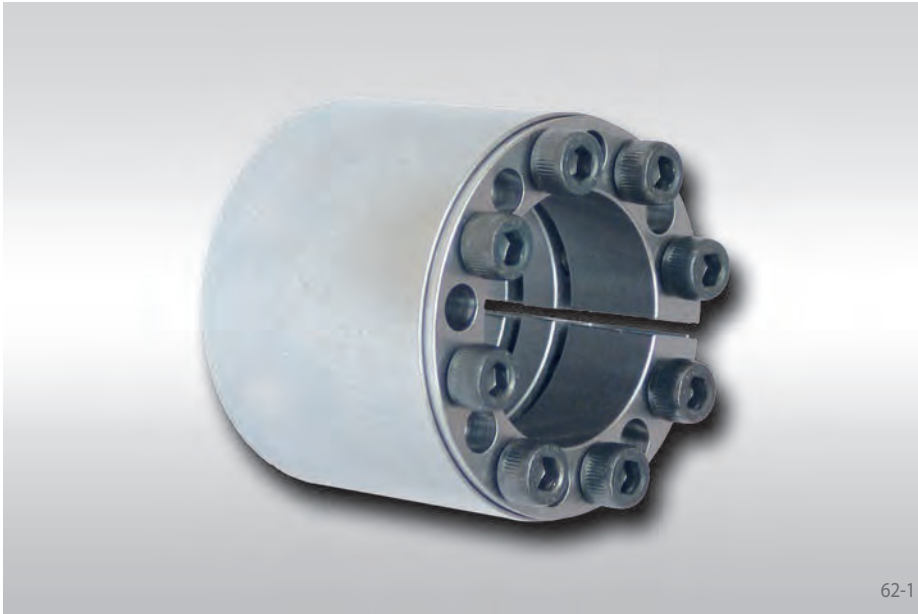


Cone Clamping Elements RLK 402

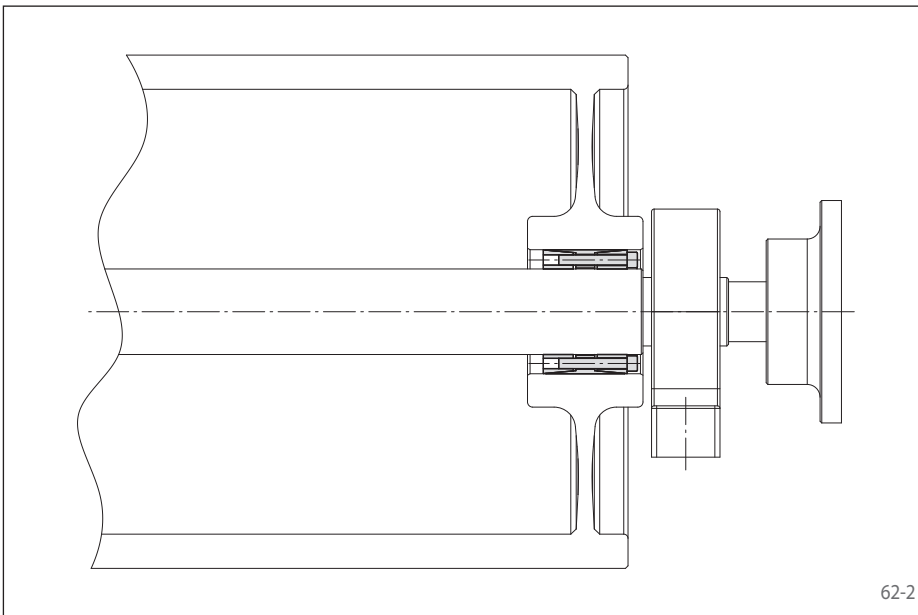
centres the hub to the shaft
highest transmissible torques



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Features

- Centres the hub to the shaft
- Highest transmissible torques
- For heavy duty applications
- No axial displacement between hub and shaft during clamping procedure
- Transmissible torque of 840 Nm up to 414 500 Nm
- For shaft diameters between 25 mm and 300 mm



62-2

Application example

Backlash free attachment of a belt drum to the drive shaft of a conveyor belt with a Cone Clamping Element RLK 402. The Cone Clamping Element can be used to transmit all acting loads of a driven belt drum. It centres the belt drum on the drive shaft. As no axial shift occurs during the clamping process, the axial position of the belt drum in relation to the drive shaft remains unchanged.

