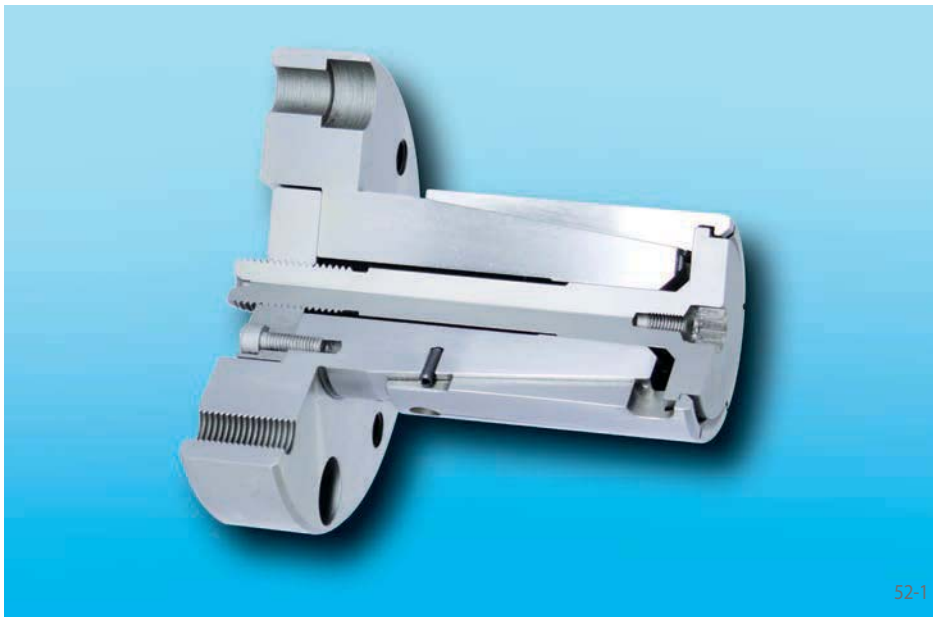


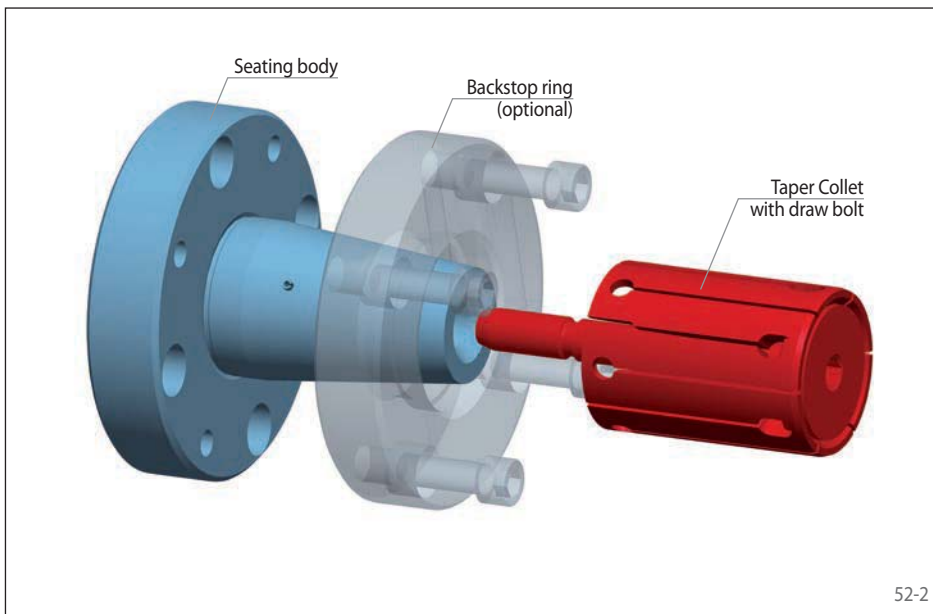
Taper Collet Flange Mandrels BKDF

as Complete Clamping Fixture



Features

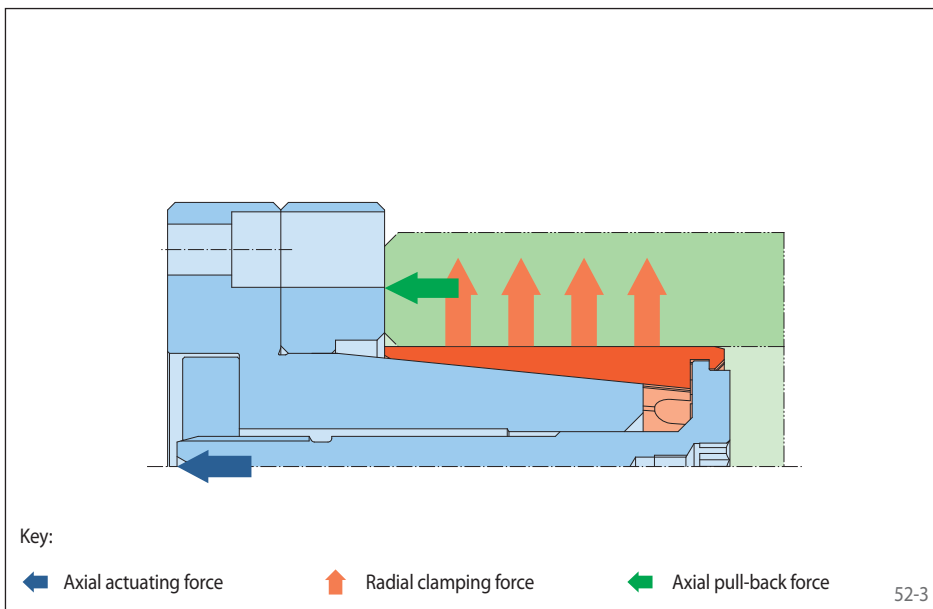
- For clamping diameters from 11,9 mm to 129,6 mm
- High true running accuracy $\leq 0,01$ mm
- Permissible component tolerance up to IT15
- Pull-back against external backstop surface or optional, individually designed external backstop ring
- For thin-walled or solid components
- Hand clamping optional possible



