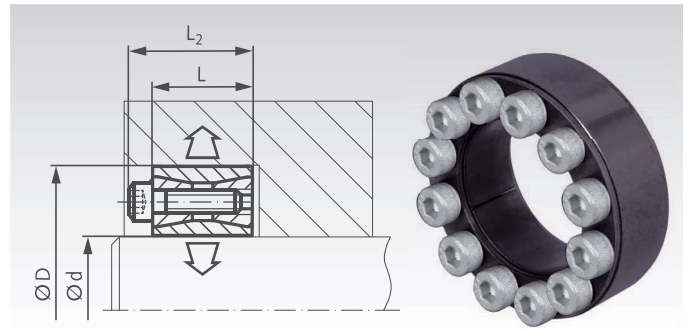


## Locking Assemblies COM-A, QPQ-Coated

**Material:** Steel.

- For fixing a hub (e.g. V-belt pulley or similar) on a shaft.
- **QPQ coated:** High corrosion resistance, improved fatigue strength, primarily food safe (further information see below).
- For medium high torques.
- Not self-centering.
- Self-releasing at dismounting.
- No axial movement during mounting.



Ordering Details: e.g.: Product No. 615 775 14, Locking Assembly COM-A QPQ, 14 mm

Product No.	d mm	D mm	L mm	L <sub>2</sub> mm	T Nm	F <sub>ax</sub> kN	P <sub>w</sub> N/mm <sup>2</sup>	P <sub>N</sub> N/mm <sup>2</sup>	Screw 12.9* Number x Size	T <sub>A</sub> Nm	Weight kg
615 775 14	14	42	20	26	180	26	291	97	8 x M6 x 18	15	0,18
615 775 15	15	42	20	26	200	27	282	101	8 x M6 x 18	15	0,18
615 775 16	16	44	20	26	205	26	251	99	8 x M6 x 18	15	0,18
615 775 17	17	44	20	26	220	26	240	93	8 x M6 x 18	15	0,18
615 775 18	18	47	20	26	230	25	195	82	8 x M6 x 18	15	0,22
615 775 19	19	47	20	26	270	28	221	93	8 x M6 x 18	15	0,22
615 775 20	20	47	20	26	290	28	232	98	8 x M6 x 18	15	0,22
615 775 22	22	47	20	26	290	30	200	90	8 x M6 x 18	15	0,21
615 775 24	24	50	20	26	380	32	216	103	8 x M6 x 18	15	0,21
615 775 25	25	50	20	26	400	33	200	100	8 x M6 x 18	15	0,23
615 775 28	28	55	20	26	520	36	208	104	10 x M6 x 18	15	0,27
615 775 30	30	55	20	26	520	37	183	99	10 x M6 x 18	15	0,26
615 775 32	32	60	20	26	690	43	209	112	12 x M6 x 18	15	0,28
615 775 35	35	60	20	26	770	44	196	113	12 x M6 x 18	15	0,30
615 775 38	38	65	20	26	940	49	202	116	14 x M6 x 18	15	0,33
615 775 40	40	65	20	26	980	49	190	115	14 x M6 x 18	15	0,32
615 775 45	45	75	24	32	1700	74	216	127	12 x M8 x 22	37	0,55
615 775 50	50	80	24	32	1830	75	196	118	12 x M8 x 22	37	0,56

\* Screws with special coating.

More sizes up to d=1,000mm for 1,980,000Nm are available.  
Price and delivery time on request.

T = transmittable torque at F<sub>ax</sub> = 0.  
F<sub>ax</sub> = transmittable axial force at T = 0.  
P<sub>w</sub> = surface pressure onto the shaft.  
P<sub>N</sub> = surface pressure onto the hub.  
T<sub>A</sub> = fastening torque of the screws.

### What is QPQ Nitro Carburising?

**Q** = Quench (nitrocarburising followed by oxidising cooling process).  
**P** = Polish (mechanical polishing up to desired surface finish before nitrocarburising).  
**Q** = Quench (Oxidising to increase the corrosion resistance).  
Salt-bath nitro carburising is, in many cases, a good alternative to other surface layer treatments as case hardening or hard plating.

### QPQ Surface Properties

Very good corrosion resistance, better than hard chrome or chem. nickel. Corrosion resistance in the salt spray test SS CASS in accordance with DIN 50021.  
Improved wear resistance, no fretting corrosion, no cold shut.  
Increased endurance strength, sometimes up to 100% higher.  
Is completely safe to use with food as long as there is no contact with any acidic substances with a pH-value of ≤ 4.

### Fit

Shaft h8, Hub H8.  
Surface roughness max. 12.5µm.

