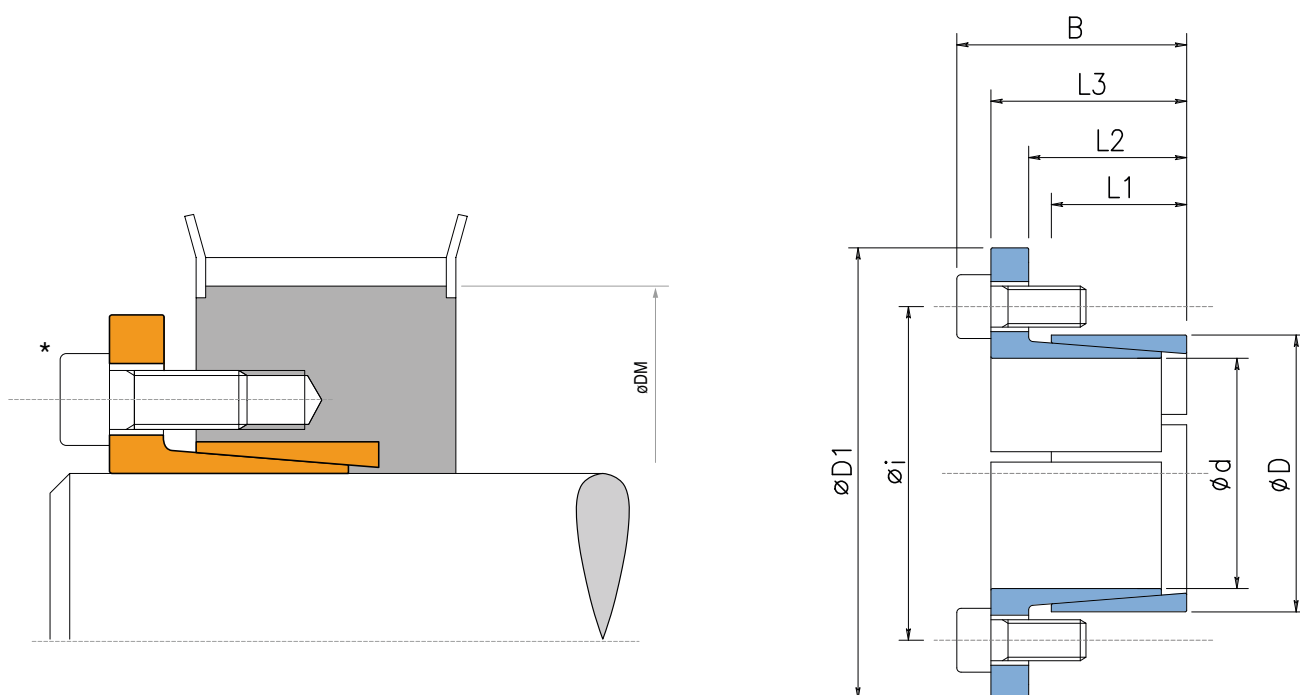


TLK 111



TLK 111 DIMENSIONS

Dimensions						"Tightening screws"	Screws Class: 8.8				
d x D mm	L1 mm	L2 mm	L3 mm	D1 mm	i mm		Tightening torque Ms Nm	Torque Mt Nm	Axial force Fax KN	Surface pressures on	
						N° x Type				Shaft pw N/mm ²	Hub pn N/mm ²
14 x 25	16	20	26	42	33	4 x M4	2,9	65	9	112	62
15 x 25	16	20	26	42	33	4 x M4	2,9	70	9	104	62
16 x 25	16	20	26	42	33	4 x M4	2,9	75	9	98	62
18 x 25	16	20	26	42	33	4 x M4	2,9	80	9	87	62
19 x 25	16	20	26	42	33	4 x M4	2,9	85	9	82	62
20 x 30	16	20	26	50	39	4 x M5	6	150	15	127	85
22 x 30	16	20	26	50	39	4 x M5	6	165	15	116	85
24 x 30	16	20	26	50	39	4 x M5	6	180	15	106	85
25 x 36	16	20	26	55	45	4 x M5	6	190	15	102	71
28 x 36	16	20	26	55	45	4 x M5	6	210	15	91	71
30 x 36	16	20	26	55	45	4 x M5	6	230	15	85	71
32 x 42	16	20	28	62	51	4 x M5	6	245	15	80	61
35 x 42	16	20	28	62	51	4 x M5	6	265	15	73	61
36 x 42	16	20	28	62	51	4 x M5	6	275	15	71	61
38 x 44	16	20	28	66	54	4 x M6	10	410	22	95	82
40 x 48	16	20	28	70	58	4 x M6	10	430	22	90	75
42 x 48	16	20	28	70	58	4 x M6	10	455	22	86	75
45 x 55	20	25	35	82	67	4 x M8	25	890	40	118	96
48 x 55	20	25	35	82	67	4 x M8	25	950	40	110	96
50 x 62	20	25	35	89	74	4 x M8	25	990	40	106	85
55 x 62	20	25	35	89	74	4 x M8	25	1090	40	96	85
60 x 72	20	25	35	99	84	4 x M8	25	1190	40	88	73
65 x 72	20	25	35	99	84	4 x M8	25	1290	40	81	73

