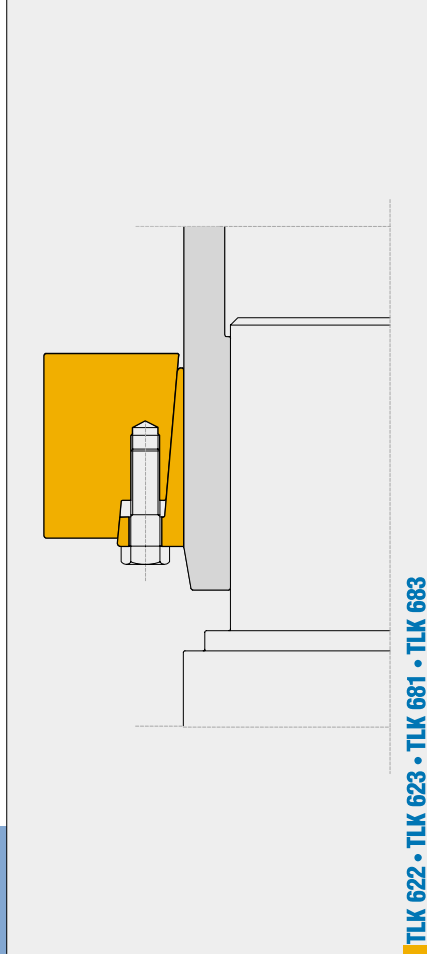


Shrink discs

TLK 622 • TLK 623 • TLK 681 • TLK 683



TLK 622 • TLK 623 • TLK 681 • TLK 683

Characteristics

Very high torques
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 = f7 for shaft

Dw diameter tolerances

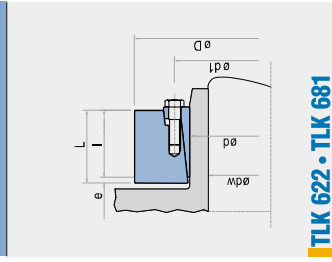
dw: Up to 150 mm **H7/h6**
From 155 mm **H7/g6**