### Mounting

Slightly oil the locking assembly before mounting, do not use molybdenum disulphide or grease. Tighten the screws evenly and crosswise in several steps.

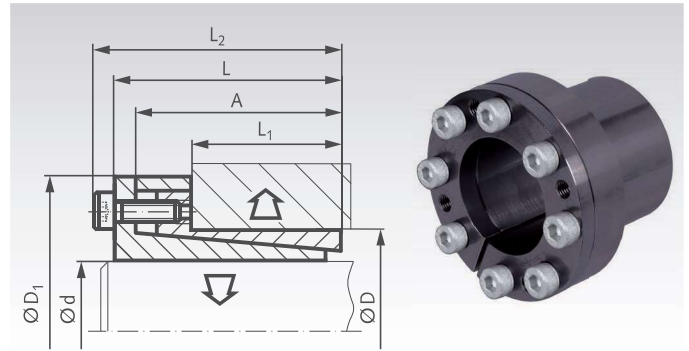
### Demounting

Due to the cone angle, the locking assembly is usually released once all screws have been fully unfastened. There are three large auxiliary threads cut into the front ring, which serve to remove this ring.

## Locking Assemblies COM-B, QPQ-Coated

**Material:** Steel.

- For fixing a hub (e.g. timing belt pulley or similar) on a shaft.
- **QPQ coated:** High corrosion resistance, improved fatigue strength, primarily food safe (further information see below).
- For medium torques.
- Also suitable for small hub diameters.
- Self-centering.
- Self-locking.
- No axial movement during mounting.



Ordering Details: e.g.: Product No. 615 776 06, Locking Assembly COM-B QPQ, 6 mm

Product No.	d mm	D mm	L mm	A mm	L <sub>1</sub> mm	L <sub>2</sub> mm	D <sub>1</sub> mm	T Nm	F <sub>ax</sub> kN	P <sub>w</sub> N/mm <sup>2</sup>	P <sub>N</sub> N/mm <sup>2</sup>	Screw 12.9* Number x Size	T <sub>A</sub> Nm	Weight kg
615 776 06	6	14	21	18,5	10	24	25	12	4	185	80	3 x M3 x 10	2	0,05
615 776 07	7	15	25	22	12	29	27	24	7	223	111	3 x M4 x 12	5	0,07
615 776 08	8	15	25	22	12	29	27	29	7	207	111	3 x M4 x 12	5	0,07
615 776 09	9	16	26	23	14	30	28	42	10	197	110	4 x M4 x 12	5	0,07
615 776 10	10	16	26	23	14	30	28	48	10	179	112	4 x M4 x 12	5	0,07
615 776 11	11	18	26	23	14	30	32	51	10	165	102	4 x M4 x 12	5	0,07
615 776 12	12	18	26	23	14	30	32	55	10	152	100	4 x M4 x 12	5	0,08
615 776 14	14	23	26	23	14	30	38	68	10	130	80	4 x M4 x 12	5	0,11
615 776 15	15	24	36	29	16	42	45	133	18	194	121	3 x M6 x 18	17	0,22
615 776 16	16	24	36	29	16	42	45	140	18	180	118	3 x M6 x 18	17	0,22
615 776 17	17	26	38	31	18	44	47	180	22	190	125	4 x M6 x 18	17	0,25
615 776 18	18	26	38	31	18	44	47	200	22	180	125	4 x M6 x 18	17	0,23
615 776 19	19	27	38	31	18	44	49	210	22	172	121	4 x M6 x 18	17	0,25
615 776 20	20	28	38	31	18	44	50	220	22	160	115	4 x M6 x 18	17	0,26
615 776 22	22	32	45	38	25	51	54	250	22	113	78	4 x M6 x 18	17	0,35
615 776 24	24	34	45	38	25	51	56	270	22	106	76	4 x M6 x 18	17	0,36
615 776 25	25	34	45	38	25	51	56	280	22	101	76	4 x M6 x 18	17	0,34
615 776 28	28	39	45	38	25	51	61	450	32	130	93	6 x M6 x 18	17	0,42
615 776 30	30	41	45	38	25	51	62	500	32	133	95	6 x M6 x 18	17	0,43
615 776 32	32	43	45	38	25	51	65	540	35	115	86	6 x M6 x 18	17	0,49
615 776 35	35	47	52	45	32	58	69	800	44	106	81	8 x M6 x 18	17	0,55
615 776 40	40	53	52	45	32	58	75	900	45	92	68	8 x M6 x 18	17	0,64
615 776 45	45	59	70	62	45	78	86	1800	80	105	81	8 x M8 x 22	41	1,05
615 776 50	50	65	70	62	45	78	92	2020	81	96	72	8 x M8 x 22	41	1,26

\* Screws with special coating.

