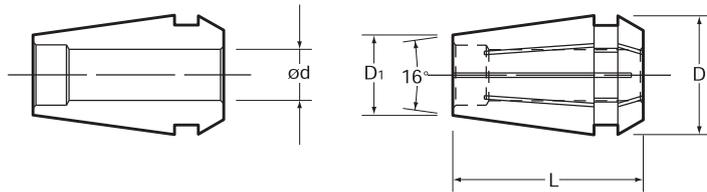


# ER

## Collet For Small Diameters



### ER collet dimensional data

Type	D	D1	L	I.D.	
				inch	mm
ER8	0.331	0.217	0.535	φ 0.020-0.197	φ 0.5-5.0
ER11	0.406	0.307	0.709	φ 0.020-0.276	φ 0.5-7.0
ER16	0.677	0.445	1.063	φ 0.020-0.394	φ 0.5-10.0
ER20	0.835	0.571	1.220	φ 0.020-0.512	φ 0.5-13.0
ER25	1.031	0.728	1.378	φ 0.020-0.630	φ 0.5-16.0
ER32	1.307	0.961	1.575	φ 0.098-0.787	φ 2.5-20.0
ER40	1.622	1.228	1.811	φ 0.118-1.024	φ 3.0-26.0
ER50	2.067	1.539	2.362	φ 0.394-1.339	φ 10.0-34.0

#### Selection example of ER8

To clamp φ3.0 tool shank, there are 2 collets, φ3.0 and φ3.5 collets. We suggest you select φ3.0 collet for higher accuracy.

#### Ordering Example

**ER8 - 2.0 AA**  
 Max. Accuracy  
 chucking dia.

AA is available.

