WIDIA

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TOOLING SYSTEMS

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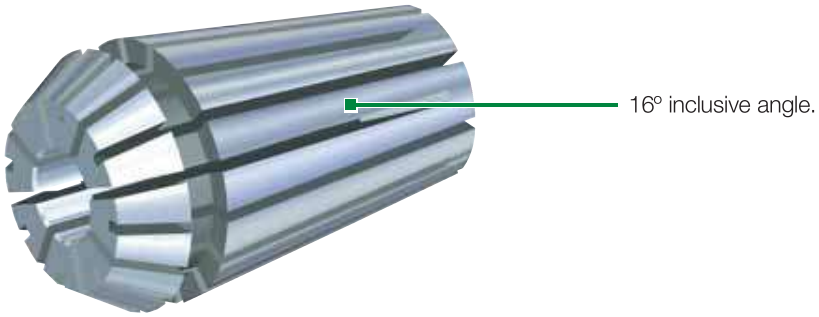
Erickson™ • **ER Single-Angle Collets**

The standard ER Collets are manufactured according to DIN 6499-B (16° inclusive angle) standard and are available in a variety of styles, ER8, ER11, ER16, ER20, ER25, ER32, and ER40, with sizes ranging from 0,5–26mm (.0197–1.0000"). Applications of light end milling, drilling, tapping, reaming, and boring solution are applicable.

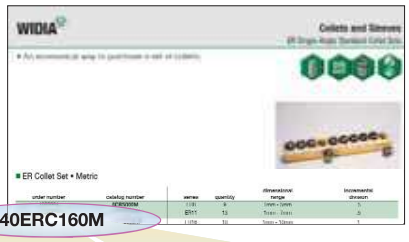
ER Collets

- DIN 6499 Class 2 accuracy.
- 16° inclusive taper angle taper for approximately 2:1 grip.
- Dedicated versions for tapping — driving off the square of the tap.



How Do Catalog Numbers Work?

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.



ERICKSON

40ERC160M

40	ER	C	160	M
System Size	Collet Style	Special Feature *(optional)*	Collet Bore Size	Identification Value
11 = ER11 **16** = ER16 **20** = ER20 **25** = ER25 **32** = ER32 **40** = ER40	**ER-DIN 6499** = Single-angle	**TC** = Solid tapping (square for drive) **TCT** = Solid tapping with tension only	**metric (xx.x)** **010** = 1mm **160** = 16mm **245** = 24,5mm **inch (x.xxx)** **0125** = 1/8" **0500** = 1/2" **1000** = 1"	**M** = Collet bore size built to metric values **(blank)** = Collet bore size built to metric values

ER • Single-Angle

ERICKSON

- Provides good grip and accuracy for all drilling applications.
- Wide clamping range.
- Available in both inch and metric bores.
- 1mm (.040") range of collapse.
- Manufactured to DIN 6499.
- Accuracy to DIN 6499 Class 2.

ERTC • Single-Angle Tap Collet

ERICKSON

- Designed to grip taps on shank and square to eliminate slippage.
- Fits all standard ER-style collet chucks.
- 0,13mm (.005") range of collapse.

ERTCT • Single-Angle Tap Collet with Axial Compensation

ERICKSON

- Designed to grip taps on shank and square to eliminate slippage.
- Tension only, cost effective solution for machines that require axial compensation for tapping.
- Fits all standard ER-style collet chucks.

Our complete portfolio.
Your complete satisfaction.

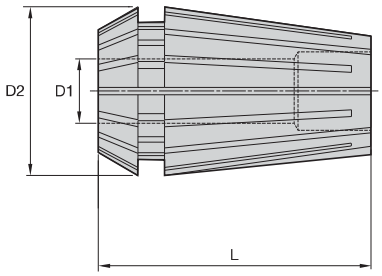
From turning, holemaking, and indexable milling to solid carbide end milling, solid carbide drilling, and tapping, the most powerful tools in the business now proudly wear WIDIA™ brands. When you buy WIDIA products, you're not just purchasing speed, power, and precision, you're investing in quality and complete satisfaction.

