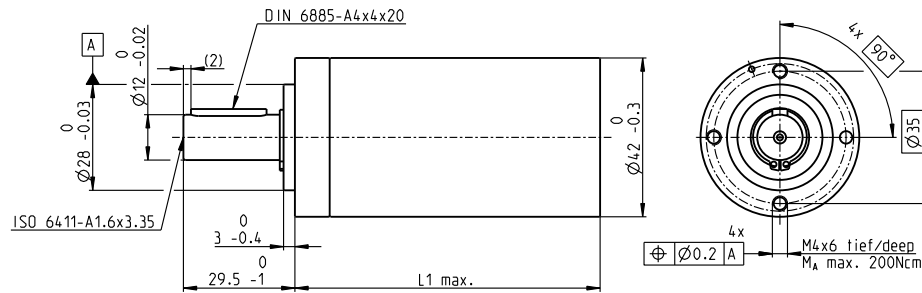


# Planetary Gearhead GP 42 C $\varnothing 42$ mm, 3.0–15.0 Nm

Ceramic Version

maxon gear



M 1:2

### 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)	150 N
Max. force for press fits	300 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
Max. radial load, 12 mm from flange	120 N 240 N 360 N 360 N

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

### Part Numbers

	203113	203115	203119	203120	203124	203129	203128	203133	203137	203141
<b>Gearhead Data</b>										
1 Reduction	3.5:1	12:1	26:1	43:1	81:1	156:1	150:1	285:1	441:1	756:1
2 Absolute reduction	$\frac{7}{2}$	$\frac{49}{4}$	26	$\frac{343}{8}$	$\frac{2197}{27}$	156	$\frac{2401}{16}$	$\frac{15379}{54}$	441	756
10 Mass inertia gcm <sup>2</sup>	14	15	9.1	15	9.4	9.1	15	15	14	14
3 Max. motor shaft diameter mm	10	10	8	10	8	8	10	10	10	10
<b>Part Numbers</b>	<b>203114</b>	<b>203116</b>	<b>260552*</b>	<b>203121</b>	<b>203125</b>	<b>260553*</b>	<b>203130</b>	<b>203134</b>	<b>203138</b>	<b>203142</b>
1 Reduction	4.3:1	15:1	36:1	53:1	91:1	216:1	186:1	319:1	488:1	936:1
2 Absolute reduction	$\frac{19}{3}$	$\frac{91}{6}$	$\frac{36}{1}$	$\frac{637}{12}$	91	$\frac{216}{1}$	$\frac{4459}{24}$	$\frac{637}{2}$	$\frac{4394}{9}$	936
10 Mass inertia gcm <sup>2</sup>	9.1	15	5.0	15	15	5.0	15	15	9.4	9.1
3 Max. motor shaft diameter mm	8	10	4	10	10	4	10	10	8	8
<b>Part Numbers</b>	<b>260551*</b>	<b>203117</b>		<b>203122</b>	<b>203126</b>		<b>203131</b>	<b>203135</b>	<b>203139</b>	<b>260554*</b>
1 Reduction	6:1	19:1		66:1	113:1		230:1	353:1	546:1	1296:1
2 Absolute reduction	$\frac{6}{1}$	$\frac{169}{9}$		$\frac{1183}{18}$	$\frac{338}{3}$		$\frac{8281}{36}$	$\frac{28561}{81}$	546	$\frac{1296}{1}$
10 Mass inertia gcm <sup>2</sup>	4.9	9.4		15	9.4		15	9.4	14	5.0
3 Max. motor shaft diameter mm	4	8		10	8		10	8	10	4
<b>Part Numbers</b>		<b>203118</b>		<b>203123</b>	<b>203127</b>		<b>203132</b>	<b>203136</b>	<b>203140</b>	
1 Reduction		21:1		74:1	126:1		257:1	394:1	676:1	
2 Absolute reduction		21		$\frac{147}{2}$	126		$\frac{1029}{4}$	$\frac{1183}{3}$	676	
10 Mass inertia gcm <sup>2</sup>		14		15	14		15	15	9.1	
3 Max. motor shaft diameter mm		10		10	10		10	10	8	
4 Number of stages		1	2	2	3	3	3	4	4	4
5 Max. continuous torque Nm		3.0	7.5	7.5	15.0	15.0	15.0	15.0	15.0	15.0
6 Max. intermittent torque at gear output Nm		4.5	11.3	11.3	22.5	22.5	22.5	22.5	22.5	22.5
7 Max. efficiency %		90	81	81	72	72	72	64	64	64
8 Weight g		260	360	360	460	460	460	560	560	560
9 Average backlash no load °		0.6	0.8	0.8	1.0	1.0	1.0	1.0	1.0	1.0
11 Gearhead length L1** mm		41.0	55.5	55.5	70.0	70.0	70.0	84.5	84.5	84.5

