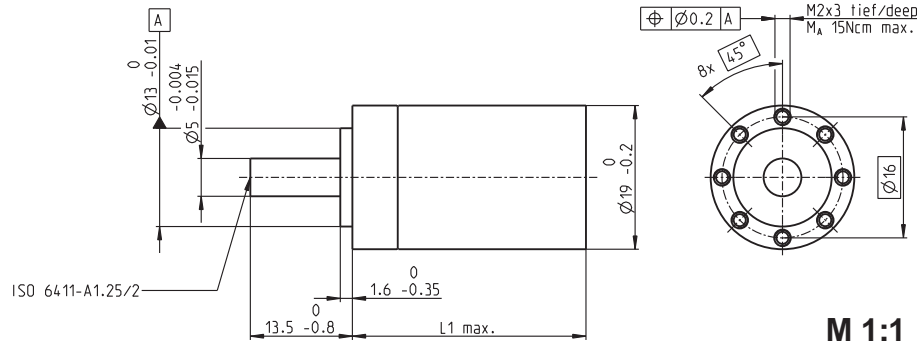


# Planetary Gearhead GP 19 M Ø19 mm, 0.1–0.315 Nm

Sterilizable



Technical Data	
Planetary Gearhead	straight teeth
Output shaft	stainless steel
Bearing at output	ball bearing
Radial play, 10 mm from flange	max. 0.08 mm
Axial play	0.10 mm
Max. axial load (dynamic)	50 N
Max. force for press fits	100 N
Direction of rotation, drive to output	=
Max. continuous input speed	40000 rpm
Recommended temperature range	-10...+100°C
Number of stages	1 2
Max. radial load, 10 mm from flange	20 N 30 N

- Stock program
- Standard program
- Special program (on request)

### Part Numbers

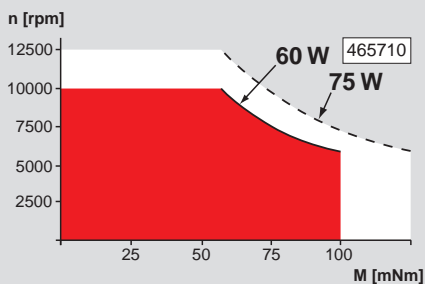
Gearhead Data	Part Numbers					
	with shaft seal	465710	467808	467821	476914	467863
1 Reduction		4:1	5:1	16:1	20:1	25:1
2 Absolute reduction		4/1	5/1	16/1	20/1	25/1
3 Max. motor shaft diameter	mm	3.8	2.7	3.8	2.7	2.7
4 Number of stages		1	1	2	2	2
5 Max. continuous torque	Nm	0.1	0.1	0.315	0.315	0.315
6 Max. intermittent torque at gear output	Nm	0.125	0.125	0.390	0.390	0.390
7 Max. efficiency	%	85	85	80	80	80
8 Weight	g	33	33	54	54	54
9 Average backlash no load	°	1.0	1.0	1.2	1.2	1.2
10 Mass inertia	gcm <sup>2</sup>	0.16	0.16	0.14	0.14	0.14
11 Gearhead length L1	mm	31.0	31.0	38.5	38.5	38.5
13 Max. transmittable power (continuous)	W	60	60	40	40	40
14 Max. transmittable power (intermittent)	W	75	75	50	50	50



### maxon Modular System

+ Motor	Page	+ Sensor/Brake	Page	Overall length [mm] = Motor length + gearhead length + (sensor/brake) + assembly parts				
EC 19, 120 W, ster.	206			83.4	83.4	90.9	90.9	90.9

### Operating Range (Output shaft)



### Comments

- Continuous operating**  
Valid in an ambient temperature of 25°C and taking account of stage-dependent limits (points 5 and 13). The recommended motor speed must not be exceeded.
- Short term operation**  
Valid in an ambient temperature of 25°C and taking account of stage-dependent limits (points 6 and 14). This range may be used intermittently and repeatedly. It is defined as follows
  - during max. 1 second
  - during max. 10% of the operating cycle
- max. transferable continuous performance
- - - - max. transferable intermittent performance

Application	Sterilization information
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>135°C</b>  </div> <b>Sterilizable Devices</b>	With shaft seal: typically 2000 autoclave cycles
Saws	Sterilization with steam
Surgical Reamers	Temperature 134°C ± 4°C
Arthroscopic Shavers	Compression pressure up to 2.3 bar
Surgical Staplers	Rel. humidity 100 %
Dental Tools	Cycle length 18 minutes

maxon gear