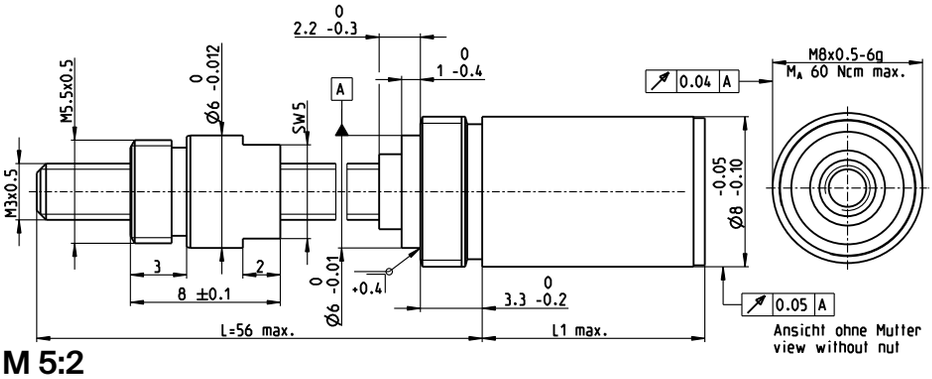
Screw Drive GP 8 S ∅8 mm, metric lead screw



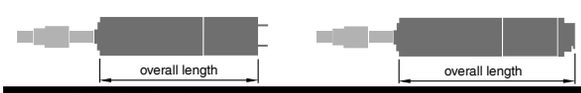
M 5:2

Technical Data					
Screw	M3 x 0.5, stainless steel				
Standard length	56 mm				
Special length (5 mm steps)	max. 100 mm				
Nut (standard)	thread nut				
Material	bronze				
Axial play	< 0.1 mm				
Planetary gearhead	straight teeth				
Bearing	ball bearing				
Radial play, 5 mm from flange	< 0.08 mm				
Axial play	preloaded				
Max. continuous input speed	12 000 rpm				
Recommended temperature range	-15...+80°C				
Max. axial load (static)[1]	25 N				
Number of stages	1	2	3	4	5
Max. radial load, 5 mm from flange	5 N	5 N	5 N	5 N	5 N

Stock program
Standard program
Special program (on request)

Screw Drive Data			Part Numbers				
			473643	473644	473645	473646	473647
1	Reduction		4:1	16:1	64:1	256:1	1024:1
2	Absolute reduction		4/1	16/1	64/1	256/1	1024/1
20	Max. feed velocity[1]	mm/s	15	6.3	1.6	0.4	0.1
21	Max. feed force (continuous)[1]	N	3	6	9	14	22
22	Max. feed force (intermittent)[1]	N	8	18	27	27	27
4	Number of stages		1	2	3	4	5
7	Max. efficiency gearhead incl. screw	%	27	24	22	19	17
8	Weight[1]	g	6.3	6.9	7.5	8.1	8.7
9	Average backlash no load	°	1.8	2.0	2.2	2.5	2.8
23	Mechanical positioning accuracy[1]	mm	0.112	0.112	0.112	0.112	0.113
10	Mass inertia gearhead incl. screw[1]	gcm^2	0.005	0.004	0.004	0.004	0.004
11	Gearhead length L1	mm	7.0	9.6	12.2	14.8	17.4

[1] based on screw length 56 mm



maxon Modular System								
+ Motor	Page	**+ Sensor / Brake**	Page	**Overall length [mm]** = Motor length + gearhead length + (sensor / brake) + assembly parts				
RE 8, 0.5 W, A	118			23.7	26.3	28.9	31.5	34.1
RE 8, 0.5 W, B	118			26.7	29.3	31.9	34.5	37.1
RE 8, 0.5 W, A	118	MR	473	30.3	32.9	35.5	38.1	40.7
RE 8, 0.5 W, A	118	Enc 8 OPT	480	31.9	34.5	37.1	39.7	42.3