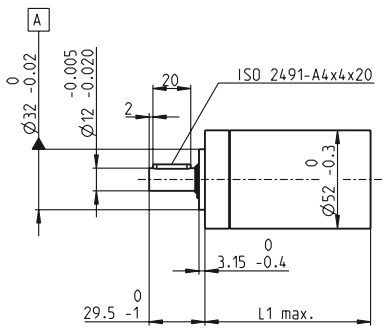
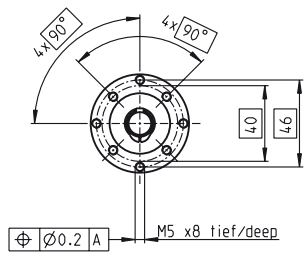
Planetary Gearhead GP 52 C ∅52 mm, 4–30 Nm

Ceramic Version





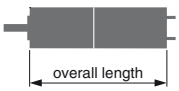
M 1:4

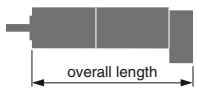
Technical Data

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. permissible axial load				200 N
Max. permissible force for press fits				500 N
Sense of rotation, drive to output				=
Recommended 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	500 N	700 N	900 N	900 N

Stock program
Standard program
Special program (on request)

Article Numbers							
	223080	223083	223089	223094	223097	223104	223109
Gearhead Data							
1 Reduction	3.5 : 1	12 : 1	43 : 1	91 : 1	150 : 1	319 : 1	546 : 1
2 Reduction absolute	7/2	49/4	343/8	91	2401/16	637/2	546
10 Mass inertia gcm²	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
Article 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 Reduction absolute	13/3	91/6	637/12	338/3	4459/24	28561/81	676
10 Mass inertia gcm²	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
Article Numbers		**223085**	223091	223096	223101	223106	223111
1 Reduction		19 : 1	66 : 1	126 : 1	230 : 1	394 : 1	756 : 1
2 Reduction absolute		169/9	1183/18	126	8281/36	1183/3	756
10 Mass inertia gcm²		9.5	16.7	16.4	16.8	16.7	16.4
3 Max. motor shaft diameter mm		8	10	10	10	10	10
Article Numbers		223086	223092	223098	223102	223107	223112
1 Reduction		21 : 1	74 : 1	156 : 1	257 : 1	441 : 1	936 : 1
2 Reduction absolute		21	147/2	156	1029/4	441	936
10 Mass inertia gcm²		16.5	17.2	9.1	17.3	16.5	9.1
3 Max. motor shaft diameter mm		10	10	8	10	10	8
Article Numbers		223087	**223093**		223103	223108	
1 Reduction		26 : 1	81 : 1		285 : 1	488 : 1	
2 Reduction absolute		26	2197/27		15379/54	4394/9	
10 Mass inertia gcm²		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	3	4	4	4
5 Max. continuous torque Nm	4	15	30	30	30	30	30
6 Intermittently permissible 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						
EC 45, 150 W	158					160.3	176.3	189.8	189.8	203.3	203.3	203.3
EC 45, 150 W	158	HEDL 9140	281			175.9	191.9	205.4	205.4	218.9	218.9	218.9
EC 45, 150 W	158	Res 26	287			160.3	176.3	189.8	189.8	203.3	203.3	203.3
EC 45, 150 W	158			AB 28	331	167.7	183.7	197.2	197.2	210.7	210.7	210.7
EC 45, 150 W	158	HEDL 9140	281	AB 28	331	184.7	200.7	214.2	214.2	227.7	227.7	227.7
EC 45, 250 W	159					193.1	209.1	222.6	222.6	236.1	236.1	236.1
EC 45, 250 W	159	HEDL 9140	281			208.7	224.7	238.2	238.2	251.7	251.7	251.7
EC 45, 250 W	159	Res 26	287			193.1	209.1	222.6	222.6	236.1	236.1	236.1
EC 45, 250 W	159			AB 28	331	200.5	216.5	230.0	230.0	243.5	243.5	243.5
EC 45, 250 W	159	HEDL 9140	281	AB 28	331	217.5	233.5	247.0	247.0	260.5	260.5	260.5
EC-max 40, 120 W	171					137.1	153.1	166.6	166.6	180.1	180.1	180.1
EC-max 40, 120 W	171	MR	273			153.0	169.0	182.5	182.5	196.0	196.0	196.0
EC-max 40, 120 W	171	HEDL 5540	281			160.5	176.5	190.0	190.0	203.5	203.5	203.5
EC-max 40, 120 W	171			AB 28	329	177.1	193.1	206.6	206.6	220.1	220.1	220.1
EC-max 40, 120 W	171	HEDL 5540	281	AB 28	329	200.5	216.5	230.0	230.0	243.5	243.5	243.5
EC 60 flat, IP 00	198					89.8	105.8	119.3	119.3	132.8	132.8	132.8
EC 60 flat, IP 54	198					94.8	110.8	124.3	124.3	137.8	137.8	137.8
EC 60 flat, IP 00	198	MILE				90.8	106.8	120.3	120.3	133.8	133.8	133.8
EC 60 flat, IP 54	198	MILE				94.8	110.8	124.3	124.3	137.8	137.8	137.8
EC 90 flat, 90 W	199					81.4	97.4	110.9	110.9	124.4	124.4	124.4