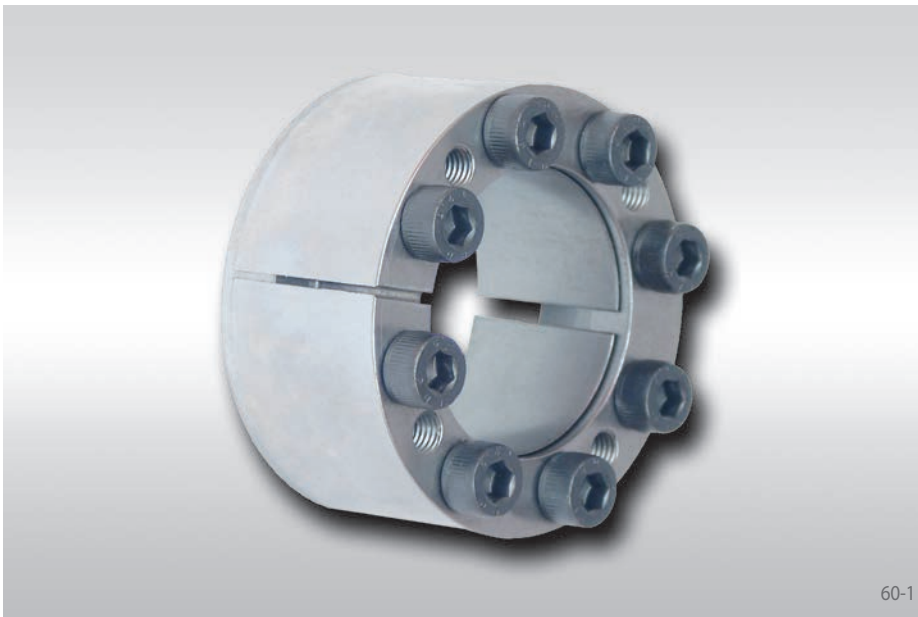


Cone Clamping Elements RLK 350

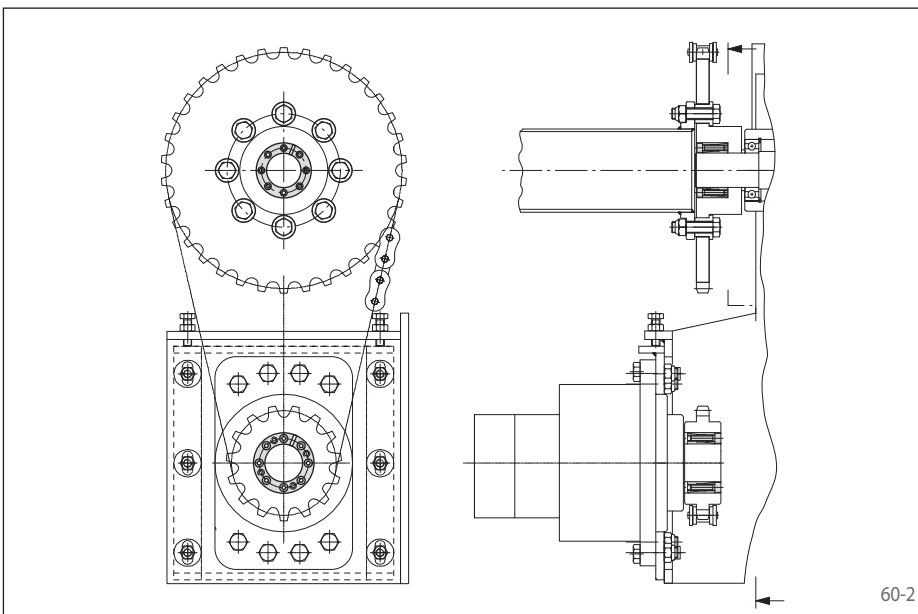
centres the hub to the shaft
for small shaft diameters



60-1

Features

- Centres the hub to the shaft
- Transmissible torque of 7,2 Nm up to 2200 Nm
- For shaft diameters between 5 mm and 50 mm



60-2

Application example

Backlash free connection of sprocket wheels to shafts in the drive of an industrial door with Cone Clamping Elements RLK 350. The Cone Clamping Elements centre the sprocket wheels on the shaft. The sprocket wheels can be easily aligned in axial and circumferential directions during assembly.