\*no combination with EC 45 (150/250 W) and EC-140  
\*\*for EC 45 flat L1 is -3.6 mm



### maxon Modular System

+ Motor	Page	+ Sensor	Page	Brake	Page	Overall length [mm] = Motor length + gearhead length + (sensor/brake) + assembly parts										
RE 35, 90 W	130					112.1	126.6	126.6	141.1	141.1	141.1	155.6	155.6	155.6	155.6	
RE 35, 90 W	130	MR	420			123.5	138.0	138.0	152.5	152.5	152.5	167.0	167.0	167.0	167.0	
RE 35, 90 W	130	HED_5540	429/431			132.8	147.3	147.3	161.8	161.8	161.8	176.3	176.3	176.3	176.3	
RE 35, 90 W	130	DCT 22	438			130.2	144.7	144.7	159.2	159.2	159.2	173.7	173.7	173.7	173.7	
RE 35, 90 W	130			AB 28	480	148.2	162.7	162.7	177.2	177.2	177.2	191.7	191.7	191.7	191.7	
RE 35, 90 W	130	HED_5540	429/431	AB 28	480	165.4	179.9	179.9	194.4	194.4	194.4	208.9	208.9	208.9	208.9	
RE 40, 150 W	132					112.1	126.6	126.6	141.1	141.1	141.1	155.6	155.6	155.6	155.6	
RE 40, 150 W	132	MR	420			123.5	138.0	138.0	152.5	152.5	152.5	167.0	167.0	167.0	167.0	
RE 40, 150 W	132	HED_5540	429/432			132.8	147.3	147.3	161.8	161.8	161.8	176.3	176.3	176.3	176.3	
RE 40, 150 W	132	HEDL 9140	436			166.2	180.7	180.7	195.2	195.2	195.2	209.7	209.7	209.7	209.7	
RE 40, 150 W	132			AB 28	480	148.2	162.7	162.7	177.2	177.2	177.2	191.7	191.7	191.7	191.7	
RE 40, 150 W	132			AB 28	481	156.2	170.7	170.7	185.2	185.2	185.2	199.7	199.7	199.7	199.7	
RE 40, 150 W	132	HED_5540	429/432	AB 28	480	165.4	179.9	179.9	194.4	194.4	194.4	208.9	208.9	208.9	208.9	
RE 40, 150 W	132	HEDL 9140	436	AB 28	481	176.7	191.2	191.2	205.7	205.7	205.7	220.2	220.2	220.2	220.2	
EC 40, 170 W	213					121.1	135.6	135.6	150.1	150.1	150.1	164.6	164.6	164.6	164.6	
EC 40, 170 W	213	HED_5540	430/432			144.5	159.0	159.0	173.5	173.5	173.5	188.0	188.0	188.0	188.0	
EC 40, 170 W	213	Res 26	439			148.3	162.8	162.8	177.3	177.3	177.3	191.8	191.8	191.8	191.8	
EC 40, 170 W	213			AB 32	482	163.8	178.3	178.3	192.8	192.8	192.8	207.3	207.3	207.3	207.3	
EC 40, 170 W	213	HED_5540	430/432	AB 32	482	182.2	196.7	196.7	211.2	211.2	211.2	225.7	225.7	225.7	225.7	
EC 45, 150 W	214					152.3	166.8	166.8	181.3	181.3	181.3	195.8	195.8	195.8	195.8	
EC 45, 150 W	214	HEDL 9140	436			167.9	182.4	182.4	196.9	196.9	196.9	211.4	211.4	211.4	211.4	
EC 45, 150 W	214	Res 26	439			152.3	166.8	166.8	181.3	181.3	181.3	195.8	195.8	195.8	195.8	
EC 45, 150 W	214			AB 28	481	159.7	174.2	174.2	188.7	188.7	188.7	203.2	203.2	203.2	203.2	
EC 45, 150 W	214	HEDL 9140	436	AB 28	481	176.7	191.2	191.2	205.7	205.7	205.7	220.2	220.2	220.2	220.2	
EC 45, 250 W	215					185.1	199.6	199.6	214.1	214.1	214.1	228.6	228.6	228.6	228.6	
EC 45, 250 W	215	HEDL 9140	436			200.7	215.2	215.2	229.7	229.7	229.7	244.2	244.2	244.2	244.2	
EC 45, 250 W	215	Res 26	439			185.1	199.6	199.6	214.1	214.1	214.1	228.6	228.6	228.6	228.6	
EC 45, 250 W	215			AB 28	481	192.5	207.0	207.0	221.5	221.5	221.5	236.0	236.0	236.0	236.0	
EC 45, 250 W	215	HEDL 9140	436	AB 28	481	209.5	224.0	224.0	238.5	238.5	238.5	253.0	253.0	253.0	253.0	