	1932.20631
22.000	0.8661		—	—	—	1932.22000
22.225	0.8750	7/8"	—	—	—	1932.22221
23.813	0.9375	15/16"	—	—	—	1932.23811
25.000	0.9842		—	—	—	1932.25000
25.400	1.0000	1"	—	—	—	1932.25401



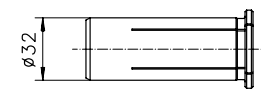
HS 12



HS 20



HS 25

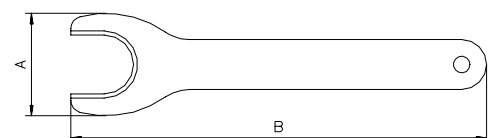


HS 32

Additional technical information on page 13-4

MATCHING PRODUCTS

Extractor	Part No.	for size	A [mm]	B [mm]
EHS 12	7321.12000	HS 12	24.6	100
EHS 20 - 3/4"	7321.20000	HS 20 / HS 3/4"	38.0	160
EHS 25 - 1"	7321.25000	HS 25 / HS 1"	51.0	180
EHS 32 - 1 1/4"	7321.32000	HS 32 / HS 1 1/4"	63.0	200

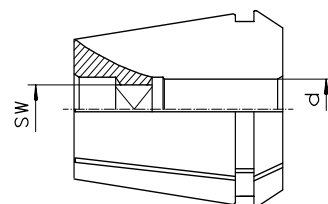


The extractor helps in the removal of HS reduction sleeves from hydrochucks



ER-GB

■ *ER-GB RIGID TAPPING COLLETS WITHOUT AXIAL COMPENSATION*

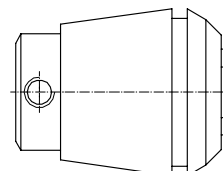


d [mm]	SW [mm]	STD.	ER 11-GB Part No.	ER 16-GB Part No.	ER 20-GB Part No.	ER 25-GB Part No.	ER 32-GB Part No.	ER 40-GB Part No.
2.8	2.1	DIN	1411.02800	-	-	-	-	-
3.5	2.7	DIN	1411.03500	-	-	-	-	-
4.0	3.0	DIN	1411.04000	-	-	-	-	-
4.0	3.15/3.2	ISO, JIS	-	1416.04002	1420.04002	1425.04002	1432.04002	-
4.5	3.4	DIN	1411.04500	1416.04500	1420.04500	1425.04500	1432.04500	-
5.0	4.0	ISO, JIS	-	1416.05002	1420.05002	1425.05002	1432.05002	-
5.5	4.3	DIN	-	1416.05500	1420.05500	1425.05500	1432.05500	-
5.5	4.5	JIS	-	1416.05501	1420.05501	1425.05501	1432.05501	-
6.0	4.5	JIS	-	1416.06001	1420.06001	1425.06001	1432.06001	1440.06001
6.0	4.9	DIN	1411.06000	1416.06000	1420.06000	1425.06000	1432.06000	1440.06000
6.2	5.0	JIS	-	1416.06201	1420.06201	1425.06201	1432.06201	1440.06201
6.3	5.0	ISO	-	1416.06302	1420.06302	1425.06302	1432.06302	1440.06302
7.0	5.5	DIN, JIS	-	1416.07000	1420.07000	1425.07000	1432.07000	1440.07000
7.1	5.6	ISO	-	1416.07102	1420.07102	1425.07102	1432.07102	1440.07102
8.0	6.2/6.3	DIN, ISO	-	1416.08000	1420.08000	1425.08000	1432.08000	1440.08000
8.5	6.5	JIS	-	1416.08501	1420.08501	1425.08501	1432.08501	1440.08501
9.0	7.0/7.1	DIN, ISO	-	1416.09000	1420.09000	1425.09000	1432.09000	1440.09000
10.0	8.0	DIN, ISO	-	-	1420.10000	1425.10000	1432.10000	1440.10000
10.5	8.0	JIS	-	-	1420.10501	1425.10501	1432.10501	1440.10501
11.0	9.0	DIN	-	-	1420.11000	1425.11000	1432.11000	1440.11000
11.2	9.0	ISO	-	-	1420.11202	1425.11202	1432.11202	1440.11202
12.0	9.0	DIN	-	-	-	1425.12000	1432.12000	1440.12000
12.5	10.0	ISO, JIS	-	-	-	1425.12502	1432.12502	1440.12502
14.0	11.0/11.2	DIN, ISO, JIS	-	-	-	1425.14000	1432.14000	1440.14000
15.0	12.0	JIS	-	-	-	1425.15001	1432.15001	1440.15001
16.0	12.0	DIN	-	-	-	1425.16000	1432.16000	1440.16000
17.0	13.0	JIS	-	-	-	-	1432.17001	1440.17001
18.0	14.0/14.5	DIN, ISO	-	-	-	-	1432.18000	1440.18000
20.0	16.0	DIN, ISO	-	-	-	-	1432.20000	1440.20000
22.0	18.0	DIN	-	-	-	-	-	1440.22000

