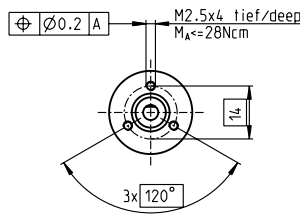
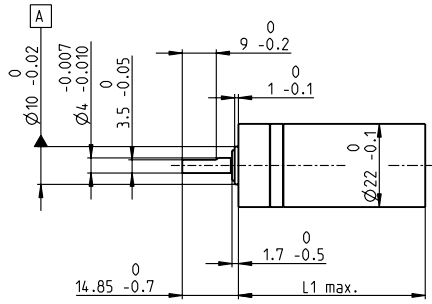


Planetary Gearhead GP 22 M $\varnothing 22$ mm, 0.5 - 2.0 Nm

Sterilizable



M 1:2

Technical Data

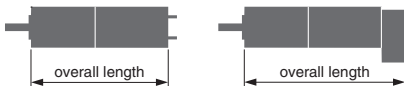
Planetary Gearhead	straight teeth
Output shaft	stainless steel, hardened
Bearing at output	ball bearing
Radial play, 10 mm from flange	max. 0.12 mm
Axial play	max. 0.05 mm
Max. radial load, 10 mm from flange	25 N
Max. permissible axial load	100 N
Max. permissible force for press fits	100 N
Sense of rotation, drive to output	=
Recommended input speed	< 8000 rpm
Recommended temperature range	-15 ... +100°C
Extended range as option	-40 ... +100°C