Transmissible torques and axial forces

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

Tolerances

- h8 for shaft diameter d
- H8 for hub bore D

Surfaces

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

Materials

The following apply to the shaft and the hub:

- E-module $\geq 170 \text{ kN/mm}^2$

Installation

If the hub cannot be freely moved the values for M, F, P_W and P_N are reduced by 37%. K_{min} can be decreased. See the technical notes on page 75.

Please request our installation and operating instructions for Cone Clamping Elements RLK 350.

Simultaneous transmission of torque and axial force

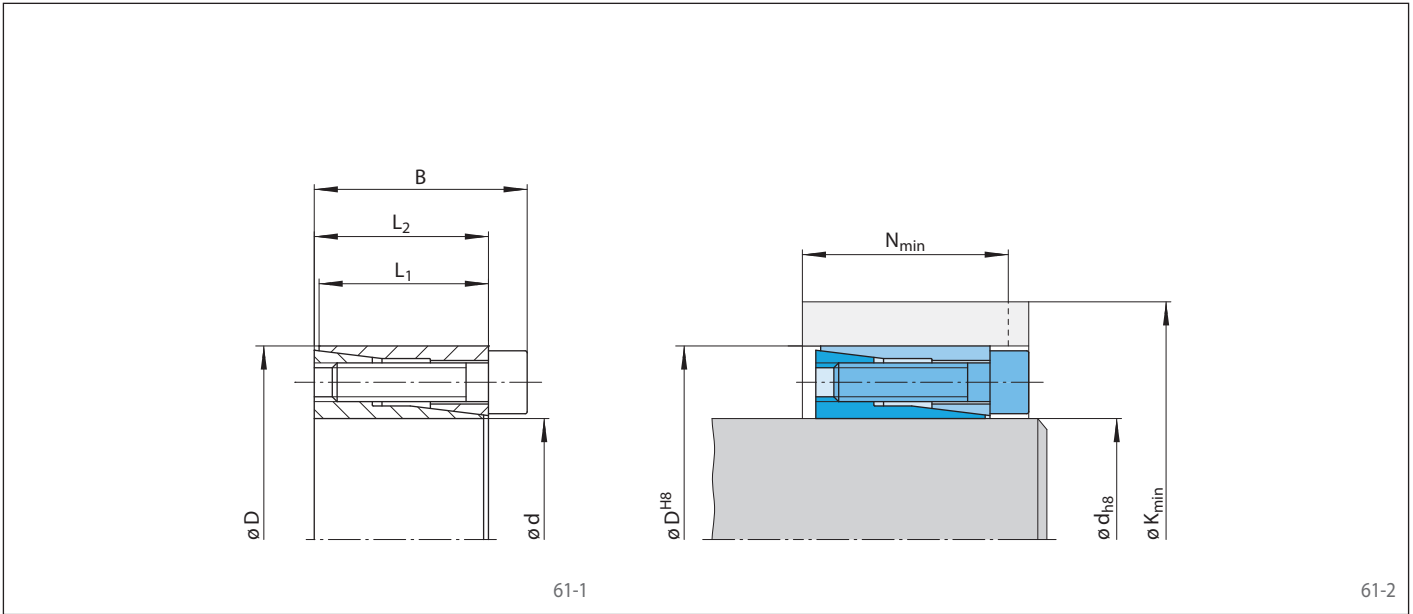
The transmissible torques M which are shown in the tables apply for axial forces $F = 0 \text{ kN}$ and conversely, the indicated axial forces F apply to torques $M = 0 \text{ Nm}$. If torque and axial force are to be transmitted simultaneously, the transmissible torque and the transmissible axial force are reduced. Please refer to the technical points on pages 74 and 75.

Example for ordering

Cone Clamping Element RLK 350 for shaft diameter $d = 50 \text{ mm}$:

