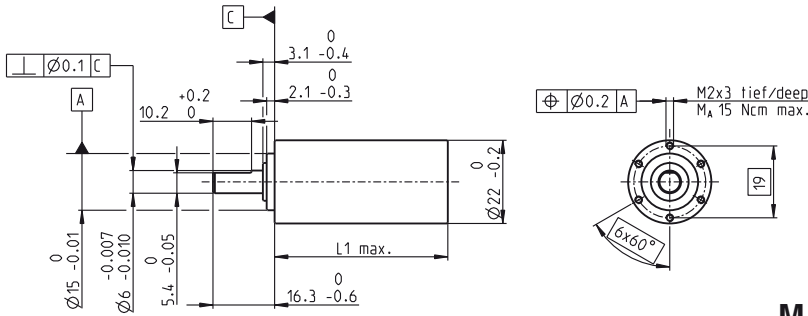


# Planetary Gearhead GP 22 HP $\varnothing 22$ mm, 2.0–3.4 Nm

High Power



## Technical Data

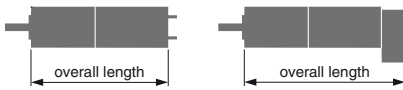
Planetary Gearhead	straight teeth
Output shaft	stainless steel, hardened
Bearing at output	ball bearing
Radial play, 10 mm from flange	max. 0.2 mm
Axial play	max. 0.1 mm
Max. permissible axial load	100 N
Max. permissible force for press fits	100 N
Sense of rotation, drive to output	=
Recommended input speed	< 12000 rpm
Recommended temperature range	-40...+100°C
Number of stages	1 2 3 4
Max. radial load, 10 mm from flange	70 N 70 N 70 N 70 N

M 1:2

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

## Article Numbers

	370683	370687	370690	370776	370780	370783	370792	370797	370802	370807
<b>Gearhead Data (provisional)</b>										
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>Article 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	192375/832	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>Article 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>Article 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	25.4	32.2	32.2	39.0	39.0	39.0	45.8	45.8	45.8	45.8



## maxon Modular System

+ Motor	Page	+ Sensor/Brake	Page	Overall length [mm] = Motor length + gearhead length + (sensor/brake) + assembly parts									
EC 22, 40 W	149			70.0	76.8	76.8	83.6	83.6	83.6	90.4	90.4	90.4	90.4
EC 22, 40 W	149	MR	271	76.0	82.8	82.8	89.6	89.6	89.6	96.4	96.4	96.4	96.4
EC 22, 100 W	151			88.2	95.0	95.0	101.8	101.8	101.8	108.6	108.6	108.6	108.6
EC 22, 100 W	151	MR	271	94.2	101.0	101.0	107.8	107.8	107.8	114.6	114.6	114.6	114.6
EC-max 22, 12 W	166			57.5	64.3	64.3	71.1	71.1	71.1	77.9	77.9	77.9	77.9
EC-max 22, 12 W	166	MR	271	67.2	74.0	74.0	80.8	80.8	80.8	87.6	87.6	87.6	87.6
EC-max 22, 12 W	166	AB 20	328	93.1	99.9	99.9	106.7	106.7	106.7	113.5	113.5	113.5	113.5
EC-max 22, 25 W	167			74.0	80.8	80.8	87.6	87.6	87.6	94.4	94.4	94.4	94.4
EC-max 22, 25 W	167	MR	271	83.7	90.5	90.5	97.3	97.3	97.3	104.1	104.1	104.1	104.1
EC-max 22, 25 W	167	AB 20	328	109.7	116.5	116.5	123.3	123.3	123.3	130.1	130.1	130.1	130.1
EC-4pole 22	175			74.1	80.9	80.9	87.7	87.7	87.7	94.5	94.5	94.5	94.5
EC-4pole 22	175	HEDL 5540	280	95.6	102.4	102.4	109.2	109.2	109.2	116.0	116.0	116.0	116.0
EC-4pole 22	176			91.5	98.3	98.3	105.1	105.1	105.1	111.9	111.9	111.9	111.9
EC-4pole 22	176	HEDL 5540	280	113.0	119.8	119.8	126.6	126.6	126.6	133.4	133.4	133.4	133.4