T = transmittable torque at  $F_{ax} = 0$ .  
 $F_{ax}$  = transmittable axial force at  $T = 0$ .  
 $P_w$  = surface pressure onto the shaft.  
 $P_N$  = surface pressure onto the hub.  
 $T_A$  = fastening torque of the screws.

More sizes up to  $d=130\text{mm}$  for 24,800Nm are available.  
 Price and delivery time on request.

### What is QPQ Nitro Carburising?

**Q** = Quench (nitrocarburising followed by oxidising cooling process).  
**P** = Polish (mechanical polishing up to desired surface finish before nitrocarburising).  
**Q** = Quench (Oxidising to increase the corrosion resistance).  
 Salt-bath nitro carburising is, in many cases, a good alternative to other surface layer treatments as case hardening or hard plating.

### QPQ Surface Properties

Very good corrosion resistance, better than hard chrome or chem. nickel. Corrosion resistance in the salt spray test SS CASS in accordance with DIN 50021.  
 Improved wear resistance, no fretting corrosion, no cold shut.  
 Increased endurance strength, sometimes up to 100% higher.  
 Is completely safe to use with food as long as there is no contact with any acidic substances with a pH-value of  $\leq 4$ .

### Fit

Shaft h8, Hub H8.  
 Surface roughness max.  $12.5\mu\text{m}$ .

### Mounting

Slightly oil the locking assembly before mounting, do not use molybdenum disulphide or grease. Tighten the screws evenly and crosswise in several steps.

### Demounting

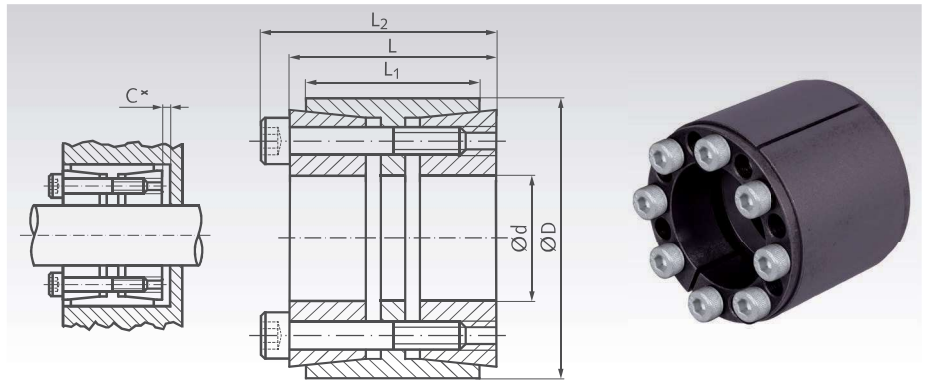
Remove all tensioning screws and screw them into the (usually unused) forcing thread of the front flange, until the flange is released.

## Locking Assemblies COM-L, QPQ-Coated

**Material:** Steel.

- For fixing a hub (e.g. drive wheel, rotor or similar) on a shaft.
- **QPQ coated:** High corrosion resistance, improved fatigue strength, primarily food safe (further information see below).
- For very high torques.
- Self-centering.
- Slight axial offset possible during assembly.

**Concentricity:** 0.02 to 0.04 mm.



Ordering Details: e.g.: Product No. 615 511 25Q, Locking Assembly COM-L QPQ, 25 mm

