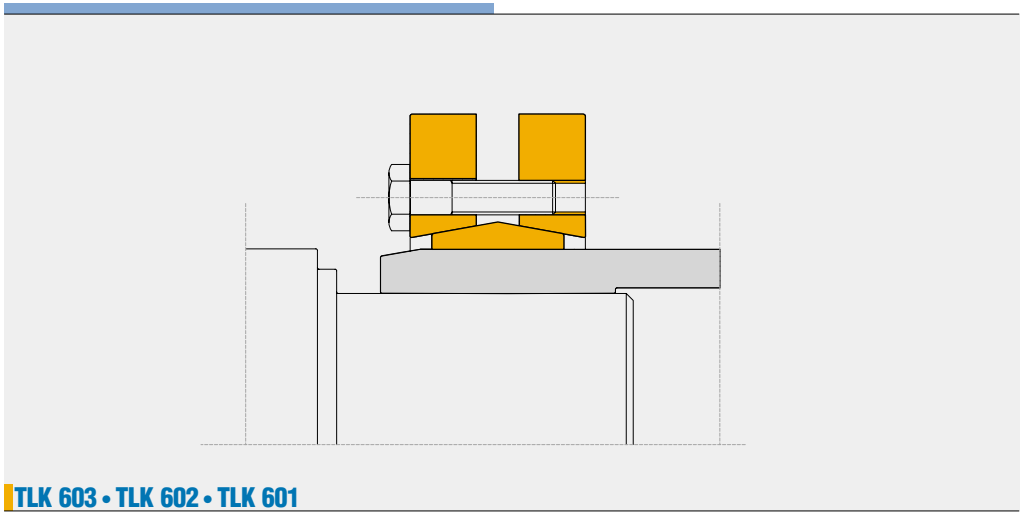
Shrink discs

TLK 603 • TLK 602 • TLK 601



TLK 603 • TLK 602 • TLK 601

Characteristics

Medium-high torque
No shaft-hub axial movement
Limited installation time
Quick dismantling

Installation

Carefully clean the hub and shaft contact surfaces. Slide the shrink disc outside the hollow shaft. Tighten gradually and regularly in continuous sequence all screws to reach the tightening torque **Ms** indicated in the table.
To reach the required tightening torque **Ms** it is necessary to repeat the procedure more than once.
Do not use **molybdenum bisulphide** in the hub and shaft contact surfaces.

Dismantling

Loosen the clamping screws in a continuous and gradual sequence. Do not remove screws from threads. Normally with this operation the shrink disc is released.
In case of reuse, apply a solid lubricant (that can guarantee a friction coefficient equal to 0,04) in the screws and in the tapered surfaces.

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:
d = h8 for shaft

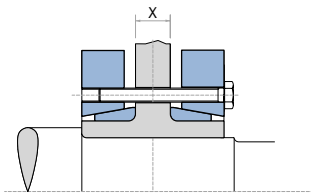
dw diameter tolerances

From 18 mm to 30 mm dw	H6/j6
From 30 mm to 50 mm dw	H6/h6
From 50 mm to 80 mm dw	H6/g6
From 80 mm to 500 mm dw	H7/g6

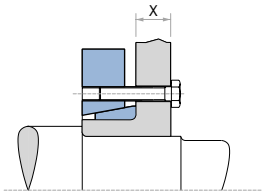
Axial movement

During screws tightening the hub has no axial movement with respect to the shaft.

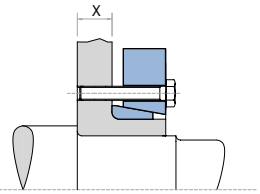
Shrink discs
Special applications



Split version

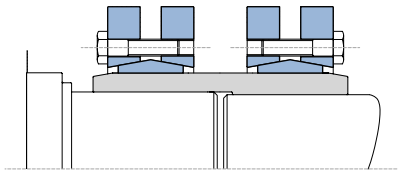


Half I version

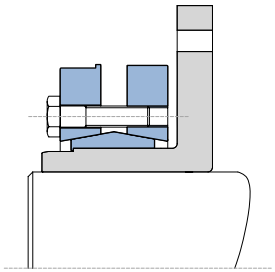


Half S version

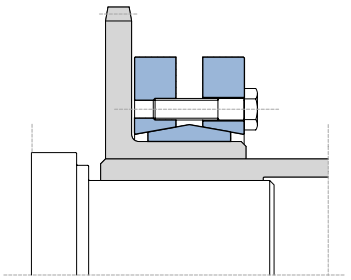
When ordering please specify X dimension



Use of model TLK 603 as coupling between different size shafts



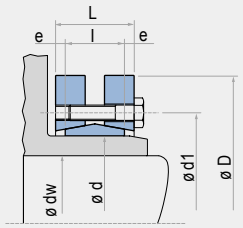
Special version equipped with housing for brake



Contemporaneus locking of a sprocket and a hollow shaft.

