

Basic Dimensions

Type	A	B
ER-11	11.5	18
ER-16	17	27
ER-20	21	31
ER-25	26	35
ER-32	33	40
ER-40	41	46
ER-50	52	60

Concentricity Tolerances

L mm	D mm	Standard Precision	A _A Ultra Precision	DIN 6499
6	1.0-1.6	0.01	0.005	
10	1.6-3.0	0.01	0.005	0.015
16	3.0-6.0	0.01	0.005	0.015
25	6.0-10.0	0.01	0.005	0.015
40	10.0-18.0	0.01	0.005	0.020
50	18.0-26.0	0.01	0.005	0.020
60	26.0-34.0			0.025

ER - Sealed Collet
Two Types

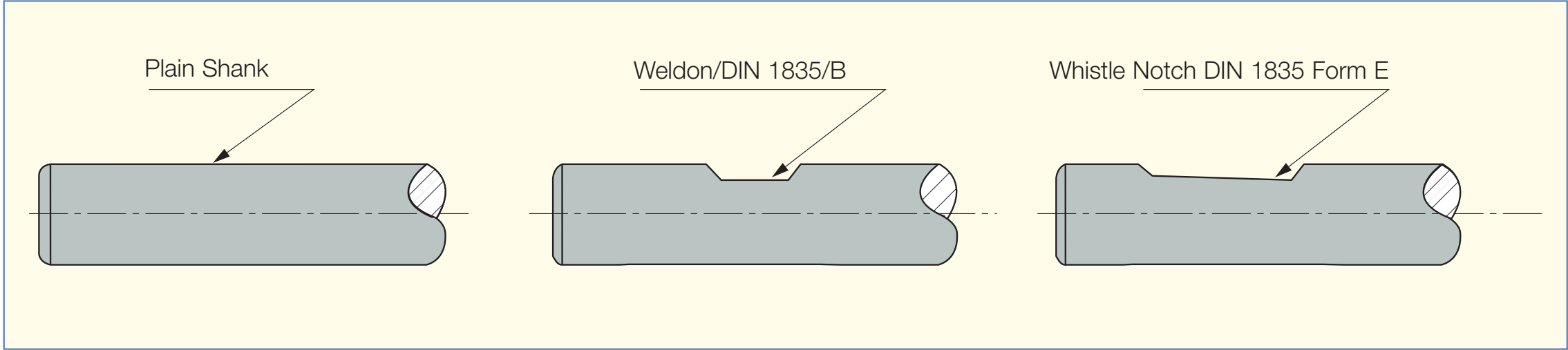


Sealed Collet
For straight shank cutting tools with internal coolant supply.

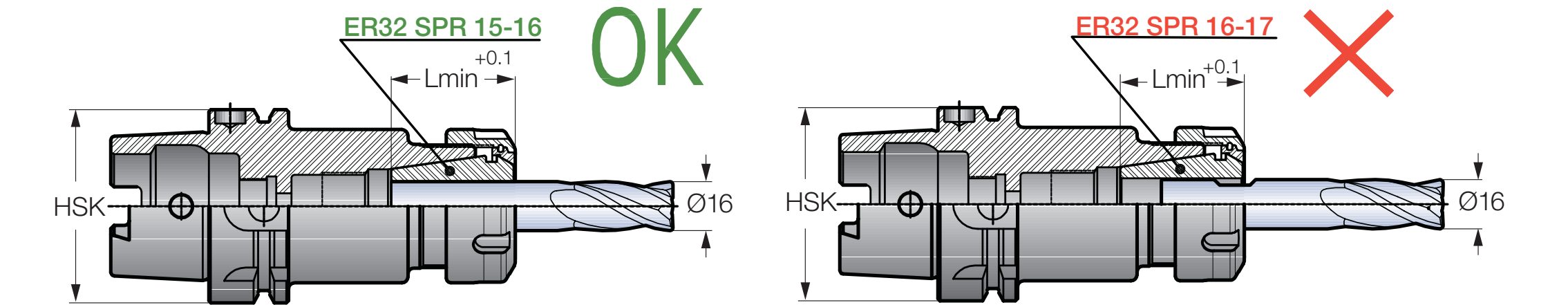


Seal Jet
With angular nozzles. Coolant flow is direct to the cutting edge - for use with standard straight shank cutting tools (without coolant hole).

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 - Top Clamping Nut for DIN 6499 Collets

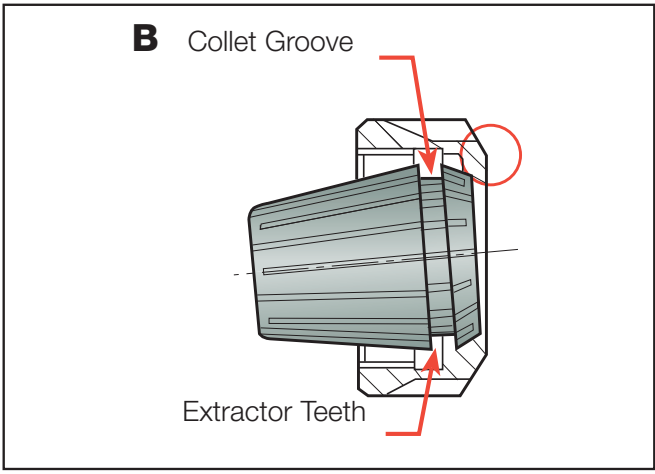
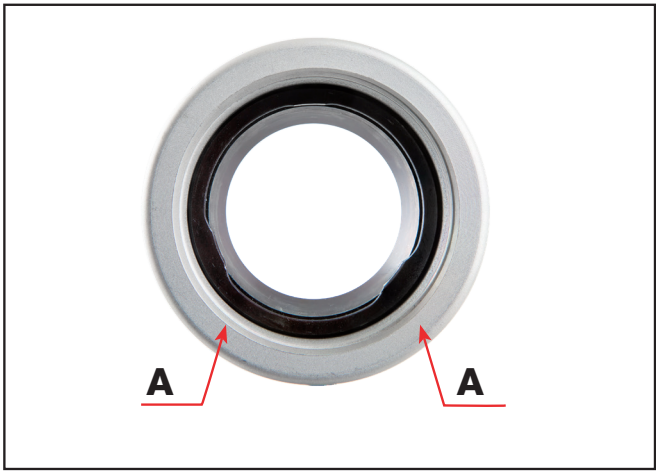
Description

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

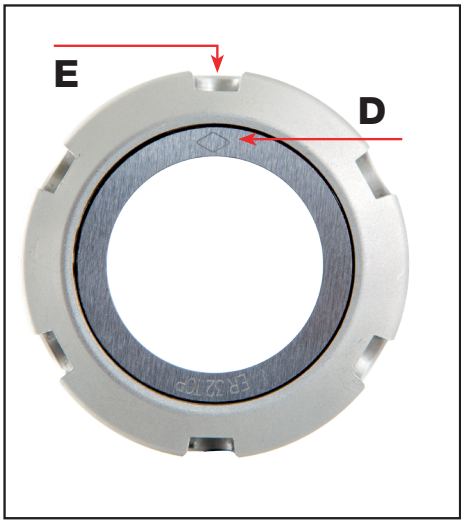
Always assemble the collet into the nut before mounting onto the collet chuck.



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



Nut type	Kgxm
ER-11	5
ER-11M	3
ER-16	7
ER-16M	4
ER-20	12
ER-20M	8
ER-25	20
ER-32	22
ER-40	25
ER-50	35

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

A 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.

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)**.

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)**.



F