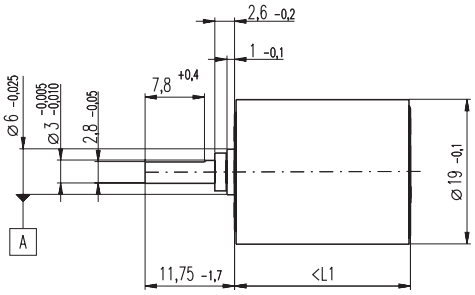
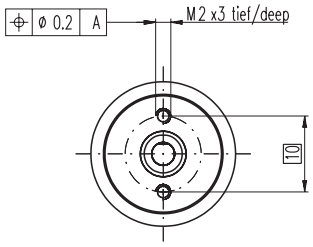
Planetary Gearhead GP 19 B ∅19 mm, 0.1 - 0.3 Nm

Sleeve Bearing





M 1:1

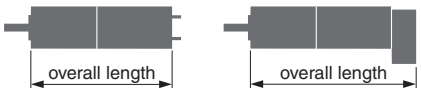
Technical Data

Planetary Gearhead					straight teeth
Output shaft					stainless steel, hardened
Bearing at output					sleeve bearing
Radial play, 6 mm from flange					< 0.08 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 area as option					-35 ... +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

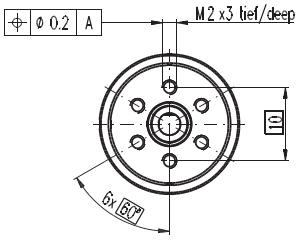
Gearhead Data		149039	149041	149044	149047	149048	149051	149053	149056
1 Reduction		4.4 : 1	19 : 1	84 : 1	157 : 1	370 : 1	690 : 1	1621 : 1	3027 : 1
2 Reduction absolute		57/13	3249/169	185193/2197	19683/125	10556001/28561	1121931/1625	601692057/371293	63950067/21125
3 Max. motor shaft diameter	mm	2	2	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	1.5	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
5 Max. continuous torque	Nm	0.10	0.15	0.20	0.20	0.25	0.25	0.30	0.30
6 Intermittently permissible torque at gear output	Nm	0.150	0.225	0.300	0.300	0.375	0.375	0.450	0.450
7 Max. efficiency	%	90	81	73	73	65	65	59	59
8 Weight	g	26	31	36	36	41	41	46	46
9 Average backlash no load	°	1.4	1.6	2.0	2.0	2.4	2.4	3.0	3.0
10 Mass inertia	gcm²	0.07	0.05	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	30.3



Combination

+ Motor	Page	+ Tacho / Brake	Page	Overall length [mm] = Motor length + gearhead length + (tacho / brake) + assembly parts							
A 2520, 1.2 W	89			34.1	37.7	41.3	41.3	44.9	44.9	48.5	48.5
A 2520, 1.2 W	89	MEnc 13	270	41.6	45.2	48.8	48.8	52.4	52.4	56.0	56.0
A-max 19	107/108			44.9	48.5	52.1	52.1	55.7	55.7	59.3	59.3
A-max 19, 1.5 W	108	MR	255/256	50.0	53.6	57.2	57.2	60.8	60.8	64.4	64.4
A-max 19, 1.5 W	108	Enc 22	261	59.3	62.9	66.5	66.5	70.1	70.1	73.7	73.7
A-max 19, 1.5 W	108	MEnc 13	270	52.4	56.0	59.6	59.6	63.2	63.2	66.8	66.8
A-max 19, 2.5 W	109/110			47.5	51.1	54.7	54.7	58.3	58.3	61.9	61.9
A-max 19, 2.5 W	110	MR	255/256	51.8	55.4	59.0	59.0	62.6	62.6	66.2	66.2
A-max 19, 2.5 W	110	Enc 22	261	61.9	65.5	69.1	69.1	72.7	72.7	76.3	76.3
A-max 19, 2.5 W	110	MEnc 13	270	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					< 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 area 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