Shrink disc standard version

TLK 603



TLK 603

Type	Shaft diameter	Torque	Axial Thrust	Dimensions					Tightening screws DIN 931-10.9	Tightening torque	Weight
d mm	dw mm	Mt Nm	F ass. KN	D mm	l mm	L mm	d1 mm	e mm	N° x type	Ms Nm	kg
	11	30	6								
14	12	50	9	38	7	11,0	23	2,00	4 x M5*	4	0,1
	13	70	10								
16	14	90	13	41	11	15,0	26	2,00	5 x M5*	4	0,1
	19	170	25								
24	20	210	27	50	14	19,5	36	2,75	6 x M5*	4	0,2
	21	250	29								
	24	300	29								
30	25	340	31	60	16	21,5	44	2,75	7 x M5*	4	0,3
	26	380	33								
	28	440	50								
36	30	570	58	72	18	23,5	52	2,75	5 x M6	12	0,4
	31	630	58								
	32	620	64								
44	35	780	74	80	20	25,5	61	2,75	7 x M6	12	0,6
	36	860	77								
	38	940	79								
50	40	1160	86	90	22	27,5	70	2,75	8 x M6	12	0,8
	42	1380	92								
	42	1160	79								
55	45	1520	88	100	23	30,5	75	3,75	8 x M6	12	1,1
	48	1880	97								
	48	1850	100								
62	50	2200	111	110	23	30,5	86	3,75	10 x M6	12	1,3
	52	2400	117								
	50	2000	97								
68	55	2500	106	115	23	30,5	86	3,75	10 x M6	12	1,4
	60	3150	120								
	55	2500	119								
75	60	3200	137	138	25	32,5	100	3,75	7 x M8	30	1,7
	65	3950	155								
	60	3200	124								
80	65	3900	140	145	25	32,5	100	3,75	7 x M8	30	1,9
	70	4600	158								
	65	4800	175								
85	70	6100	195	155	30	39,0	114	4,50	10 x M8	30	3,5
	75	7400	216								
	65	4750	170								
90	70	6000	190	155	30	39,0	114	4,50	10 x M8	30	3,3
	75	7250	210								
	70	6900	195								
100	75	7500	220	170	34	44,0	124	5,00	12 x M8	30	4,7
	80	9000	240								
	75	7200	229								
110	80	9000	252	185	39	50,0	136	5,50	9 x M10	59	5,9
	85	10800	262								
	80	7400	235								
115	85	9200	259	188	39	50,0	141	5,50	9 x M10	59	5,5
	90	11100	269								
	80	10600	285								
120	85	13300	314	215	42	54,0	160	6,00	12 x M10	59	9
	90	14500	340								
	85	11000	296								
125	90	13000	324	215	42	54,0	160	6,00	12 x M10	59	8,3
	95	15000	352								
	90	11300	304								
130	95	13300	333	215	42	54,0	160	6,00	12 x M10	59	8
	100	15400	362								
	95	15100	367								
140	100	17600	396	230	46	60,5	175	7,25	10 x M12	100	10
	105	20100	425								
	105	22000	447								
155	110	25000	478	265	50	64,5	192	7,25	12 x M12	100	15
	115	28000	509								
	110	22600	460								
160	115	25700	490	265	50	64,5	192	7,25	12 x M12	100	14,5
	120	28800	520								
	115	31000	595								
165	120	35000	630	290	56	71,0	210	7,50	8 x M16	250	22
	125	39000	655								

*8.8

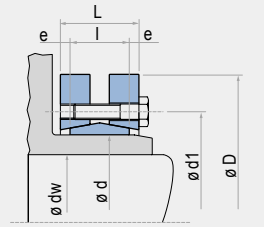
To be continued...

