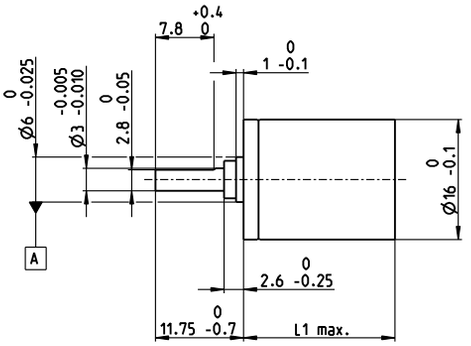
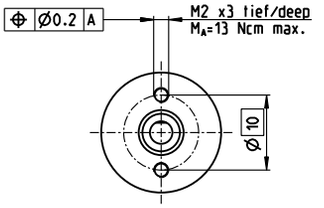
Planetary Gearhead GP 16 A ∅16 mm, 0.1–0.3 Nm





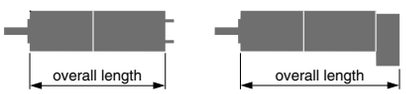
M 1:1

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					0.02–0.10 mm
Max. axial load (dynamic)					8 N
Max. force for press fits					100 N
Direction of rotation, drive to output					=
Max. continuous input speed					8000 rpm
Recommended temperature range					-30…+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)

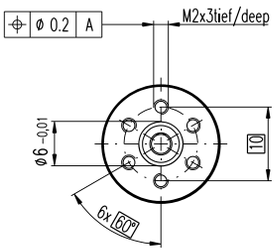
		Part Numbers							
		110321	110322	110323	118186	110324	134782	110325	134785
Gearhead Data									
1 Reduction		4.4:1	19:1	84:1	157:1	370:1	690:1	1621:1	3027:1
2 Absolute reduction		57/13	3249/169	185193/2197	19683/125	10556001/28561	1121931/1625	601692057/371293	63950067/21125
3 Max. motor shaft diameter	mm	2	2	2	1.5	2	2	2	2
Part Numbers		118184	134777	134778		134780	118187	134783	134786
1 Reduction		5.4:1	24:1	104:1		455:1	850 :1	1996:1	3728:1
2 Absolute reduction		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
Part Numbers			118185	134779		134781		134784	118188
1 Reduction			29:1	128:1		561:1		2458:1	4592:1
2 Absolute reduction			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 Max. intermittent 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	20	23	27	27	31	31	35	35
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	0.04	0.05	0.05	0.05	0.05
11 Gearhead length L1	mm	15.5	19.1	22.7	22.7	26.3	26.3	29.9	29.9



maxon Modular System

+ Motor	Page	+ Sensor/Brake	Page	Overall length [mm] = Motor length + gearhead length + (sensor/brake) + assembly parts							
RE 16, 2 W	120			37.9	41.5	45.1	45.1	48.7	48.7	52.3	52.3
RE 16, 2 W	120	MR	416/417	43.6	47.2	50.8	50.8	54.4	54.4	58.0	58.0
RE 16, 3.2 W	121/122			56.0	59.6	63.2	63.2	66.8	66.8	70.4	70.4
RE 16, 3.2 W	122	MR	416/417	61.0	64.6	68.2	68.2	71.8	71.8	75.4	75.4
RE 16, 3.2 W	122	MEnc 13	407	62.1	65.7	69.3	69.3	72.9	72.9	76.5	76.5
RE 16, 4.5 W	123/124			59.0	62.6	66.2	66.2	69.8	69.8	73.4	73.4
RE 16, 4.5 W	124	MR	416/417	64.0	67.6	71.2	71.2	74.8	74.8	78.4	78.4
RE 16, 4.5 W	124	MEnc 13	407	65.2	68.8	72.4	72.4	76.0	76.0	79.6	79.6
A-max 16	139-142			41.0	44.6	48.2	48.2	51.8	51.8	55.4	55.4
A-max 16	140/142	MR	416/417	46.0	49.6	53.2	53.2	56.8	56.8	60.4	60.4
A-max 16	140/142	MEnc 13	407	49.1	52.7	56.3	56.3	59.9	59.9	63.5	63.5
EC-max 16, 5 W	219			39.6	43.2	46.8	46.8	50.4	50.4	54.0	54.0
EC-max 16, 5 W	219	MR	418	46.9	50.5	54.1	54.1	57.7	57.7	61.3	61.3
EC-max 16, 2-wire	220			49.1	52.7	56.3	56.3	59.9	59.9	63.5	63.5

Option Ball Bearing



Part Numbers			
4.4 : 1	138333	455 : 1	138343
5.4 : 1	138334	561 : 1	138344
19 : 1	138335	690 : 1	138345
24 : 1	138336	850 : 1	138346
29 : 1	138337	1621 : 1	138347
84 : 1	138338	1996 : 1	138348
104 : 1	138339	2458 : 1	138349
128 : 1	138340	3027 : 1	138350
157 : 1	138341	3728 : 1	138351
370 : 1	138342	4592 : 1	138352

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. axial load (dynamic)					8 N
Max. force for press fits					25 N
Direction of rotation, drive to output					=
Max. continuous input speed					8000 rpm
Recommended temperature range					-40…+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