Axial movement

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

Shrink discs

TLK 622 • TLK 681



TLK 622 • TLK 681

TLK 622

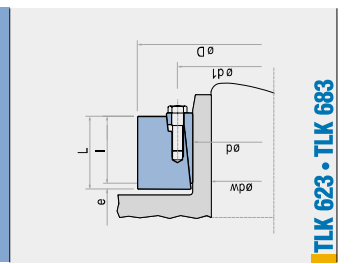
TLK 681

Type	Shaft diameter	Torque	Axial Thrust	Tightening torque	Torque	Axial Thrust	Tightening torque	Dimensions					Tightening screws	Weight	
d	d _w	Mt	F _{ass.}	Ms	Mt	F _{ass.}	Ms	D	I	L	d1	e	DN 931		
mm	mm	Nm	KN	Nm	Nm	KN	Nm	mm	mm	mm	mm	mm	kg		
12	9	20	5	12	-	-	-	35	10	11	24	1	M6	0.1	
	10	40	8	-	-	-	-	-	-	-	-	-	-	-	
14	11	30	6	12	-	-	-	38	10	11	26	1	M6	0.1	
	12	50	9	-	-	-	-	-	-	-	-	-	-	-	
16	13	70	10	13	12	-	-	41	13,5	15	28	1,5	M6	0.1	
	14	90	13	-	-	-	-	-	-	-	-	-	-	-	
18	15	80	11	14	12	-	-	44	13,5	15	30	1,5	M6	0.1	
	16	110	14	-	-	-	-	-	-	-	-	-	-	-	
20	17	150	18	20	12	-	-	47	13,5	15	32	1,5	M6	0.1	
	18	180	20	-	-	-	-	-	-	-	-	-	-	-	
24	19	160	17	20	12	-	-	50	16	18	36	2	M6	0.2	
	22	280	25	-	-	-	-	-	-	-	-	-	-	-	
30	24	270	23	25	12	-	-	60	18	20	44	2	M6	0.3	
	26	360	28	-	-	-	-	-	-	-	-	-	-	-	
36	27	440	32	30	11	41	30	72	20	22	52	2	M8	0.5	
	33	820	50	-	-	-	-	-	-	-	-	-	-	-	
44	34	690	41	40	-	-	-	80	22	24	61	2	M8	0.6	
	35	770	44	30	-	-	-	-	-	-	-	-	-	-	
50	37	920	50	50	-	-	-	-	-	-	-	-	-	-	
	37	920	50	-	-	-	-	-	-	-	-	-	-	-	
50	40	1290	65	30	1700	85	35	90	23,5	26	68	2,5	M8	0.8	
	42	1510	71	1900	93	-	-	-	-	-	-	-	-	-	
55	42	1230	59	1600	78	-	-	35	100	26	29	72	3	M8	1,1
	45	1530	68	30	2000	88	-	-	-	-	-	-	-	-	
48	48	1860	78	2400	99	-	-	-	-	-	-	-	-	-	
48	48	1670	70	2200	91	-	-	35	110	26	29	80	3	M8	1,3
62	50	1890	76	30	2400	98	-	35	115	26	29	86	3	M8	1,3
	52	2120	81	30	2700	104	-	-	-	-	-	-	-	-	
50	50	1870	75	2400	94	-	-	35	110	26	29	80	3	M8	1,3
68	55	2450	89	30	3000	111	-	35	115	26	29	86	3	M8	1,3
60	60	3120	104	3800	127	-	-	35	115	26	29	86	3	M8	1,3
55	55	2330	85	3700	136	-	-	35	115	26	29	86	3	M8	1,3
75	60	3020	101	59	4700	157	70	138	27	31	100	4	M10	2,3	
65	65	3810	117	5800	178	-	-	70	138	27	31	100	4	M10	2,3
60	60	3190	106	4200	142	-	-	70	141	27	31	104	4	M10	2,3
80	65	4060	123	59	5200	161	70	141	27	31	104	4	M10	2,3	
70	70	4910	140	6300	181	-	-	70	141	27	31	104	4	M10	2,3
65	65	5400	166	5900	181	-	-	70	141	27	31	104	4	M10	2,3
90	70	6500	187	59	7100	203	70	155	34	38	114	4	M10	3,2	
75	75	6000	208	8500	226	-	-	70	155	34	38	114	4	M10	3,2
70	70	6000	171	7400	213	-	-	70	155	34	38	114	4	M10	3,2
100	75	7200	192	59	8900	237	70	170	39	43	124	4	M10	4,3	
80	80	8500	213	10400	261	-	-	70	170	39	43	124	4	M10	4,3
80	80	10000	249	12600	314	-	-	70	170	39	43	124	4	M10	4,3
110	85	11700	275	100	14600	344	121	185	43,5	49	138	5,5	M12	5,8	
90	90	13600	302	16900	375	-	-	121	185	43,5	49	138	5,5	M12	5,8
85	85	11900	280	13600	320	-	-	121	185	43,5	49	138	5,5	M12	5,8
120	90	13800	307	100	15700	349	121	197	46,5	53	147	6,5	M12	6,9	
95	95	15900	334	18000	378	-	-	121	197	46,5	53	147	6,5	M12	6,9
95	95	15900	334	18000	378	-	-	121	197	46,5	53	147	6,5	M12	6,9
125	95	16500	347	100	18800	395	121	215	46,5	53	152	6,5	M12	8,7	
100	100	18700	375	21300	426	-	-	121	215	46,5	53	152	6,5	M12	8,7
95	95	18100	382	20300	427	-	-	121	215	46,5	53	152	6,5	M12	8,7
135	100	20600	412	160	23000	459	195	230	49,5	58	165	8,5	M14	11	
110	110	26000	473	28900	525	-	-	195	230	49,5	58	165	8,5	M14	11
100	100	19600	392	23000	459	-	-	195	230	49,5	58	165	8,5	M14	11
140	105	22100	421	160	25800	492	195	230	49,5	58	170	8,5	M14	10	
115	115	27600	481	32100	568	-	-	195	230	49,5	58	170	8,5	M14	10
110	110	26500	482	31100	565	-	-	195	230	49,5	58	170	8,5	M14	10
155	115	29500	514	160	34500	601	195	263	53,5	62	184	8,5	M14	15	
125	125	36100	578	44000	672	-	-	195	263	53,5	62	184	8,5	M14	15
165	120	37300	622	44000	734	-	-	300	290	58	68	198	10	M16	22
135	135	49600	734	58100	860	-	-	300	290	58	68	198	10	M16	22
130	130	45000	692	54000	834	-	-	300	290	58	68	198	10	M16	22
175	135	49000	730	250	59000	876	300	300	59	68	208	10	M16	23	
145	145	58000	805	70000	962	-	-	300	300	59	68	208	10	M16	23