I.D.	Type		ER8 AA	ER11 AA	ER16 A	ER20 A	ER25 A	ER32 A	ER40 A	ER50 A
	mm	inch								
φ 1.0 - 0.5	φ 0.039 - 0.020		ER8-1.0	ER11-1.0	ER16-1.0	ER20-1.0	ER25-1.0			
φ 1.5 - 1.0	φ 0.059 - 0.039		ER8-1.5	ER11-1.5	ER16-1.5	ER20-1.5	ER25-1.5			
φ 2.0 - 1.5	φ 0.079 - 0.059		ER8-2.0	ER11-2.0	ER16-2.0	ER20-2.0	ER25-2.0			
φ 2.5 - 2.0	φ 0.098 - 0.079		ER8-2.5	ER11-2.5	ER16-2.5	ER20-2.5	ER25-2.5			
φ 3.0 - 2.5	φ 0.118 - 0.098		ER8-3.0	ER11-3.0	ER16-3.0	ER20-3.0	ER25-3.0	ER32-3.0		
φ 3.5 - 3.0 (1/8")	φ 0.138 - 0.118		ER8-3.5	ER11-3.5	ER16-3.5	ER20-3.5	ER25-3.5	ER32-3.5		
φ 4.0 - 3.5	φ 0.157 - 0.138		ER8-4.0	ER11-4.0	ER16-4.0					
φ 4.5 - 4.0	φ 0.177 - 0.157		ER8-4.5	ER11-4.5	ER16-4.5					
φ 5.0 - 4.5 (3/16")	φ 0.197 - 0.177		ER8-5.0	ER11-5.0	ER16-5.0					
φ 5.5 - 5.0	φ 0.217 - 0.197			ER11-5.5	ER16-5.5					
φ 6.0 - 5.5	φ 0.236 - 0.217			ER11-6.0	ER16-6.0					
φ 6.5 - 6.0 (1/4")	φ 0.256 - 0.236			ER11-6.5	ER16-6.5					
φ 7.0 - 6.5	φ 0.276 - 0.256			ER11-7.0	ER16-7.0					
φ 7.5 - 7.0	φ 0.295 - 0.276				ER16-7.5					
φ 8.0 - 7.5 (5/16")	φ 0.315 - 0.295				ER16-8.0					
φ 8.5 - 8.0	φ 0.335 - 0.315				ER16-8.5					
φ 9.0 - 8.5	φ 0.354 - 0.335				ER16-9.0					
φ 9.5 - 9.0	φ 0.374 - 0.354				ER16-9.5					
φ 10.0 - 9.5 (3/8")	φ 0.394 - 0.374				ER16-10.0					
φ 4.0 - 3.0 (1/4")	φ 0.157 - 0.118					ER20-4.0	ER25-4.0	ER32-4.0	ER40-4.0	
φ 5.0 - 4.0 (3/16")	φ 0.197 - 0.157					ER20-5.0	ER25-5.0	ER32-5.0	ER40-5.0	
φ 6.0 - 5.0	φ 0.236 - 0.197					ER20-6.0	ER25-6.0	ER32-6.0	ER40-6.0	
φ 7.0 - 6.0 (1/4")	φ 0.276 - 0.236					ER20-7.0	ER25-7.0	ER32-7.0	ER40-7.0	
φ 8.0 - 7.0 (5/16")	φ 0.315 - 0.276					ER20-8.0	ER25-8.0	ER32-8.0	ER40-8.0	
φ 9.0 - 8.0	φ 0.354 - 0.315					ER20-9.0	ER25-9.0	ER32-9.0	ER40-9.0	
φ 10.0 - 9.0 (3/8")	φ 0.394 - 0.354					ER20-10.0	ER25-10.0	ER32-10.0	ER40-10.0	
φ 11.0 - 10.0	φ 0.433 - 0.394					ER20-11.0	ER25-11.0	ER32-11.0	ER40-11.0	ER50-12.0
φ 12.0 - 11.0	φ 0.472 - 0.433					ER20-12.0	ER25-12.0	ER32-12.0	ER40-12.0	
φ 13.0 - 12.0 (1/2")	φ 0.512 - 0.472					ER20-13.0	ER25-13.0	ER32-13.0	ER40-13.0	
φ 14.0 - 13.0	φ 0.551 - 0.512						ER25-14.0	ER32-14.0	ER40-14.0	ER50-14.0
φ 15.0 - 14.0	φ 0.591 - 0.551						ER25-15.0	ER32-15.0	ER40-15.0	
φ 16.0 - 15.0 (5/8")	φ 0.630 - 0.591						ER25-16.0	ER32-16.0	ER40-16.0	ER50-16.0
φ 17.0 - 16.0	φ 0.669 - 0.630							ER32-17.0	ER40-17.0	
φ 18.0 - 17.0	φ 0.709 - 0.669							ER32-18.0	ER40-18.0	ER50-18.0
φ 19.0 - 18.0	φ 0.748 - 0.709							ER32-19.0	ER40-19.0	
φ 20.0 - 19.0 (3/4")	φ 0.787 - 0.748							ER32-20.0	ER40-20.0	ER50-20.0
φ 21.0 - 20.0	φ 0.827 - 0.787								ER40-21.0	
φ 22.0 - 21.0	φ 0.866 - 0.827								ER40-22.0	ER50-22.0
φ 23.0 - 22.0 (7/8")	φ 0.906 - 0.866								ER40-23.0	
φ 24.0 - 23.0	φ 0.945 - 0.906								ER40-24.0	ER50-24.0
φ 25.0 - 24.0	φ 0.984 - 0.945								ER40-25.0	
φ 26.0 - 25.0 (1")	φ 1.024 - 0.984								ER40-26.0	ER50-26.0
φ 27.0 - 26.0	φ 1.063 - 1.024									
φ 28.0 - 27.0	φ 1.102 - 1.063									ER50-28.0
φ 29.0 - 28.0	φ 1.142 - 1.102									
φ 30.0 - 29.0	φ 1.181 - 1.142									ER50-30.0
φ 31.0 - 30.0	φ 1.220 - 1.181									
φ 32.0 - 31.0 (1-1/4")	φ 1.260 - 1.220									ER50-32.0
φ 33.0 - 32.0	φ 1.299 - 1.260									
φ 34.0 - 33.0	φ 1.339 - 1.299									ER50-34.0