Product No.	d mm	D mm	L <sub>1</sub> mm	L mm	C* mm	L <sub>2</sub> mm	at T <sub>A</sub> transmittable		Surface Pressure		Screws** DIN 912 12.9	Weight	
							T Nm	F <sub>ax</sub> kN	P <sub>w</sub> N/mm <sup>2</sup>	P <sub>N</sub> N/mm <sup>2</sup>			Number x Size
615 511 25Q	25	55	32	40	4	46	810	65	288	98	6 x M6 x 35	17	0,35
615 511 28Q	28	55	32	40	4	46	950	65	268	102	6 x M6 x 35	17	0,42
615 511 30Q	30	55	32	40	4	46	970	68	241	98	6 x M6 x 35	17	0,40
615 511 35Q	35	60	44	54	5	60	1240	70	157	83	7 x M6 x 45	17	0,60
615 511 38Q	38	75	44	54	5	62	2780	145	263	117	7 x M8 x 50	41	1,15
615 511 40Q	40	75	44	54	5	62	3020	146	293	121	7 x M8 x 50	41	0,59
615 511 42Q	42	75	44	54	5	62	3150	151	248	116	7 x M8 x 50	41	1,25
615 511 45Q	45	75	44	54	5	62	3390	151	261	121	7 x M8 x 50	41	0,74
615 511 48Q	48	80	56	64	4	72	3920	159	161	96	8 x M8 x 55	41	1,30
615 511 50Q	50	80	56	64	4	72	4110	163	156	97	8 x M8 x 55	41	1,26
615 511 55Q	55	85	56	64	4	72	4370	164	137	89	8 x M8 x 55	41	1,36
615 511 60Q	60	90	56	64	4	72	6320	211	167	111	10 x M8 x 55	41	1,46
615 511 65Q	65	95	56	64	4	72	7100	217	160	109	10 x M8 x 55	41	1,55
615 511 70Q	70	110	70	78	4	88	11730	314	184	117	10 x M10 x 60	83	2,9
615 511 75Q	75	115	70	78	5	88	11900	340	159	104	10 x M10 x 60	83	3,0
615 511 80Q	80	120	70	78	5	88	16400	392	196	130	12 x M10 x 60	83	3,3
615 511 85Q	85	125	70	78	5	88	16600	400	175	119	12 x M10 x 60	83	3,4
615 511 90Q	90	130	70	78	5	88	18000	400	169	116	12 x M10 x 60	83	3,5
615 511 95Q	95	135	70	78	5	88	19000	412	160	112	12 x M10 x 60	83	3,7
615 512 00Q	100	145	90	100	6	112	27900	559	165	113	12 x M12 x 80	145	5,5

\* When using in a stepped bore, the clearance C is to be foreseen for demounting.

\*\* Screws with special coating.

T = transmittable torque at F<sub>ax</sub> = 0.  
 F<sub>ax</sub> = transmittable axial force at T = 0.  
 P<sub>w</sub> = surface pressure onto the shaft.  
 P<sub>N</sub> = surface pressure onto the hub.  
 T<sub>A</sub> = fastening torque of the screws.

More sizes up to d=300mm for 444,000Nm are available.  
 Price and delivery time on request.

### What is QPQ Nitro Carburising?

- Q = Quench (nitrocarburising followed by oxidising cooling process).  
 P = Polish (mechanical polishing up to desired surface finish before nitrocarburising).  
 Q = Quench (Oxidising to increase the corrosion resistance).  
 Salt-bath nitro carburising is, in many cases, a good alternative to other surface layer treatments as case hardening or hard plating.

### QPQ Surface Properties

Very good corrosion resistance, better than hard chrome or chem. nickel. Corrosion resistance in the salt spray test SS CASS in accordance with DIN 50021.  
 Improved wear resistance, no fretting corrosion, no cold shut.  
 Increased endurance strength, sometimes up to 100% higher.  
 Is completely safe to use with food as long as there is no contact with any acidic substances with a pH-value of ≤ 4.

### Fit

Shaft h8, Hub H8.  
 Surface roughness hub/shaft R<sub>z</sub>  
 max. 12.5 µm.

### Mounting

Slightly oil the locking assembly before mounting, do not use MoS2 or grease. Tighten the screws evenly and crosswise in several steps to the set torque. To ease mounting the outer ring and the rear tensioning ring can be fixed with screws via the forcing thread.

### Demounting

Remove all tensioning screws and screw them into the unused forcing threads of the front tensioning ring, until it is released.  
 Then screw in the screws into the unused forcing threads of the outer ring, until the rear tensioning ring is released.

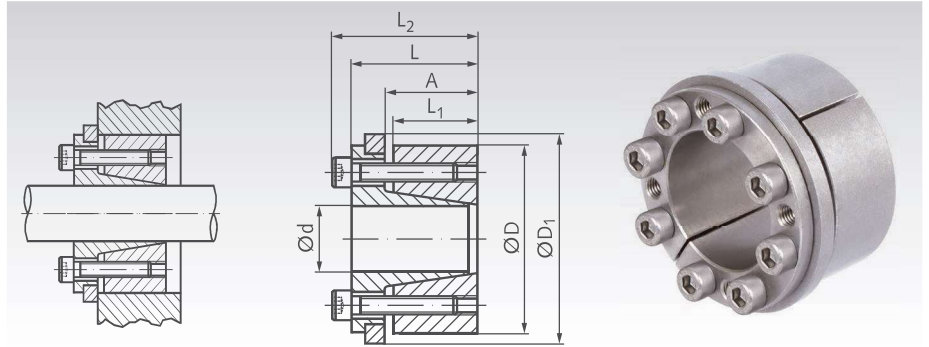
## Locking Assemblies COM-C, Stainless

**Material:** Stainless steel 1.4401 (SS316).

- For fixing a hub (e.g. drive wheel, rotor or similar) on a shaft.
- For medium torques.
- Self-centering.
- No axial offset.

