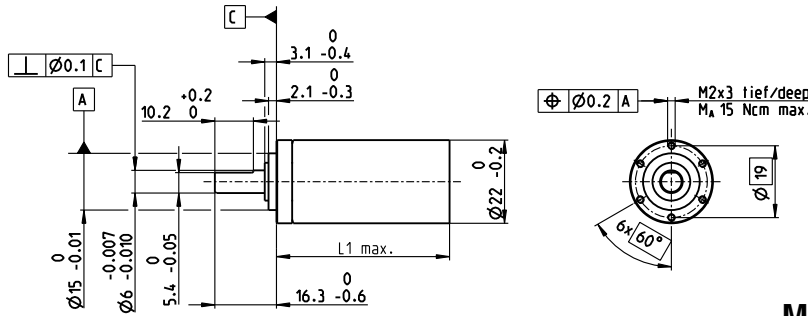


# Planetary Gearhead GP 22 HP $\varnothing 22$ mm, 2.0–3.4 Nm

High Power

maxon gear



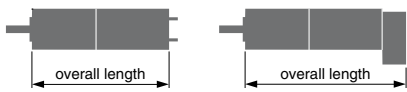
Technical Data	
Planetary Gearhead	straight teeth
Output shaft	stainless steel, hardened
Bearing at output	ball bearing
Radial play, 10 mm from flange	max. 0.2 mm
Axial play	max. 0.1 mm
Max. permissible axial load	100 N
Max. permissible force for press fits	100 N
Sense of rotation, drive to output	=
Recommended input speed	< 12000 rpm
Recommended temperature range	-40...+100°C
Number of stages	1 2 3 4
Max. radial load, 10 mm from flange	55 N 85 N 100 N 110 N

M 1:2

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

### Part Numbers

Gearhead Data (provisional)	370683	370687	370690	370776	370780	370783	370792	370797	370802	370807
1 Reduction	3.8:1	14:1	20:1	53:1	76:1	104:1	198:1	316:1	410:1	590:1
2 Reduction absolute	15/4	225/16	81/4	3375/64	1215/16	87723/845	50625/256	2777895/8788	6561/16	59049/100
3 Max. motor shaft diameter	mm 4	4	4	4	4	3.2	4	3.2	4	4
<b>Part Numbers</b>	<b>370685</b>	<b>370688</b>	<b>370691</b>	<b>370778</b>	<b>370781</b>	<b>370784</b>	<b>370794</b>	<b>370799</b>	<b>370803</b>	<b>370808</b>
1 Reduction	4.4:1	16:1	24:1	62:1	84:1	109:1	231:1	333:1	455:1	690:1
2 Reduction absolute	57/13	855/52	1539/65	12825/208	185193/2197	2187/20	192375/632	69255/208	1701938/3739	1121931/1625
3 Max. motor shaft diameter	mm 3.2	3.2	3.2	3.2	3.2	4	3.2	3.2	3.2	3.2
<b>Part Numbers</b>	<b>370686</b>	<b>370689</b>	<b>370692</b>	<b>370779</b>	<b>370782</b>	<b>370785</b>	<b>370795</b>	<b>370800</b>	<b>370805</b>	<b>370809</b>
1 Reduction	5.4:1	19:1	29:1	72:1	89:1	128:1	270:1	370:1	479:1	850:1
2 Reduction absolute	27/5	3249/169	729/25	48735/676	4617/52	41553/325	731025/2704	29198/79	124659/260	531441/625
3 Max. motor shaft diameter	mm 2.5	3.2	2.5	3.2	3.2	3.2	3.2	3.2	3.2	2.5
<b>Part Numbers</b>						<b>370786</b>	<b>370796</b>	<b>370801</b>	<b>370806</b>	
1 Reduction						157:1	285:1	389:1	561:1	
2 Reduction absolute						19683/125	18225/64	263169/676	2368521/4225	
3 Max. motor shaft diameter						mm 2.5	4	3.2	3.2	
4 Number of stages	1	2	2	3	3	3	4	4	4	4
5 Max. continuous torque	Nm 2	2.4	2.4	3	3	3	3.4	3.4	3.4	3.4
6 Intermittently permissible torque at gear output	Nm 2.5	3	3	3.5	3.5	3.5	3.8	3.8	3.8	3.8
7 Max. efficiency	% 84	70	70	59	59	59	49	49	49	49
8 Weight	g 51	64	64	78	78	78	91	91	91	91
9 Average backlash no load	° 1.0	1.2	1.2	1.6	1.6	1.6	2.0	2.0	2.0	2.0
10 Mass inertia	gcm <sup>2</sup> 0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
11 Gearhead length L1	mm 25.3	32.3	32.3	39.0	39.0	39.0	45.7	45.7	45.7	45.7



### maxon Modular System

+ Motor	Page	+ Sensor/Brake	Page	Overall length [mm] = Motor length + gearhead length + (sensor/brake) + assembly parts									
EC 22, 40 W	173			69.9	76.9	76.9	83.6	83.6	83.6	90.3	90.3	90.3	90.3
EC 22, 40 W	173	MR	301	75.9	82.9	82.9	89.6	89.6	89.6	96.3	96.3	96.3	96.3
EC 22, 100 W	175			88.1	95.1	95.1	101.8	101.8	101.8	108.5	108.5	108.5	108.5
EC 22, 100 W	175	MR	301	94.1	101.1	101.1	107.8	107.8	107.8	114.5	114.5	114.5	114.5
EC-max 22, 12 W	190			57.4	64.4	64.4	71.1	71.1	71.1	77.8	77.8	77.8	77.8
EC-max 22, 12 W	190	MR	301	67.0	74.0	74.0	80.7	80.7	80.7	87.4	87.4	87.4	87.4
EC-max 22, 12 W	190	AB 20	346	93.0	100.0	100.0	106.7	106.7	106.7	113.4	113.4	113.4	113.4
EC-max 22, 25 W	191			73.9	80.9	80.9	87.6	87.6	87.6	94.3	94.3	94.3	94.3
EC-max 22, 25 W	191	MR	301	83.5	90.5	90.5	97.2	97.2	97.2	103.9	103.9	103.9	103.9
EC-max 22, 25 W	191	AB 20	346	109.5	116.5	116.5	123.2	123.2	123.2	129.9	129.9	129.9	129.9
EC-4pole 22	199			74.0	81.0	81.0	87.7	87.7	87.7	94.4	94.4	94.4	94.4
EC-4pole 22	199	HEDL 5540	309	95.5	102.5	102.5	109.2	109.2	109.2	115.9	115.9	115.9	115.9
EC-4pole 22	200			91.4	98.4	98.4	105.1	105.1	105.1	111.8	111.8	111.8	111.8
EC-4pole 22	200	HEDL 5540	309	112.9	119.9	119.9	126.6	126.6	126.6	133.3	133.3	133.3	133.3