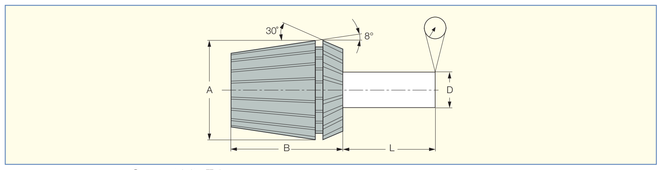
Standard
ER Collet Type DIN 6499



Basic Dimensions

Type	A	B
ER-11	.45	.71
ER-16	.67	1.06
ER-20	.83	1.22
ER-25	1.02	1.38
ER-32	1.30	1.57
ER-40	1.61	1.81
ER-50	2.05	2.36

Concentricity Tolerances

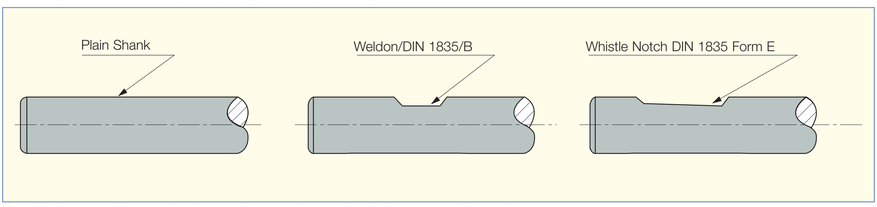
L	D	Standard Precision	Ultra Precision $_{AA}$	DIN $_{6499}$
.24	.039- .063	.0004	.0002	
.39	.063- .118	.0004	.0002	.0006
.63	.118- .236	.0004	.0002	.0006
.98	.236- .394	.0004	.0002	.0006
1.57	.394- .709	.0004	.0002	.0008
1.97	.709-1.024	.0004	.0002	.0008
2.36	1.024-1.339			.0010

ER - Coolit Sealed Collet
Two Types

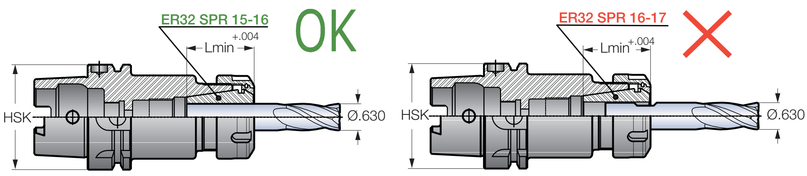
Sealed Collet
For straight shank cutting tools with internal coolant supply.

Seal Jet
With angular nozzles. Coolant flow is direct to the cutting edge - for use with standard straight shank cutting tools (without coolant hole).

Standard Shank for Use in Sealed Collets



Note: The front end of the sealed collet should be located beyond the Weldon or the whistle notch.



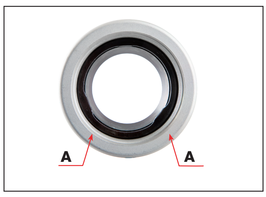
ER Collet
ER - Top Clamping Nut for DIN 6499 Collets

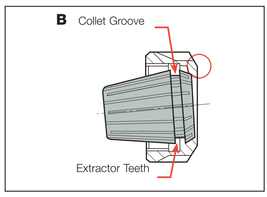
Description
Friction bearing **ER** nut is a nut with a unique two-piece exclusive friction mechanism, combining radial and angular self-centering movements.

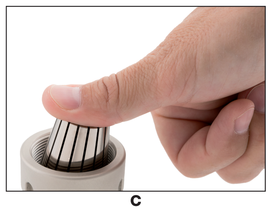
Features
- Unique two-piece friction bearing
- Radial and angular float for better concentricity
- Powerful gripping force, **50-100%** higher than the standard **ER** nut due to the friction bearing mechanism
- Balanced for higher spindle spin due to unique extractor teeth design
- Compact design - general dimensions and size range are the same as the standard nut
- Designed for use with sealed collets

Insertion Procedure
1. Insert the collet at an angle, fitting the two extractor teeth which protrude **(A)** into the collet's groove **(B).**
2. Place the two parts on a clean and horizontal work surface.
3. Press down with your thumb on the back end of the collet until it clicks into place **(C).**

Always assemble the collet into the nut before mounting onto the collet chuck.



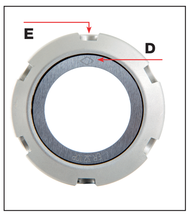




C

Important: Never insert the collet parallel to the extractor ring. Doing this will chip or break the extractor's teeth. When unclamping the nut, the collet will self-release from the chuck by means of extractor teeth.

Extraction Procedure
1. Align the engraved diamond shape which is on the silver ring **(D),** with any of the key slots **(E)** of the nut.
2. Place the nut with the collet facing down on a clean and horizontal work surface.
3. Insert a screwdriver vertically between the nut slots and the collet on the reverse side of the engraved diamond shape **(D).**
4. Tilt the screwdriver outwards, while helping the extraction by pushing the collet's back end in the opposite direction **(F).**



Nut type	LbsxFt	KgxM
E-11	36	5
ER-11M	21	3
ER-16	50	7
ER-16M	29	4
ER-20	86	12
ER-20M	58	8
ER-25	144	20
ER-32	160	22
ER-40	180	25
ER-50	252	35

Note:
For maximum performance the clamping nut thread and collet taper must be cleaned and oiled before use.

⚠ Recommended Clamping Torque for
Standard ER & ER-Top Clamping Nut

Important:
This torque is calculated with the maximum diameter capacity per collet which should be gradually reduced when used with a smaller shank size.

F