**Concentricity:** 0.02 to 0.04 mm.

**Ordering Details:** e.g.: Product No. 615 971 20, Locking Assembly COM-C, stainless, 20 mm



Product No.	d mm	D mm	L <sub>1</sub> mm	A mm	L mm	L <sub>2</sub> mm	D <sub>1</sub> mm	at T <sub>A</sub> transmittable		Surface Pressure		Screws DIN 912 A2-70 Number x size	T <sub>A</sub> Nm	Weight kg
								T Nm	F <sub>ax</sub> kN	Shaft P <sub>w</sub> N/mm <sup>2</sup>	Hub P <sub>N</sub> N/mm <sup>2</sup>			
615 971 20	20	47	26	30	39	45	53	152	15	78	34	6 x M6 x 22	8	0,39
615 971 24	24	50	26	30	39	45	56	179	15	65	31	6 x M6 x 22	8	0,45
615 971 25	25	50	26	30	39	45	56	188	15	63	31	6 x M6 x 22	8	0,44
615 971 30	30	55	26	30	39	45	61	228	15	51	29	6 x M6 x 22	8	0,45
615 971 35	35	60	26	30	39	45	66	353	20	60	36	8 x M6 x 22	8	0,53
615 971 40	40	65	26	30	39	45	71	402	20	54	31	8 x M6 x 22	8	0,60
615 971 45	45	75	30	35	47	55	81	605	28	54	32	6 x M8 x 30	18	0,98
615 971 50	50	80	30	35	47	55	86	901	37	47	30	6 x M8 x 30	18	1,00
615 971 60	60	90	30	35	47	55	96	1081	37	53	36	8 x M8 x 30	18	1,20

More sizes up to d=180mm for 18,000Nm are available.

Price and delivery time on request.

T = transmittable torque at F<sub>ax</sub> = 0.  
 F<sub>ax</sub> = transmittable axial force at T = 0.  
 P<sub>w</sub> = surface pressure onto the shaft.  
 P<sub>N</sub> = surface pressure onto the hub.  
 T<sub>A</sub> = fastening torque of the screws.

*Hub Calculation and Selection Tool  
 on the Internet at [www.maedler.de](http://www.maedler.de)  
 in the section MÄDLER®-Tools*

### Fit

Shaft h8, Hub H8.  
 Surface roughness hub/shaft R<sub>z</sub>  
 max. 12.5 µm.

### Mounting

Slightly oil the locking assembly before mounting, do not use MoS2 or grease.  
 Tighten the screws evenly and crosswise in several steps to the set torque.

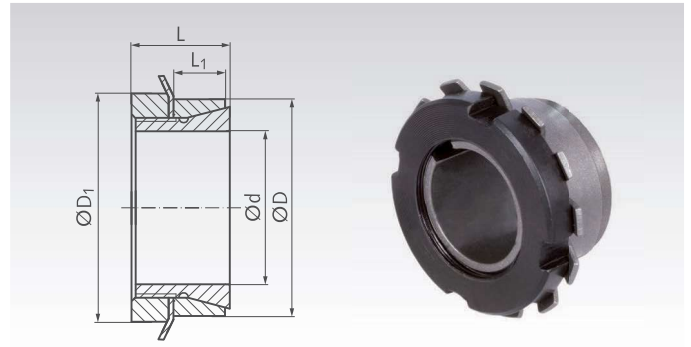
### Demounting

Remove all tensioning screws and screw them into the unused forcing threads of the front flange evenly and crosswise in several steps, until the flange is released.

## Locking Assemblies SSGK

Material: Steel.

- For fixing a hub (e.g. drive wheel, rotor or similar) on a shaft.
- For low torques.
- Very short version.
- Also suitable for small hub diameters.
- Not self-centering.
- Not self-locking.
- Axial movement during mounting.