Configuration

The Taper Collet Flange Mandrel consists of a seating body and a Taper Collet with draw bolt. Taper Collets with hexagon head or pre-centering, a backstop ring and a plate with threaded bore are optionally available. The Taper Collet Flange Mandrel is attached to the machine with the seating body. The Clamping Fixture is actuated by the draw bolt, which is connected to the machine power actuating unit.

Intermediate Flanges and Spring Force Actuators are shown starting on page 86.



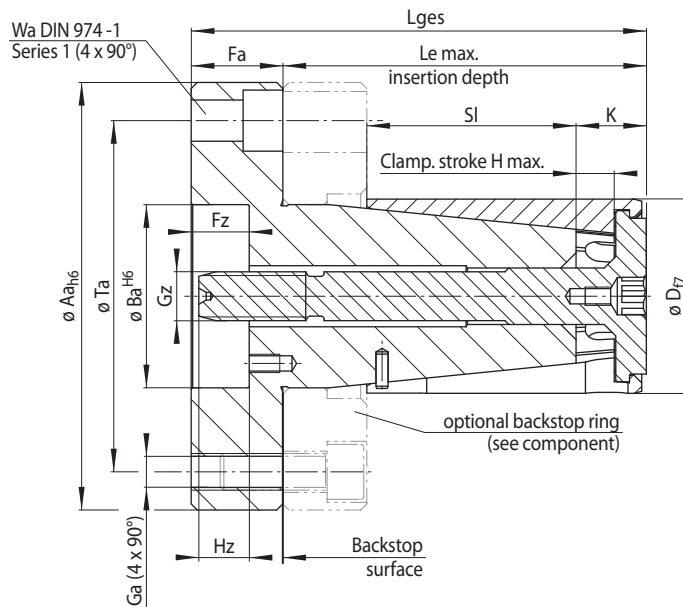
Clamping principle

For clamping, the Taper Collet is pulled against the seating body. 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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53-1

Size	Clamping range D ¹⁾ mm	Maximum diameter change* ΔD mm	Max. transmissible torque** M Nm	Max. Actuating force** F N	Aa	Ba	Fa	Fz	Ga	Gz	H max.	Hz	K	Le max.	Lges	SI	Ta	Wa
BKDF 6	11,90 - 15,00	0,6	11	5000	70	37	20	9	M 8	M 5	3	18,4	8	32,6	52,6	15	50	8
BKDF 7	14,70 - 20,90	1,2	13	5000	70	37	20	9	M 8	M 5	6	18,4	11	49,1	69,1	24	50	8
BKDF 12	20,70 - 27,90	1,2	44	12000	70	37	20	9	M 8	M 8	6	16,4	12	64,2	84,2	33	50	8
BKDF 18	27,70 - 32,80	1,2	58	12000	70	37	20	9	M 8	M 8	6	16,4	12	61,5	81,5	33	50	8
BKDF 19	32,60 - 42,80	1,2	114	20000	90	50	30	14	M 8	M 12	6	18,3	13	83,0	113,0	52	70	8
BKDF 27	42,60 - 51,80	1,2	147	20000	90	50	30	14	M 8	M 12	6	18,3	13	83,0	113,0	52	70	8
BKDF 32	51,60 - 64,00	2,4	273	30000	120	60	30	19	M 10	M 16	12	16,5	22	118,5	148,5	68	95	10
BKDF 43	63,60 - 72,00	2,4	333	30000	140	60	30	19	M 12	M 16	12	16,5	22	118,5	148,5	68	115	12
BKDF 44	71,60 - 82,00	2,4	373	30000	140	60	30	19	M 12	M 16	12	16,5	22	148,5	178,5	98	115	12
BKDF 54	81,60 - 132,00	2,4	424	30000	140	60	30	19	M 12	M 16	12	16,5	22	148,5	178,5	98	115	12

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

* 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: BKDF 27
Clamping range: 46,60 - 47,80 mm

➔ BKDF 27-46,60-47,80

Insertion depth

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

$$Le_{min.} = K + Lf$$

Customer assembly

The Taper Collets and components shown on pages 54 to 61 are available for customer assembled Taper Collet Flange Mandrels.

