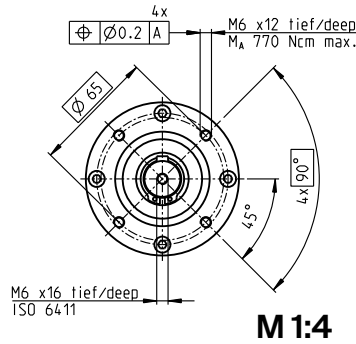
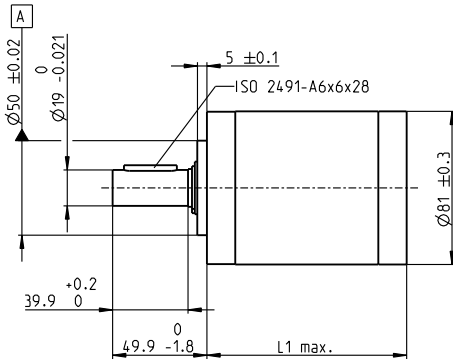


# Planetary Gearhead GP 81 A Ø81 mm, 20.0–120.0 Nm

gear



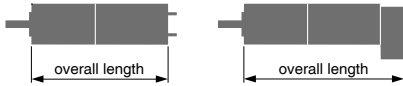
## Technical Data

Planetary Gearhead	straight teeth
Output shaft	steel
Bearing at output	ball bearing
Radial play, 8 mm from flange	max. 0.1 mm
Axial play	max. 1 mm
Max. force for press fits	1500 N
Direction of rotation, drive to output	=
Max. continuous input speed	3000 rpm
Recommended temperature range	-30...+140°C
Number of stages	1 2 3
Max. radial load, 24 mm from flange	400 N 600 N 1000 N
Max. axial load (dynamic)	80 N 120 N 200 N

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

## Part Numbers

Gearhead Data	Part Numbers					
	110408	110409	110410	110411	110412	110413
1 Reduction	3.7:1	14:1	25:1	51:1	93:1	308:1
2 Absolute reduction	$\frac{63}{17}$	$\frac{3969}{289}$	$\frac{1701}{68}$	$\frac{250047}{4913}$	$\frac{107163}{1156}$	$\frac{19683}{64}$
3 Max. motor shaft diameter mm	14	14	14	14	14	14
4 Number of stages	1	2	2	3	3	3
5 Max. continuous torque Nm	20	60	60	120	120	120
6 Max. intermittent torque at gear output Nm	30	90	90	180	180	180
7 Max. efficiency %	80	75	75	70	70	70
8 Weight g	2300	3000	3000	3700	3700	3700
9 Average backlash no load °	0.5	0.55	0.55	0.6	0.6	0.6
10 Mass inertia gcm <sup>2</sup>	165	155	125	88	154	89
11 Gearhead length L1 mm	92.0	113.7	113.7	135.3	135.3	135.3



## maxon Modular System

+ Motor	Page	+ Sensor	Page	Brake	Page	Overall length [mm] = Motor length + gearhead length + (sensor/brake) + assembly parts					
RE 65, 250 W	143					223.5	245.2	245.2	266.8	266.8	266.8
RE 65, 250 W	143	HEDS 5540	472			249.4	271.1	271.1	292.7	292.7	292.7
RE 65, 250 W	143	HEDL 5540	474			249.4	271.1	271.1	292.7	292.7	292.7
RE 65, 250 W	143	HEDL 9140	479			279.6	301.3	301.3	322.9	322.9	322.9
RE 65, 250 W	143			AB 44	524	279.6	301.3	301.3	322.9	322.9	322.9
RE 65, 250 W	143	HEDL 9140	479	AB 44	524	297.6	319.3	319.3	340.9	340.9	340.9
EC 60, 400 W	232					269.4	291.1	291.1	312.7	312.7	312.7
EC 60, 400 W	232	HEDL 9140	478			269.4	291.1	291.1	312.7	312.7	312.7
EC 60, 400 W	232	Res 26	481			269.4	291.1	291.1	312.7	312.7	312.7
EC 60, 400 W	232			AB 41	523	283.0	304.7	304.7	326.3	326.3	326.3
EC 60, 400 W	232	HEDL 9140	478	AB 41	523	307.0	328.7	328.7	350.3	350.3	350.3