To be continued...

Shrink discs

TLK 623 • TLK 683

TLK 683

Type	Shaft diameter	Torque			Axial Thrust			Torque			Axial Thrust	Tightening torque	Dimensions					Weight							
		d	dw	Mt	F _{ass}	Mt	F _{ass}	Mt	F _{ass}	Mt			F _{ass}	D	I	L	d1		e						
	mm	mm	mm	Nm	Nm	Nm	Nm	Nm	Nm	Nm	Nm	mm	mm	mm	mm	mm	Kg								
A	100	100	26000	523	30000	562	250	34000	607	30000	300	230	64	74	174	10	M16	13							
	140	105	30000	562	30000	562	250	42000	641	45000	810	263	70	80	194	10	M16	19							
	115	37000	641	45000	810	263	70	80	194	10	M16	26	27	88	204	11	M16	26							
	155	115	40000	687	250	48000	772	60000	959	60000	1047	300	290	77	88	204	11	M16	26						
	125	50000	828	770	250	63000	1105	63000	1105	63000	1105	63000	1105	63000	1105	63000	1105	63000	1105						
	165	125	55000	877	250	63000	1105	63000	1105	63000	1105	63000	1105	63000	1105	63000	1105	63000	1105						
	135	60000	977	83000	1223	73000	1121	73000	1121	73000	1121	73000	1121	73000	1121	73000	1121	73000	1121						
	175	135	67000	993	250	80000	1178	80000	1178	80000	1178	80000	1178	80000	1178	80000	1178	80000	1178						
	145	79000	1094	94000	1292	106000	1512	106000	1512	106000	1512	106000	1512	106000	1512	106000	1512	106000	1512						
	185	145	98000	1269	1330	490	115000	1582	115000	1582	115000	1582	115000	1582	115000	1582	115000	1582	115000	1582					
B	150	150	104000	1391	134000	1455	490	136000	1695	126000	1695	570	320	100	112	232	12	M20	40						
	200	155	113000	1453	490	136000	1757	136000	1757	136000	1757	570	340	100	112	246	12	M20	44						
	165	130000	1577	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900					
	220	160	127000	1591	162000	2027	570	174000	2012	570	174000	2012	570	370	121	134	266	13	M20	64					
	165	137000	1681	490	213000	2366	213000	2366	213000	2366	213000	2366	213000	2366	213000	2366	213000	2366	213000	2366					
	180	169000	1876	490	235000	2607	490	258000	3000	258000	3000	258000	3000	258000	3000	258000	3000	258000	3000	258000	3000				
	170	157000	1847	200	285000	3207	570	399000	3623	399000	3623	399000	3623	399000	3623	399000	3623	399000	3623	399000	3623				
	240	180	160000	1996	490	235000	2607	490	258000	3000	258000	3000	258000	3000	258000	3000	258000	3000	258000	3000	258000	3000			
	200	200	230000	2320	490	321000	3207	570	430	144	160	306	16	M20	102	102	102	102	102	102	102				
	260	200	250000	2600	490	321000	3207	570	430	144	160	306	16	M20	102	102	102	102	102	102	102				
C	220	210	306000	2918	361000	3435	840	401000	3646	980	460	156	172	334	16	M24	126	126	126	126	126	126			
	240	240	418000	3405	448000	4074	840	489000	4074	489000	4074	489000	4074	489000	4074	489000	4074	489000	4074	489000	4074				
	230	360000	3132	840	461000	4230	980	508000	4230	980	485	158	176	354	18	M24	141	141	141	141	141	141			
	300	240	398000	3314	3498	556000	4452	556000	4452	556000	4452	556000	4452	556000	4452	556000	4452	556000	4452	556000	4452				
	250	430000	3580	512000	4269	3580	512000	4269	3580	512000	4269	3580	512000	4269	3580	512000	4269	3580	512000	4269	3580	512000	4269		
	240	430000	3580	512000	4269	3580	512000	4269	3580	512000	4269	3580	512000	4269	3580	512000	4269	3580	512000	4269	3580	512000	4269		
	320	250	473000	3781	840	565000	4186	670000	4960	670000	4960	670000	4960	670000	4960	670000	4960	670000	4960	670000	4960	670000	4960		
