



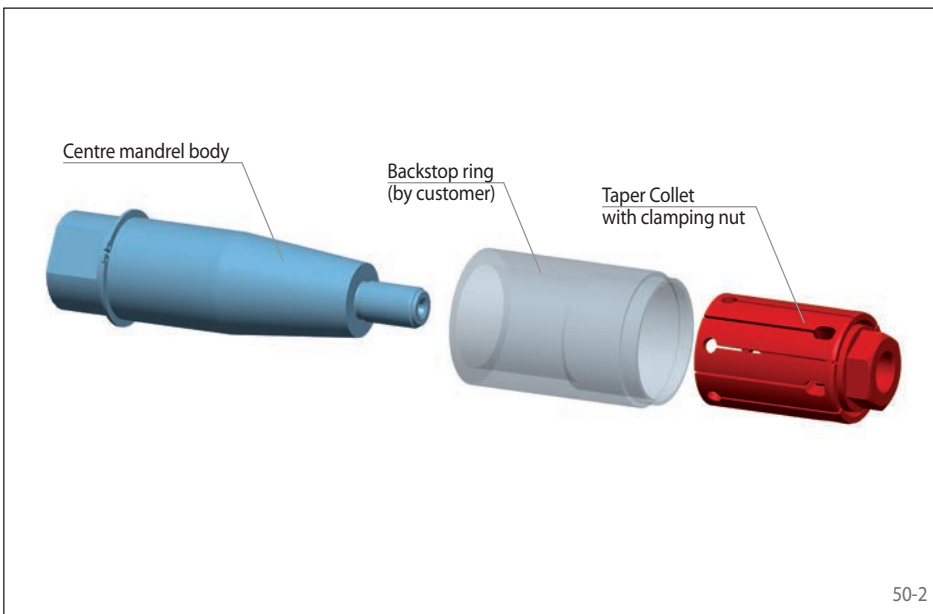
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Features

- For clamping diameters from 11,9 mm to 132 mm
- High true running accuracy $\leq 0,01$ mm
- Permissible component tolerance up to IT15
- Pull-back against external backstop ring by the customer
- For thin-walled or solid components
- For hand clamping

Configuration

The Taper Collet Centre Mandrel consists of a centre mandrel body and a Taper Collet with a clamping nut. The Taper Collet Centre Mandrel is mounted between the centring tips. The Taper Collet is activated by turning the clamping nut.

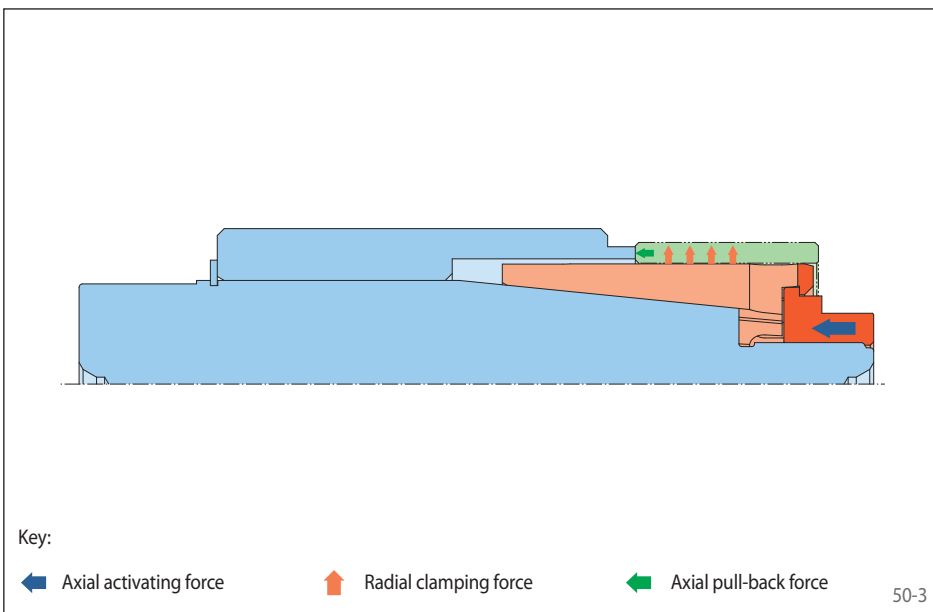


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Clamping principle

For clamping, the Taper Collet is pushed against the centre mandrel body and radially expands over the cone of basebody. The component is centred, pressed against the backstop and aligned flush.