Match the most expansive portfolio of precision-engineered products and engineered solution services available today with a global, specialized network of Authorized Distributor partners, and you have the tools you need — and the power that only comes from WIDIA brands. For product information, or to schedule an onsite demonstration, visit www.widia.com.

To learn more about our innovations, contact your local Authorized Distributor or visit **www.widia.com**.

WIDIA™

- Provides approximately 2:1 grip advantage.
- Wide clamping range for all drilling applications.
- ER8 and ER11 0,5mm (.020") range of collapse.
- ER16, ER20, ER25, ER32, and ER40 1mm (.040") range of collapse.
- Available in both metric and inch sizes.
- Manufactured to DIN 6499 Class 2 accuracy; see page K79.



ERICKSON

ER Collets • Metric

D1	ER8 D2 = 8,5mm L = 13,5mm	ER11 D2 = 11,5mm L = 18mm	ER16 D2 = 17mm L = 27,5mm	ER20 D2 = 21mm L = 31,5mm	ER25 D2 = 26mm L = 34mm	ER32 D2 = 33mm L = 40mm	ER40 D2 = 41mm L = 46mm	collet capacity max mm	collet capacity min mm
1,0	8ER010M	11ER010M	16ER010M	20ER010M	–	–	–	1,00	0,50
1,5	8ER015M	11ER015M	16ER015M	–	–	–	–	1,50	1,00
2,0	–	–	16ER020M	20ER020M	25ER020M	–	–	2,00	1,00
2,0	8ER020M	11ER020M	–	–	–	–	–	2,00	1,50
2,5	–	–	16ER025M	–	–	–	–	2,50	1,50
2,5	8ER025M	11ER025M	–	–	–	–	–	2,50	2,00
3,0	–	–	16ER030M	20ER030M	25ER030M	32ER030M	–	3,00	2,00
3,0	8ER030M	11ER030M	–	–	–	–	–	3,00	2,50
3,5	–	–	16ER035M	–	–	–	–	3,50	2,50
3,5	8ER035M	11ER035M	–	–	–	–	–	3,50	3,00
4,0	–	–	16ER040M	20ER040M	25ER040M	32ER040M	40ER040M	4,00	3,00
4,0	8ER040M	11ER040M	–	–	–	–	–	4,00	3,50
4,5	–	–	16ER045M	–	–	–	–	4,50	3,50
4,5	8ER045M	11ER045M	–	–	–	–	–	4,50	4,00
5,0	–	–	16ER050M	20ER050M	25ER050M	32ER050M	40ER050M	5,00	4,00
5,0	8ER050M	11ER050M	–	–	–	–	–	5,00	4,50
5,5	–	–	16ER055M	–	–	–	–	5,50	4,50
5,5	–	11ER055M	–	–	–	–	–	5,50	5,00
6,0	–	–	16ER060M	20ER060M	25ER060M	32ER060M	40ER060M	6,00	5,00
6,0	–	11ER060M	–	–	–	–	–	6,00	5,50
6,5	–	–	16ER065M	–	–	–	–	6,50	5,50
6,5	–	11ER065M	–	–	–	–	–	6,50	6,00
7,0	–	–	16ER070M	20ER070M	25ER070M	32ER070M	40ER070M	7,00	6,00
7,0	–	11ER070M	–	–	–	–	–	7,00	6,50
7,5	–	–	16ER075M	–	–	–	–	7,50	6,50
8,0	–	–	16ER080M	20ER080M	25ER080M	32ER080M	40ER080M	8,00	7,00

(continued)

(ER Single-Angle Standard Collets continued)

