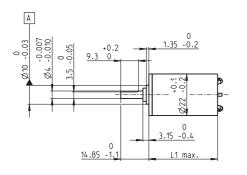
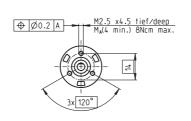
## Planetary Gearhead GP 22 L Ø22 mm, 0.2 - 0.6 Nm Plastic Version

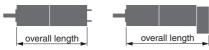




<b>Technical Data</b>									
Planetary Gearhead				straight	teeth				
Housing				- F	olastic				
Output shaft	Output shaft stainless								
Bearing at output	sl	sleeve bearing							
Radial play, 10 mm f	rom fla	nge		max. 0.	.2 mm				
Axial play		_		max. 0.	.2 mm				
Max. permissible axi	ial load				20 N				
Max. permissible for	ce for p	ress fits	3		100 N				
Sense of rotation, di	rive to c	utput			=				
Recommended inpu		< 600	0 rpm						
Recommended temp		-15 +80°C							
Number of stages	1	2	3	4	5				
Max. radial load,									
10 mm from flange	15 N	20 N	25 N	30 N	30 N				

M 1:2

Cearhead Data														
Cearhead Data			Order Number											
Reduction   Sabrit   Sabrit		Special program (on request)		232763	232766	232772	232778	232782	232788	232794	232796	232803	232809	23281
2 Reduction absolute	Ge	arhead Data												
Max. motor shaft diameter	1	Reduction		3.8 : 1	14 : 1	53 : 1							1996 : 1	3189
Max. motor shaft diameter	2	Reduction absolute		15/4	225/16	3375/64	87723/845	50625/256	10556001/28561	59049/100	759375/	158340015/	285012027/	1594323
Reduction absolute	3	Max. motor shaft diameter	mm	4		4								4
2 Reduction absolute		Order Number		232764	232767	232773	232779	232783	232789	232795	232798	232804	232810	2328
Max. motor shaft diameter	1	Reduction		4.4 :1	16 : 1	62 : 1	109 : 1	231 : 1	389 : 1	690 : 1	867 : 1	1460 : 1	2102 : 1	3728
Max. motor shaft diameter	2	Reduction absolute		57/13	855/52	12825/208	2187/20	192375/832	263169/676	1121931/	2885625/3328	3947535/2704	7105563/3380	30292137/
Reduction absolute   S.4.1   19:1   72:1   128:1   270:1   410:1   850:1   1014:1   1538:1   2214:1   4592   45735/676   41553/325   731025/1704   6150/16   531441/625   5056537/19065   69415/64   4174747/60   1434800   17747/60   1434800   132800	3	Max. motor shaft diameter	mm		3.2	3.2	4							3.2
2 Reduction absolute		Order Number		232765	232768	232774	232780	232784	232790	232797	232799	232805	232811	2328
Max. motor shaft diameter   Mm	1	Reduction		5.4 : 1	19 : 1	72 : 1	128 : 1		410 : 1			1538 : 1	2214 : 1	4592
Max. motor shaft diameter   Mm	2	Reduction absolute		27/5	3249/169	48735/676	41553/325	731025/2704	6561/16	531441/625	10965375/	98415/64	177147/80	14348907
Reduction absolute	3	Max. motor shaft diameter	mm	2.5		3.2	3.2							2.5
2 Reduction absolute mm		Order Number			232769	232775	232781	232785	232791		232800	232806	232812	
Max. motor shaft diameter   Mm	1	Reduction			20 : 1	76 : 1	157 : 1	285 : 1	455 : 1		1068 : 1	1621 : 1	2458 : 1	
Max. motor shaft diameter   mm	2	Reduction absolute			81/4	1215/16	19683/125	18225/64	5000211/		273375/256	601692057/371293	135005697/	
1 Reduction absolute 24:1 84:1 316:1 479:1 1185:1 1707:1 2589:1 1539/ <sub>65</sub> 185193/ <sub>2197</sub> 2777895/ <sub>8788</sub> 124659/ <sub>260</sub> 41668425/ <sub>55152</sub> 15000633/ <sub>8788</sub> 3865793/ <sub>1300</sub> 3 Max. motor shaft diameter mm 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2	3	Max. motor shaft diameter	mm		4	4	2.5		3.2				3.2	
2 Reduction absolute		Order Number			232770	232776		232786	232792		232801	232807	232813	
3 Max. motor shaft diameter mm 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2	1	Reduction			24:1	84 : 1		316:1	479 : 1					
3 Max. motor shaft diameter mm 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2	2	Reduction absolute			1539/65	185193/2197	7	2777895/8788	124659/260		41668425/35152	15000633/8788	3365793/	
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 23.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.2 3.	3	Max. motor shaft diameter	mm					3.2	3.2		3.2	3.2	3.2	
2 Reduction absolute		Order Number			232771	232777		232787	232793		232802	232808	232814	