maxon gear

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

Order Number

	305129	305132	305138	305144	305148	305154	305160	305163	305169	305175	305181
Gearhead Data											
1 Reduction	3.8 : 1	14 : 1	53 : 1	104 : 1	198 : 1	370 : 1	590 : 1	742 : 1	1386 : 1	1996 : 1	3189 : 1
2 Reduction absolute	¹⁵ / ₄	²²⁵ / ₁₆	³³⁷⁵ / ₆₄	⁸⁷⁷²³ / ₈₄₅	⁵⁰⁶²⁵ / ₂₅₆	¹⁰⁵⁵⁶⁰⁰¹ / ₂₈₅₆₁	⁵⁹⁰⁴⁹ / ₁₀₀	⁷⁵⁹³⁷⁵ / ₁₀₂₄	¹⁵⁸³⁴⁰⁰¹⁵ / ₁₁₄₂₄₄	²⁸⁵⁰¹²⁰²⁷ / ₁₄₂₈₀₅	¹⁵⁹⁴³²³ / ₅₀₀
3 Max. motor shaft diameter	mm 4.0	4.0	4.0	3.2	4.0	3.2	4.0	4.0	3.2	3.2	4.0
Order Number	305130	305133	305139	305145	305149	305155	305161	305164	305170	305176	305182
1 Reduction	4.4 : 1	16 : 1	62 : 1	109 : 1	231 : 1	389 : 1	690 : 1	867 : 1	1460 : 1	2102 : 1	3728 : 1
2 Reduction absolute	⁵⁷ / ₁₃	⁸⁵⁵ / ₅₂	¹²⁸²⁵ / ₂₀₈	²¹⁸⁷ / ₂₀	¹⁹²³⁷⁵ / ₈₃₂	²⁶³¹⁶⁹ / ₆₇₆	¹¹²¹⁹³¹ / ₁₆₂₅	²⁸⁸⁵⁶²⁵ / ₃₃₂₈	³⁹⁴⁷⁵³⁵ / ₂₇₀₄	⁷¹⁰⁵⁵⁶³ / ₃₃₈₀	³⁰²⁹²¹³⁷ / ₈₁₂₅
3 Max. motor shaft diameter	mm 3.2	3.2	3.2	4.0	3.2	3.2	3.2	3.2	3.2	3.2	3.2
Order Number	305131	305134	305140	305146	305150	305156	305162	305165	305171	305177	305183
1 Reduction	5.4 : 1	19 : 1	72 : 1	128 : 1	270 : 1	410 : 1	850 : 1	1014 : 1	1538 : 1	2214 : 1	4592 : 1
2 Reduction absolute	²⁷ / ₅	³²⁴⁹ / ₁₆₉	⁴⁸⁷³⁵ / ₆₇₆	⁴¹⁵⁵³ / ₃₂₅	⁷³¹⁰²⁵ / ₂₇₀₄	⁶⁵⁶¹ / ₁₆	⁵³¹⁴⁴¹ / ₆₂₅	¹⁰⁹⁶⁵³⁷⁵ / ₁₀₈₁₆	⁹⁸⁴¹⁵ / ₆₄	¹⁷⁷¹⁴⁷ / ₈₀	¹⁴³⁴⁸⁹⁰⁷ / ₃₁₂₅
3 Max. motor shaft diameter	mm 2.5	3.2	3.2	3.2	4.0	2.5	2.5	3.2	4.0	4.0	2.5
Order Number		305135	305141	305147	305151	305157		305166	305172	305178	
1 Reduction		20 : 1	76 : 1	157 : 1	285 : 1	455 : 1		1068 : 1	1621 : 1	2458 : 1	
2 Reduction absolute		⁸¹ / ₄	¹²¹⁵ / ₁₆	¹⁹⁶⁸³ / ₁₂₅	¹⁸²²⁵ / ₆₄	⁵⁰⁰⁰²¹¹ / ₁₀₉₈₅		²⁷³³⁷⁵ / ₂₅₆	⁶⁰¹⁶⁹²⁰⁵⁷ / ₃₇₁₂₉₃	¹³⁵⁰⁰⁵⁶⁹⁷ / ₅₄₉₂₅	
3 Max. motor shaft diameter	mm	4.0	4.0	2.5	4.0	3.2		4.0	3.2	3.2	
Order Number		305136	305142		305152	305158		305167	305173	305179	
1 Reduction		24 : 1	84 : 1		316 : 1	479 : 1		1185 : 1	1707 : 1	2589 : 1	
2 Reduction absolute		¹⁵³⁹ / ₆₅	¹⁸⁵¹⁹³ / ₂₁₉₇		²⁷⁷⁷⁸⁹⁵ / ₈₇₈₈	¹²⁴⁶⁵⁹ / ₂₆₀		⁴¹⁶⁶⁸⁴²⁵ / ₃₅₁₅₂	¹⁵⁰⁰⁰⁶³³ / ₆₇₈₈	³³⁶⁵⁷⁹³ / ₁₃₀₀	
3 Max. motor shaft diameter	mm	3.2	3.2		3.2	3.2		3.2	3.2	3.2	
Order Number		305137	305143		305153	305159		305168	305174	305180	
1 Reduction		29 : 1	89 : 1		333 : 1	561 : 1		1249 : 1	1798 : 1	3027 : 1	
2 Reduction absolute		⁷²⁹ / ₂₅	⁴⁶¹⁷ / ₅₂		⁶⁹²⁵⁵ / ₂₀₈	²³⁶⁸⁵²¹ / ₄₂₂₅		¹⁰³⁸⁸²⁵ / ₈₃₂	³⁷³⁹⁷⁷ / ₂₀₈	⁶³⁹⁵⁰⁰⁶⁷ / ₂₁₁₂₅	
3 Max. motor shaft diameter	mm	2.5	3.2		3.2	3.2		3.2	3.2	3.2	
4 Number of stages	1	2	3	3	4	4	4	5	5	5	5
5 Max. continuous torque	Nm 0.5	0.6	1.2	1.2	1.8	1.8	1.8	2.0	2.0	2.0	2.0
6 Intermittently permissible torque at gear output	Nm 0.8	0.9	1.9	1.9	2.7	2.7	2.7	3.0	3.0	3.0	3.0
7 Max. efficiency	% 84	70	59	59	49	49	49	42	42	42	42
8 Weight	g 64	77	90	90	103	103	103	116	116	116	116
9 Average backlash no load	° 1.0	1.2	1.6	1.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0
10 Mass inertia	gcm ² 0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
11 Gearhead length L1	mm 35.8	42.6	49.4	49.4	56.2	56.2	56.2	63.0	63.0	63.0	63.0



maxon Modular System

+ Motor	Page	+ Sensor/Brake	Page	Overall length [mm] = Motor length + gearhead length + (sensor / brake) + assembly parts								
EC 22, 40 W, ster.	150			80.4	87.2	94.0	100.8	100.8	107.6	107.6	107.6	107.6
EC 22, 100 W, ster.	152			98.6	105.4	112.2	112.2	119.0	119.0	125.8	125.8	125.8

Application	Sterilization information
Medicine / surgery / chemicals	The motor can be sterilized at least 100 times in autoclave. No need to dismantle.
Hand tools that can be sterilized, such as bone saw, bone drilling and grinding machine	Sterilization with steam
Dermatological and dental tools	Temperature +134°C± 4°C
Infusion pumps	Compression pressure up to 2.3 bar
ECG	Rel. humidity 100 %
Therapy aid, analysis and dialysis equipment	Cycle length 20 minutes