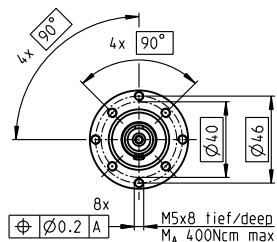
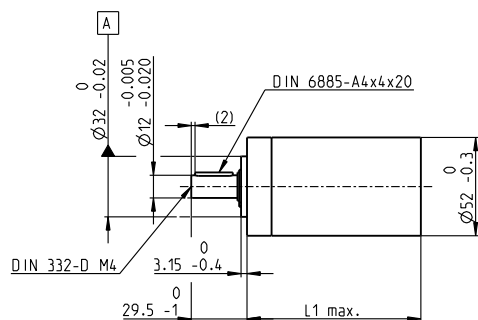


Planetary Gearhead GP 52 C Ø52 mm, 4–30 Nm

Ceramic Version



M 1:4

Technical Data

Planetary Gearhead	straight teeth
Output shaft	stainless steel
Bearing at output	preloaded ball bearings
Radial play, 12 mm from flange	max. 0.06 mm
Axial play at axial load	< 5 N 0 mm > 5 N max. 0.3 mm
Max. axial load (dynamic)	200 N
Max. force for press fits	500 N
Direction of rotation, drive to output	=
Max. continuous input speed	6000 rpm
Recommended temperature range	-15...+80°C
Extended range as option	-40...+100°C
Number of stages	1 2 3 4
Max. radial load, 12 mm from flange	420 N 630 N 900 N 900 N

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

Part Numbers

Gearhead Data

		223080	223083	223089	223094	223097	223104	223109
1 Reduction		3.5:1	12:1	43:1	91:1	150:1	319:1	546:1
2 Absolute reduction		7/2	49/4	343/8	91	2401/16	637/2	546
10 Mass inertia	gcm ²	20.7	17.6	17.3	16.7	17.3	16.8	16.4
3 Max. motor shaft diameter	mm	10	10	10	10	10	10	10
Part Numbers		223081	223084	223090	223095	223099	223105	223110
1 Reduction		4.3:1	15:1	53:1	113:1	186:1	353:1	676:1
2 Absolute reduction		13/3	91/6	637/12	338/3	4459/24	28561/81	676
10 Mass inertia	gcm ²	12	16.8	17.2	9.3	17.3	9.4	9.1
3 Max. motor shaft diameter	mm	8	10	10	8	10	8	8
Part Numbers		223085	223091	223096	223101	223106	223111	
1 Reduction		19:1	66:1	126:1	230:1	394:1	756:1	
2 Absolute reduction		169/9	1183/18	126	8281/36	1183/3	756	
10 Mass inertia	gcm ²	9.5	16.7	16.4	16.8	16.7	16.4	
3 Max. motor shaft diameter	mm	8	10	10	10	10	10	
Part Numbers		223086	223092	223098	223102	223107	223112	
1 Reduction		21:1	74:1	156:1	257:1	441:1	936:1	
2 Absolute reduction		21	147/2	156	1029/4	441	936	
10 Mass inertia	gcm ²	16.5	17.2	9.1	17.3	16.5	9.1	
3 Max. motor shaft diameter	mm	10	10	8	10	10	8	
Part Numbers		223087	223093		223103	223108		
1 Reduction		26:1	81:1		285:1	488:1		
2 Absolute reduction		26	2197/27		15379/54	4394/9		
10 Mass inertia	gcm ²	9.1	9.4		16.7	9.4		
3 Max. motor shaft diameter	mm	8	8		10	8		
4 Number of stages		1	2	3	4	4	4	
5 Max. continuous torque	Nm	4	15	30	30	30	30	30
6 Max. intermittent torque at gear output	Nm	6	22.5	45	45	45	45	45
7 Max. efficiency	%	91	83	75	75	68	68	68
8 Weight	g	460	620	770	770	920	920	920
9 Average backlash no load	°	0.6	0.8	1.0	1.0	1.0	1.0	1.0
11 Gearhead length L1	mm	49.0	65.0	78.5	78.5	92.0	92.0	92.0



maxon Modular System

+ Motor	Page	+ Sensor	Page	Brake	Page	Overall length [mm] = Motor length + gearhead length + (sensor/brake) + assembly parts					
RE 40, 150 W	132					120.1	136.1	149.6	149.6	163.1	163.1
RE 40, 150 W	132	MR	405			131.5	147.5	161.0	161.0	174.5	174.5
RE 40, 150 W	132	HED_ 5540	413/416			140.8	156.8	170.3	170.3	183.8	183.8
RE 40, 150 W	132	HEDL 9140	419			174.1	190.1	203.6	203.6	217.1	217.1
RE 40, 150 W	132			AB 28	458	156.2	172.2	185.7	185.7	199.2	199.2
RE 40, 150 W	132			AB 28	459	164.2	180.2	193.7	193.7	207.2	207.2
RE 40, 150 W	132	HED_ 5540	413/416	AB 28	458	173.4	189.4	202.9	202.9	216.4	216.4
RE 40, 150 W	132	HEDL 9140	419	AB 28	459	184.6	200.6	214.1	214.1	227.6	227.6
RE 50, 200 W	133					157.1	173.1	186.6	186.6	200.1	200.1
RE 50, 200 W	133	HED_ 5540	414/416			177.8	193.8	207.3	207.3	220.8	220.8
RE 50, 200 W	133	HEDL 9140	420			219.5	235.5	249.0	249.0	262.5	262.5
RE 50, 200 W	133			AB 44	462	219.5	235.5	249.0	249.0	262.5	262.5
RE 50, 200 W	133	HEDL 9140	420	AB 44	462	232.5	248.5	262.0	262.0	275.5	275.5
EC 40, 170 W	219					129.1	145.1	158.6	158.6	172.1	172.1
EC 40, 170 W	219	HED_ 5540	414/416			152.5	168.5	182.0	182.0	195.5	195.5
EC 40, 170 W	219	Res 26	422			156.3	172.3	185.8	185.8	199.3	199.3
EC 40, 170 W	219			AB 32	460	171.8	187.8	201.3	201.3	214.8	214.8
EC 40, 170 W	219	HED_ 5540	414/416	AB 32	460	190.2	206.2	219.7	219.7	233.2	233.2