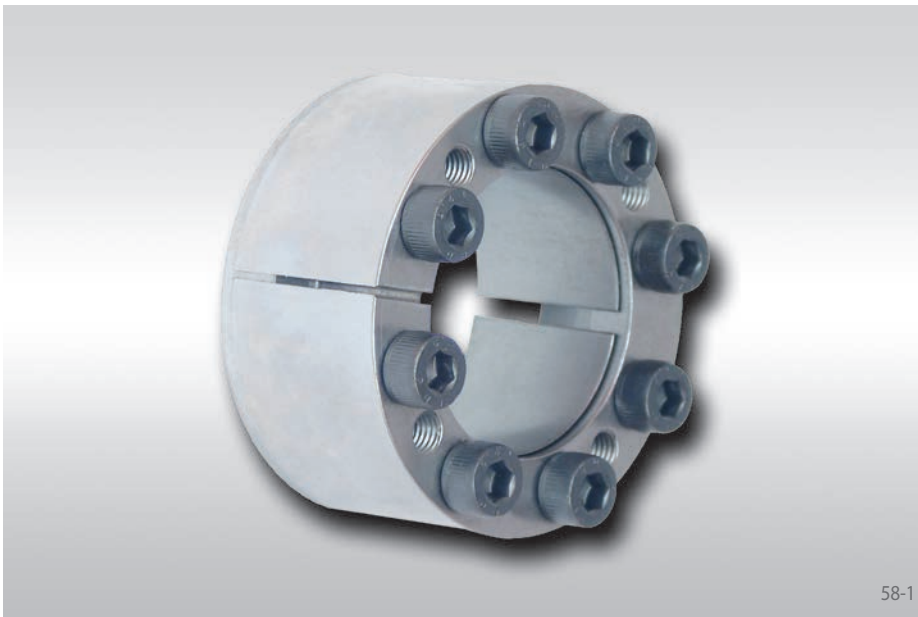


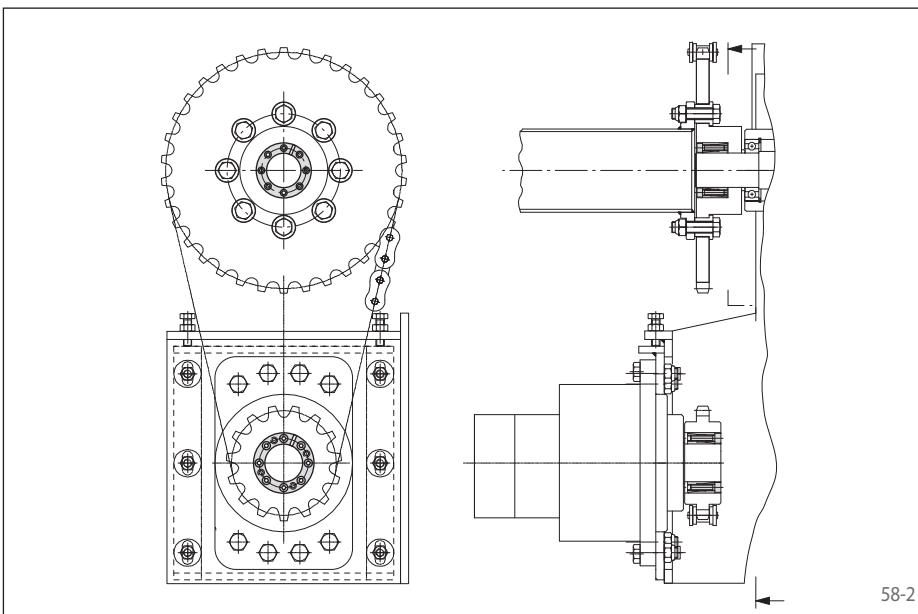
centres the hub to the shaft
for small shaft diameters



58-1

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



58-2

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 73.

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

Simultaneous transmission of torque and axial force

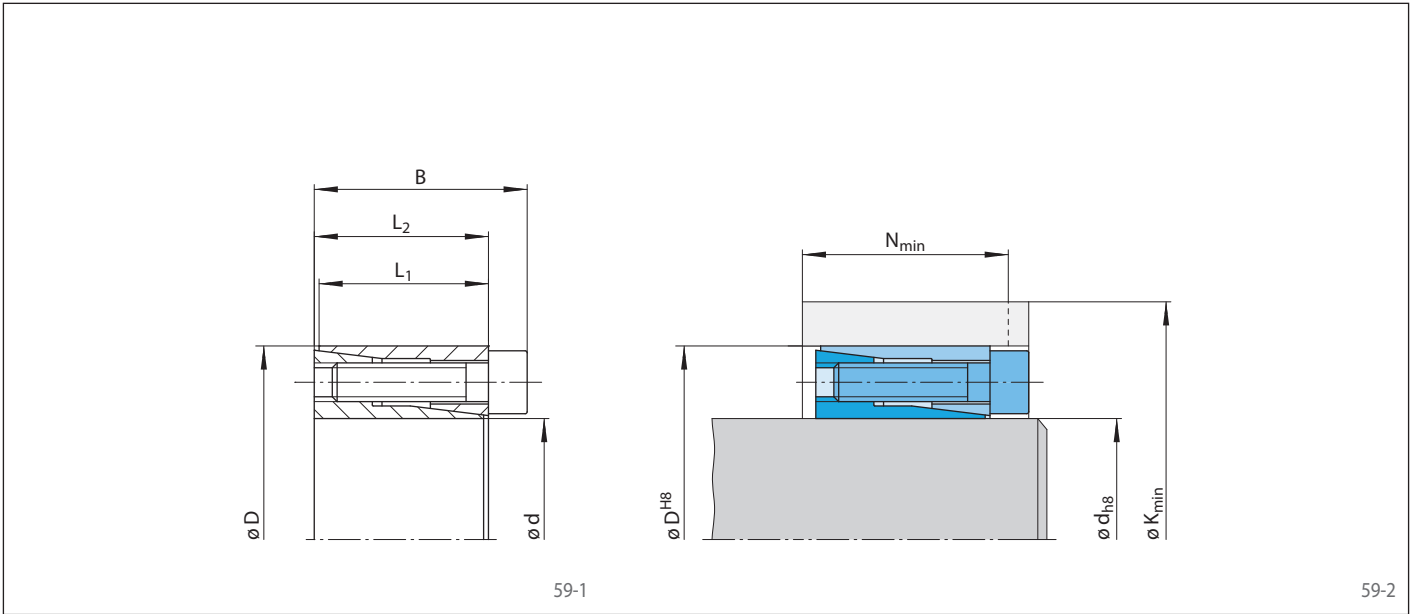
The transmissible torques M which are shown in the tables apply for axial forces $F = 0 \text{ kN}$ and conversely, the indicated axial forces F apply to torques $M = 0 \text{ Nm}$. If torque and axial force are to be transmitted simultaneously, the transmissible torque and the transmissible axial force are reduced. Please refer to the technical points on pages 72 and 73.