	270	565000	4186	670000	4960	670000	4960	670000	4960	670000	4960	670000	4960	670000	4960	670000	4960	670000	4960	670000	4960	670000	4960		
	250	551000	4407	1250	722000	5552	1450	570	186	206	404	20	M27	235	235	235	235	235	235	235	235	235	235		
	340	280	603000	4637	852000	6096	852000	6096	852000	6096	852000	6096	852000	6096	852000	6096	852000	6096	852000	6096	852000	6096	852000	6096	
D	280	280	714000	5100	820000	5654	1250	820000	5654	1450	590	188	210	424	22	M27	251	251	251	251	251	251	251		
	270	671000	4969	840	763000	5654	1250	763000	5654	1450	590	188	210	424	22	M27	251	251	251	251	251	251	251		
	360	280	729000	5204	1250	820000	5654	1450	820000	5654	1450	590	188	210	424	22	M27	251	251	251	251	251	251		
	300	850000	5654	1450	820000	5654	1450	820000	5654	1450	590	188	210	424	22	M27	251	251	251	251	251	251	251		
	290	850000	5654	1450	820000	5654	1450	820000	5654	1450	590	188	210	424	22	M27	251	251	251	251	251	251	251		
	390	300	917000	6116	1210	1054000	7029	1450	650	196	220	456	24	M27	324	324	324	324	324	324	324	324	324		
	320	1061000	6533	1250	1210000	6906	1250	1210000	6906	1250	650	196	220	456	24	M27	324	324	324	324	324	324	324		
	420	320	1007000	6294	1250	1297000	6106	1450	690	221	246	486	25	M27	409	409	409	409	409	409	409	409	409		
	330	1000000	6146	1250	1398000	6106	1450	690	221	246	486	25	M27	409	409	409	409	409	409	409	409	409	409		
	350	1235000	7059	1582000	83012	1582000	83012	1582000	83012	1582000	83012	1582000	83012	1582000	83012	1582000	83012	1582000	83012	1582000	83012	1582000	83012	1582000	83012
E	340	350	1218000	7166	1640	1687000	8642	1970	750	233	258	514	25	M30	526	526	526	526	526	526	526	526	526	526	
	350	1301000	7433	1640	1734000	9632	1970	750	233	258	514	25	M30	544	544	544	544	544	544	544	544	544	544	544	
	370	1475000	7972	1970	1970000	10306	1970	750	233	258	514	25	M30	544	544	544	544	544	544	544	544	544	544	544	
	360	1402000	7791	1640	1841000	9953	1970	770	233	258	534	25	M30	544	544	544	544	544	544	544	544	544	544	544	
	370	1491000	8062	1640	1841000	9953	1970	770	233	258	534	25	M30	544	544	544	544	544	544	544	544	544	544	544	
	390	1678000	8606	2067000	10599	2067000	10599	1970	770	233	258	534	25	M30	544	544	544	544	544	544	544	544	544	544	
	380	1707000	8984	2076000	10926	2076000	10926	1970	800	270	298	552	28	M30	642	642	642	642	642	642	642	642	642	642	
	410	2023000	9687	1640	2198000	11270	1970	800	270	298	552	28	M30	642	642	642	642	642	642	642	642	642	642	642	
	400	1993000	9963	1640	2252000	12645	2529000	12645	1970	850	270	300	572	30	M30	741	741	741	741	741	741	741	741	741	
	500	410	2106000	10273	2699000	13021	2699000	13021	1970	850	270	300	572	30	M30	741	741	741	741	741	741	741	741	741	741
F	430	2342000	10895	2962000	13777	2962000	13777	2962000	13777	2962000	13777	2962000	13777	2962000	13777	2962000	13777	2962000	13777	2962000	13777	2962000	13777	2962000	13777
	530	440	2549000	11857	3093000	14385	3093000	14385	2650	890	306	338	616	32	M33	899	899	899	899	899	899	899	899	899	899
	460	2962000	12978	3584000	15581	3584000	15581	3584000	15581	3584000	15581	3584000	15581	3584000	15581	3584000	15581	3584000	15581	3584000	15581	3584000	15581	3584000	15581
	560	450	2837000	12069	3439000	15284	3439000	15284	2210	3070000	15683	2650	940	306	338	646	32	M33	1000	1000	1000	1000	1000	1000	1000

