

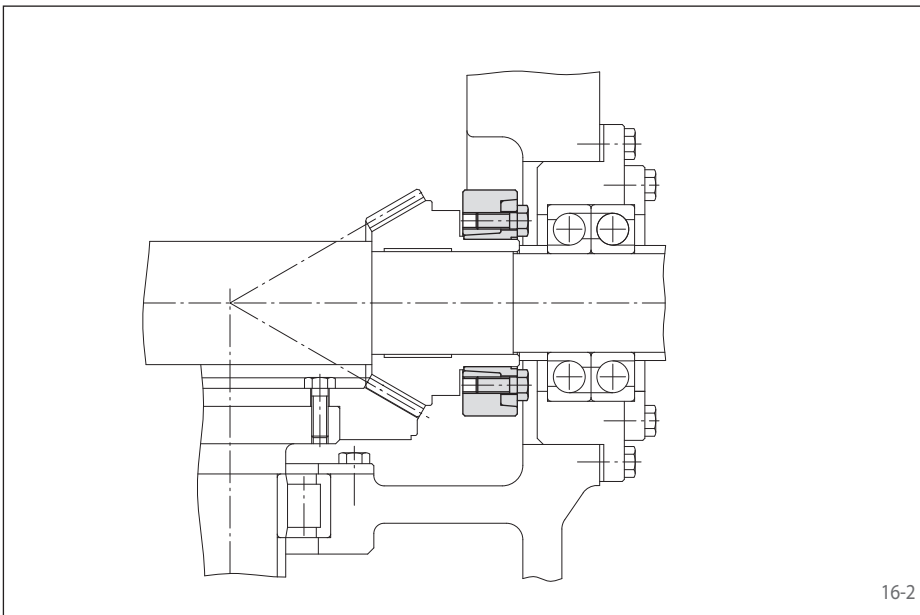
two-part design
high torque capacity



16-1

Features

- High torque capacity
- Transmissible torque of 165 Nm up to 36 200 Nm
- Easy, quick assembly by tightening clamping screws without a torque wrench
- Distance-controlled assembly ensures guaranteed transmissible torques
- Enclosed design, therefore impervious to dirt
- True running even at high speeds
- Centres the hollow shaft or hub to the shaft
- For hollow shafts or hubs with outer diameters of 24 mm up to 155 mm



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Application example

Backlash free connection of a bevel spur gear to a drive shaft of a gearbox with a Shrink Disc RLK 606. The backlash free connection permits extended reversing operations.

Transmissible torques and axial forces

The transmissible torques or axial forces listed on the following two pages are subject to the following tolerances, surface characteristics and material requirement. Please contact us in the case of deviations.

Tolerances

d_w		Hollow shaft bore ISO	Shaft ISO	Joint clearance	
> mm	≤ mm			min. mm	max. mm
18	30	H7	h6	0	0,034
30	50			0	0,041
50	80			0	0,049
80	120			0	0,057
120	180			0	0,065

Other fits may be selected, provided the joint clearance between the shaft and the hollow shaft remains within the indicated ranges.

Surfaces

Average surface roughness at the contact surfaces between the shaft and the hollow shaft $R_z = 10 \dots 25 \mu\text{m}$.

Materials

The following apply to the shaft and the hollow shaft:

- Yield strength $R_e \geq 360 \text{ N/mm}^2$
- E-module ca. 206 kN/mm^2

Installation

Please request our installation and operating instructions for Shrink Discs RLK 606.