Ordering Details: e.g.: Product No. 615 201 14, Locking Assembly SSGK, 14 mm

Product No.	d mm	D mm	L mm	L <sub>1</sub> mm	D <sub>1</sub> mm	T Nm	F <sub>ax</sub> kN	P <sub>W</sub> N/mm <sup>2</sup>	P <sub>N</sub> N/mm <sup>2</sup>	Nut 8.8 Thread	T <sub>A</sub> Nm	Weight kg
615 201 14	14	25	16,5	6,5	32	39	5,0	204	112	M20x1	95	0,05
615 201 15	15	25	16,5	6,5	32	43	5,1	192	114	M20x1	95	0,05
615 201 16	16	25	16,5	6,5	32	45	5,1	181	114	M20x1	95	0,04
615 201 17	17	30	18	6,5	38	55	6,0	197	112	M25x1,5	160	0,08
615 201 18	18	30	18	6,5	38	59	6,0	188	113	M25x1,5	160	0,08
615 201 19	19	30	18	6,5	38	64	7,0	181	115	M25x1,5	160	0,08
615 201 20	20	30	18	6,5	38	69	7,3	174	115	M25x1,5	160	0,07
615 201 22	22	35	18	6,5	45	100	8,0	210	132	M30x1,5	220	0,10
615 201 24	24	35	18	6,5	45	108	8,7	191	131	M30x1,5	220	0,09
615 201 25	25	35	18	6,5	45	108	9	174	124	M30x1,5	220	0,09
615 201 28	28	40	19,5	7	52	155	11	185	129	M35x1,5	340	0,08
615 201 30	30	40	19,5	7	52	158	11	159	119	M35x1,5	340	0,09
615 201 32	32	45	21,5	8	58	208	12	165	119	M40x1,5	480	0,18
615 201 35	35	45	21,5	8	58	225	13	150	118	M40x1,5	480	0,17
615 201 36	36	45	21,5	8	58	240	13,5	149	120	M40x1,5	480	0,16
615 201 38	38	52	24,5	10	65	287	14	125	92	M45x1,5	680	0,25
615 201 40	40	52	24,5	10	65	313	15	121	94	M45x1,5	680	0,24
615 201 42	42	57	25,5	10	70	352	16	124	91	M50x1,5	870	0,31
615 201 45	45	57	25,5	10	70	400	18	123	97	M50x1,5	870	0,29
615 201 48	48	62	25,5	10	75	520	21	140	109	M55x2	970	0,32
615 201 50	50	62	25,5	10	75	540	22	135	109	M55x2	970	0,30
615 201 55	55	68	27,5	12	80	580	22	98	80	M60x2	1100	0,35
615 201 56	56	68	27,5	12	80	610	22	99	80	M60x2	1100	0,34
615 201 60	60	73	28,5	12	85	820	28	116	96	M65x2	1300	0,42
615 201 63	63	79	30,5	14	92	1000	31	111	89	M70x2	1600	0,56
615 201 65	65	79	30,5	14	92	1020	32	103	85	M70x2	1600	0,52
615 201 70	70	84	31,5	14	98	1280	36	113	95	M75x2	2000	0,63

T = transmittable torque at F<sub>ax</sub> = 0.

F<sub>ax</sub> = transmittable axial force at T = 0.

P<sub>W</sub> = surface pressure onto the shaft.

P<sub>N</sub> = surface pressure onto the hub.

T<sub>A</sub> = fastening torque of slotted nut.

### Fit

Shaft h8, Hub H8.  
Surface roughness R<sub>z</sub>  
max. 12.5 µm.

### Mounting

Slightly oil the locking assembly before mounting, do not use molybdenum disulphide or grease. Tighten the slotted nut and bend the lock washer.

### Demounting

Re-bend the lock washer. Remove the nut. Then, due to the large cone angle, the locking assembly is usually released.

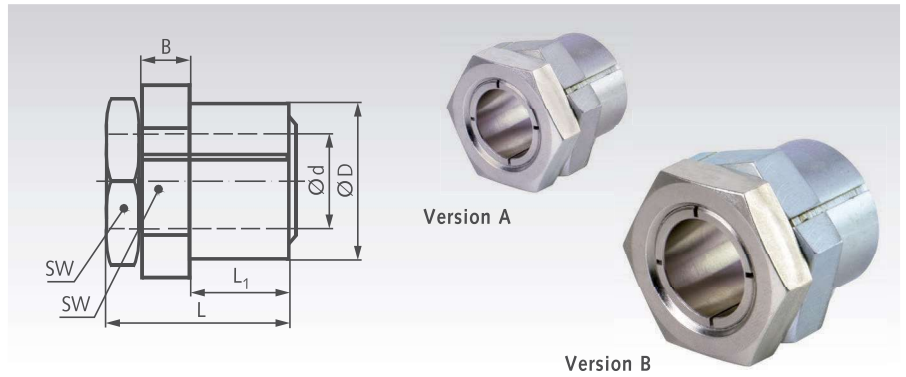


## Locking Assemblies TMK

**Material Version A:** Steel, bright.

**Material Version B:** Steel with corrosion protection (inner bush and nut nickel-plated, outer bush zinc-plated).

- For fixing a hub (e.g. drive wheel, rotor or similar) on a shaft.
- For medium torques.
- Self-centering.
- With a second hexagon to hold against while tightening the nut.
- Axial offset during mounting (can be compensated by correct positioning).



