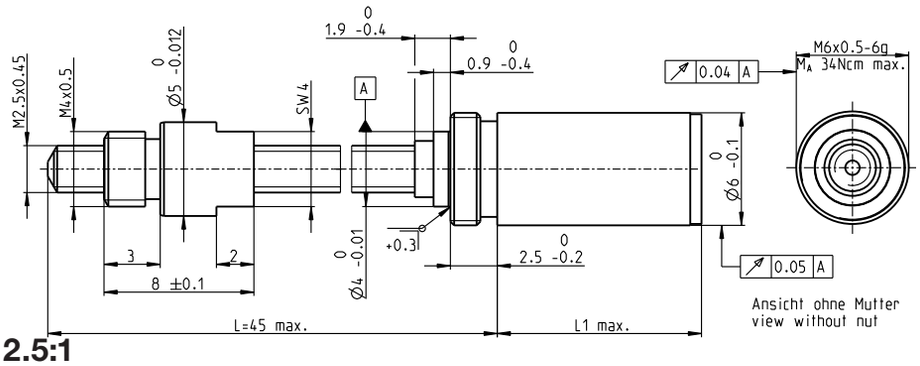
Spindle Drive GP 6 S Ø6 mm, Metric spindle



M 2.5:1

Technical Data					
Spindle	M2.5 x 0.45, stainless steel				
Standard length	45 mm				
Special length (5 mm steps)	max. 80 mm				
Nut (standard)	thread nut				
Material	bronze				
Axial play	< 0.088 mm				
Planetary gearhead	straight teeth				
Bearing	ball bearing				
Radial play, 5 mm from flange	< 0.12 mm				
Axial play	preloaded				
Max. continuous input speed	12 000 rpm				
Recommended temperature range	-15…+80°C				
Max. axial load (static)[1]	10 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				
	428758	428757	428756	420663	428755
Spindle Drive Data					
1 Reduction	3.9 : 1	15 : 1	57 : 1	221 : 1	854 : 1
2 Absolute reduction	27/7	729/49	19683/343	531441/2401	1438907/16807
20 Max. feed velocity[1] mm/s	15	10	2.6	0.7	0.2
21 Max. feed force (continuous)[1] N	2	3	4	6	10
22 Max. feed force (intermittent)[1] N	6	8	12	15	15
4 Number of stages	1	2	3	4	5
7 Max. efficiency gearhead incl. spindle %	28	24	21	19	16
8 Weight[1] g	2.9	3.3	3.7	4.1	4.5
9 Average backlash no load °	1.8	2.0	2.2	2.5	2.8
23 Mechanical positioning accuracy[1] mm	0.106	0.107	0.107	0.107	0.108
10 Mass inertia gearhead incl. spindle[1] gcm^2	0.001	0.001	0.001	0.001	0.001
11 Gearhead length L1 mm	6.9	9.4	12.0	14.5	17.1

[1] based on spindle length 45 mm

maxon Modular System

+ Motor	Page	**+ Sensor/Brake**	Page	**Overall length [mm]** = Motor length + gearhead length + (sensor / brake) + assembly parts				
RE 6, 0.3 W, A	152			22.6	25.1	27.7	30.2	32.8
RE 6, 0.3 W, B	152			26.6	29.1	31.7	34.2	36.8
EC 6, 1.5 W	236			28.3	30.8	33.4	35.9	38.5
EC 6, 1.5 W	236	Enc 6-8 MAG	384	30.4	32.9	35.5	38.0	40.6
EC 6, 1.5 W	236	Enc 6-8 OPT	394	30.4	32.9	35.5	38.0	40.6
EC 6, 2 W	237			28.3	30.8	33.4	35.9	38.5
EC 6, 2 W	237	Enc 6-8 MAG	384	30.4	32.9	35.5	38.0	40.6
EC 6, 2 W	237	Enc 6-8 OPT	394	30.4	32.9	35.5	38.0	40.6