Simultaneous transmission of torque and axial force

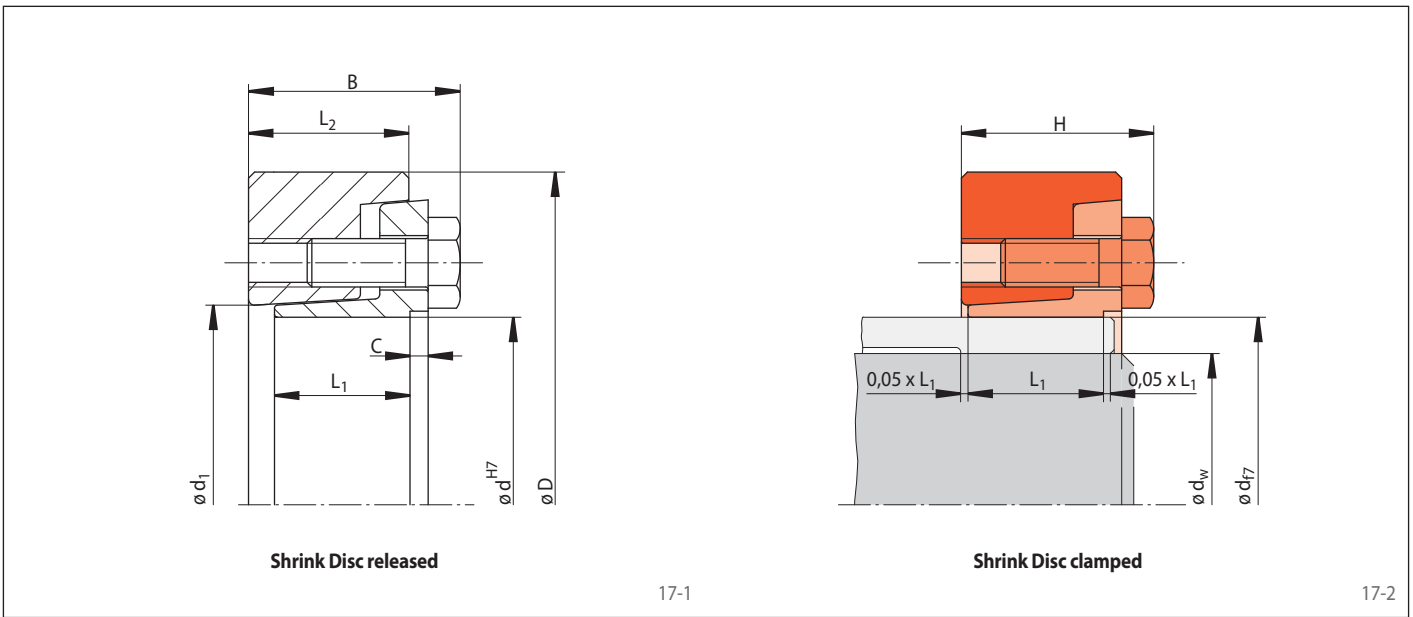
The transmissible torques M which are shown in the tables apply for axial forces $F = 0 \text{ kN}$ and conversely, the indicated axial forces F apply to torques $M = 0 \text{ Nm}$. If torque and axial force are to be transmitted simultaneously, the transmissible torque and the transmissible axial force are reduced. Please refer to the technical points on page 31.

Example for ordering

Shrink Disc RLK 606 for hollow shaft with an outer diameter $d = 100 \text{ mm}$:

- RLK 606-100
Article number 4200-100601-000000

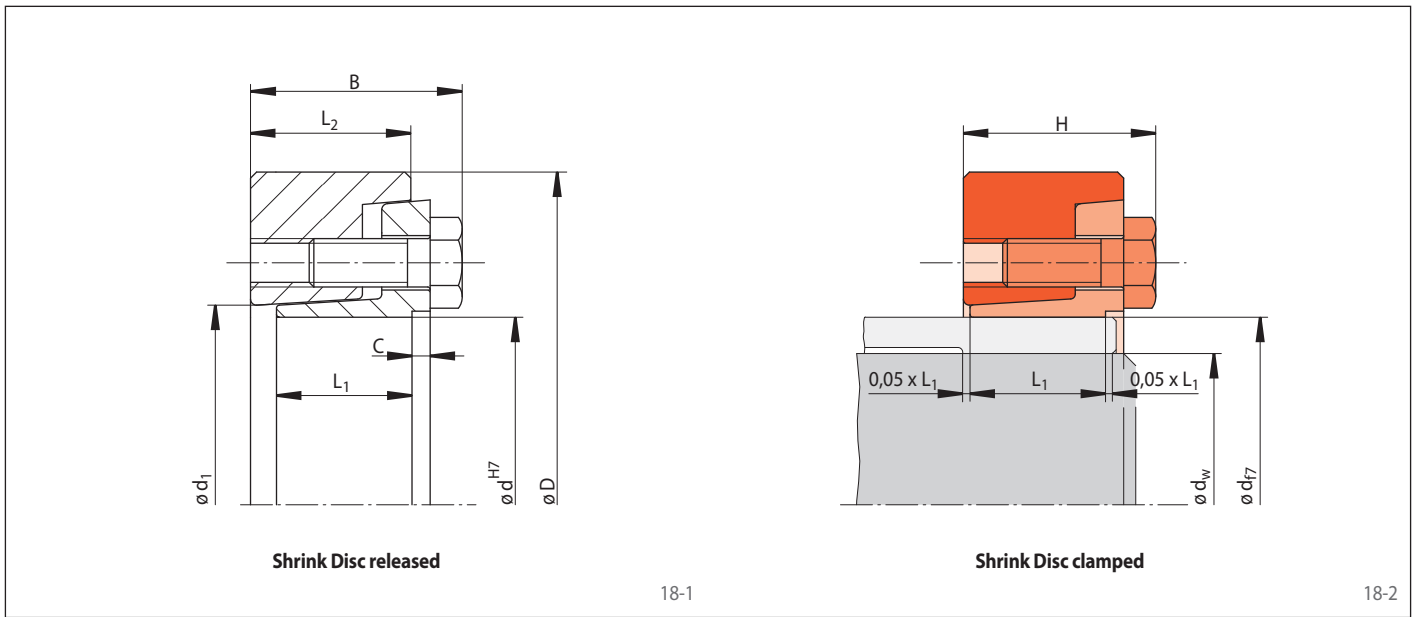
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Dimensions									Technical Data				Article number		
Size d mm	D mm	d ₁ mm	B mm	L ₁ mm	L ₂ mm	C mm	H mm	d _w * mm	Transmissible torque or axial force		Clamping screws			Weight kg	
									M Nm	F kN	Number	Size	Length mm		
24	50	26	22	15	17	1	21,0	19	165	17	5	M 6	16	0,3	4200-024601-000000
								20	210	21					
								21	240	22					
30	60	32	24	17	19	1	23,0	24	280	23	6	M 6	16	0,3	4200-030601-000000
								25	330	26					
								26	370	28					
36	72	39	27,5	19	20,5	1	25,8	27	480	35	5	M 8	20	0,5	4200-036601-000000
								30	630	42					
								33	820	49					
40	80	47	29,5	20,5	22,5	1,5	27,8	30	480	32	6	M 8	20	0,6	4200-040601-000000
								32	580	36					
								34	700	41					
44	80	47	29,5	20,5	22,5	1,5	27,8	34	720	42	6	M 8	20	0,6	4200-044601-000000
								35	780	44					
								37	920	49					
50	90	53	31	22	24	1,5	29,3	38	1150	60	8	M 8	20	0,8	4200-050601-000000
								40	1300	65					
								42	1520	72					
55	100	58	34,5	24,5	27	1,5	32,3	42	1300	61	8	M 8	20	1,2	4200-055601-000000
								45	1600	71					
								48	1900	79					
62	110	66	34,5	24,5	27	1,5	32,3	48	1700	70	9	M 8	20	1,5	4200-062601-000000
								50	1950	78					
								52	2160	83					
68	115	72	35	24,5	27	1,5	32,3	50	1900	76	9	M 8	20	1,6	4200-068601-000000
								55	2500	90					
								60	3150	105					
75	138	79	38	25	28	2	34,4	55	2700	98	10	M 10	25	2,6	4200-075601-000000
								60	3400	113					
								65	4100	126					
80	141	84	38	25	28	2	34,4	60	3300	110	10	M 10	25	2,8	4200-080601-000000
								65	4100	126					
								70	4950	141					
90	155	94	45	31,5	35	2,5	41,4	65	5500	169	11	M 10	25	3,4	4200-090601-000000
								70	6600	188					
								75	7900	210					
100	170	104	50,5	36,5	40	2,5	46,4	70	6200	177	14	M 10	30	4,6	4200-100601-000000
								75	7400	197					
								80	8600	215					
110	185	114	57	40,5	45,5	3	53,0	80	10500	262	12	M 12	35	6,2	4200-110601-000000
								85	11800	277					
								90	13700	304					
120	197	124	61	45	49	3	56,5	85	12500	294	14	M 12	35	7,4	4200-120601-000000
								90	14100	313					
								95	16000	336					
125	215	134	61,5	45	49	3	56,5	90	14500	322	14	M 12	35	9,3	4200-125601-000000
								95	16600	349					
								100	18800	376					

*The shaft diameters d_w listed in the table are selected examples. For other shaft diameters d_w see the technical specifications on page 31.

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Dimensions									Technical Data					Article number	
Size d mm	D mm	d ₁ mm	B mm	L ₁ mm	L ₂ mm	C mm	H mm	d _w * mm	Transmissible torque or axial force		Clamping screws				Weight kg
									M Nm	F kN	Number	Size	Length mm		
130	215	134	61,5	45	49	3	56,5	95	17000	357	14	M 12	35	8,7	4200-130601-000000
								100	18400	368					
								110	22000	400					
130	230	139	66,5	47	53	4	61,8	95	18400	387	12	M 14	40	11,9	4200-130601-000001
								100	20800	416					
								110	26200	476					
140	230	144	67	47	53	4	61,8	100	19900	398	12	M 14	40	11,0	4200-140601-000000
								105	22200	422					
								115	27800	483					
150	263	159	72	51	57	4	65,8	110	27000	490	14	M 14	40	16,0	4200-150601-000000
								120	32000	533					
								125	36200	579					
155	263	159	72	51	57	4	65,8	110	27000	490	14	M 14	40	16,0	4200-155601-000000
								120	32000	533					
								125	36200	579					

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