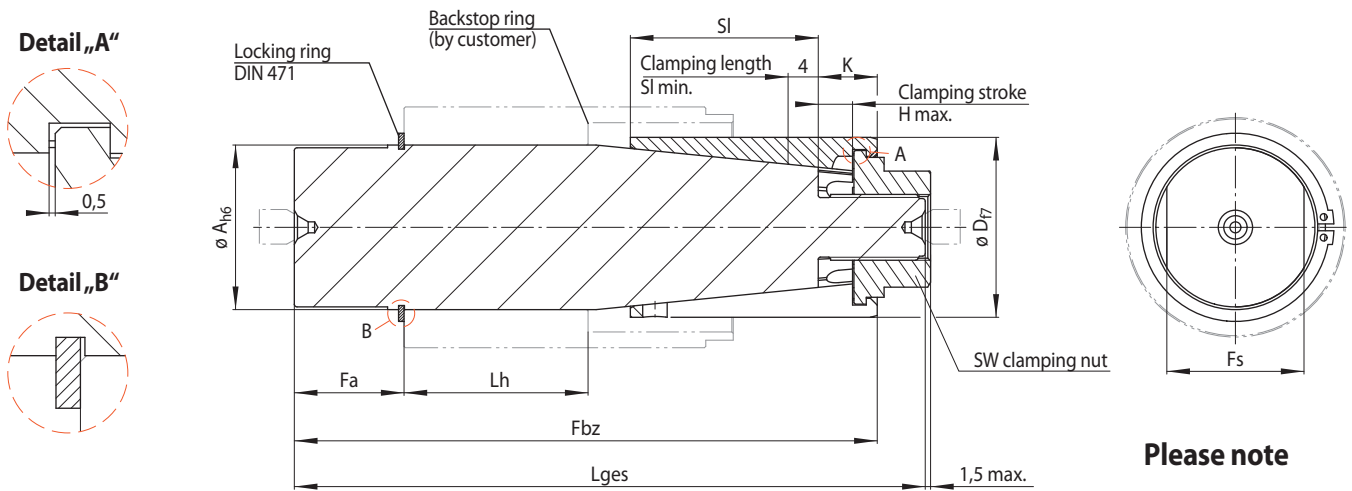
The cylindrical form of the component bore in the clamping area has to be smaller than the tolerance class IT7, independent of the component bore tolerance.



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Key:

- ← Axial activating force
- ↑ Radial clamping force
- ← Axial pull-back force



Please note



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Size	Clamping range	Maximum diameter change*	Max. transmissible torque**	Tightening torque**	A	Fa	Fbz	Fs	H max.	K	Lges	Lh max.	SI	SW
	D ¹⁾ mm	Δ D mm	M Nm	M _H Nm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
BKDI 6	11,90 - 15,00	0,6	11	5	11	17,0	69,5	8	4,1	8,1	77	24	14,9	9
BKDI 7	14,70 - 20,90	1,2	13	7	14	17,0	83,9	10	6,9	10,9	90	24	24,1	11
BKDI 12	20,70 - 27,90	1,2	44	25	20	21,2	102,45	15	6,95	11,45	110	28	33,55	17
BKDI 18	27,70 - 32,80	1,2	58	37	26	21,2	102,5	17	7,0	11,5	110	28	33,5	17
BKDI 19	32,60 - 42,80	1,2	114	67	30	28,5	148,0	24	7,0	13,0	160	46	52,0	27
BKDI 27	42,60 - 51,80	1,2	147	78	39	28,75	148,0	27	7,0	13,0	160	46	52,0	27
BKDI 32	51,60 - 64,00	2,4	273	153	49	39,75	212,5	41	13,0	21,5	230	68	68,5	41
BKDI 43	63,60 - 72,00	2,4	333	175	60	40,0	212,5	41	13,0	21,5	230	68	68,5	41
BKDI 44	71,60 - 82,00	2,4	373	204	66	48,5	277,5	55	13,0	21,5	300	94	98,5	55
BKDI 54	81,60 - 132,00	2,4	424	222	77	48,5	277,55	55	13,05	21,55	300	94	98,45	55

¹⁾ Please note the standard clamping ranges according to the tables on the next pages „Clamping Elements Taper Collets BMD“.

* of the clamping diameter of the Clamping Element.

** for clamping with pull-back action.

Example for ordering

Please indicate the size of the Clamping Fixture and the clamping range of the requested Taper Collet, in your order:

Size: BKDI 12
 Clamping range: 23,70 - 24,90 mm
 ➔ BKDI 12-23,70-24,90

Insertion depth

The minimum insertion depth $Le_{min.}$ is derived according to the following formula from the component chamfer length Lf and dimension K :

$$Le_{min.} = K + Lf + 4 \text{ mm (SI}_{min.})$$