* Upon request.

TLK 111

Characteristics

- Medium torque
- Restricted hub diameter
- Limited installation time
- Very low surface pressure

Installation

Carefully clean the hub and shaft contact surfaces and apply a thin film of light-weight oil. Slide the locking assembly into the hub bore, insert the shaft and the screws (not included in the supply), tighten them gradually and regularly in crossed sequence to reach the tightening torque M_s as indicated in the table.

The values M_t and F_{ax} indicated in the table are valid only in case of screws quality 8.8; 10.9 and 12.9 and in case of oil installation. Do not use any oil with **molybdenum bisulphide** or high pressure additives and not grease. Above substances notably reduce the friction coefficient.

Dismantling

Loosen the clamping screws. Insert the screws into the dismantling threading and tighten gradually and regularly in crossed sequence until the back cone is released.

If the element is to be reused, relubricate both screws and threadings.

Tolerances, surface finish

A good surface finish by machine tool is sufficient.

Maximum allowable surface finish:

Rt max 16 μm (Ra 3 μm - Rz 13 μm)

Maximum permissible tolerances:

h8 for shaft

H8 for hub

Axial movement

TLK 111: during screws tightening the hub has a slight axial movement with respect to the shaft.

DM hub calculation

The pressure P_n in the hub can be compared to the inside pressure on a thick hollow cylinder.

For DM calculation see page 46.

Screws Class: 10.9					Screws Class: 12.9					Weight Kg
Tightening torque M_s Nm	Torque M_t Nm	Axial force F_{ax} KN	Surface pressures on		Tightening torque M_s Nm	Torque M_t Nm	Axial force F_{ax} KN	Surface pressures on		
			Shaft P_w N/mm ²	Hub P_n N/mm ²				Shaft P_w N/mm ²	Hub P_n N/mm ²	
4,1	90	13	156	87	4,9	110	16	187	105	0,10
4,1	95	13	146	87	4,9	115	16	175	105	0,09
4,1	105	13	136	87	4,9	125	16	164	105	0,09
4,1	115	13	121	87	4,9	140	16	146	105	0,08
4,1	125	13	115	87	4,9	150	16	138	105	0,08
8,5	215	22	179	120	10	255	26	214	143	0,12
8,5	235	22	163	120	10	280	26	195	143	0,11
8,5	255	22	149	120	10	310	26	179	143	0,10
8,5	270	22	143	100	10	320	26	171	119	0,15
8,5	300	22	128	100	10	360	26	153	119	0,13
8,5	320	22	120	100	10	385	26	143	119	0,12
8,5	345	22	112	85	10	410	26	134	102	0,21
8,5	375	22	102	85	10	450	26	122	102	0,18
8,5	385	22	100	85	10	465	26	119	102	0,17
14	575	30	133	115	17	690	36	159	137	0,18
14	605	30	126	105	17	725	36	151	126	0,22
14	635	30	120	105	17	765	36	144	126	0,20
35	1260	56	165	135	41	1510	67	199	163	0,39
35	1340	56	155	135	41	1610	67	186	163	0,34
35	1400	56	149	120	41	1680	67	179	144	0,48
35	1540	56	135	120	41	1850	67	163	144	0,38
35	1680	56	124	103	41	2020	67	149	124	0,55
35	1820	56	114	103	41	2190	67	138	124	0,44