D1	ER8 D2 = 8,5mm L = 13,5mm	ER11 D2 = 11,5mm L = 18mm	ER16 D2 = 17mm L = 27,5mm	ER20 D2 = 21mm L = 31,5mm	ER25 D2 = 26mm L = 34mm	ER32 D2 = 33mm L = 40mm	ER40 D2 = 41mm L = 46mm	collet capacity max mm	collet capacity min mm
8,5	–	–	16ER085M	–	–	–	–	8,50	7,50
9,0	–	–	16ER090M	20ER090M	25ER090M	32ER090M	40ER090M	9,00	8,00
9,5	–	–	16ER095M	–	–	–	–	9,50	8,50
10,0	–	–	16ER100M	20ER100M	25ER100M	32ER100M	40ER100M	10,00	9,00
11,0	–	–	–	20ER110M	25ER110M	32ER110M	40ER110M	11,00	10,00
12,0	–	–	–	20ER120M	25ER120M	32ER120M	40ER120M	12,00	11,00
13,0	–	–	–	20ER130M	25ER130M	32ER130M	40ER130M	13,00	12,00
14,0	–	–	–	–	25ER140M	32ER140M	40ER140M	14,00	13,00
15,0	–	–	–	–	25ER150M	32ER150M	40ER150M	15,00	14,00
16,0	–	–	–	–	25ER160M	32ER160M	40ER160M	16,00	15,00
17,0	–	–	–	–	–	32ER170M	40ER170M	17,00	16,00
18,0	–	–	–	–	–	32ER180M	40ER180M	18,00	17,00
19,0	–	–	–	–	–	32ER190M	40ER190M	19,00	18,00
20,0	–	–	–	–	–	32ER200M	40ER200M	20,00	19,00
21,0	–	–	–	–	–	–	40ER210M	21,00	20,00
22,0	–	–	–	–	–	–	40ER220M	22,00	21,00
23,0	–	–	–	–	–	–	40ER230M	23,00	22,00
24,0	–	–	–	–	–	–	40ER240M	24,00	23,00
25,0	–	–	–	–	–	–	40ER250M	25,00	24,00
26,0	–	–	–	–	–	–	40ER260M	26,00	25,00

(continued)

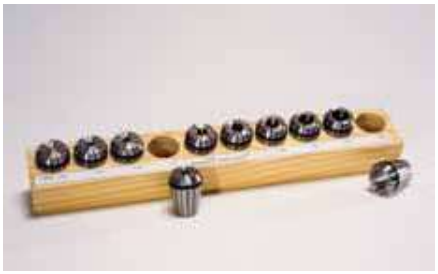
(ER Single-Angle Standard Collets continued)

ER Collets • Inch

D1	ER16 D2 = .669 L = 1.083	ER20 D2 = .827 L = 1.240	ER25 D2 = 1.024 L = 1.339	ER32 D2 = 1.299 L = 1.575	ER40 D2 = 1.614 L = 1.811	collet capacity max inch	collet capacity min inch
1/16	16ER0062	20ER0062	25ER0062	–	–	.0625	.0425
3/32	–	20ER0094	–	–	–	.0938	.0538
3/32	16ER0094	–	25ER0094	–	–	.0938	.0738
1/8	16ER0125	20ER0125	25ER0125	32ER0125	40ER0125	.1250	.0850
5/32	16ER0156	20ER0156	25ER0156	32ER0156	40ER0156	.1563	.1163
3/16	16ER0188	20ER0188	25ER0188	32ER0188	40ER0188	.1875	.1475
7/32	16ER0219	20ER0219	25ER0219	32ER0219	40ER0219	.2188	.1788
1/4	16ER0250	20ER0250	25ER0250	32ER0250	40ER0250	.2500	.2100
9/32	16ER0281	20ER0281	25ER0281	32ER0281	40ER0281	.2813	.2413
5/16	16ER0312	20ER0312	25ER0312	32ER0312	40ER0312	.3125	.2725
11/32	16ER0344	20ER0344	25ER0344	32ER0344	40ER0344	.3438	.3038
3/8	16ER0375	20ER0375	25ER0375	32ER0375	40ER0375	.3750	.3350
13/32	16ER0406	20ER0406	25ER0406	32ER0406	40ER0406	.4063	.3663
7/16	–	20ER0438	25ER0438	32ER0438	40ER0438	.4375	.3975
15/32	–	20ER0469	25ER0469	32ER0469	40ER0469	.4688	.4288
1/2	–	20ER0500	25ER0500	32ER0500	40ER0500	.5000	.4600
17/32	–	–	25ER0531	32ER0531	40ER0531	.5313	.4913
9/16	–	–	–	32ER0562	40ER0562	.5625	.5225
9/16	–	–	25ER0562	–	–	.5626	.5225
19/32	–	–	25ER0594	32ER0594	40ER0594	.5938	.5538
5/8	–	–	25ER0625	32ER0625	40ER0625	.6250	.5850
21/32	–	–	–	32ER0656	40ER0656	.6563	.6163
11/16	–	–	–	32ER0688	40ER0688	.6875	.6475
23/32	–	–	–	32ER0719	40ER0719	.7188	.6788
3/4	–	–	–	32ER0750	40ER0750	.7500	.7100
25/32	–	–	–	32ER0781	40ER0781	.7813	.7413
13/16	–	–	–	32ER0812	40ER0812	.8125	.7725
27/32	–	–	–	–	40ER0844	.8438	.8038
7/8	–	–	–	–	40ER0875	.8750	.8350
29/32	–	–	–	–	40ER0906	.9063	.8663
15/16	–	–	–	–	40ER0938	.9375	.8975
31/32	–	–	–	–	40ER0969	.9688	.9288
1	–	–	–	–	40ER1000	1.0000	.9600