- RLK 350, size 50 x 80
Article number 4208-050001-000000

centres the hub to the shaft
for small shaft diameters



Dimensions												Technical Data								Article number	
Size		Yield strength R_e of the hub material [N/mm ²]					Transmissible torque or axial force		Contact pressure at		Clamping screws			Weight							
d	D	B	L ₁	L ₂		200		320		500		M	F	Shaft	Hub	Tightening torque	Num-ber	Size	Length	kg	
mm	mm	mm	mm	mm		K _{min}	N _{min}	K _{min}	N _{min}	K _{min}	N _{min}	Nm	kN	P _w	P _N	M _s			mm		
						mm	mm	mm	mm	mm	mm			N/mm ²	N/mm ²	Nm					
5	16	13,5	10	11		24	14	21	13	19	12	7,2	2,9	218	68	1,1	3	M 2,5	10	0,010	4208-005001-000000
6	16	13,5	10	11		24	14	21	13	19	12	8,6	2,9	182	68	1,1	3	M 2,5	10	0,012	4208-006001-000000
6,35	16	13,5	10	11		24	14	21	13	19	12	9,1	2,9	172	68	1,1	3	M 2,5	10	0,012	4208-006002-000000
7	17	13,5	10,5	11		24	14	22	13	20	12	10	2,9	145	60	1,1	3	M 2,5	10	0,013	4208-007001-000000
8	18	13,5	10,5	11		25	14	23	13	21	12	11	2,9	127	57	1,1	3	M 2,5	10	0,015	4208-008001-000000
9	20	15,5	12,5	13		28	17	25	15	24	15	17	3,8	133	60	1,1	4	M 2,5	12	0,020	4208-009001-000000
9,53	20	15,5	12,5	13		28	17	25	15	24	15	18	3,8	126	60	1,1	4	M 2,5	12	0,019	4208-009002-000000
10	20	15,5	12,5	13		28	17	25	15	24	15	19	3,8	120	60	1,1	4	M 2,5	12	0,019	4208-010001-000000
11	22	15,5	12,5	13		30	17	27	15	26	15	21	3,8	109	55	1,1	4	M 2,5	12	0,024	4208-011001-000000
12	22	15,5	12,5	13		30	17	27	15	26	15	23	3,8	100	55	1,1	4	M 2,5	12	0,022	4208-012001-000000
14	26	20	16,5	17		35	21	32	20	30	19	42	5,9	98	53	2,1	4	M 3	16	0,039	4208-014001-000000
15	28	20	16,5	17		37	21	34	20	32	19	45	5,9	92	49	2,1	4	M 3	16	0,044	4208-015001-000000
16	32	21	16,5	17		47	24	42	22	38	20	85	11	155	78	5,1	4	M 4	16	0,067	4208-016001-000000
17	35	25	20,5	21		48	27	43	25	40	23	91	11	120	58	5,1	4	M 4	20	0,090	4208-017001-000000
18	35	25	20,5	21		48	27	43	25	40	23	96	11	113	58	5,1	4	M 4	20	0,087	4208-018001-000000
19	35	25	20,5	21		48	27	43	25	40	23	100	11	107	58	5,1	4	M 4	20	0,083	4208-019001-000000
20	38	26	20,5	21		58	31	51	27	46	25	170	17	161	85	10,0	4	M 5	20	0,100	4208-020001-000000
22	40	26	20,5	21		60	31	53	27	48	25	190	17	147	81	10,0	4	M 5	20	0,110	4208-022001-000000
24	47	32	25	26		70	37	62	33	57	30	290	24	158	81	17,4	4	M 6	25	0,200	4208-024001-000000
25	47	32	25	26		70	37	62	33	57	30	300	24	152	81	17,4	4	M 6	25	0,190	4208-025001-000000
28	50	32	25	26		84	42	71	36	64	32	510	36	204	114	17,4	6	M 6	25	0,180	4208-028001-000000
30	55	32	25	26		87	41	76	36	69	32	550	36	190	104	17,4	6	M 6	25	0,220	4208-030001-000000
32	55	32	25	26		87	41	76	36	69	32	580	36	178	104	17,4	6	M 6	25	0,270	4208-032001-000000
35	60	37	30	31		88	44	78	39	72	36	640	36	132	77	17,4	6	M 6	30	0,250	4208-035001-000000
38	65	37	30	31		101	48	88	42	80	38	920	49	162	95	17,4	8	M 6	30	0,360	4208-038001-000000
40	65	37	30	31		101	48	88	42	80	38	970	49	154	95	17,4	8	M 6	30	0,430	4208-040001-000000
45	75	44	35	36		131	63	110	53	98	47	2000	89	218	131	42,2	8	M 8	35	0,630	4208-045001-000000
50	80	44	35	36		134	62	115	53	103	47	2200	89	197	123	42,2	8	M 8	35	0,700	4208-050001-000000