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

Please request our installation and operating instructions for Cone Clamping Elements RLK 402.

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.

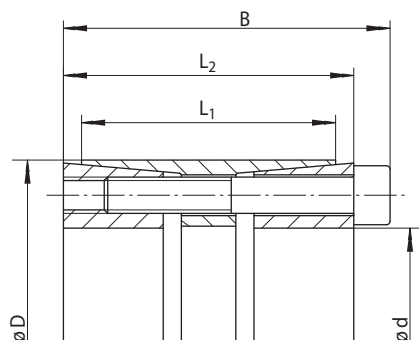
Example for ordering

Cone Clamping Element RLK 402 for shaft diameter $d = 100 \text{ mm}$:

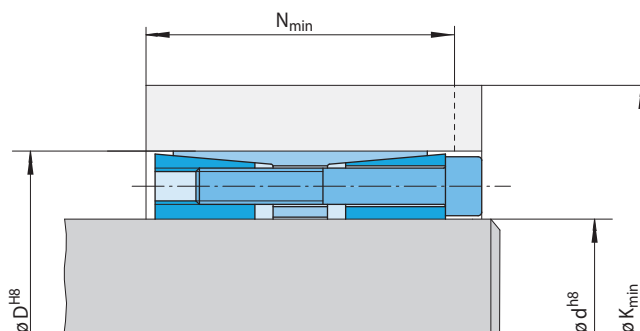
- RLK 402, size 100 x 145
Article number 4205-100201-000000

