

8-1

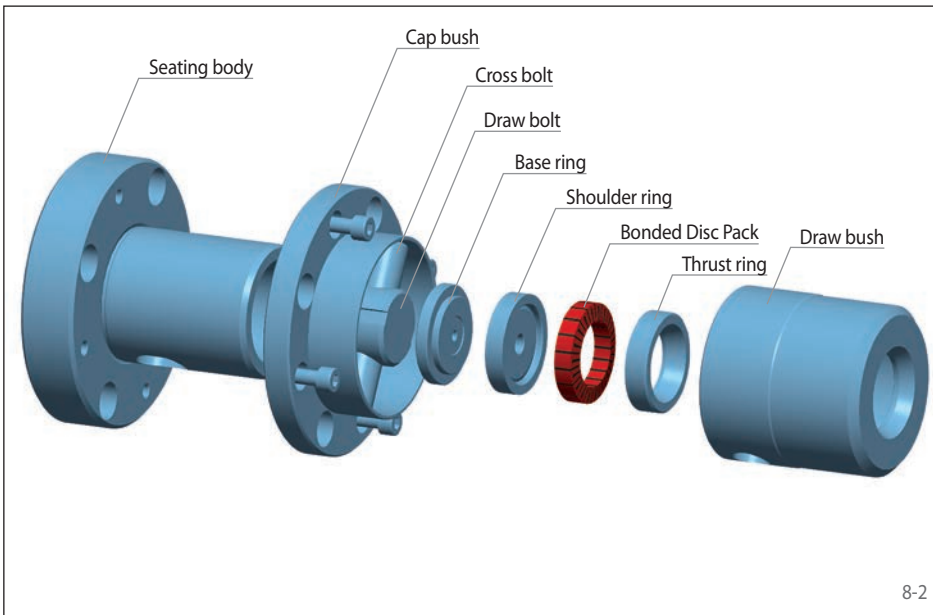
## Features

- For clamping diameters from 7 mm to 80 mm
- High true running accuracy  $\leq 0,01$  mm
- Permissible component tolerance up to IT11
- Short or long clamping length possible
- Pull-back against shoulder ring
- For thin-walled or solid components
- Impervious to ingress of foreign objects due to the rubberized slots in the Bonded Disc Pack

## Configuration

The Bonded Disc Pack Flange Chuck consists of a seating body, a cap bush, draw and cross bolts, base and shoulder rings, a Bonded Disc Pack, a thrust ring and a draw bush. The Bonded Disc Pack Flange Chuck is attached to the machine with the seating body. The Clamping Fixture is actuated via the draw bolt, which is connected to the machine power actuating unit. Depending on the required transmitted torque, Bonded Disc Packs of different widths may be installed. The required installation situations for the base and shoulder rings are shown in Fig. 9-2.

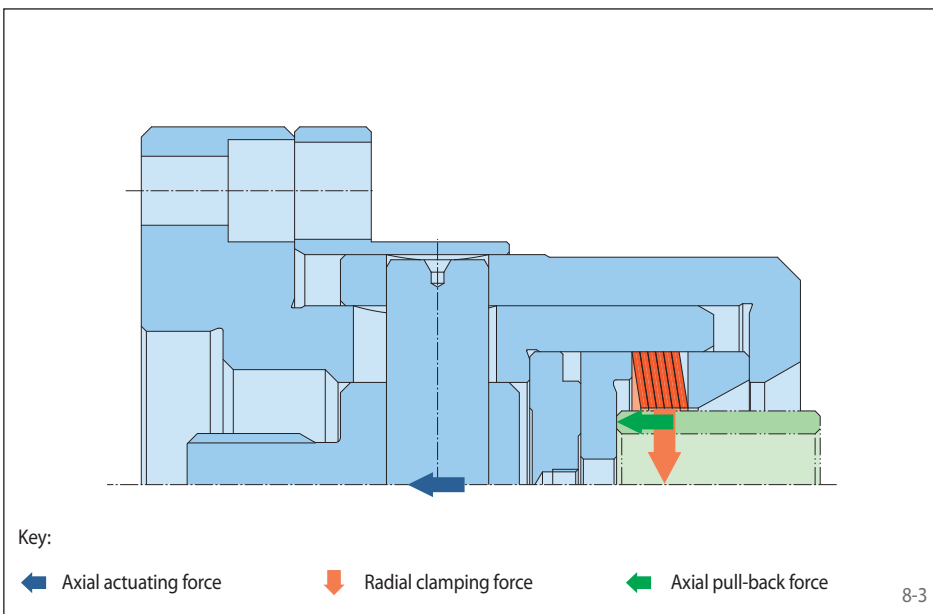
Intermediate Flanges and Spring Force Actuators are shown starting on page 58.



