

Shrink Discs RLK 606

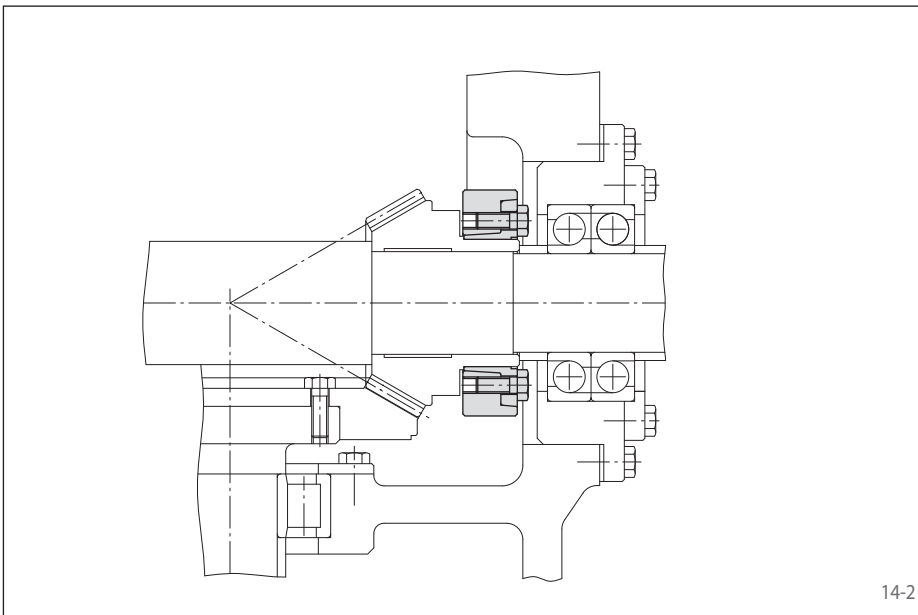
Two-part design
High transmissible torques



14-1

Features

- High transmissible torques
- 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
- Centers the hollow shaft or hub to the shaft
- For hollow shafts or hubs with outer diameters of 24 mm up to 155 mm



14-2

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 pages 15 through 16 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]
24	30	H7	h6	0	0,034
30	50			0	0,041
50	80			0	0,049
80	120			0	0,057
120	155			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 $R_a \leq 3,2 \mu\text{m}$.

Materials

The following apply to the shaft and the hollow shaft:

- Yield strength $R_e \geq 340 \text{ N/mm}^2$
- 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 pages 22 and 23.