NOTE: Inserting the cutting tool less than 2/3 the gripping length into the collet can permanently damage the collet.
Full length of the gripping bore must be maintained to achieve maximum accuracy and safety.
Collet accuracies are based on size-for-size conditions.
Never try to stretch the collets by clamping oversized cutting tools.

• An economical way to purchase a set of collets.



ERICKSON

ER Collet Set • Metric

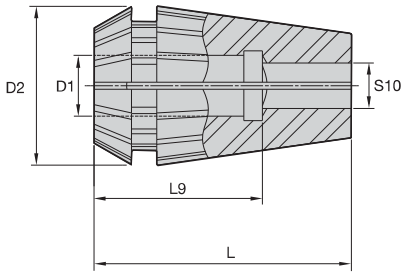
order number	catalog number	series	quantity	dimensional range	incremental division
1025864	8ERS000M	ER8	9	1mm - 5mm	.5
1020872	11ERS000M	ER11	13	1mm - 7mm	.5
1135892	16ERS000M	ER16	10	1mm - 10mm	1
1025865	20ERS000M	ER20	12	2mm - 13mm	1
1123858	25ERS000M	ER25	15	2mm - 16mm	1
1135911	32ERS000M	ER32	18	3mm - 20mm	1
1126252	40ERS000M	ER40	23	4mm - 26mm	1

ER Collet Set • Inch

order number	catalog number	series	quantity	dimensional range	incremental division
2269968	16ERS000SET2	ER16	12	1/16 - 13/32	1/32
2269969	20ERS000SET1	ER20	8	1/16 - 1/2	1/16
2269970	20ERS000SET2	ER20	15	1/16 - 1/2	1/32
2269971	25ERS000SET1	ER25	10	1/16 - 5/8	1/16
2269972	25ERS000SET2	ER25	19	1/16 - 5/8	1/32
2269973	32ERS000SET1	ER32	12	1/8 - 13/16	1/16
2269974	32ERS000SET2	ER32	23	1/8 - 13/16	1/32
2269975	40ERS000SET1	ER40	15	1/8 - 1	1/16
2269976	40ERS000SET2	ER40	29	1/8 - 1	1/32

NOTE: ER collet sets come complete with protective tray.

- Square in back of collet acts as a drive for the tap square.
- Can be used in all standard ER collet chucks.
- Available in metric and inch sizes.