Shrink disc standard version

TLK 603

Type	Shaft diameter	Torque	Axial Thrust	Dimensions					Tightening screws DIN 931-10.9	Tightening torque	Weight
d mm	dw mm	Mt Nm	F ass. KN	D mm	l mm	L mm	d1 mm	e mm	N° x type	Ms Nm	kg
	120	31900	610								
170	125	36000	640	290	56	71	210	7,5	8 x M16	250	21
	130	40100	670								
	125	36000	605								
175	130	41000	639	300	56	71	220	7,5	8 x M16	250	22
	135	45000	675								
	130	37000	800								
180	135	42200	840	300	56	71	220	7,5	8 x M16	250	21
	140	46300	885								
	135	52000	778								
185	140	57000	819	330	71	86	236	7,5	10 x M16	250	37
	145	62000	861								
	140	53500	800								
190	145	58700	840	330	71	86	236	7,5	10 x M16	250	36
	150	63800	885								
	140	65000	933								
195	150	76000	1025	350	71	86	246	7,5	12 x M16	250	41
	155	81500	1071								
	150	74000	990								
200	155	80000	1035	350	71	86	246	7,5	12 x M16	250	41
	160	86000	1080								
	160	95000	1190								
220	165	102000	1239	370	88	104	270	8,0	15 x M16	250	54
	170	110000	1290								
	170	120000	1464								
240	180	138000	1576	405	92	109	295	8,5	12 x M20	490	67
	190	156000	1675								
	190	164000	1760								
260	200	184000	1880	430	103	120	321	8,5	14 x M20	490	82
	210	205000	2010								
	210	217000	2090								
280	220	244000	2220	460	114	134	346	10,0	16 x M20	490	102
	230	270000	2350								
	230	275000	2431								
300	240	295000	2567	485	122	142	364	10,0	18 x M20	490	118
	245	315000	2636								
	240	312000	2647								
320	250	340000	2786	520	122	142	386	10,0	20 x M20	490	131
	260	374000	2900								
	250	390000	3119								
340	260	422500	3249	570	134	156	408	11,0	24 x M20	490	186
	270	460000	3400								
	270	442000	3276								
350	280	480000	3430	580	140	162	432	11,0	24 x M20	490	195
	285	500000	3500								
	280	463000	3310								
360	290	502000	3461	590	140	162	432	11,0	24 x M20	490	204
	295	522000	3536								
	290	567000	3910								
380	300	610000	4080	645	144	168	458	12,0	20 x M24	840	239
	310	658000	4248								
	300	624000	4160								
390	310	671000	4330	660	144	168	468	12,0	21 x M24	840	260
	320	718000	4484								
	315	670000	4260								
400	320	695000	4345	680	144	168	480	12,0	21 x M24	840	280
	330	744000	4500								
	330	780000	4850								
420	340	840000	5040	690	164	188	504	12,0	24 x M24	840	316
	350	900000	5220								
	340	806000	4740								
440	350	860000	4910	750	177	202	527	12,5	24 x M24	840	408
	360	917000	5090								
	360	1000000	5670								
460	370	1070000	5860	770	177	202	547	12,5	28 x M24	840	420
	380	1140000	6050								
	380	1170000	6150								
480	390	1240000	6350	800	188	213	570	12,5	30 x M24	840	505
	400	1310000	6550								