Additional technical information on page 13-5



ET1



■ PCM ET1 TAPPING COLLETS WITH AXIAL COMPENSATION

Shank Dia. [mm]	STD.	ET1 12 Part No.	ET1 16 Part No.	ET1 20 Part No.	ET1 25 Part No.	ET1 32 Part No.	ET1 40 Part No.
1.40	DIN	1512.01400	1516.01400	-	-	-	-
1.60	DIN	1512.01600	1516.01600	-	-	-	-
1.80	DIN	1512.01800	1516.01800	-	-	-	-
2.00	ISO	1512.02000	1516.02000	-	-	-	-
2.20	DIN	1512.02200	1516.02200	1520.02200	-	-	-
2.24	ISO	1512.02240	1516.02240	1520.02240	-	-	-
2.50	DIN, ISO	1512.02500	1516.02500	1520.02500	1525.02500	-	-
2.80	DIN, ISO	1512.02800	1516.02800	1520.02800	1525.02800	-	-
3.00	JIS	1512.03000	1516.03000	1520.03000	1525.03000	-	-
3.15	ISO	1512.03150	1516.03150	1520.03150	1525.03150	-	-
3.50	DIN	1512.03500	1516.03500	1520.03500	1525.03500	-	-
3.55	ISO	1512.03550	1516.03550	1520.03550	1525.03550	-	-
4.00	DIN, ISO, JIS	-	1516.04000	1520.04000	1525.04000	-	-
4.50	DIN, ISO	-	1516.04500	1520.04500	1525.04500	1532.04500	-
5.00	ISO, JIS	-	1516.05000	1520.05000	1525.05000	1532.05000	-
5.50	DIN, ISO	-	1516.05500	1520.05500	1525.05500	1532.05500	-
5.60	ISO	-	1516.05600	1520.05600	1525.05600	1532.05600	-
6.00	DIN, JIS	-	1516.06000	1520.06000	1525.06000	1532.06000	1540.06000
6.20	JIS	-	1516.06200	1520.06200	1525.06200	1532.06200	1540.06200
6.30	ISO	-	1516.06300	1520.06300	1525.06300	1532.06300	1540.06300
7.00	DIN, JIS	-	-	1520.07000	1525.07000	1532.07000	1540.07000
7.10	ISO	-	-	-	1525.07100	1532.07100	1540.07100
8.00	DIN, ISO, JIS	-	-	-	1525.08000	1532.08000	1540.08000
8.50	JIS	-	-	-	1525.08500	1532.08500	1540.08500
9.00	DIN, ISO	-	-	-	1525.09000	1532.09000	1540.09000
10.00	DIN, ISO	-	-	-	1525.10000	1532.10000	1540.10000
10.50	JIS	-	-	-	-	1532.10500	1540.10500
11.00	DIN	-	-	-	-	1532.11000	1540.11000
11.20	ISO	-	-	-	-	1532.11200	1540.11200
12.00	DIN	-	-	-	-	1532.12000	1540.12000
12.50	ISO, JIS	-	-	-	-	1532.12500	1540.12500
14.00	DIN, ISO, JIS	-	-	-	-	-	1540.14000
15.00	JIS	-	-	-	-	-	1540.15000
16.00	DIN, ISO	-	-	-	-	-	1540.16000
17.00	JIS	-	-	-	-	-	1540.17000