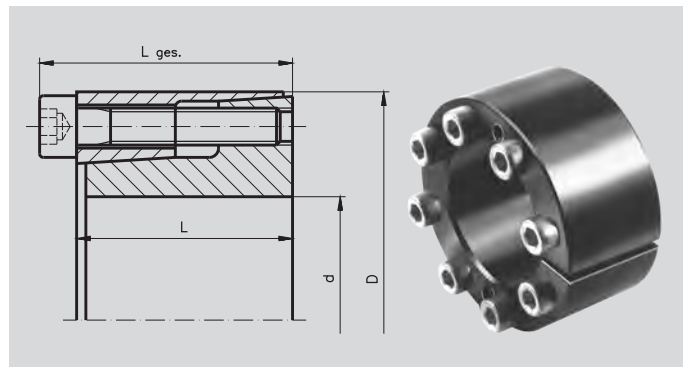


Clamping Sets BAR, QPQ-Coated

Material: 11SMnPb37

- For fixing a hub on a shaft.
- **QPQ coated:** High corrosion resistance, improved fatigue strength, primarily food safe (further information see below).
- For medium torques.
- Self-centering.
- Slight axial offset possible during assembly.



Ordering Details: e.g.: Product No. 615 706 00, Clamping Set BAR QPQ, 6 mm Bore

Product No.	d mm	D mm	L mm	L ges. mm	At M_A		Surface Pressure		Tensioning Screw DIN 912-12.9 with special coating Size	Fastening Torque M_A [Nm]	Amount	Weight kg
					transmittable M_t Nm	F_{ax} kN	at Shaft P_W N/mm ²	at Hub P_N N/mm ²				
615 705 00	5	16	11	13.5	6	2	150	55	M2.5 x 10	1.2	3	0.012
615 706 00	6	16	11	13.5	6	2	150	55	M2.5 x 10	1.2	3	0.012
615 708 00	8	18	11	13.5	10	2.5	110	50	M2.5 x 10	1.2	3	0.015
615 709 00	9	20	13	15.5	15	3	120	55	M2.5 x 12	1.2	4	0.020
615 710 00	10	20	13	15.5	15	3	110	55	M2.5 x 12	1.2	4	0.019
615 711 00	11	22	13	15.5	18	3	100	50	M2.5 x 12	1.2	4	0.024
615 712 00	12	22	13	15.5	20	3	90	50	M2.5 x 12	1.2	4	0.022
615 714 00	14	26	17	20	35	5	105	55	M3 x 16	2.1	4	0.039
615 715 00	15	28	17	20	40	5	100	50	M3 x 16	2.1	4	0.044
615 716 00	16	32	17	21	70	8	130	65	M4 x 16	4.9	4	0.067
615 718 00	18	35	21	25	80	8	115	60	M4 x 20	4.9	4	0.087
615 720 00	20	38	21	26	150	15	140	75	M5 x 20	9.7	4	0.100
615 725 00	25	47	26	32	260	20	135	75	M6 x 25	16.5	4	0.190
615 730 00	30	55	26	32	470	30	175	95	M6 x 25	16.5	6	0.270
615 738 00	38	65	31	37	800	40	155	90	M6 x 30	16.5	8	0.430
615 740 00	40	65	31	37	840	40	145	90	M6 x 30	16.5	8	0.400
615 750 00	50	80	36	44	1900	75	185	115	M8 x 35	40	8	0.700

What is QPQ Nitro Carburising?

QPQ means:

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 using the TENIFER method is, in many cases, a good alternative to other surface layer treatments as case hardening or hard plating. The principle task of the QPQ surface refinement is to protect machine components of all industries against wear and corrosion, but it also meets other functional requirements as, e.g., improving the endurance strength.

Mounting

Notes regarding fit, surface structure, mounting, demounting and hub calculation see page 299.

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.

Layer thickness of 10 - 25 μm possible. For medium operational demands we recommend a layer thickness of $\approx 15 \mu\text{m}$ at a 90 minute treatment.

Only very small changes in dimensions (only 5 μm), as the surface modification is achieved through diffusion and not application.

Surface hardness same as clamping set material $\geq 350 \text{ HV}$.

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 .