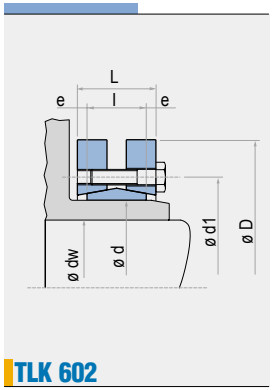
For larger diameter please contact us



TLK 603

Shrink disc heavy version

TLK 602



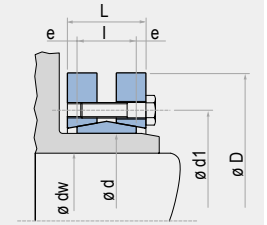
TLK 602

Type	Shaft diameter	Torque	Axial Thrust	Dimensions					Tightening screws DIN 931-10.9	Tightening torque	Weight
d mm	dw mm	Mt Nm	F ass. KN	D mm	l mm	L mm	d1 mm	e mm	N° x type	Ms Nm	kg
125	85 90 95	15000 17500 20000	355 388 422	215	55	65	160	5	10 x M12	100	11
140	95 100 105	20600 23500 26500	433 469 500	230	60	74	175	7	12 x M12	100	13
155	105 110 115	28600 32500 36400	550 590 630	265	66	80	198	7	15 x M12	100	20
165	115 120 125	41000 46000 50700	740 785 815	290	72	88	210	8	10 x M16	250	26
175	125 130 135	47000 52000 57000	750 795 840	300	72	88	220	8	10 x M16	250	29
185	135 140 145	72000 78000 86000	1100 1150 1200	330	92	112	236	10	14 x M16	250	47
195	140 150 155	75000 88000 96000	1075 1180 1235	350	92	112	246	10	14 x M16	250	53
200	145 150 155	85000 92500 100000	1170 1230 1290	350	92	112	246	10	15 x M16	250	50
220	160 165 170	127000 136000 146500	1590 1650 1720	370	114	134	270	10	20 x M16	250	65
240	170 180 190	155000 176000 198000	1820 1960 2080	405	120	144	295	12	15 x M20	490	87
260	190 200 210	213000 240000 268000	2260 2420 2580	430	136	160	321	12	18 x M20	490	100
280	210 220 230	285000 320000 355000	2740 2910 3090	460	148	172	346	12	21 x M20	490	132
300	230 240 245	341000 376000 394000	2960 3130 3215	485	152	176	364	12	22 x M20	490	140
320	240 250 260	378000 415000 451000	3150 3325 3470	520	160	184	386	12	24 x M20	490	165
340	250 260 270	489500 530000 578000	3910 4075 4275	570	176	200	420	12	21 x M24	840	240
350	270 280 285	556000 604000 629000	4122 4320 4415	580	176	200	425	12	21 x M24	840	247
360	280 290 295	612000 663000 689000	4370 4570 4670	590	180	204	432	12	22 x M24	840	250
380	290 300 310	618000 668000 719000	4270 4455 4645	645	180	204	458	12	22 x M24	840	320
390	300 310 320	708000 762000 814500	4715 4910 5090	660	188	212	468	12	24 x M24	840	350
400	315 320 330	765000 788000 845000	4855 4927 5125	680	188	212	480	12	24 x M24	840	370
420	330 340 350	999000 1068000 1140000	6055 6285 6515	690	214	238	504	12	30 x M24	840	410
440	340 350 360	1058000 1130000 1204000	6230 6460 6690	750	224	252	527	14	24 x M27	1250	525
460	360 370 380	1320000 1420000 1500000	7440 7700 7950	770	224	252	547	14	28 x M27	1250	540

For larger diameter please contact us.

Shrink disc light version

TLK 601



TLK 601

Type	Shaft diameter	Torque	Axial Thrust	Dimensions					Tightening screws DIN 931-10.9	Tightening torque	Weight
d mm	dw mm	Mt Nm	F ass. KN	D mm	l mm	L mm	d1 mm	e mm	N° x type	Ms Nm	kg
125	95 100 105	10550 12100 13800	220 240 260	185	39	51	158	6	8 x M10	59	6
140	110 120 125	14800 18640 20500	265 310 325	220	39	51	175	6	9 x M10	59	8
155	130 135 140	24000 26400 29000	365 390 410	245	39	51	192	6	11 x M10	59	10
165	135 140 145	32000 35200 38500	475 500 530	260	46	62	210	8	10 x M12	100	14
175	145 150 155	39000 42400 46000	535 560 590	275	46	62	220	8	11 x M12	100	16
185	155 160 165	46600 50300 54000	600 625 650	295	46	62	225	8	12 x M12	100	20
195	165 170 175	63000 67700 72500	760 795 825	315	56	72	237	8	15 x M12	100	27
200	175 180 185	74000 79500 84500	850 890 915	330	56	72	242	8	16 x M12	100	30
220	180 190 200	82800 93500 105000	920 980 1055	345	66	84	265	9	10 x M16	250	35
240	200 210 215	113000 127500 134500	1135 1210 1250	370	66	84	290	9	12 x M16	250	44
260	220 230 235	149000 165000 173000	1350 1435 1475	395	72	92	310	10	14 x M16	250	48
280	230 240 250	171000 189000 208000	1485 1570 1660	425	84	104	333	10	16 x M16	250	60
300	250 260 270	215000 234000 255000	1720 1800 1890	460	84	104	358	10	18 x M16	250	75
320	270 280 290	260000 284000 306000	1940 2030 2125	495	84	106	378	11	20 x M16	250	84
340	290 300 305	300000 324400 337000	2070 2160 2210	535	84	106	402	11	21 x M16	250	100
350	300 305 310	372000 385000 400000	2485 2540 2590	545	100	122	413	11	16 x M20	490	120
360	300 310 320	360000 388000 415000	2400 2500 2590	555	100	122	423	11	16 x M20	490	125
380	320 325 330	435000 451000 467000	2720 2780 2835	585	112	136	442	12	18 x M20	490	150
390	330 340 350	505000 540000 577000	3060 3175 3295	595	112	136	452	12	20 x M20	490	156
400	340 350 360	550000 587000 626000	3235 3360 3480	615	112	136	462	12	21 x M20	490	170
420	350 360 370	578000 617000 655000	3300 3425 3545	630	120	144	485	12	22 x M20	490	185
440	370 380 390	677000 719000 762000	3660 3785 3910	660	120	144	505	12	24 x M20	490	205
460	390 400 410	840000 890000 935000	4320 4460 4580	685	132	158	527	13	28 x M20	490	235

For larger diameter please contact us.