For larger diameter please contact us

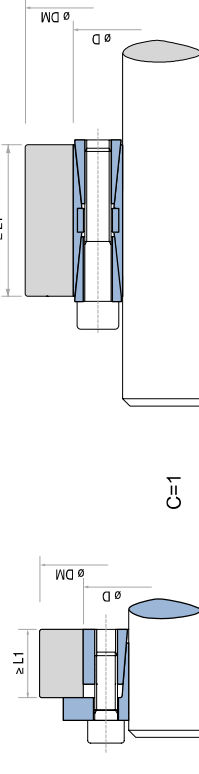
For larger diameter please contact us

Locking Assemblies

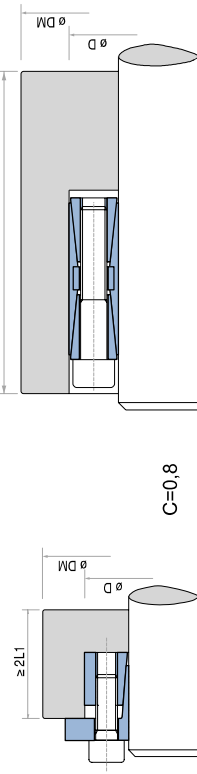
Calculation of minimum hub diameter DM

By installing TOLLOK locking assemblies the surface pressure **Pn**, existing between the clamping outer ring and related hub bore, generate a stress. To calculate the minimum hub diameter **DM** the formula normally used for thick hollow cylinder is valid. Depending from hub shape and length with respect to the dimension **L1** of locking assemblies, the real stresses change.

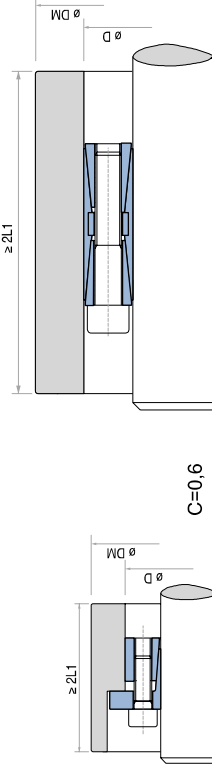
Factor **C** must be considered in function of application type.



C=1



C=0,8



C=0,6

For minimum hub diameter DM calculation following formula must be applied:

$$DM \geq D \cdot K$$

$$\text{where } K \text{ is equal to: } K = \sqrt{\frac{\sigma_s + (C \cdot P_n)}{\sigma_s - (C \cdot P_n)}}$$

To simplify the calculation our technical department has prepared the table on page 39.

Example:

Locking Assembly type TOLLOK TLK 131 $\varnothing$ 60x90.

Hub pressure $P_n = 85 \text{ N/mm}^2$ (see table page 9).

Hub material GGG40 (yielding limit $\sigma_{02} = 250 \text{ N/mm}^2$).