ERICKSON

ER Solid Tap Collet • Metric DIN and ISO

tap size	ER16 D2 = 17mm L = 27,5mm	ER20 D2 = 21mm L = 31,5mm	ER25 D2 = 26mm L = 34mm	ER32 D2 = 33mm L = 40mm	ER40 D2 = 41mm L = 46mm	D1	S10	L9
M4 & M6	**16ERTC045034M**	**20ERTC045034M**	**25ERTC045034M**	**32ERTC045034M**	–	4,5	3,4	18
–	**16ERTC055043M**	**20ERTC055043M**	**25ERTC055043M**	**32ERTC055043M**	–	5,5	4,3	18
M5 & M6 & M7 & M8	**16ERTC060049M**	**20ERTC060049M**	**25ERTC060049M**	**32ERTC060049M**	–	6,0	4,9	18
M10	**16ERTC070055M**	**20ERTC070055M**	**25ERTC070055M**	**32ERTC070055M**	**40ERTC070055M**	7,0	5,5	18
M8	**16ERTC080062M**	**20ERTC080062M**	**25ERTC080062M**	**32ERTC080062M**	**40ERTC080062M**	8,0	6,2	22
M12	**16ERTC090070M**	**20ERTC090070M**	**25ERTC090070M**	**32ERTC090070M**	**40ERTC090070M**	9,0	7,0	22
M10	–	**20ERTC100080M**	**25ERTC100080M**	**32ERTC100080M**	**40ERTC100080M**	10,0	8,0	25
M14	–	**20ERTC110090M**	**25ERTC110090M**	**32ERTC110090M**	**40ERTC110090M**	11,0	9,0	25
M16	–	–	**25ERTC120090M**	**32ERTC120090M**	**40ERTC120090M**	12,0	9,0	25
M18	–	–	–	**32ERTC140110M**	**40ERTC140110M**	14,0	11,0	25
–	–	–	**25ERTC140110M**	–	–	14,0	11,0	25
M20	–	–	–	**32ERTC160120M**	–	16,0	12,0	25
–	–	–	**25ERTC160120M**	–	–	16,0	12,0	25
M20	–	–	–	–	**40ERTC160120M**	16,0	12,0	25
M22 & M24	–	–	–	**32ERTC180145M**	**40ERTC180145M**	18,0	14,5	25
M27 & M30	–	–	–	**32ERTC200160M**	**40ERTC200160M**	20,0	16,0	28
M30	–	–	–	–	**40ERTC220180M**	22,0	18,0	28

(continued)

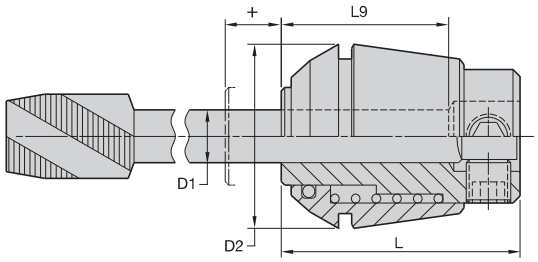
(ER Single-Angle Solid Tap Collets continued)