Ordering Details: e.g.: Product No. 615 502 05, Locking Assembly TMK Version A, 5 mm

Product No. Version A	Product No. Version B	d mm	D mm	L mm	L <sub>1</sub> mm	B* mm	T Nm	F <sub>ax</sub> kN	P <sub>w</sub> N/mm <sup>2</sup>	P <sub>N</sub> N/mm <sup>2</sup>	SW* mm	T <sub>A</sub> Nm	Weight g
615 502 05	615 582 05	5	12	19	9	6	10	4,0	264	119	14	10	16
615 502 06	615 582 06	6	12	19	9	6	12	4,0	220	119	14	10	15
615 502 07	615 582 07	7	14	22	11	6	20	5,8	205	121	16	17	23
615 502 08	615 582 08	8	14	22	11	6	23	5,8	180	121	16	17	21
615 502 09	615 582 09	9	18	24	12	7	43	9,7	246	144	22	35	47
615 502 10	615 582 10	10	18	24	12	7	48	9,7	221	144	22	35	44
615 502 11	615 582 11	11	20	24	12	7	59	10,8	225	145	22	44	47
615 502 12	615 582 12	12	20	24	12	7	65	10,8	207	145	22	44	44
615 502 14	615 582 14	14	24	28	15	7	93	13,3	179	118	27	65	76
615 502 15	615 582 15	15	24	28	15	7	99	13,3	167	118	27	65	72
615 502 16	615 582 16	16	24	28	15	7	106	13,3	156	118	27	65	67
615 502 17	615 582 17	17	26	34	16	10	163	19,2	187	148	32	110	122
615 502 18	615 582 18	18	30	36	17	10	223	24,8	224	155	36	160	176
615 502 19	615 582 19	19	30	36	17	10	235	24,8	213	155	36	160	169
615 502 20	615 582 20	20	30	36	17	10	248	24,8	202	155	36	160	162
615 502 22	615 582 22	22	38	41	20	10	349	31,7	197	134	46	250	338
615 502 24	615 582 24	24	38	41	20	10	381	31,7	181	134	46	250	315
615 502 25	615 582 25	25	38	41	20	10	397	31,7	174	134	46	250	304
615 502 28	615 582 28	28	42	44	23	10	565	40,3	174	134	50	355	370
615 502 30	615 582 30	30	42	44	23	10	605	40,3	163	134	50	355	345
615 502 32	615 582 32	32	50	51	28	10	764	47,7	166	112	55	490	552
615 502 35	615 582 35	35	50	51	28	10	836	47,7	152	112	55	490	495
615 502 38	615 582 38	38	58	58	32	11	1140	60,2	155	116	65	700	851
615 502 40	615 582 40	40	58	58	32	11	1200	60,2	147	116	65	700	801
615 502 42	615 582 42	42	60	63	37	11	1250	59,6	120	94	65	740	841
615 502 45	615 582 45	45	60	63	37	11	1340	59,6	112	94	65	740	741

T = transmittable torque at  $F_{ax} = 0$ .

$F_{ax}$  = transmittable axial force at  $T = 0$ .

$P_w$  = surface pressure onto the shaft.

$P_N$  = surface pressure onto the hub.

$T_A$  = fastening torque of the screws.

\* Slim open-end wrench required.

### Fit

Shaft h8, Hub H8.  
Surface roughness  $R_z$   
max. 12.5  $\mu\text{m}$ .

### Construction

The nut is screwed on the inner bush and is hold with it's collar inside the hexagon of the outer bush.

### Mounting

It is essential to degrease the shaft and hub. There must be little oil only between the two hexagons. The locking assembly must not get in contact with any fixed components. Hold the back hexagon with a slim open-end wrench and tighten the front hexagon with a torque wrench clockwise to the torque  $T_A$  as per the table.

### Demounting

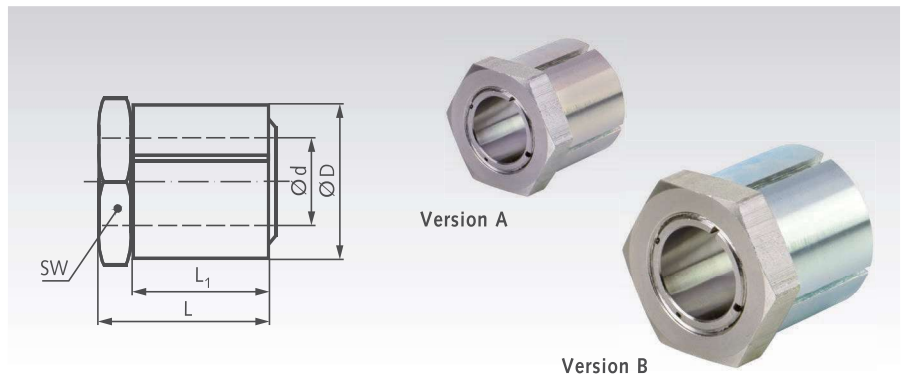
Hold the back hexagon with a slim open-end wrench and loosen the front hexagon counter-clockwise, until the inner bush moved a few millimeters out of the outer bush.