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		B mm	L ₁ mm	L ₂ mm	Yield strength R _e of the hub material [N/mm ²]						Transmissible torque or axial force		Contact pressure at		Clamping screws			Weight kg		
d mm	D mm				200		320		500		M Nm	F kN	Shaft P _w N/mm ²	Hub P _N N/mm ²	Tightening torque M _s Nm	Num- ber	Size			Length mm
5	16	13,5	10	11	22	13	20	12	19	12	7,2	2,9	153	48	1,1	3	M 2,5	10	0,010	4208-005001-000000
6	16	13,5	10	11	22	13	20	12	19	12	8,6	2,9	127	48	1,1	3	M 2,5	10	0,012	4208-006001-000000
6,35	16	13,5	10	11	22	13	20	12	19	12	9,1	2,9	120	48	1,1	3	M 2,5	10	0,012	4208-006002-000000
7	17	13,5	10,5	11	23	14	21	13	20	12	10	2,9	104	43	1,1	3	M 2,5	10	0,013	4208-007001-000000
8	18	13,5	10,5	11	24	14	22	13	21	12	11	2,9	91	41	1,1	3	M 2,5	10	0,015	4208-008001-000000
9	20	15,5	12,5	13	26	16	24	15	23	14	17	3,8	91	41	1,1	4	M 2,5	12	0,020	4208-009001-000000
9,53	20	15,5	12,5	13	26	16	24	15	23	14	18	3,8	86	41	1,1	4	M 2,5	12	0,019	4208-009002-000000
10	20	15,5	12,5	13	26	16	24	15	23	14	19	3,8	82	41	1,1	4	M 2,5	12	0,019	4208-010001-000000
11	22	15,5	12,5	13	28	16	26	15	25	14	21	3,8	74	37	1,1	4	M 2,5	12	0,024	4208-011001-000000
12	22	15,5	12,5	13	28	16	26	15	25	14	23	3,8	68	37	1,1	4	M 2,5	12	0,022	4208-012001-000000
14	26	20	16,5	17	33	20	30	19	30	19	42	5,9	69	37	2,1	4	M 3	16	0,039	4208-014001-000000
15	28	20	16,5	17	35	20	32	19	32	19	45	5,9	64	35	2,1	4	M 3	16	0,044	4208-015001-000000
16	32	21	16,5	17	44	23	39	20	37	19	85	11	108	54	5,1	4	M 4	16	0,067	4208-016001-000000
17	35	25	20,5	21	45	26	41	24	40	23	91	11	82	40	5,1	4	M 4	20	0,090	4208-017001-000000
18	35	25	20,5	21	45	26	41	24	40	23	96	11	77	40	5,1	4	M 4	20	0,087	4208-018001-000000
19	35	25	20,5	21	45	26	41	24	40	23	100	11	73	40	5,1	4	M 4	20	0,083	4208-019001-000000
20	38	26	20,5	21	54	29	48	26	44	24	170	17	110	58	10,0	4	M 5	20	0,100	4208-020001-000000
22	40	26	20,5	21	55	28	49	25	46	24	190	17	100	55	10,0	4	M 5	20	0,110	4208-022001-000000
24	47	32	25	26	65	34	58	31	54	29	290	24	108	55	17,4	4	M 6	25	0,200	4208-024001-000000
25	47	32	25	26	65	34	58	31	54	29	300	24	104	55	17,4	4	M 6	25	0,190	4208-025001-000000
28	50	32	25	26	77	39	66	33	60	30	510	36	139	78	17,4	6	M 6	25	0,180	4208-028001-000000
30	55	32	25	26	81	38	71	33	65	30	550	36	129	71	17,4	6	M 6	25	0,220	4208-030001-000000
32	55	32	25	26	81	38	71	33	65	30	580	36	121	71	17,4	6	M 6	25	0,270	4208-032001-000000
35	60	37	30	31	82	41	73	37	69	35	640	36	93	54	17,4	6	M 6	30	0,250	4208-035001-000000
38	65	37	30	31	93	44	83	39	76	36	920	49	114	67	17,4	8	M 6	30	0,360	4208-038001-000000
40	65	37	30	31	93	44	83	39	76	36	970	49	108	67	17,4	8	M 6	30	0,430	4208-040001-000000
45	75	44	35	36	121	58	103	49	93	44	2000	89	150	90	42,2	8	M 8	35	0,630	4208-045001-000000
50	80	44	35	36	124	57	107	49	97	44	2200	89	135	85	42,2	8	M 8	35	0,700	4208-050001-000000