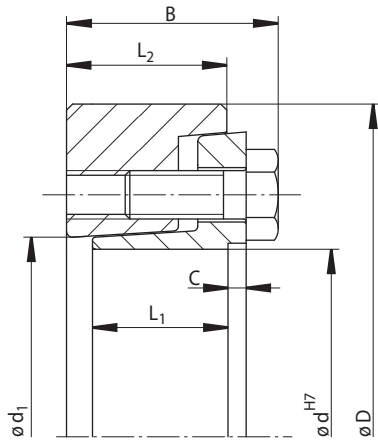
Example for ordering

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

- RLK 606-100
Article number 4200.100.601.000000

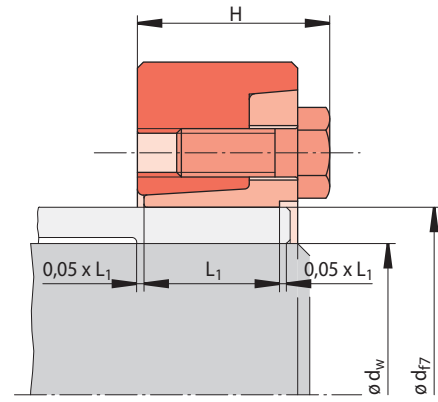
Shrink Discs RLK 606

Two-part design
High transmissible torques



Shrink Disc released

15-1



Shrink Disc clamped

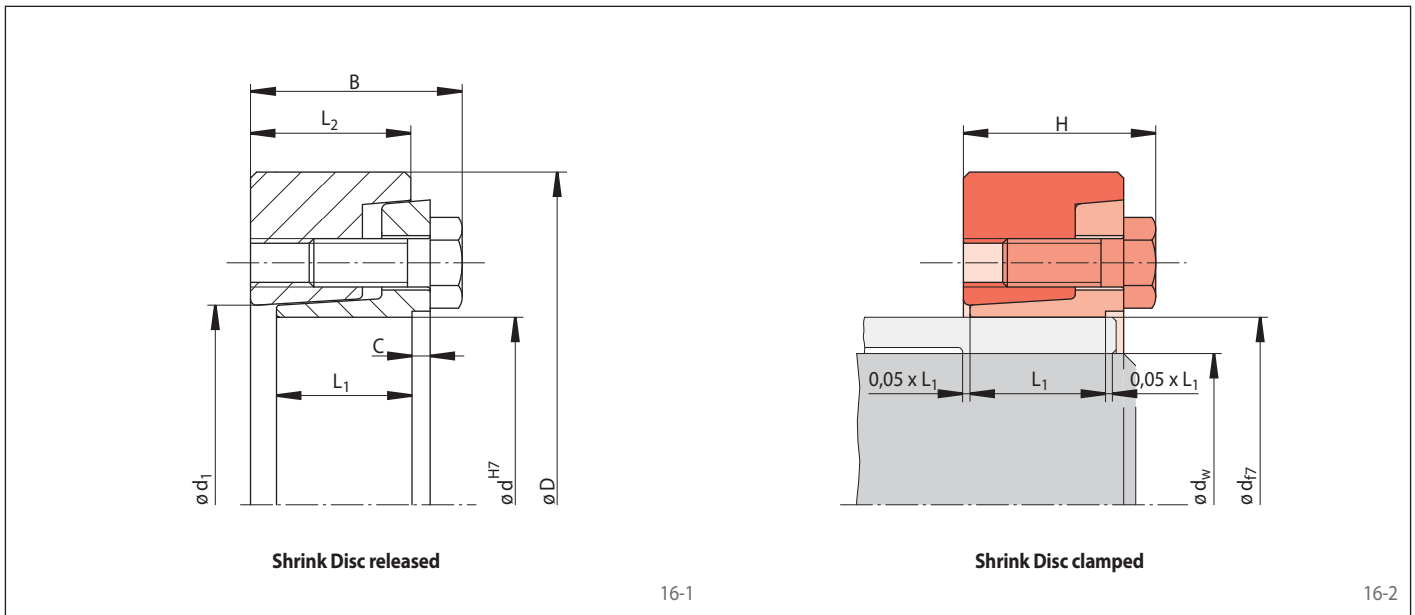
15-2

Size d mm	Dimensions								Technical Data			Clamping screws			Weight kg	Article number
	D mm	d ₁ mm	B mm	L ₁ mm	L ₂ mm	C mm	H mm	d _w * mm	M Nm	F kN	Number	Size	Length mm			
24	50	26	22	15	17	1	21,0	19	165	17	5	M6	16	0,3	4200.024.601.000000	
								20	210	21						
								21	240	22						
30	60	32	24	17	19	1	23,0	24	280	23	6	M6	16	0,3	4200.030.601.000000	
								25	330	26						
								26	370	28						
36	72	39	27,5	19	20,5	1	25,8	27	480	35	5	M8	20	0,5	4200.036.601.000000	
								30	630	42						
								33	820	49						
40	80	47	29,5	20,5	22,5	1,5	27,8	30	480	32	6	M8	20	0,6	4200.040.601.000000	
								32	580	36						
								34	700	41						
44	80	47	29,5	20,5	22,5	1,5	27,8	34	720	42	6	M8	20	0,6	4200.044.601.000000	
								35	780	44						
								37	920	49						
50	90	53	31	22	24	1,5	29,3	38	1150	60	8	M8	20	0,8	4200.050.601.000000	
								40	1300	65						
								42	1520	72						
55	100	58	34,5	24,5	27	1,5	32,3	42	1300	61	8	M8	20	1,2	4200.055.601.000000	
								45	1600	71						
								48	1900	79						
62	110	66	34,5	24,5	27	1,5	32,3	48	1700	70	9	M8	20	1,5	4200.062.601.000000	
								50	1950	78						
								52	2160	83						
68	115	72	35	24,5	27	1,5	32,3	50	1900	76	9	M8	20	1,6	4200.068.601.000000	
								55	2500	90						
								60	3150	105						
75	138	79	38	25	28	2	34,4	55	2700	98	10	M10	25	2,6	4200.075.601.000000	
								60	3400	113						
								65	4100	126						
80	141	84	38	25	28	2	34,4	60	3300	110	10	M10	25	2,8	4200.080.601.000000	
								65	4100	126						
								70	4950	141						
90	155	94	45	31,5	35	2,5	41,4	65	5500	169	11	M10	25	3,4	4200.090.601.000000	
								70	6600	188						
								75	7900	210						
100	170	104	50,5	36,5	40	2,5	46,4	70	6200	177	14	M10	30	4,6	4200.100.601.000000	
								75	7400	197						
								80	8600	215						
110	185	114	57	40,5	45,5	3	53,0	80	10500	262	12	M12	35	6,2	4200.110.601.000000	
								85	11800	277						
								90	13700	304						
120	197	124	61	45	49	3	56,5	85	12500	294	14	M12	35	7,4	4200.120.601.000000	
								90	14100	313						
								95	16000	336						
125	215	134	61,5	45	49	3	56,5	90	14500	322	14	M12	35	9,3	4200.125.601.000000	
								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 22.

Shrink Discs RLK 606

Two-part design
High transmissible torques



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
									M Nm	F kN	Number	Size	Length mm	kg	
130	215	134	61,5	45	49	3	56,5	95	17 000	357	14	M12	35	8,7	4200.130.601.000000
								100	18 400	368					
								110	22 000	400					
130	230	139	66,5	47	53	4	61,8	95	18 400	387	12	M14	40	11,9	4200.130.601.000001
								100	20 800	416					
								110	26 200	476					
140	230	144	67	47	53	4	61,8	100	19 900	398	12	M14	40	11,0	4200.140.601.000000
								105	22 200	422					
								115	27 800	483					
150	263	159	72	51	57	4	65,8	110	27 000	490	14	M14	40	16,0	4200.150.601.000000
								120	32 000	533					
								125	36 200	579					
155	263	159	72	51	57	4	65,8	110	27 000	490	14	M14	40	16,0	4200.155.601.000000
								120	32 000	533					
								125	36 200	579					

* The shaft diameters d_w listed in the table are selected examples. For other shaft diameters d_w see the technical specifications on page 22.

Any questions? Please contact us.

Morskate Aandrijvingen BV

Oosterveldsingel 47A
7558 PJ Hengelo (Ov)
The Netherlands

NL

T +31 (0)74 - 760 11 11
info@morskateaandrijvingen.nl
www.morskateaandrijvingen.nl

DE

T +49 692 - 222 34 95
info@morskateantriebstechnik.de
www.morskateantriebstechnik.de

EN

T +31 (0)74 - 760 11 11
info@morskatedrivetechnology.com
www.morskatedrivetechnology.com