## ER collet collapse range

Type	I.D.	Collapse Range		Type	I.D.	Collapse Range		Type	I.D.	Collapse Range	
ER8	1.0 - 5.0mm	0.020"	0.5mm	ER20	1.0 - 3.5mm	0.020"	0.5mm	ER32	3.0 - 3.5mm	0.020"	0.5mm
ER11	1.0 - 7.0mm	0.020"	0.5mm		4.0 - 13.0mm	0.039"	1.0mm		4.0 - 20.0mm	0.039"	1.0mm
ER16	1.0 - 10.0mm	0.020"	0.5mm	ER25	1.0 - 3.5mm	0.020"	0.5mm	ER40	4.0 - 26.0mm	0.039"	1.0mm
					4.0 - 16.0mm	0.039"	1.0mm	ER50	12.0 - 34.0mm	0.079"	2.0mm

## ER-OH

For tool with coolant hole

Tool Shank Dia.		Model
		ER8-OH
mm	inch	Size
φ 1.8	φ 0.071	ER8-1.8-OH
φ 1.9	φ 0.075	ER8-1.9-OH
φ 2.0	φ 0.079	ER8-2.0-OH
φ 2.1	φ 0.083	ER8-2.1-OH
φ 2.2	φ 0.087	ER8-2.2-OH
φ 2.3	φ 0.091	ER8-2.3-OH
φ 2.4	φ 0.094	ER8-2.4-OH
φ 2.5	φ 0.098	ER8-2.5-OH
φ 2.6	φ 0.102	ER8-2.6-OH
φ 2.7	φ 0.106	ER8-2.7-OH
φ 2.8	φ 0.110	ER8-2.8-OH
φ 2.9	φ 0.114	ER8-2.9-OH
φ 3.0	φ 0.118	ER8-3.0-OH
φ 3.1	φ 0.122	ER8-3.1-OH
φ 3.2	φ 0.126	ER8-3.2-OH
φ 3.3	φ 0.130	ER8-3.3-OH
φ 3.4	φ 0.134	ER8-3.4-OH
φ 3.5	φ 0.138	ER8-3.5-OH
φ 3.6	φ 0.142	ER8-3.6-OH
φ 3.7	φ 0.146	ER8-3.7-OH
φ 3.8	φ 0.150	ER8-3.8-OH
φ 3.9	φ 0.154	ER8-3.9-OH
φ 4.0	φ 0.157	ER8-4.0-OH
φ 4.1	φ 0.161	ER8-4.1-OH
φ 4.2	φ 0.165	ER8-4.2-OH
φ 4.3	φ 0.169	ER8-4.3-OH
φ 4.4	φ 0.173	ER8-4.4-OH
φ 4.5	φ 0.177	ER8-4.5-OH
φ 4.6	φ 0.181	ER8-4.6-OH
φ 4.7	φ 0.185	ER8-4.7-OH
φ 4.8	φ 0.189	ER8-4.8-OH
φ 4.9	φ 0.193	ER8-4.9-OH
φ 5.0	φ 0.197	ER8-5.0-OH

Shrinkage allowance for coolant collet ER8-OH : 0.1mm

Tool Shank Dia.		Model
		ER11-OH
mm	inch	Size
φ 3.0	φ 0.118	ER11-3.0-OH
φ 3.2 (1/8")	φ 0.125	ER11-3.2-OH
φ 3.5	φ 0.138	ER11-3.5-OH
φ 4.0	φ 0.157	ER11-4.0-OH
φ 4.2	φ 0.165	ER11-4.2-OH
φ 4.5	φ 0.177	ER11-4.5-OH
φ 4.8 (3/16")	φ 0.187	ER11-4.8-OH
φ 5.0	φ 0.197	ER11-5.0-OH
φ 5.5	φ 0.217	ER11-5.5-OH
φ 6.0	φ 0.236	ER11-6.0-OH
φ 6.4 (1/4")	φ 0.250	ER11-6.4-OH
φ 6.5	φ 0.256	ER11-6.5-OH
φ 6.8	φ 0.268	ER11-6.8-OH
φ 7.0	φ 0.276	ER11-7.0-OH

Please contact NT USA for ER16 – ER50 coolant type.

