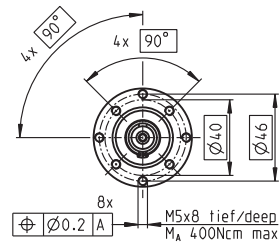
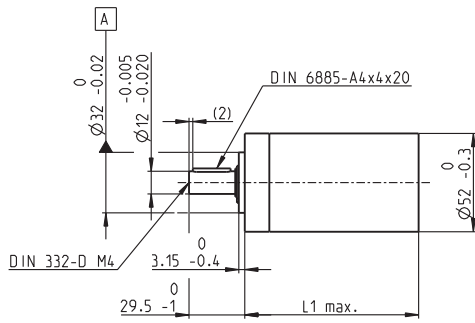


Planetary Gearhead GP 52 C $\varnothing 52$ mm, 4–30 Nm

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

maxon gear

- 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	$\frac{7}{2}$	$\frac{49}{4}$	$\frac{343}{8}$	91	$\frac{2401}{16}$	$\frac{637}{2}$	546
10 Mass inertia	20.7	17.6	17.3	16.7	17.3	16.8	16.4
3 Max. motor shaft diameter	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	$\frac{19}{3}$	$\frac{91}{6}$	$\frac{637}{12}$	$\frac{338}{3}$	$\frac{4459}{24}$	$\frac{28561}{81}$	676
10 Mass inertia	12	16.8	17.2	9.3	17.3	9.4	9.1
3 Max. motor shaft diameter	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		$\frac{169}{9}$	$\frac{1183}{18}$	126	$\frac{8281}{36}$	$\frac{1183}{3}$	756
10 Mass inertia		9.5	16.7	16.4	16.8	16.7	16.4
3 Max. motor shaft diameter		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	$\frac{147}{2}$	156	$\frac{1029}{4}$	441	936
10 Mass inertia		16.5	17.2	9.1	17.3	16.5	9.1
3 Max. motor shaft diameter		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	$\frac{2197}{27}$		$\frac{15379}{54}$	$\frac{4394}{9}$	
10 Mass inertia		9.1	9.4		16.7	9.4	
3 Max. motor shaft diameter		8	8		10	8	
4 Number of stages		1	2	3	4	4	4
5 Max. continuous torque		4	15	30	30	30	30
6 Max. intermittent torque at gear output		6	22.5	45	45	45	45
7 Max. efficiency		91	83	75	75	68	68
8 Weight		460	620	770	770	920	920
9 Average backlash no load		0.6	0.8	1.0	1.0	1.0	1.0
11 Gearhead length L1		49.0	65.0	78.5	78.5	92.0	92.0



maxon Modular System

+ Motor	Page	+ Sensor	Page	Brake	Page	Overall length [mm] = Motor length + gearhead length + (sensor/brake) + assembly parts						
EC 45, 150 W	253					160.3	176.3	189.8	189.8	203.3	203.3	203.3
EC 45, 150 W	253	HEDL 9140	405			175.9	191.9	205.4	205.4	218.9	218.9	218.9
EC 45, 150 W	253	Res 26	412			160.3	176.3	189.8	189.8	203.3	203.3	203.3
EC 45, 150 W	253			AB 28	447	167.7	183.7	197.2	197.2	210.7	210.7	210.7
EC 45, 150 W	253	HEDL 9140	405	AB 28	447	184.7	200.7	214.2	214.2	227.7	227.7	227.7
EC 45, 250 W	254					193.1	209.1	222.6	222.6	236.1	236.1	236.1
EC 45, 250 W	254	HEDL 9140	405			208.7	224.7	238.2	238.2	251.7	251.7	251.7
EC 45, 250 W	254	Res 26	412			193.1	209.1	222.6	222.6	236.1	236.1	236.1
EC 45, 250 W	254			AB 28	447	200.5	216.5	230.0	230.0	243.5	243.5	243.5
EC 45, 250 W	254	HEDL 9140	405	AB 28	447	217.5	233.5	247.0	247.0	260.5	260.5	260.5
EC-max 40, 120 W	267					137.1	153.1	166.6	166.6	180.1	180.1	180.1
EC-max 40, 120 W	267	MR	393			153.0	169.0	182.5	182.5	196.0	196.0	196.0
EC-max 40, 120 W	267	HEDL 5540	403			160.5	176.5	190.0	190.0	203.5	203.5	203.5
EC-max 40, 120 W	267			AB 28	445	171.5	187.5	201.0	201.0	214.5	214.5	214.5
EC-max 40, 120 W	267	HEDL 5540	403	AB 28	445	189.8	205.8	219.3	219.3	232.8	232.8	232.8
EC-i 52, 180 W	286					129.1	145.1	158.6	158.6	172.1	172.1	172.1
EC-i 52, 180 W	286	EASY				142.8	158.8	172.3	172.3	185.8	185.8	185.8
EC-i 52, 180 W	286	EASY, Absolute				142.8	158.8	172.3	172.3	185.8	185.8	185.8
EC-i 52, 180 W	286	HEDL 5540				149.8	165.8	179.3	179.3	192.8	192.8	192.8
EC-i 52, 180 W	286	AEDL 5810				149.8	165.8	179.3	179.3	192.8	192.8	192.8
EC 60 flat, IP 00	304					89.8	105.8	119.3	119.3	132.8	132.8	132.8
EC 60 flat, IP 54	304					94.8	110.8	124.3	124.3	137.8	137.8	137.8
EC 60 flat, IP 00	304	MILE	379			90.8	106.8	120.3	120.3	133.8	133.8	133.8
EC 60 flat, IP 54	304	MILE	379			94.8	110.8	124.3	124.3	137.8	137.8	137.8
EC 90 flat, 90 W	305					81.0	97.0	110.5	110.5	124.0	124.0	124.0
EC 90 flat, 90 W	305	MILE	379			81.0	97.0	110.5	110.5	124.0	124.0	124.0