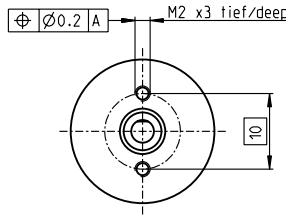
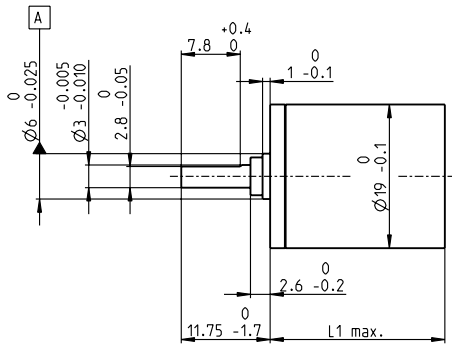


Planetary Gearhead GP 19 B $\varnothing 19$ mm, 0.1 - 0.3 Nm



M 1:1

Technical Data

Planetary Gearhead	straight teeth
Output shaft	stainless steel, hardened
Bearing at output	sleeve bearing
Radial play, 6 mm from flange	max. 0.06 mm
Axial play	0.02 - 0.12 mm
Max. permissible axial load	8 N
Max. permissible force for press fits	100 N
Sense of rotation, drive to output	=
Recommended input speed	< 8000 rpm
Recommended temperature range	-15 ... +100°C
Extended range as option	-40 ... +100°C
Number of stages	1 2 3 4 5
Max. radial load, 6 mm from flange	8 N 12 N 16 N 20 N 20 N

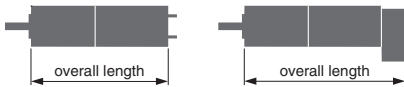
- Stock program
- Standard program
- Special program (on request)

Order Number

149039	149041	149044	149047	149048	149051	149053	149056
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Gearhead Data

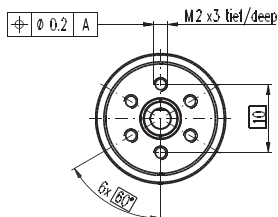
1 Reduction	4.4 : 1	19 : 1	84 : 1	157 : 1	370 : 1	690 : 1	1621 : 1	3027 : 1
2 Reduction absolute	$57/13$	$324/169$	$185193/2197$	$19683/125$	$10556001/28561$	$1121931/1625$	$601692057/371293$	$63950067/21125$
3 Max. motor shaft diameter	mm 2	2	2	1.5	2	2	2	2
Order Number	149040	149042	149045		149049	149052	149054	149057
1 Reduction	5.4 : 1	24 : 1	104 : 1		455 : 1	850 : 1	1996 : 1	3728 : 1
2 Reduction absolute	$27/5$	$1539/65$	$87723/845$		$5000211/10985$	$531441/625$	$285012027/142805$	$30292137/8125$
3 Max. motor shaft diameter	mm 1.5	2	2		2	2	2	2
Order Number		149043	149046		149050		149055	149058
1 Reduction		29 : 1	128 : 1		561 : 1		2458 : 1	4592 : 1
2 Reduction absolute		$729/25$	$41553/325$		$2368521/4225$		$135005697/54925$	$14348907/3125$
3 Max. motor shaft diameter	mm	1.5	2		2		2	1.5
4 Number of stages		1	2	3	3	4	4	5
5 Max. continuous torque	Nm	0.10	0.15	0.20	0.20	0.25	0.25	0.30
6 Intermittently permissible torque at gear output	Nm	0.150	0.225	0.300	0.300	0.375	0.375	0.450
7 Max. efficiency	%	90	81	73	73	65	65	59
8 Weight	g	26	31	36	36	41	41	46
9 Average backlash no load	°	1.4	1.6	2.0	2.0	2.4	2.4	3.0
10 Mass inertia	gcm ²	0.07	0.05	0.05	0.05	0.05	0.05	0.05
11 Gearhead length L1	mm	15.9	19.5	23.1	23.1	26.7	26.7	30.3



maxon Modular System

+ Motor	Page	+ Sensor/Brake	Page	Overall length [mm] = Motor length + gearhead length + (sensor / brake) + assembly parts							
A-max 19	93/94			44.9	48.5	52.1	52.1	55.7	55.7	59.3	59.3
A-max 19, 1.5 W	94	MR	258/260	50.0	53.6	57.2	57.2	60.8	60.8	64.4	64.4
A-max 19, 1.5 W	94	Enc 22	265	59.3	62.9	66.5	66.5	70.1	70.1	73.7	73.7
A-max 19, 1.5 W	94	MEnc 13	274	52.4	56.0	59.6	59.6	63.2	63.2	66.8	66.8
A-max 19, 2.5 W	95/96			47.5	51.1	54.7	54.7	58.3	58.3	61.9	61.9
A-max 19, 2.5 W	96	MR	258/260	51.8	55.4	59.0	59.0	62.6	62.6	66.2	66.2
A-max 19, 2.5 W	96	Enc 22	265	61.9	65.5	69.1	69.1	72.7	72.7	76.3	76.3
A-max 19, 2.5 W	96	MEnc 13	274	55.0	58.6	62.2	62.2	65.8	65.8	69.4	69.4

Option Ball Bearing



Order Number

4.4 : 1	227632	455 : 1	227642
5.4 : 1	227633	561 : 1	227643
19 : 1	227634	690 : 1	227644
24 : 1	227635	850 : 1	227645
29 : 1	227636	1621 : 1	227646
84 : 1	227637	1996 : 1	227647
104 : 1	227638	2458 : 1	227648
128 : 1	227639	3027 : 1	227649
157 : 1	227640	3728 : 1	227650
370 : 1	227641	4592 : 1	227651

Technical Data

Planetary Gearhead	straight teeth
Output shaft	stainless steel, hardened
Bearing at output	preloaded ball bearings
Radial play, 6 mm from flange	max. 0.08 mm
Axial play at axial load	< 4 N 0 mm
	> 4 N max. 0.05 mm
Max. permissible axial load	8 N
Max. permissible force for press fits	25 N
Sense of rotation, drive to output	=
Recommended input speed	< 8000 rpm
Recommended temperature range	-15 ... +100°C
Extended range as option	-35 ... +100°C
Number of stages	1 2 3 4 5
Max. radial load, 6 mm from flange	10 N 15 N 20 N 20 N 20 N
Gearhead values according to sleeve bearing version	