Hub length and shape equivalent $C = 1$.

$$DM \geq 90 \cdot 1,42 \geq 127,8 \text{ mm}$$

TABLE OF COEFFICIENT K

pn N/mm ²	Application type C	C ₁₀ Yield point N/mm ²									
		150	180	200	220	250	270	300	350	400	600
60	C=0,6	1,28	1,25	1,20	1,18	1,15	1,14	1,12	1,10	1,09	1,06
	C=0,8	1,39	1,30	1,24	1,23	1,22	1,20	1,18	1,15	1,12	1,08
	C=1	1,52	1,42	1,36	1,32	1,28	1,25	1,22	1,18	1,16	1,11
65	C=0,6	1,30	1,25	1,22	1,20	1,18	1,15	1,13	1,11	1,10	1,09
	C=0,8	1,44	1,35	1,30	1,28	1,24	1,22	1,20	1,16	1,14	1,12
	C=1	1,60	1,45	1,40	1,35	1,30	1,28	1,24	1,20	1,18	1,16
70	C=0,6	1,34	1,26	1,24	1,22	1,18	1,16	1,15	1,12	1,11	1,10
	C=0,8	1,48	1,38	1,34	1,30	1,25	1,23	1,20	1,18	1,15	1,13
	C=1	1,65	1,50	1,45	1,40	1,34	1,30	1,26	1,22	1,20	1,17
75	C=0,6	1,30	1,28	1,25	1,23	1,20	1,18	1,16	1,14	1,12	1,11
	C=0,8	1,52	1,42	1,36	1,32	1,28	1,25	1,22	1,18	1,16	1,14
	C=1	1,74	1,55	1,48	1,42	1,36	1,33	1,30	1,25	1,20	1,18
80	C=0,6	1,39	1,31	1,28	1,25	1,21	1,20	1,18	1,15	1,13	1,11
	C=0,8	1,58	1,45	1,39	1,35	1,30	1,27	1,24	1,20	1,18	1,15
	C=1	1,81	1,61	1,53	1,46	1,39	1,36	1,31	1,26	1,22	1,20
85	C=0,6	1,42	1,34	1,30	1,27	1,23	1,21	1,19	1,16	1,14	1,12
	C=0,8	1,63	1,49	1,42	1,38	1,32	1,29	1,26	1,22	1,19	1,16
	C=1	1,90	1,67	1,57	1,50	1,42	1,39	1,34	1,28	1,24	1,21
90	C=0,6	1,46	1,36	1,32	1,28	1,25	1,22	1,20	1,17	1,15	1,13
	C=0,8	1,69	1,53	1,46	1,40	1,34	1,31	1,28	1,23	1,20	1,18
	C=1	2,00	1,73	1,62	1,54	1,46	1,41	1,36	1,30	1,26	1,22
95	C=0,6	1,49	1,39	1,34	1,30	1,26	1,24	1,21	1,18	1,15	1,14
	C=0,8	1,75	1,57	1,49	1,43	1,37	1,34	1,30	1,25	1,21	1,19
	C=1	2,11	1,80	1,68	1,59	1,49	1,44	1,39	1,32	1,27	1,24
100	C=0,6	1,53	1,41	1,36	1,32	1,28	1,25	1,22	1,19	1,16	1,14
	C=0,8	1,81	1,61	1,53	1,46	1,39	1,36	1,31	1,26	1,22	1,14
	C=1	2,24	1,87	1,73	1,63	1,53	1,48	1,41	1,34	1,29	1,25
105	C=0,6	1,56	1,44	1,39	1,34	1,29	1,27	1,24	1,20	1,17	1,15
	C=0,8	1,88	1,66	1,56	1,50	1,42	1,38	1,33	1,28	1,24	1,21
	C=1	2,38	1,95	1,79	1,68	1,56	1,51	1,44	1,36	1,31	1,27
110	C=0,6	1,60	1,47	1,41	1,36	1,31	1,28	1,25	1,21	1,18	1,16
	C=0,8	1,96	1,71	1,60	1,53	1,44	1,41	1,35	1,29	1,25	1,22
