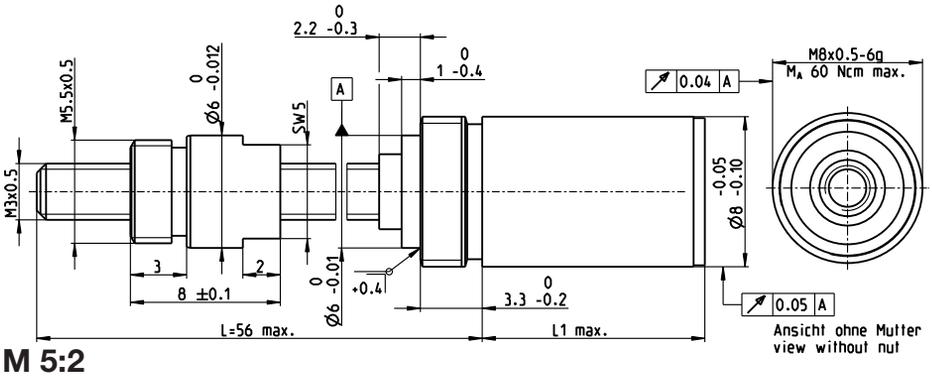
Spindle Drive GP 8 S Ø8 mm, Metric spindle



M 5:2

Technical Data					
Spindle	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)

		Part Numbers				
		473643	473644	473645	473646	473647
Spindle Drive Data						
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. spindle	%	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. spindle[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 spindle 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	153			23.7	26.3	28.9	31.5	34.1
RE 8, 0.5 W, B	153			26.7	29.3	31.9	34.5	37.1
RE 8, 0.5 W, A	153	MR	385/386	30.3	32.9	35.5	38.1	40.7
RE 8, 0.5 W, A	153	8 OPT	395	31.9	34.5	37.1	39.7	42.3
EC 8, 2 W	238			30.1	32.7	35.3	37.9	40.5