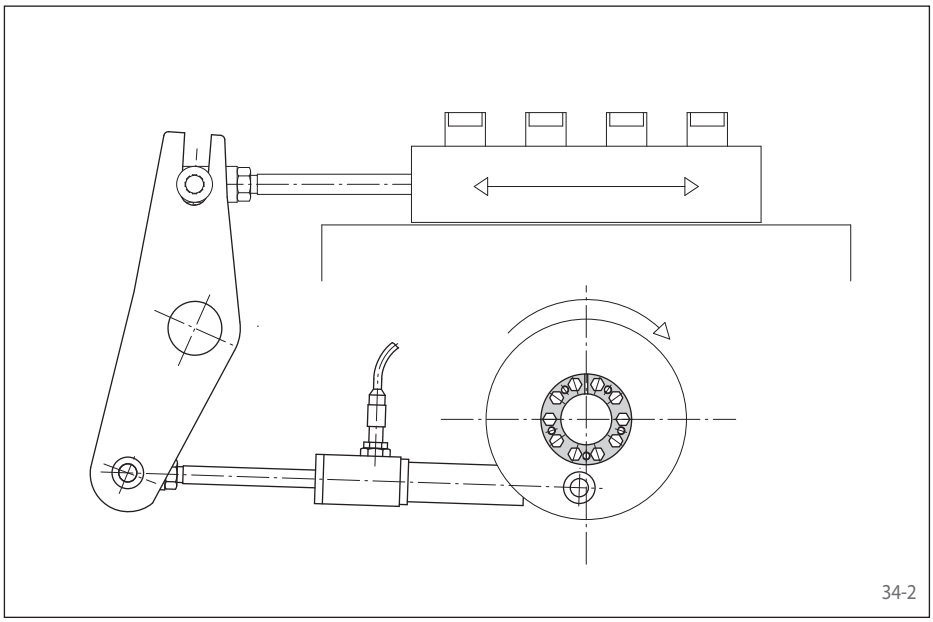
Cone Clamping Elements RLK 110 K

RINGSPANN®

centres the hub to the shaft
corrosion protected

Features

- Centres the shaft to the hub
- All parts 35 µm chemically nickel-coated for high corrosion resistance pursuant to DIN 50021 (neutral salt spray test)
- High transmissible torques
- Radial flat height is particularly suitable for small hub outer diameters
- No axial displacement between hub and shaft during clamping procedure due to fixed backstop point
- Transmissible torque of 190 Nm up to 2 800 Nm
- For shaft diameters between 19 mm and 60 mm



Application example

Backlash free connection of an eccentric wheel to the drive shaft of a packaging machine with a Cone Clamping Element RLK 110 K. The turning motion is transmitted into translatory motion by a driving rod that is protected from overload by a RINGSPANN force limiter.

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: $R_z = 10 \ldots 25$ µm.

Materials

The following apply to the shaft and the hub:

- E-module ≥ 170 kN/mm^2

Installation

Please request our installation and operating instructions for Cone Clamping Elements RLK 110 K.

Simultaneous transmission of torque and axial force

The transmissible torques M which are shown in the tables apply for axial forces F = 0 kN and conversely, the indicated axial forces F apply to torques M = 0 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

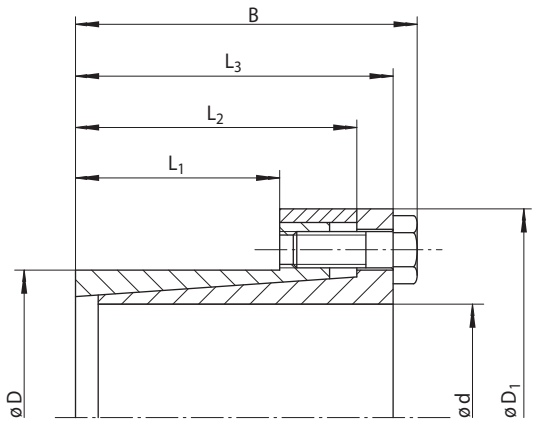
Cone Clamping Element RLK 110 K for shaft diameter d = 50 mm:

- RLK 110 K, size 50 x 65
  Article number 4206-050001-A08101

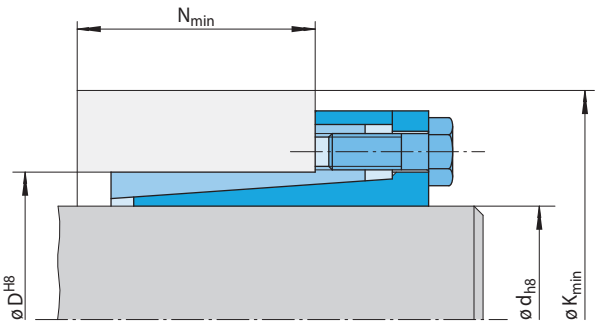
Cone Clamping Elements RLK 110 K

RINGSPANN®

centres the hub to the shaft
corrosion protected



35-1



35-2

Dimensions													Technical Data									Article number
							Yield strength R_e of the hub material [N/mm²]						Transmissible torque or axial force		Contact pressure at		Clamping screws				Weight	
Size							200		320		500				Shaft	Hub	Tightening torque	Number	Size	Length		
d	D	D_1	B	L_1	L_2	L_3	K_{min}	N_{min}	K_{min}	N_{min}	K_{min}	N_{min}	M	F	P_W	P_N	M_S					
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	Nm	kN	N/mm²	N/mm²	Nm			mm	kg	
19	27	49	41	18	31	38	62	27	44	23	37	21	190	20	157	111	14,9	4	M 6	18	0,3	4206-019001-A08101
20	28	49	41	18	31	38	62	27	45	23	38	21	200	20	149	107	14,9	4	M 6	18	0,3	4206-020001-A08101
22	32	54	48	25	38	45	52	30	43	28	39	27	220	20	98	67	14,9	4	M 6	18	0,3	4206-022001-A08101
25	34	56	48	25	38	45	54	30	45	28	41	27	250	20	86	63	14,9	4	M 6	18	0,4	4206-025001-A08101
28	39	61	49	25	38	45	71	33	56	30	49	28	420	30	115	83	14,9	6	M 6	18	0,5	4206-028001-A08101
30	41	62	49	25	38	45	71	33	57	29	51	28	450	30	108	79	14,9	6	M 6	18	0,5	4206-030001-A08101
32	43	65	56	30	43	50	79	39	62	35	54	33	650	40	112	83	14,9	8	M 6	18	0,5	4206-032001-A08101
35	47	69	56	30	43	50	81	39	65	35	58	33	710	40	102	76	14,9	8	M 6	18	0,6	4206-035001-A08101
38	50	72	56	30	43	50	82	38	68	35	61	33	770	40	94	72	14,9	8	M 6	18	0,6	4206-038001-A08101
40	53	75	56	30	43	50	84	38	70	35	63	33	810	40	90	68	14,9	8	M 6	18	0,7	4206-040001-A08101
45	59	85	71	40	57	65	108	53	84	47	74	44	1650	74	109	83	36,1	8	M 8	22	1,2	4206-045001-A08101
50	65	92	76	45	62	70	120	59	93	52	82	50	2300	92	109	84	36,1	10	M 8	22	1,3	4206-050001-A08101
55	71	98	81	50	67	75	117	62	95	56	85	54	2500	92	89	69	36,1	10	M 8	22	1,5	4206-055001-A08101
60	77	104	81	50	67	75	120	61	101	56	91	54	2800	92	82	64	36,1	10	M 8	22	1,7	4206-060001-A08101