	C=1	2,55	2,04	1,86	1,73	1,60	1,54	1,47	1,38	1,33	1,28
115	C=0,6	1,64	1,50	1,43	1,36	1,33	1,30	1,26	1,22	1,19	1,17
	C=0,8	2,04	1,78	1,64	1,56	1,47	1,43	1,37	1,31	1,26	1,23
	C=1	2,75	2,13	1,93	1,79	1,64	1,58	1,50	1,41	1,34	1,30
120	C=0,6	1,69	1,53	1,46	1,40	1,34	1,31	1,28	1,23	1,20	1,18
	C=0,8	2,13	1,81	1,69	1,60	1,50	1,45	1,39	1,33	1,28	1,24
	C=1	3,00	2,24	2,00	1,84	1,69	1,61	1,53	1,43	1,36	1,31
125	C=0,6	1,73	1,56	1,48	1,43	1,36	1,33	1,29	1,24	1,21	1,18
	C=0,8	2,24	1,87	1,73	1,63	1,53	1,48	1,41	1,34	1,29	1,25
	C=1	3,32	2,35	2,08	1,91	1,73	1,65	1,56	1,45	1,38	1,33
130	C=0,6	1,78	1,59	1,51	1,45	1,38	1,35	1,30	1,26	1,22	1,19
	C=0,8	2,35	1,93	1,78	1,67	1,56	1,50	1,44	1,36	1,30	1,27
	C=1	3,74	2,49	2,17	1,97	1,78	1,69	1,59	1,48	1,40	1,35
135	C=0,6	1,83	1,62	1,54	1,47	1,40	1,36	1,32	1,27	1,23	1,20
	C=0,8	2,48	2,00	1,83	1,71	1,59	1,53	1,46	1,38	1,32	1,28
	C=1	4,36	2,65	2,27	2,04	1,83	1,73	1,62	1,50	1,42	1,36
140	C=0,6	1,88	1,66	1,56	1,50	1,42	1,38	1,33	1,28	1,24	1,21
	C=0,8	2,50	2,03	1,86	1,74	1,62	1,56	1,49	1,41	1,35	1,30
	C=1	5,39	2,83	2,38	2,12	1,88	1,76	1,66	1,53	1,44	1,38
145	C=0,6	1,94	1,69	1,59	1,52	1,44	1,40	1,35	1,29	1,25	1,22
	C=0,8	2,65	2,15	1,94	1,80	1,66	1,59	1,51	1,43	1,36	1,31
	C=1	7,88	3,05	2,50	2,21	1,94	1,82	1,69	1,55	1,46	1,40
150	C=0,6	2,00	1,73	1,62	1,54	1,46	1,41	1,36	1,30	1,26	1,23
	C=0,8	2,73	2,20	1,98	1,84	1,69	1,61	1,53	1,45	1,38	1,33
	C=1	8,32	3,52	2,65	2,30	1,94	1,82	1,73	1,58	1,48	1,41
155	C=0,6	2,06	1,77	1,65	1,57	1,48	1,43	1,38	1,31	1,27	1,24
	C=0,8	3,25	2,53	2,06	1,89	1,72	1,65	1,55	1,45	1,38	1,33
	C=1	9,35	3,66	2,80	2,40	2,06	1,92	1,77	1,61	1,51	1,45
160	C=0,6	2,13	1,81	1,69	1,60	1,50	1,45	1,39	1,33	1,28	1,24
	C=0,8	3,55	2,43	2,13	1,94	1,76	1,67	1,58	1,47	1,39	1,34
	C=1	10,42	4,12	3,00	2,52	2,13	1,96	1,81	1,64	1,53	1,45
165	C=0,6	2,21	1,86	1,72	1,62	1,52	1,47	1,41	1,34	1,29	1,25
	C=0,8	3,96	2,55	2,21	2,00	1,80	1,71	1,60	1,49	1,41	1,35
	C=1	11,42	4,80	3,23	2,65	2,21	2,04	1,86	1,67	1,55	1,47

Locking Assemblies

Calculation of minimum hub diameter DM