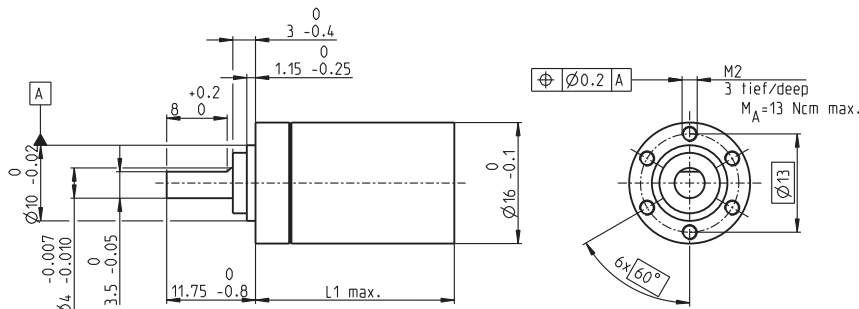


Planetary Gearhead GP 16 C \varnothing 16 mm, 0.2–0.6 Nm

Ceramic Version



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)	12 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 5
Max. radial load, 6 mm from flange	20 N 40 N 60 N 80 N 80 N

M 1:1

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

Part Numbers

416328	407883	416391	401954	328699	416028	416188	414453
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Gearhead Data

	416328	407883	416391	401954	328699	416028	416188	414453
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	1.5	2	2
Part Numbers								
1 Reduction	5.4:1	24:1	104:1		416115	415807	415893	415476
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	1.5	2		2	1.5	2	1.5
Part Numbers								
1 Reduction		29:1	128:1		416097		415786	409316
2 Absolute reduction		729/25	41553/325		2368521/4225		135005697/54925	14348907/3125
3 Max. motor shaft diameter	mm	1.5	1.5		2		2	1.5
4 Number of stages		1	2	3	3	4	4	5
5 Max. continuous torque	Nm	0.2	0.3	0.4	0.4	0.5	0.5	0.6
6 Max. intermittent torque at gear output	Nm	0.3	0.45	0.6	0.6	0.75	0.75	0.9
7 Max. efficiency	%	90	81	73	73	65	65	59
8 Weight	g	22	25	29	29	33	33	37
9 Average backlash no load	°	1.4	1.6	2	2	2.4	2.4	3
10 Mass inertia	gcm ²	0.07	0.05	0.05	0.04	0.05	0.04	0.05
11 Gearhead length L1	mm	18.1	23.2	26.8	26.8	30.4	30.4	33.9



maxon Modular System

+ Motor	Page	+ Sensor/Brake	Page	Overall length [mm] = Motor length + gearhead length + (sensor/brake) + assembly parts							
RE 16, 2 W	174			40.5	45.6	49.2	49.2	52.8	52.8	56.3	56.3
RE 16, 2 W	174	MR	388/390	46.2	51.3	54.9	54.9	58.5	58.5	62.0	62.0
RE 16, 3.2 W	175/176			58.6	63.7	67.3	67.3	70.9	70.9	74.4	74.4
RE 16, 3.2 W	176	MR	388/390	63.6	68.7	72.3	72.3	75.9	75.9	79.4	79.4
RE 16, 3.2 W	176	MEnc 13	409	64.7	69.8	73.4	73.4	77.0	77.0	80.5	80.5
RE 16, 4.5 W	177/178			61.6	66.7	70.3	70.3	73.9	73.9	77.4	77.4
RE 16, 4.5 W	178	MR	388/390	66.6	71.7	75.3	75.3	78.9	78.9	82.4	82.4
RE 16, 4.5 W	178	MEnc 13	409	67.8	72.9	76.5	76.5	80.1	80.1	83.6	83.6
A-max 16	193-196			43.6	48.7	52.3	52.3	55.9	55.9	59.4	59.4
A-max 16	194/196	MR	388/390	48.6	53.7	57.3	57.3	60.9	60.9	64.4	64.4
A-max 16	194/196	MEnc 13	409	51.7	56.8	60.4	60.4	64.0	64.0	67.5	67.5
EC 16, 30 W	244			58.2	63.3	66.9	66.9	70.5	70.5	74.0	74.0
EC 16, 30 W	244	MR	391	68.9	74.0	77.6	77.6	81.2	81.2	84.7	84.7
EC 16, 60 W	245			74.2	79.3	82.9	82.9	86.5	86.5	90.0	90.0
EC 16, 60 W	245	MR	391	84.9	90.0	93.6	93.6	97.2	97.2	100.7	100.7
EC-max 16, 5 W	259			42.2	47.3	50.9	50.9	54.5	54.5	58.0	58.0
EC-max 16, 5 W	259	MR	391	49.5	54.6	58.2	58.2	61.8	61.8	65.3	65.3
EC-max 16, 8 W	261			54.2	59.3	62.9	62.9	66.5	66.5	70.0	70.0
EC-max 16, 8 W	261	MR	391	61.5	66.6	70.2	70.2	73.8	73.8	77.3	77.3