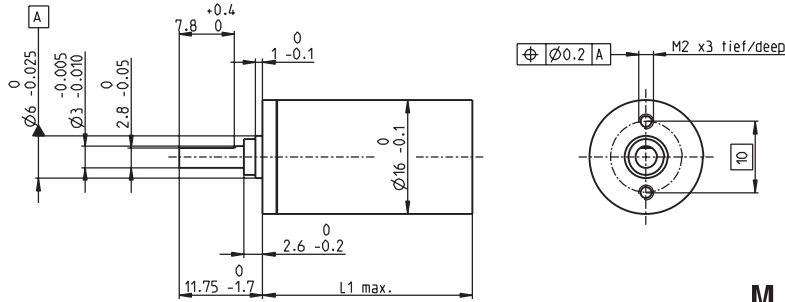


# Planetary Gearhead GP 16 A $\varnothing 16$ mm, 0.1–0.3 Nm



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. 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

maxon gear

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

## Article Numbers

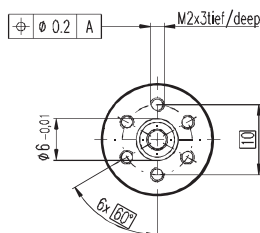
	110321	110322	110323	118186	110324	134782	110325	134785
<b>Gearhead Data</b>								
1 Reduction	4.4 : 1	19 : 1	84 : 1	157 : 1	370 : 1	690 : 1	1621 : 1	3027 : 1
2 Reduction absolute	$\frac{57}{13}$	$\frac{3249}{169}$	$\frac{185193}{2197}$	$\frac{19683}{125}$	$\frac{10556001}{28561}$	$\frac{1121931}{1625}$	$\frac{601692057}{371293}$	$\frac{68950067}{21125}$
3 Max. motor shaft diameter	mm 2	2	2	1.5	2	2	2	2
<b>Article Numbers</b>	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 Reduction absolute	$\frac{27}{5}$	$\frac{1539}{65}$	$\frac{8723}{845}$		$\frac{5000211}{10985}$	$\frac{531441}{625}$	$\frac{285012027}{145805}$	$\frac{30292137}{8125}$
3 Max. motor shaft diameter	mm 1.5	2	2		2	1.5	2	2
<b>Article Numbers</b>		118185	134779		134781		134784	118188
1 Reduction		29 : 1	128 : 1		561 : 1		2458 : 1	4592 : 1
2 Reduction absolute		$\frac{729}{25}$	$\frac{41553}{325}$		$\frac{2368521}{4225}$		$\frac{135005697}{54925}$	$\frac{14348907}{3125}$
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	20	23	27	27	31	31	35
9 Average backlash no load	°	1.4	1.6	2.0	2.0	2.4	2.4	3.0
10 Mass inertia	gcm <sup>2</sup>	0.07	0.05	0.05	0.04	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



## maxon Modular System

+ Motor	Page	+ Sensor/Brake	Page	Overall length [mm] = Motor length + gearhead length + (sensor/brake) + assembly parts													
RE 16, 2 W	72			37,9	41,5	45,1	45,1	48,7	48,7	52,3	52,3						
RE 16, 2 W	72	MR	268/270	43,6	47,2	50,8	50,8	54,4	54,4	58,0	58,0						
RE 16, 3,2 W	73/74			56,0	59,6	63,2	63,2	66,8	66,8	70,4	70,4						
RE 16, 3,2 W	74	MR	268/270	61,0	64,6	68,2	68,2	71,8	71,8	75,4	75,4						
RE 16, 3,2 W	74	MEnc 13	284	62,1	65,7	69,3	69,3	72,9	72,9	76,5	76,5						
RE 16, 4,5 W	75/76			59,0	62,6	66,2	66,2	69,8	69,8	73,4	73,4						
RE 16, 4,5 W	76	MR	268/270	64,0	67,6	71,2	71,2	74,8	74,8	78,4	78,4						
RE 16, 4,5 W	76	MEnc 13	284	65,1	68,7	72,3	72,3	75,9	75,9	79,5	79,5						
A-max 16	89-92			41,0	44,6	48,2	48,2	51,8	51,8	55,4	55,4						
A-max 16	90/92	MR	268/270	46,0	49,6	53,2	53,2	56,8	56,8	60,4	60,4						
A-max 16	90/92	MEnc 13	284	49,1	52,7	56,3	56,3	59,9	59,9	63,5	63,5						
RE-max 17	119-122			41,0	44,6	48,2	48,2	51,8	51,8	55,4	55,4						
RE-max 17	120/122	MR	268/270	46,0	49,6	53,2	53,2	56,8	56,8	60,4	60,4						
EC 16, 30 W	145			55,6	59,2	62,8	62,8	66,4	66,4	70,0	70,0						
EC 16, 30 W	145	MR	271	66,3	69,9	73,5	73,5	77,1	77,1	80,6	80,6						
EC-max 16, 5 W	163			39,6	43,2	46,8	46,8	50,4	50,4	54,0	54,0						
EC-max 16, 5 W	163	MR	271	46,9	50,5	54,1	54,1	57,7	57,7	61,3	61,3						
EC-max 16, 2-wire	164			49,1	52,7	56,3	56,3	59,9	59,9	63,5	63,5						

## Option Ball Bearing



## Article Numbers

Reduction	110321	110322	110323	118186	110324	134782	110325	134785
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. 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	