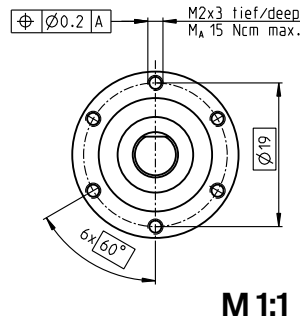
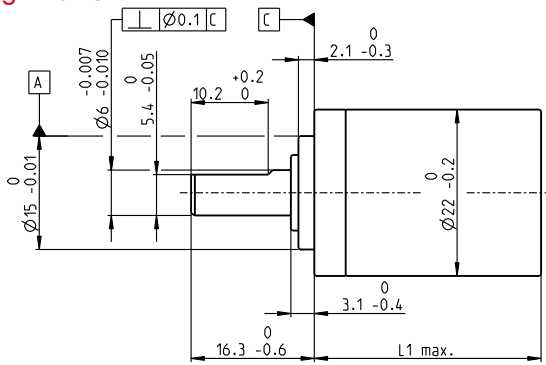


Planetary Gearhead GP 22 HP Ø22 mm, 2.0–3.4 Nm

High Power

gear



M 1:1

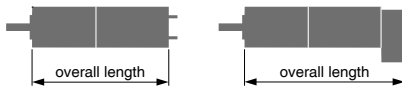
Technical Data

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

- 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
Part Numbers	370685	370688	370691	370778	370781	370784	370794	370799	370803	370808
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
Part Numbers	370686	370689	370692	370779	370782	370785	370795	370800	370805	370809
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
Part Numbers						370786	370796	370801	370806	
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 ² 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-max 22, 12 W	238			57.4	64.4	64.4	71.1	71.1	77.8	77.8	77.8	77.8
EC-max 22, 12 W	238	MR	462	67.1	74.1	74.1	80.8	80.8	80.8	87.5	87.5	87.5
EC-max 22, 12 W	238	AB 20	516	93.0	100.0	100.0	106.7	106.7	106.7	113.4	113.4	113.4
EC-max 22, 25 W	239			73.9	80.9	80.9	87.6	87.6	87.6	94.3	94.3	94.3
EC-max 22, 25 W	239	MR	462	83.6	90.6	90.6	97.3	97.3	97.3	104.0	104.0	104.0
EC-max 22, 25 W	239	AB 20	516	109.5	116.5	116.5	123.2	123.2	123.2	129.9	129.9	129.9
EC-4pole 22, 90 W	247			74.0	81.0	81.0	87.7	87.7	87.7	94.4	94.4	94.4
EC-4pole 22, 90 W	247	16 EASY/XT/Abs.	449-453	86.2	93.2	93.2	99.9	99.9	99.9	106.6	106.6	106.6
EC-4pole 22, 90 W	247	16 EASY Abs. XT	455	86.7	93.7	93.7	100.4	100.4	100.4	107.1	107.1	107.1
EC-4pole 22, 90 W	247	16 RIO	466	84.7	91.7	91.7	98.4	98.4	98.7	105.1	105.1	105.1
EC-4pole 22, 90 W	247	AEDL/HEDL	469/475	95.5	102.5	102.5	109.2	109.2	109.2	115.9	115.9	115.9
EC-4pole 22, 120 W	248			91.4	98.4	98.4	105.1	105.1	105.1	111.8	111.8	111.8
EC-4pole 22, 120 W	248	16 EASY/XT/Abs.	449-453	103.6	110.6	110.6	117.3	117.3	117.3	124.0	124.0	124.0
EC-4pole 22, 120 W	248	16 EASY Abs. XT	455	104.1	111.1	111.1	117.8	117.8	117.8	124.5	124.5	124.5
EC-4pole 22, 120 W	248	16 RIO	466	102.1	109.1	109.1	115.8	115.8	115.8	122.5	122.5	122.5
EC-4pole 22, 120 W	248	AEDL/HEDL	469/475	112.9	119.9	119.9	126.6	126.6	126.6	133.3	133.3	133.3