### Ordering Example

**ER8 - 2.0 -OH AA**  
 Max. chucking dia. Accuracy

## ER-C

For Collet through

Tool Shank Dia.		Model
		ER8-C
mm	inch	Size
φ 1.8	φ 0.071	ER8-1.8-C
φ 1.9	φ 0.075	ER8-1.9-C
φ 2.0	φ 0.079	ER8-2.0-C
φ 2.1	φ 0.083	ER8-2.1-C
φ 2.2	φ 0.087	ER8-2.2-C
φ 2.3	φ 0.091	ER8-2.3-C
φ 2.4	φ 0.094	ER8-2.4-C
φ 2.5	φ 0.098	ER8-2.5-C
φ 2.6	φ 0.102	ER8-2.6-C
φ 2.7	φ 0.106	ER8-2.7-C
φ 2.8	φ 0.110	ER8-2.8-C
φ 2.9	φ 0.114	ER8-2.9-C
φ 3.0	φ 0.118	ER8-3.0-C
φ 3.1	φ 0.122	ER8-3.1-C
φ 3.2	φ 0.126	ER8-3.2-C
φ 3.3	φ 0.130	ER8-3.3-C
φ 3.4	φ 0.134	ER8-3.4-C
φ 3.5	φ 0.138	ER8-3.5-C
φ 3.6	φ 0.142	ER8-3.6-C
φ 3.7	φ 0.146	ER8-3.7-C
φ 3.8	φ 0.150	ER8-3.8-C
φ 3.9	φ 0.154	ER8-3.9-C
φ 4.0	φ 0.157	ER8-4.0-C
φ 4.1	φ 0.161	ER8-4.1-C
φ 4.2	φ 0.165	ER8-4.2-C
φ 4.3	φ 0.169	ER8-4.3-C
φ 4.4	φ 0.173	ER8-4.4-C
φ 4.5	φ 0.177	ER8-4.5-C
φ 4.6	φ 0.181	ER8-4.6-C
φ 4.7	φ 0.185	ER8-4.7-C
φ 4.8	φ 0.189	ER8-4.8-C
φ 4.9	φ 0.193	ER8-4.9-C
φ 5.0	φ 0.197	ER8-5.0-C

Shrinkage allowance for coolant collet ER8-C : 0.1mm

Tool Shank Dia.		Model
		ER11-C
mm	inch	Size
φ 3.0	φ 0.118	ER11-3.0-C
φ 3.2 (1/8")	φ 0.125	ER11-3.2-C
φ 3.5	φ 0.138	ER11-3.5-C
φ 4.0	φ 0.157	ER11-4.0-C
φ 4.2	φ 0.165	ER11-4.2-C
φ 4.5	φ 0.177	ER11-4.5-C
φ 4.8 (3/16")	φ 0.187	ER11-4.8-C
φ 5.0	φ 0.197	ER11-5.0-C
φ 5.5	φ 0.217	ER11-5.5-C
φ 6.0	φ 0.236	ER11-6.0-C
φ 6.4 (1/4")	φ 0.250	ER11-6.4-C
φ 6.5	φ 0.256	ER11-6.5-C
φ 6.8	φ 0.268	ER11-6.8-C
φ 7.0	φ 0.276	ER11-7.0-C

Please contact NT USA for ER16 – ER50 coolant type.

### Ordering Example

**ER8 - 2.0 -C AA**  
 Max. chucking dia. Accuracy