## Locking Assemblies TOK

**Material Version A:** Steel, bright.

**Material Version B:** Steel with corrosion protection (inner bush and nut nickel-plated, outer bush zinc-plated).

- For fixing a hub (e.g. drive wheel, rotor or similar) on a shaft.
- For medium torques.
- Self-centering.
- Axial offset during mounting (can be compensated by correct positioning).



Ordering Details: e.g.: Product No. 615 503 05, Locking Assembly TOK Version A, 5 mm

Product No. Version A	Product No. Version B	d mm	D mm	L mm	L <sub>1</sub> mm	T Nm	F <sub>ax</sub> kN	P <sub>w</sub> N/mm <sup>2</sup>	P <sub>N</sub> N/mm <sup>2</sup>	SW mm	T <sub>A</sub> Nm	Weight g
615 503 05	615 583 05	5	14	19	15	10	4,0	264	97	14	10	18
615 503 06	615 583 06	6	14	19	15	12	4,0	220	96	14	10	17
615 503 07	615 583 07	7	16	22	17	20	5,8	205	91	16	17	26
615 503 08	615 583 08	8	16	22	17	23	5,8	180	91	16	17	24
615 503 09	615 583 09	9	20	24	19	43	9,7	246	115	22	35	47
615 503 10	615 583 10	10	20	24	19	48	9,7	221	115	22	35	44
615 503 11	615 583 11	11	22	24	19	59	10,8	225	117	22	44	51
615 503 12	615 583 12	12	22	24	19	65	10,9	207	117	22	44	48
615 503 14	615 583 14	14	26	28	22	93	13,3	179	99	27	65	81
615 503 15	615 583 15	15	26	28	22	99	13,3	167	99	27	65	75
615 503 16	615 583 16	16	26	28	22	106	13,3	156	99	27	65	71
615 503 17	615 583 17	17	32	34	26	163	19,2	187	108	32	110	149
615 503 18	615 583 18	18	35	36	27	223	24,8	224	125	36	161	197
615 503 19	615 583 19	19	35	36	27	235	24,8	213	125	36	161	189
615 503 20	615 583 20	20	35	36	27	248	24,8	202	125	36	161	182
615 503 22	615 583 22	22	42	41	30	349	31,7	197	111	46	250	343
615 503 24	615 583 24	24	42	41	30	381	31,7	181	111	46	250	322
615 503 25	615 583 25	25	42	41	30	397	31,7	174	111	46	250	310
615 503 28	615 583 28	28	47	44	33	565	40,3	174	110	50	355	403
615 503 30	615 583 30	30	47	44	33	605	40,3	163	110	50	355	375
615 503 32	615 583 32	32	55	51	38	764	47,7	166	102	55	490	626
615 503 35	615 583 35	35	55	51	38	836	47,7	152	102	55	490	566
615 503 38	615 583 38	38	62	58	43	1140	60,2	155	108	65	700	897
615 503 40	615 583 40	40	62	58	43	1329	66,5	147	108	65	800	842
615 503 42	615 583 42	42	65	63	48	1375	67	140	98	65	800	959
615 503 45	615 583 45	45	65	63	48	1605	71	142	98	65	900	855
615 503 48	615 583 48	48	75	73	58	2227	92	121	77	75	1290	1470
615 503 50	615 583 50	50	75	73	58	2320	92	116	77	75	1290	1380

T = transmittable torque at  $F_{ax} = 0$ .

$F_{ax}$  = transmittable axial force at  $T = 0$ .

$P_w$  = surface pressure onto the shaft.

$P_N$  = surface pressure onto the hub.

$T_A$  = fastening torque of the screws.

### Fit

Shaft h8, Hub H8.  
Surface roughness  $R_z$   
max. 12.5  $\mu\text{m}$ .

### Construction

The nut is screwed on the inner bush and is held with its collar inside the hexagon of the outer bush.

### Mounting

It is essential to degrease the shaft and hub. There must be little oil only between the two hexagons. The locking assembly must not get in contact with any fixed components. Hold the back hexagon with a slim open-end wrench and tighten the front hexagon with a torque wrench clockwise to the torque  $T_A$  as per the table.

### Demounting

Hold the back hexagon with a slim open-end wrench and loosen the front hexagon counter-clockwise, until the inner bush moved a few millimeters out of the outer bush.