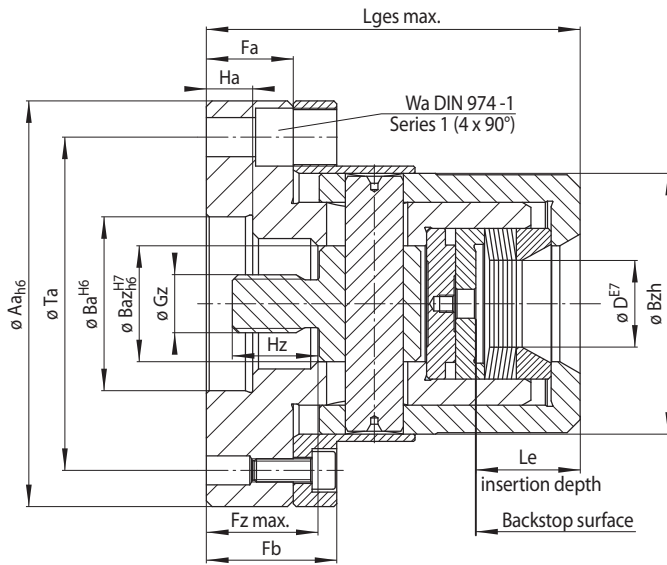
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## Clamping principle

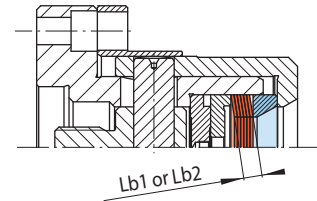
The Bonded Disc Pack sits pre-loaded in the seating diameter of the seating body. To actuate clamping, the Bonded Disc Pack is raised to an upright position by axial actuating force. The component is centred, pressed flush against the shoulder ring and aligned. The tipping movement of the Bonded Disc Pack converts the axial actuating force into a radial clamping force that is up to ten times higher.



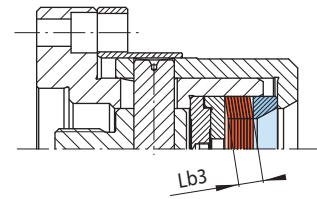
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## Installation situations



Bonded disc pack widths Lb1 and Lb2



Bonded disc pack width Lb3

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9-2

Size	Achievable clamping diameter D* mm	Maximum diameter change** Δ D mm	Bonded disc pack width Lb1			Bonded disc pack width Lb2			Bonded disc pack width Lb3			Aa	Ba	Baz	Bzh	Fa	Fb	Fz max.	Gz	Ha	Hz	Le	Lges max.	Ta	Wa
			Lb1 mm	M Nm	Fm kN	Lb2 mm	M Nm	Fm kN	Lb3 mm	M Nm	Fm kN														
LAFF 22	7 - 10	0,10	4	2,3	1,4	6	3,5	2,1	8	4,6	2,8	90	50	17	40	30	45	33,9	M 10	14	15	20	93,3	70	8
	10 - 15	0,10	4	5,6	2,4	6	8,4	3,5	8	10	4,7	90	50	17	40	30	45	33,9	M 10	14	15	20	93,3	70	8
LAFF 32	10 - 15	0,15	6	8,0	3,6	9	10	5,3	12	10	7,1	90	50	25	55	30	45	38,5	M 12	16	20	20	115	70	8
	15 - 20	0,15	6	20	6,0	9	30	8,9	12	40	11,9	90	50	25	55	30	45	38,5	M 12	16	20	20	115	70	8
LAFF 42	20 - 25	0,15	6	30	8,0	9	50	12,0	12	60	16,0	120	60	35	70	30	45	36	M 16	16	25	32	123	95	10
	25 - 30	0,15	6	60	10,8	9	90	16,2	12	120	21,6	120	60	35	70	30	45	36	M 16	16	25	32	123	95	10
LAFF 52	30 - 35	0,15	6	80	12,4	9	120	18,6	12	160	24,8	140	60	40	90	30	45	39	M 20	16	30	36	129	115	12
	35 - 40	0,15	6	120	15,6	9	180	23,4	12	240	31,2	140	60	40	90	30	45	39	M 20	16	30	36	129	115	12
LAFF 62	40 - 45	0,15	6	160	17,6	9	240	26,4	12	320	35,2	160	90	45	100	35	50	45	M 24	21	35	37	142	135	12
	45 - 50	0,15	6	200	20,8	9	310	31,2	12	410	41,6	160	90	45	100	35	50	45	M 24	21	35	37	142	135	12
LAFF 80	50 - 55	0,25	6	250	22,2	10	420	37,0	16	670	59,2	200	125	55	125	35	50	46,7	M 24	21	35	43,7	164,5	175	12
	55 - 60	0,25	6	300	25,2	10	510	42,0	16	810	67,2	200	125	55	125	35	50	46,7	M 24	21	35	43,7	164,5	175	12
LAFF 90	60 - 65	0,25	6	370	27,0	10	620	45,0	16	990	72,0	200	125	65	140	35	50	41,7	M 24	21	35	44,7	175,5	175	12
	65 - 70	0,25	6	430	30,0	10	730	50,0	16	1160	80,0	200	125	65	140	35	50	41,7	M 24	21	35	44,7	175,5	175	12
LAFF 100	70 - 75	0,25	6	510	31,8	10	850	53,0	16	1360	84,8	225	125	70	160	35	50	41,7	M 24	21	35	44,7	175,5	200	12
	75 - 80	0,25	6	580	35,4	10	980	59,0	16	1560	94,4	225	125	70	160	35	50	41,7	M 24	21	35	44,7	175,5	200	12

\* Clamping diameter from > up to ≤ adjustable to two places after the decimal point

\*\* of the clamping diameter of the Clamping Element.

## Key

- D = Achievable clamping diameter
- Δ D = Maximum diameter change of the clamping diameter of the Clamping Element
- Lb = Bonded disc pack width
- M = Max. transmissible torque
- Fm = Required actuating force for component clamping with pull-back action for max. transmissible torque

## Example for ordering

Please indicate the size of the Clamping Fixture and the clamping diameter of your component, including component tolerance, and the desired bonded disc pack width in your order:

Size: LAFF 42  
 Clamping diameter: 21,47 mm  
 Component tolerance: h6  
 Bonded disc pack width: 9 mm  
 ➔ LAFF 42-21,47h6-9