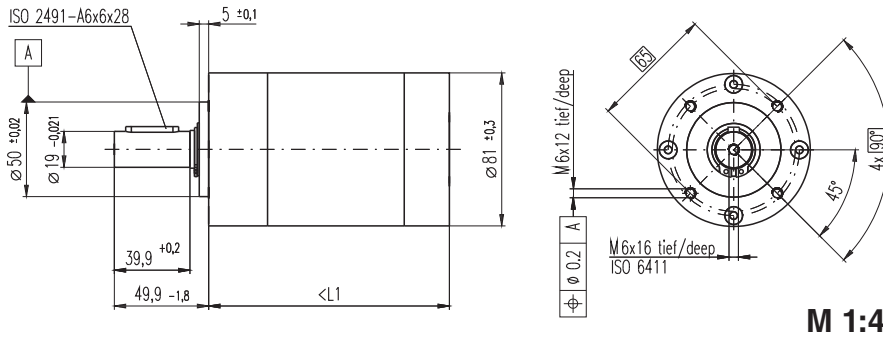


Planetary Gearhead GP 81 A $\varnothing 81$ mm, 20 - 120 Nm



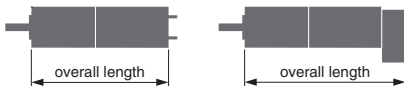
Technical Data

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. permissible force for press fits	1500 N
Sense of rotation, drive to output	=
Recommended 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. permissible axial load	80 N 120 N 200 N

Option: low-play version

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

Gearhead Data						
	110408	110409	110410	110411	110412	110413
1 Reduction	3.7 : 1	14 : 1	25 : 1	51 : 1	93 : 1	308 : 1
2 Reduction absolute	$\frac{63}{17}$	$\frac{3969}{289}$	$\frac{1701}{68}$	$\frac{250047}{4913}$	$\frac{107163}{1156}$	$\frac{19683}{64}$
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 Intermittently permissible 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 °	1.0	1.5	1.5	2.0	2.0	2.0
10 Mass inertia gcm ²	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	84					223.5	245.2	245.2	266.8	266.8
RE 65, 250 W	84	HEDS 5540	267			249.4	271.1	271.1	292.7	292.7
RE 65, 250 W	84	HEDL 5540	269			249.4	271.1	271.1	292.7	292.7
RE 65, 250 W	84	HEDL 9140	272			279.6	301.3	301.3	322.9	322.9
RE 65, 250 W	84			AB 44	322	279.6	301.3	301.3	322.9	322.9
RE 65, 250 W	84	HEDL 9140	272	AB 44	322	297.6	319.3	319.3	340.9	340.9
EC 60, 400 W	158					269.4	291.1	291.1	312.7	312.7
EC 60, 400 W	158	HEDL 9140	271			269.4	291.1	291.1	312.7	312.7
EC 60, 400 W	158	Res 26	277			269.4	291.1	291.1	312.7	312.7
EC 60, 400 W	158			AB 41	321	283.0	304.7	304.7	326.3	326.3
EC 60, 400 W	158	HEDL 9140	271	AB 41	321	307.0	328.7	328.7	350.3	350.3