

Cone Clamping Elements RLK 200

easy to release
compact design

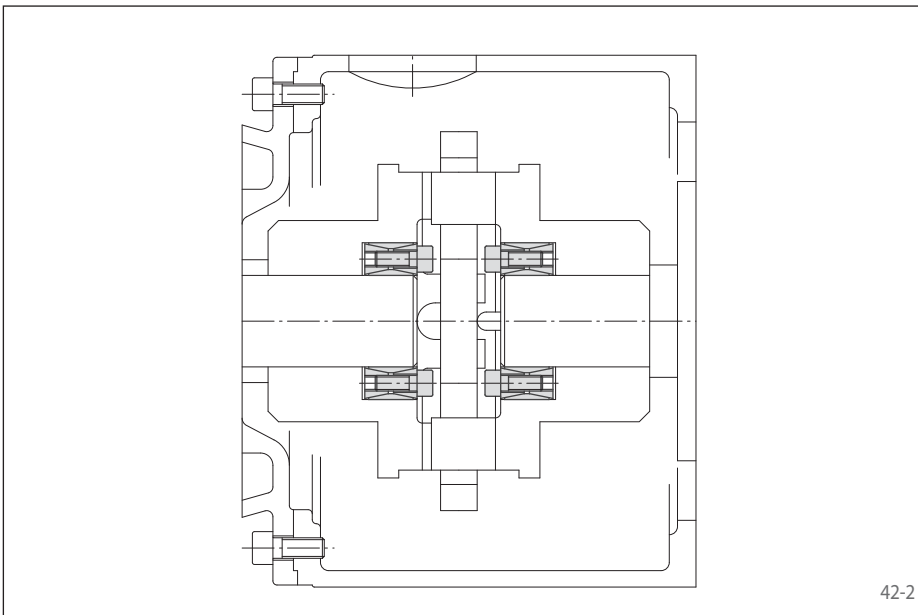
EDMAYR
ANTRIEBSTECHNIK



42-1

Features

- Easy to release
- Compact design
- No axial displacement between hub and shaft during clamping procedure
- Extended tolerances for hub and shaft
- For shaft diameters between 20 mm and 400 mm



42-2

Application example

Backlash free connection of the two hubs of a Flexible Coupling L42 from RINGSPANN with a Cone Clamping Element RLK 200. The Flexible Coupling is situated in the lantern of a geared motor driving a roller conveyor.

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

- h9 for shaft diameter d
- H9 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 200.

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 62 and 63.

Example for ordering

Cone Clamping Element RLK 200 for shaft diameter $d = 100 \text{ mm}$:

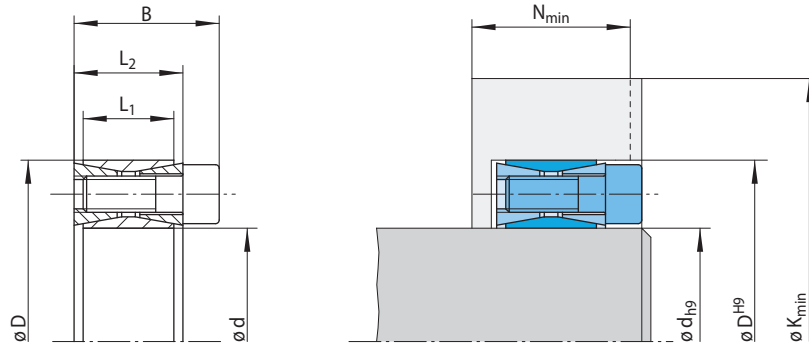
- RLK 200, size 100 x 145
Article number 4201-100001-000000

Kontakt:
Edmayr Antriebstechnik GmbH
Thalham 20, 4880 St. Georgen/Attg.
T: +43 7667 6840 F: +43 7667 20070
office@edmayr.at www.edmayr.at