3 Max. motor shaft diameter mm 2.5 3.2 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 0.2 0.3 0.4 0.4 0.5 0.5 0.5 0.5 0.6 0.6 0.6 0.6   6 Intermittently permissible torque at gear output Nm 0.3 0.4 0.5 0.5 0.7 0.7 0.7 0.8 0.8 0.8 0.8   7 Max. efficiency % 84 70 59 59 49 49 49 42 42 42 42   8 Weight g 28 35 43 43 51 51 51 59 59 59 59   9 Average backlash no load ° 1.0 1.2 1.6 1.6 2.0	1	Reduction			29:1	89 : 1		333:1			1249 : 1	1798 : 1	3027 : 1	
3 Max. motor shaft diameter     mm     2.5     3.2     3.5     5     5     5     5     5     5     5     5     5     5     6     0.0     0.0     0.0 <td>2</td> <td>Reduction absolute</td> <td></td> <td></td> <td>729/25</td> <td>4617/<sub>52</sub></td> <td></td> <td>69255/208</td> <td>2368521/4225</td> <td></td> <td>1038825/832</td> <td>373977/208</td> <td>63950067/21125</td> <td></td>	2	Reduction absolute			729/25	4617/ <sub>52</sub>		69255/208	2368521/4225		1038825/832	373977/208	63950067/21125	
5     Max. continuous torque     Nm     0.2     0.3     0.4     0.4     0.5     0.5     0.5     0.6     0.6     0.6     0.6       6     Intermittently permissible torque at gear output     Nm     0.3     0.4     0.5     0.5     0.7     0.7     0.7     0.8     0.8     0.8     0.8       7     Max. efficiency     %     84     70     59     59     49     49     49     42     42     42     42       8     Weight     g     28     35     43     43     51     51     51     59     59     59       9     Average backlash no load     °     1.0     1.2     1.6     1.6     2.0	3	Max. motor shaft diameter	mm		2.5	3.2					3.2	3.2	3.2	
6 Intermittently permissible torque at gear output Nm 0.3 0.4 0.5 0.5 0.7 0.7 0.7 0.8 0.8 0.8 0.8 0.7 Max. efficiency % 84 70 59 59 49 49 49 42 42 42 42 42 42 8 Weight g 28 35 43 43 51 51 51 51 59 59 59 59 49 Average backlash no load 0 1.0 1.2 1.6 1.6 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 10 Mass inertia g cm² 0.5 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4	4	Number of stages		1	2	3	3	4	4	4	5	5	5	5
7 Max. efficiency % 84 70 59 59 49 49 49 42 42 42 42 42 8 Weight g 28 35 43 43 51 51 51 59 59 59 59 59 59 59 59 49 49 49 49 42 42 42 42 42 42 42 42 42 42 42 42 42	5	Max. continuous torque	Nm	0.2	0.3	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.6
8 Weight g 28 35 43 43 51 51 59 59 59 59 59 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 2.0 10 Mass inertia gcm² 0.5 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4	6	Intermittently permissible torque at gear output	Nm	0.3		0.5	0.5	0.7	0.7	0.7	0.8	0.8	0.8	0.8
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 gcm² 0.5 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4	7	Max. efficiency	%	84	70	59	59	49	49	49	42	42	42	42
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 2.10 1.0 Mass inertia gcm <sup>2</sup> 0.5 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.0 0.4 0.4	8	Weight	g	28	35	43	43	51	51	51	59	59	59	59
J	9	Average backlash no load	0	1.0	1.2	1.6	1.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0
11 Gearbead length I 1 mm 22 7 29 5 36 3 36 3 43 1 43 1 49 9 49 9 49 9 49	10	Mass inertia	gcm <sup>2</sup>	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
334344 10.19 2 20.0 00.0 10.1 10.1 10.1 10.0 10.0	11	Gearhead length L1	mm	22.7	29.5	36.3	36.3	43.1	43.1	43.1	49.9	49.9	49.9	49.9



<b>▼</b>	<u> </u>	·	-											
maxon Mod	ular Syste	m												
+ Motor	Page	+ Sensor / Brake	Page	Overall le	ength [mm	] = Motor le	ngth + gearh	nead length +	(sensor / b	rake) + asse	mbly parts			
A-max 22	97-100			54.7	61.5	68.3	68.3	75.1	75.1	75.1	81.9	81.9	81.9	81.9
A-max 22	98/100	MR	258/260	59.7	66.5	73.3	73.3	80.1	80.1	80.1	86.9	86.9	86.9	86.9
A-max 22	98/100	Enc 22	265	69.1	75.9	82.7	82.7	89.5	89.5	89.5	96.3	96.3	96.3	96.3
A-max 22	98/100	MEnc 13	274	61.8	68.6	75.4	75.4	82.2	82.2	82.2	89.0	89.0	89.0	89.0

maxon gear 221 May 2010 edition / subject to change