Cone Clamping Elements RLK 402

centres the hub to the shaft
highest transmissible torques



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63-2

Dimensions												Technical Data										Article number	
Yield strength R_{σ} of the hub material [N/mm ²]					Transmissible torque or axial force		Contact pressure at		Clamping screws				Weight										
									Tightening torque	Num- ber	Size	Length											
Size					200		320		500		M	F	Shaft	Hub	M _S								
d mm	D mm	B mm	L ₁ mm	L ₂ mm	K _{min} mm	N _{min} mm	K _{min} mm	N _{min} mm	K _{min} mm	N _{min} mm	Nm	kN	P _W N/mm ²	P _N N/mm ²	Nm			mm	kg				
25	50	51	41	45	115	49	82	40	68	37	840	67	222	111	17,4	6	M 6	35	0,5	4205-025201-000000			
28	55	51	41	45	147	55	100	44	79	38	1 250	89	265	135	17,4	8	M 6	35	0,5	4205-028201-000000			
30	55	51	41	45	147	55	100	44	79	38	1 350	89	247	135	17,4	8	M 6	35	0,5	4205-030201-000000			
32	60	51	41	45	143	53	102	43	83	38	1 450	89	232	124	17,4	8	M 6	35	0,6	4205-032201-000000			
35	60	51	41	45	143	53	102	43	83	38	1 550	89	212	124	17,4	8	M 6	35	0,5	4205-035201-000000			
38	65	51	41	45	173	58	120	45	96	39	2 100	110	252	147	17,4	10	M 6	35	0,6	4205-038201-000000			
40	65	51	41	45	173	58	120	45	96	39	2 250	110	239	147	17,4	10	M 6	35	0,6	4205-040201-000000			
42	75	51	41	45	236	71	159	51	122	42	3 400	160	344	193	42,2	8	M 8	35	0,9	4205-042201-000000			
45	75	51	41	45	236	71	159	51	122	42	3 700	160	321	193	42,2	8	M 8	35	0,9	4205-045201-000000			
48	80	70	58	62	192	72	136	58	111	52	3 900	160	205	123	42,2	8	M 8	55	1,4	4205-048201-000000			
50	80	70	58	62	192	72	136	58	111	52	4 100	160	197	123	42,2	8	M 8	55	1,3	4205-050201-000000			
55	85	70	58	62	194	70	141	56	117	50	4 500	160	188	122	42,2	8	M 8	55	1,4	4205-055201-000000			
60	90	70	58	62	232	78	163	61	131	53	6 100	200	215	143	42,2	10	M 8	55	1,5	4205-060201-000000			
65	95	70	58	62	229	76	165	60	135	52	6 600	200	198	136	42,2	10	M 8	55	1,6	4205-065201-000000			
70	110	86	70	76	287	101	199	79	159	69	11 200	320	218	139	83	10	M 10	60	2,9	4205-070201-000000			
75	115	86	70	76	283	98	201	78	163	68	12 000	320	203	133	83	10	M 10	60	3,1	4205-075201-000000			
80	120	86	70	76	330	109	226	83	179	71	15 500	390	229	153	83	12	M 10	60	3,3	4205-080201-000000			
85	125	86	70	76	330	106	231	81	185	69	16 500	390	223	152	83	12	M 10	60	3,4	4205-085201-000000			
90	130	86	70	76	327	104	233	80	189	69	17 500	390	211	146	83	12	M 10	60	3,5	4205-090201-000000			
95	135	86	70	76	324	102	235	79	193	69	18 500	390	200	141	83	12	M 10	60	3,7	4205-095201-000000			
100	145	110	92	98	380	133	262	104	210	91	28 500	570	203	140	144	12	M 12	80	5,6	4205-100201-000000			
110	155	110	92	98	373	129	266	102	218	90	31 000	570	185	131	144	12	M 12	80	6,1	4205-110201-000000			
120	165	110	92	98	419	138	296	107	239	93	39 500	660	198	144	144	14	M 12	80	6,6	4205-120201-000000			
130	180	128	108	114	439	151	312	119	254	105	50 500	780	184	133	229	12	M 14	90	9,5	4205-130201-000000			
140	190	128	108	114	495	163	347	126	278	108	63 500	900	200	147	229	14	M 14	90	10,0	4205-140201-000000			
150	200	128	108	114	549	174	380	131	301	112	77 500	1 050	213	160	229	16	M 14	90	10,6	4205-150201-000000			
160	210	128	108	114	543	169	385	129	309	110	82 500	1 050	202	154	229	16	M 14	90	11,2	4205-160201-000000			
170	225	162	136	146	553	192	391	152	318	134	105 000	1 250	176	133	354	14	M 16	110	16,8	4205-170201-000000			
180	235	162	136	146	615	205	428	159	343	137	127 000	1 400	190	146	354	16	M 16	110	17,6	4205-180201-000000			
190	250	162	136	146	605	199	434	156	354	136	134 500	1 400	180	137	354	16	M 16	110	20,3	4205-190201-000000			
200	260	162	136	146	601	196	439	155	363	136	141 500	1 400	171	132	354	16	M 16	110	21,3	4205-200201-000000			
220	285	162	136	146	713	215	513	165	416	141	194 500	1 750	198	153	354	20	M 16	110	24,9	4205-220201-000000			
240	305	162	136	146	759	222	550	170	447	144	233 000	1 950	199	157	354	22	M 16	110	26,9	4205-240201-000000			
260	325	162	136	146	757	214	563	166	465	141	252 500	1 950	188	150	354	22	M 16	110	28,7	4205-260201-000000			
280	355	197	165	177	832	249	613	195	504	168	348 000	2 500	182	143	692	18	M 20	130	43,4	4205-280201-000000			
300	375	197	165	177	895	260	658	201	540	172	414 500	2 800	188	151	692	20	M 20	130	46,0	4205-300201-000000			

Larger elements available on request.