

ROBA®-Sliding Hubs as Torque Limiters for Chain-, Gear- and Belt Drive-wheels

Material: Steel, zinc-phosphated.

ROBA®-sliding hubs are high-quality machine components. They are machined all-round and zinc-phosphated, i.e. rust-proof. They are of fully-closed design.

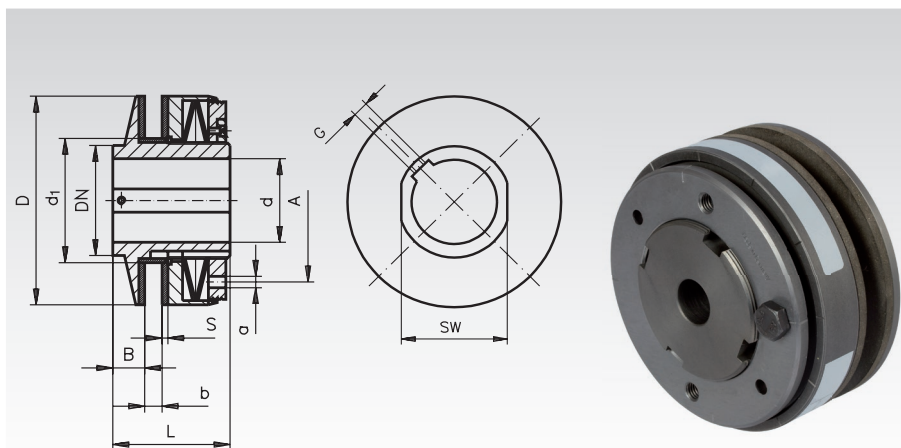
The sliding hubs are delivered pre-drilled with the max bush length (for b_{\max}).

Required bush length:

The bush length required depends on the width of the component to be joined. To calculate the bush length take the width of the component and add 1.5 times the thickness of the friction lining, plus an additional 0.5mm.

Bush length in mm = $b + 1.5 \times s + 0.5$.

Other bush lengths, customized bores feather-key grooves and setscrew-threads available at extra charge.



Pictured version for up to 700 Nm max.

Ordering Details: e.g.: Product No. 612 300 00, ROBA-Sliding Hub

Product No.	Size	Torque min. Nm	Torque max. Nm	Speed max. min ⁻¹	Clamping Tool A mm	a ^{-0,2} mm	B mm	b _{min.} mm	b _{max.} mm	D mm	DN mm	Sprocket Bore d ₁ ^{H8} mm	d max. mm	Pilot Bore mm	Set Screw G mm	L mm	SW mm	Lining S mm	Weight Pre-drilled g
612 300 00	0	2	10	8500	37	3	8,5	2	6	45	45	35	20 ¹⁾	6	M4	33	-	2,5	300
612 320 00	1	14	70	5600	50	5	17	3	10	68	45	44	25	10	M*	52	41	3	900
612 340 00	2	26	130	4300	67	6	19	4	12	88	58	58	35	14	M**	57	50	3	1600
612 360 00	3	50	250	3300	84	6	21	5	15	115	75	72	45	18	M***	68	65	4	3100
612 380 00	4	110	550	2700	104	7	23	6	18	140	90	85	55	24	M8	78	80	4	5400
612 400 00	5	140	700	2200	125	8	29	8	20	170	102	98	65	28	M8	92	90	5	9000
612 420 00	6	240	1200	1900	150	8	31	8	23	200	120	116	80	38	M8	102	105	5	12400

M* Up to Ø12 M4, above Ø12 M5, above Ø17 M6.

M** Up to Ø 17 M5, above Ø 17 M6.

M*** Up to Ø 22 M6, above Ø 22 M8.

¹⁾ Above Ø19 only with keyway DIN6885/3.

Replacement Friction Linings and Face Spanners

Matching Product No.	Product No. Spare Part Friction Lining*	Weight g	Product No. Face Spanner	Weight g
612 300 00	612 301 00	3	612 302 00	114
612 320 00	612 321 00	13	612 322 00	159
612 340 00	612 341 00	21	612 342 00	240
612 360 00	612 361 00	51	612 362 00	240
612 380 00	612 381 00	79	612 382 00	750
612 400 00	612 401 00	157	612 402 00	1700
612 420 00	612 421 00	216	612 402 00	1700

* 2 pieces required.

Technical Explanations

The driving element (sprocket or pulley) is pushed onto the bush and clamped between the friction disks, supported by the pressure plate, the disk springs and the adjusting nut. The harder the disk springs are compressed by the adjusting nuts, the higher is the torque at which the driving element slips. The exact adjustment values for the torque can be found in the table stuck onto the sliding hubs.

The torque values refer to the sprocket version with ground surfaces. Non-ground surfaces lead to faster wear of the friction disks.

Wear due to frequent slipping reduces the set torque.

Torque – Increase

Changing the series stacking shown to a parallel stacking the maximum torque can be doubled. The minimum torque setting is then approx. 50% of the maximum value.

For product no. 612 320 00 to 612 400 00 the specified torque can be tripled by the addition of a (third) spring washer. The minimum torque setting is then approx. 65% of the maximum value.

For Product No. 612 360 00 to 612 400 00 this requires a special adjusting nut, and the pressure plate has to be shortened (both against surcharge).