ER Solid Tap Collet • Inch/Metric ANSI

tap size mm	tap size in	ER16 D2 = .669 L = 1.083	ER20 D2 = .827 L = 1.240	ER25 D2 = 1.024 L = 1.339	ER32 D2 = 1.299 L = 1.575	ER40 D2 = 1.614 L = 1.811	D1	S10	L9
M4	8 & 5/32	16ERTC8	20ERTC8	25ERTC8	32ERTC8	–	.168	.131	.710
M4,5 & M5	10 & 3/16	16ERTC10	20ERTC10	25ERTC10	32ERTC10	–	.194	.152	.710
–	12 & 7/32	16ERTC12	20ERTC12	25ERTC12	32ERTC12	–	.220	.165	.710
M6 & M6,3	14 & 1/4	16ERTC025	20ERTC025	25ERTC025	32ERTC025	40ERTC025	.255	.191	.710
M7 & M8	5/16	–	20ERTC031	25ERTC031	32ERTC031	40ERTC031	.318	.238	.866
–	7/16	–	20ERTC043	25ERTC043	32ERTC043	40ERTC043	.323	.242	.866
M12 & M12,5	1/2	–	20ERTC050	25ERTC050	32ERTC050	40ERTC050	.367	.275	.866
M10	3/8	–	20ERTC037	25ERTC037	32ERTC037	40ERTC037	.381	.286	.866
M14	9/16	–	–	25ERTC056	32ERTC056	40ERTC056	.429	.322	.984
M16	5/8	–	–	25ERTC062	32ERTC062	40ERTC062	.480	.360	.984
M18	11/16	–	–	–	32ERTC069	40ERTC069	.542	.406	.984
–	3/4	–	–	–	32ERTC075	–	.590	.422	.984
–	3/4	–	–	–	–	40ERTC075	.590	.442	.984
M20	13/16	–	–	–	32ERTC081	40ERTC081	.652	.489	.984
M22	7/8	–	–	–	–	40ERTC087	.697	.523	.984
M24	15/16	–	–	–	–	40ERTC093	.760	.570	1.100
M25	1	–	–	–	–	40ERTC100	.800	.600	1.100

NOTE: Inserting the cutting tool less than 2/3 the gripping length into the collet can permanently damage the collet.
Full length of the gripping bore must be maintained to achieve maximum accuracy and safety.
Collet accuracies are based on size-for-size conditions. Using the collapsible range can influence the accuracy and gripping powers.
Never try to stretch the collets by clamping oversized cutting tools.

- Tension feature for applications that need synchronized tapping.
- Adjustable screws in back of collet act as a drive for the tap square.
- Can be used in all standard ER collet chucks.
- Available in inch sizes.



ERICKSON

ER T-Only Tap Collet • Inch/Metric ANSI

tap size mm	tap size in	ER12 D2 = 11,4mm L = 21,5mm	ER16 D2 = 17mm L = 27,5mm	ER20 D2 = 21mm L = 31,5mm	ER25 D2 = 26mm L = 34mm	ER32 D2 = 33mm L = 40mm	ER40 D2 = 41mm L = 46mm	D1 mm	D1 in
M3 & M3,15 & M3,5	#0-#6 & 1/8	12ERTCT6	16ERTCT6	20ERTCT6	25ERTCT6	–	–	3,58	.141
M4	#8 & 5/32	–	16ERTCT8	20ERTCT8	25ERTCT8	32ERTCT8	–	4,27	.168
M4,5 & M5	#10 & 3/16	–	16ERTCT10	20ERTCT10	25ERTCT10	32ERTCT10	–	4,93	.194
–	#12 & 7/32	–	–	20ERTCT12	25ERTCT12	32ERTCT12	–	5,59	.220
M6 & M6,3	#14 & 1/4	–	–	20ERTCT025	25ERTCT025	32ERTCT025	40ERTCT025	6,48	.255
–	1/8P(LS)	–	–	–	–	32ERTCT012P	–	7,94	.313
M7 & M8	5/16	–	–	–	25ERTCT031	32ERTCT031	40ERTCT031	8,08	.318
–	7/16	–	–	–	25ERTCT043	32ERTCT043	40ERTCT043	8,20	.323
M12 & M12,5	1/2	–	–	–	25ERTCT050	32ERTCT050	40ERTCT050	9,32	.367
M10	3/8	–	–	–	25ERTCT037	32ERTCT037	40ERTCT037	9,68	.381
M14	9/16	–	–	–	–	32ERTCT056	40ERTCT056	10,90	.429
M16	5/8	–	–	–	–	32ERTCT062	40ERTCT062	12,19	.480
M18	11/16	–	–	–	–	–	40ERTCT069	13,77	.542
–	3/4	–	–	–	–	–	40ERTCT075	14,99	.590
M20	13/16	–	–	–	–	–	40ERTCT081	16,56	.652
M22	7/8	–	–	–	–	–	40ERTCT087	17,70	.697

NOTE: 12ERTCT6 fits ER11 chucks.
Full length of the gripping bore must be maintained to achieve maximum accuracy and safety.