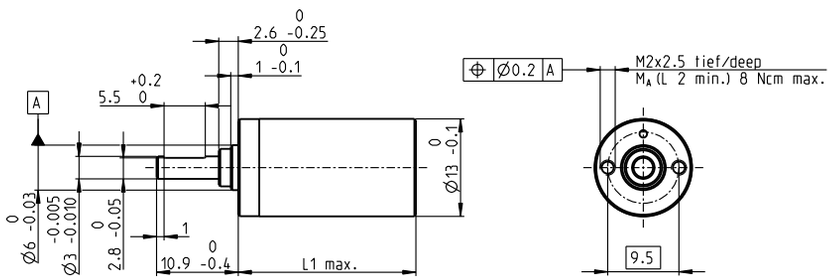
Planetary Gearhead GP 13 A ∅13 mm, 0.2–0.35 Nm



M 1:1

Technical Data

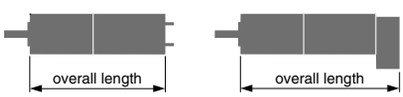
Planetary Gearhead	straight teeth
Output shaft	stainless steel, hardened
Bearing at output	sleeve bearing
Radial play, 6 mm from flange	max. 0.055 mm
Axial play	0.02–0.10 mm
Max. axial load (dynamic)	8 N
Max. force for press fits	100 N
Direction of rotation, drive to output	=
Max. continuous input speed	8000 rpm
Recommended temperature range	-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	110313	110314	110315	110316	110317
Gearhead Data					
1 Reduction	4.1:1	17:1	67:1	275:1	1119:1
2 Absolute reduction	$^{57}/_{14}$	$^{3249}/_{196}$	$^{185193}/_{2744}$	$^{10556001}/_{38416}$	$^{601692057}/_{537824}$
3 Max. motor shaft diameter mm	1.5	1.5	1.5	1.5	1.5
Part Numbers	352365	352366	352367	352368	352369
1 Reduction	5.1:1	26:1	131:1	664:1	3373:1
2 Absolute reduction	$^{66}/_{13}$	$^{4356}/_{169}$	$^{287496}/_{2197}$	$^{18974736}/_{28561}$	$^{1252332576}/_{371293}$
3 Max. motor shaft diameter mm	1.5	1.5	1.5	1.5	1.5
4 Number of stages	1	2	3	4	5
5 Max. continuous torque Nm	0.20	0.20	0.30	0.30	0.35
6 Max. intermittent torque at gear output Nm	0.30	0.30	0.45	0.45	0.53
7 Max. efficiency %	91	83	75	69	62
8 Weight g	11	14	17	20	23
9 Average backlash no load °	1.0	1.2	1.5	1.8	2.0
10 Mass inertia gcm²	0.025	0.015	0.015	0.015	0.015
11 Gearhead length L1* mm	16.0	19.9	23.7	27.6	31.4

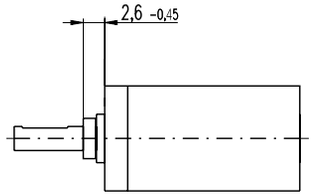
* for A-max 12 and RE-max 13 L1 is + 0.3 mm



maxon Modular System

+ Motor	Page	+ Sensor/Brake	Page	Overall length [mm] = Motor length + gearhead length + (sensor/brake) + assembly parts				
RE 13	105/107			35.4	39.3	43.1	47.0	50.8
RE 13, 0.75 W	107	MR	397-399	42.5	46.4	50.2	54.1	57.9
RE 13, 0.75 W	107	MEnc 13	393	43.2	47.1	50.9	54.8	58.6
RE 13	109/111			47.6	51.5	55.3	59.2	63.0
RE 13, 2 W	111	MR	397-399	54.7	58.6	62.4	66.3	70.1
RE 13, 2 W	111	MEnc 13	393	55.4	59.3	63.1	67.0	70.8
RE 13, 1.5 W	113/115			38.5	42.4	46.2	50.1	53.9
RE 13, 1.5 W	115	MR	397-399	44.6	48.5	52.3	56.2	60.0
RE 13, 1.5 W	115	MEnc 13	393	46.5	50.4	54.2	58.1	61.9
RE 13, 3 W	117/119			50.7	54.6	58.4	62.3	66.1
RE 13, 3 W	119	MR	397-399	56.8	60.7	64.5	68.4	72.2
RE 13, 3 W	119	MEnc 13	393	58.7	62.6	66.4	70.3	74.1
A-max 12	137/138			37.6	41.5	45.3	49.2	53.0
A-max 12, 0.5 W	138	MR	397-399	41.7	45.6	49.4	53.3	57.1
RE-max 13	165/166			36.9	40.8	44.6	48.5	52.3
RE-max 13, 0.75 W	166	MR	397-399	41.6	45.5	49.3	53.2	57.0
RE-max 13	167/168			47.9	51.8	55.6	59.5	63.3
RE-max 13, 2 W	168	MR	397-399	52.6	56.5	60.3	64.2	68.0
EC 13, 6 W	210			37.4	41.3	45.1	49.0	52.8
EC 13, 12 W	211			49.6	53.5	57.3	61.2	65.0

Option Ball Bearing



Gearhead length: L1 + 0.2 mm

Part Numbers			
4.1 : 1	144300	131 : 1	352393
5.1 : 1	352391	275 : 1	144303
17 : 1	144301	664 : 1	352394
26 : 1	352392	1119 : 1	144304
67 : 1	144302	3373 : 1	352395

Technical Data

Planetary Gearhead	straight teeth
Output shaft	stainless steel, hardened
Bearing at output	preloaded ball bearings
Radial play, 6 mm from flange	max. 0.04 mm
Axial play at axial load	< 5 N 0 mm
	> 5 N max. 0.04 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	25 N	25 N

Gearhead values according to sleeve bearing version