Cone Clamping Elements RLK 200

easy to release
compact design



43-1

43-2

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	200		320		500		M	F	Shaft	Hub	Tightening torque	Number	Size	Length	kg					
mm	mm	B	L ₁	L ₂	K _{min}	N _{min}	K _{min}	N _{min}	K _{min}	N _{min}	Nm	kN	P _W	P _N	M _S		mm				
20	47	26	17	20	77	32	66	27	59	23	270	28	247	105	16	8	M 6	18	0,2	4201-020001-000000	
22	47	26	17	20	77	32	66	27	59	23	300	28	224	105	16	8	M 6	18	0,2	4201-022001-000000	
24	50	26	17	20	79	32	68	26	62	23	330	28	206	99	16	8	M 6	18	0,3	4201-024001-000000	
25	50	26	17	20	79	32	68	26	62	23	340	28	198	99	16	8	M 6	18	0,3	4201-025001-000000	
28	55	26	17	20	99	37	81	30	72	26	580	42	265	135	16	12	M 6	18	0,3	4201-028001-000000	
30	55	26	17	20	99	37	81	30	72	26	620	42	247	135	16	12	M 6	18	0,3	4201-030001-000000	
32	60	26	17	20	101	36	85	30	77	26	660	42	231	123	16	12	M 6	18	0,3	4201-032001-000000	
35	60	26	17	20	101	36	85	30	77	26	720	42	212	123	16	12	M 6	18	0,3	4201-035001-000000	
38	65	26	17	20	117	39	95	32	85	27	980	52	244	142	16	15	M 6	18	0,4	4201-038001-000000	
40	65	26	17	20	117	39	95	32	85	27	1000	52	231	142	16	15	M 6	18	0,4	4201-040001-000000	
42	75	32	20	24	138	48	113	39	100	33	1550	74	268	150	38	12	M 8	22	0,6	4201-042001-000000	
45	75	32	20	24	138	48	113	39	100	33	1650	74	251	150	38	12	M 8	22	0,5	4201-045001-000000	
48	80	32	20	24	140	47	117	39	105	33	1750	74	235	141	38	12	M 8	22	0,6	4201-048001-000000	
50	80	32	20	24	140	47	117	39	105	33	1850	74	225	141	38	12	M 8	22	0,6	4201-050001-000000	
55	85	32	20	24	162	51	129	42	115	35	2500	93	256	166	38	15	M 8	22	0,6	4201-055001-000000	
60	90	32	20	24	164	51	133	42	119	35	2700	93	235	157	38	15	M 8	22	0,7	4201-060001-000000	
65	95	32	20	24	166	50	137	41	124	35	3000	93	217	148	38	15	M 8	22	0,8	4201-065001-000000	
70	110	38	24	28	211	63	167	52	148	43	5200	149	271	172	75	15	M 10	25	1,3	4201-070001-000000	
75	115	38	24	28	213	63	171	52	153	43	5500	149	253	165	75	15	M 10	25	1,2	4201-075001-000000	
80	120	38	24	28	215	62	175	52	157	43	5900	149	237	158	75	15	M 10	25	1,4	4201-080001-000000	
85	125	38	24	28	218	61	179	51	162	43	6300	149	223	152	75	15	M 10	25	1,4	4201-085001-000000	
90	130	38	24	28	220	61	184	51	167	43	6600	149	211	146	75	15	M 10	25	1,5	4201-090001-000000	
95	135	38	24	28	244	65	199	54	177	45	8400	179	239	168	75	18	M 10	25	1,6	4201-095001-000000	
100	145	44	26	32	263	74	214	61	192	50	10900	218	255	176	130	15	M 12	30	2,2	4201-100001-000000	
110	155	44	26	32	268	72	222	60	202	50	12000	218	231	164	130	15	M 12	30	2,3	4201-110001-000000	
120	165	44	26	32	282	73	235	61	213	50	13500	233	226	165	130	16	M 12	30	2,4	4201-120001-000000	
130	180	50	34	38	311	83	257	69	231	60	18500	291	200	144	130	20	M 12	35	3,5	4201-130001-000000	
140	190	50	34	38	331	85	273	71	244	61	22000	320	204	150	130	22	M 12	35	3,8	4201-140001-000000	
150	200	50	34	38	351	88	290	73	258	63	26000	350	208	156	130	24	M 12	35	4,0	4201-150001-000000	
160	210	50	34	38	371	90	306	74	271	65	30000	379	211	161	130	26	M 12	35	4,4	4201-160001-000000	
170	225	58	38	44	391	100	323	83	290	71	36000	424	199	151	200	22	M 14	40	5,7	4201-170001-000000	
180	235	58	38	44	414	103	341	85	304	73	41500	463	205	157	200	24	M 14	40	6,0	4201-180001-000000	
190	250	66	46	52	438	113	361	94	321	82	51000	540	188	143	200	28	M 14	45	8,0	4201-190001-000000	
200	260	66	46	52	459	116	378	96	334	83	57500	579	191	147	200	30	M 14	45	8,2	4201-200001-000000	
220	285	72	50	56	500	126	412	104	366	91	74000	674	186	144	300	26	M 16	50	11,0	4201-220001-000000	
240	305	72	50	56	547	133	450	108	395	95	93000	778	197	155	300	30	M 16	50	12,2	4201-240001-000000	
260	325	72	50	56	593	139	486	112	426	97	114500	882	206	165	300	34	M 16	50	13,2	4201-260001-000000	
280	355	84	60	66	624	151	515	124	455	109	139000	994	180	142	410	32	M 18	60	19,2	4201-280001-000000	
300	375	84	60	66	671	158	553	129	487	112	167500	1119	190	152	410	36	M 18	60	20,5	4201-300001-000000	
320	405	98	72	78	746	183	607	149	530	129	235000	1469	193	153	590	36	M 20	70	29,6	4201-320001-000000	
340	425	98	72	78	755	181	622	147	549	129	249500	1469	182	146	590	36	M 20	70	31,1	4201-340001-000000	
360	455	112	84	90	827	205	675	167	592	146	322000	1791	180	143	790	36	M 22	80	42,2	4201-360001-000000	
380	475	112	84	90	837	203	691	166	610	146	340000	1791	171	137	790	36	M 22	80	44,0	4201-380001-000000	
400	495	112	84	90	848	200	708	165	629	146	358000	1791	162	131	790	36	M 22	80	46,0	4201-400001-000000	

Larger elements available on request.