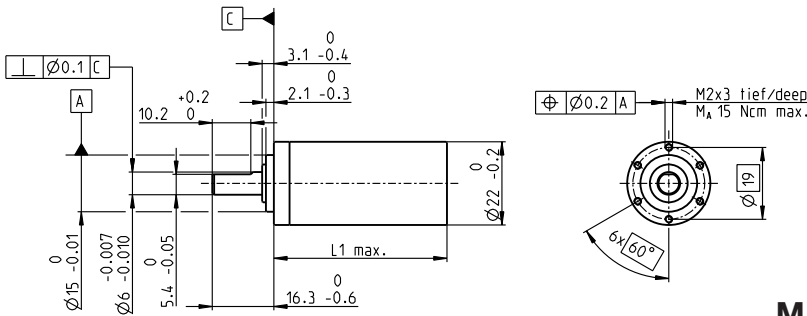


# Planetary Gearhead GP 22 HP $\varnothing 22$ mm, 2.0–3.4 Nm

High Power



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. 0.2 mm
Axial play	max. 0.1 mm
Max. axial load (dynamic)	100 N
Max. force for press fits	100 N
Direction of rotation, drive to output	=
Max. continuous 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

maxon gear

- 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 Absolute reduction	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 Absolute reduction	57/13	855/52	1539/65	12825/208	185193/2197	2187/20	192375/632	69255/208	5000211/10985	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 Absolute reduction	27/5	3249/169	729/25	48735/676	4617/52	41553/325	731025/2704	10556001/28561	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 Absolute reduction						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 Max. intermittent 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	246			69.9	76.9	76.9	83.6	83.6	83.6	90.3	90.3	90.3	90.3
EC 22, 40 W	246	MR	391	75.9	82.9	82.9	89.6	89.6	89.6	96.3	96.3	96.3	96.3
EC 22, 100 W	247			88.1	95.1	95.1	101.8	101.8	101.8	108.5	108.5	108.5	108.5
EC 22, 100 W	247	MR	391	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	262			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	262	MR	391	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	262	AB 20	444	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	263			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	263	MR	391	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	263	AB 20	444	109.5	116.5	116.5	123.2	123.2	123.2	129.9	129.9	129.9	129.9
EC-4pole 22, 90 W	271			74.0	81.0	81.0	87.7	87.7	87.7	94.4	94.4	94.4	94.4
EC-4pole 22, 90 W	271	HEDL 5540	404	95.5	102.5	102.5	109.2	109.2	109.2	115.9	115.9	115.9	115.9
EC-4pole 22, 120 W	272			91.4	98.4	98.4	105.1	105.1	105.1	111.8	111.8	111.8	111.8
EC-4pole 22, 120 W	272	HEDL 5540	404	112.9	119.9	119.9	126.6	126.6	126.6	133.3	133.3	133.3	133.3