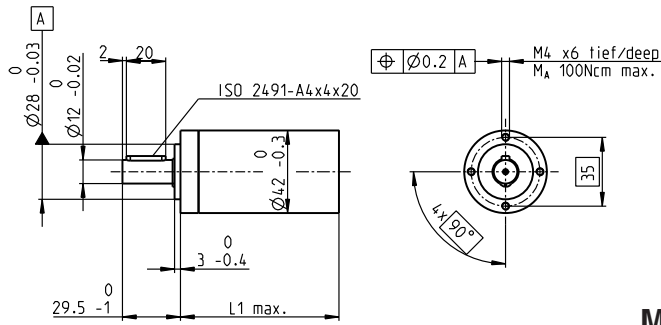


Planetary Gearhead GP 42 C $\varnothing 42$ mm, 3 - 15 Nm

Ceramic Version



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	150 N
Max. permissible force for press fits	300 N
Sense of rotation, drive to output	=
Recommended 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 150 N 150 N 150 N

M 1:4

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

Order Number

	203113	203115	203119	203120	203124	203129	203128	203133	203137	203141
Gearhead Data										
1 Reduction	3.5 : 1	12 : 1	26 : 1	43 : 1	81 : 1	156 : 1	150 : 1	285 : 1	441 : 1	756 : 1
2 Reduction absolute	7/2	49/4	26	343/8	2197/27	156	2401/16	15379/54	441	756
10 Mass inertia gcm ²	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
Order Number	203114	203116	260552*	203121	203125	260553*	203130	203134	203138	203142
1 Reduction	4.3 : 1	15 : 1	36 : 1	53 : 1	91 : 1	216 : 1	186 : 1	319 : 1	488 : 1	936 : 1
2 Reduction absolute	13/3	91/6	36/1	637/12	91	216/1	4459/24	637/2	4394/9	936
10 Mass inertia gcm ²	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
Order Number	260551*	203117		203122	203126		203131	203135	203139	260554
1 Reduction	6 : 1	19 : 1		66 : 1	113 : 1		230 : 1	353 : 1	546 : 1	1296 : 1
2 Reduction absolute	6/1	169/9		1183/18	336/3		8281/36	28561/81	546	1296/1
10 Mass inertia gcm ²	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
Order Number		203118		203123	203127		203132	203136	203140	
1 Reduction		21 : 1		74 : 1	126 : 1		257 : 1	394 : 1	676 : 1	
2 Reduction absolute		21		147/2	126		1029/4	1183/3	676	
10 Mass inertia gcm ²		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	3	3	3	4	4	4	4
5 Max. continuous torque Nm		3.0	7.5	15.0	15.0	15.0	15.0	15.0	15.0	15.0
6 Intermittently permissible torque at gear output Nm		4.5	11.3	22.5	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 W and 250 W) **for EC 45 flat L1 is - 3.5 mm

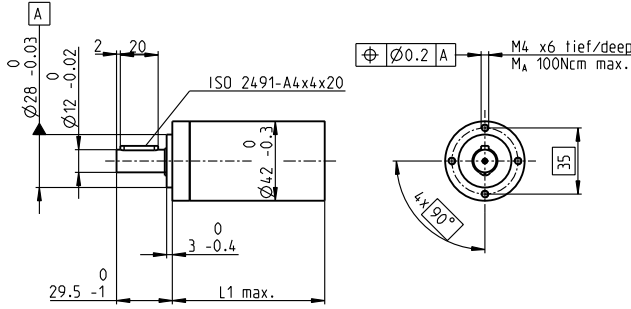


maxon Modular System

+ Motor	Page	+ Sensor	Page	Brake	Page	Overall length [mm] = Motor length + gearhead length + (sensor / brake) + assembly parts									
RE 35, 90 W	81					112.1	126.6	126.6	141.1	141.1	141.1	155.6	155.6	155.6	155.6
RE 35, 90 W	81	MR	263			123.5	138.0	138.0	152.5	152.5	152.5	167.0	167.0	167.0	167.0
RE 35, 90 W	81	HED_5540	266/268			132.8	147.3	147.3	161.8	161.8	161.8	176.3	176.3	176.3	176.3
RE 35, 90 W	81	DCT 22	276			130.2	144.7	144.7	159.2	159.2	159.2	173.7	173.7	173.7	173.7
RE 35, 90 W	81			AB 28	318	148.2	162.7	162.7	177.2	177.2	177.2	191.7	191.7	191.7	191.7
RE 40, 150 W	82					112.1	126.6	126.6	141.1	141.1	141.1	155.6	155.6	155.6	155.6
RE 40, 150 W	82	MR	263			123.5	138.0	138.0	152.5	152.5	152.5	167.0	167.0	167.0	167.0
RE 40, 150 W	82	HED_5540	266/268			132.8	147.3	147.3	161.8	161.8	161.8	176.3	176.3	176.3	176.3
RE 40, 150 W	82	HEDL 9140	271			166.2	180.7	180.7	195.2	195.2	195.2	209.7	209.7	209.7	209.7
RE 40, 150 W	82			AB 28	318	148.2	162.7	162.7	177.2	177.2	177.2	191.7	191.7	191.7	191.7
RE 40, 150 W	82			AB 28	319	156.2	170.7	170.7	185.2	185.2	185.2	199.7	199.7	199.7	199.7
RE 40, 150 W	82	HED_5540	266/268	AB 28	318	165.3	179.8	179.8	194.3	194.3	194.3	208.8	208.8	208.8	208.8
RE 40, 150 W	82	HEDL 9140	271	AB 28	319	176.7	191.2	191.2	205.7	205.7	205.7	220.2	220.2	220.2	220.2
EC 40, 170 W	155					120.9	135.4	135.4	149.9	149.9	149.9	164.4	164.4	164.4	164.4
EC 40, 170 W	155	HED_5540	267/269			144.3	158.8	158.8	173.3	173.3	173.3	187.8	187.8	187.8	187.8
EC 40, 170 W	155	Res 26	277			148.3	162.8	162.8	177.3	177.3	177.3	191.8	191.8	191.8	191.8
EC 40, 170 W	155			AB 32	320	163.6	178.1	178.1	192.6	192.6	192.6	207.1	207.1	207.1	207.1
EC 40, 170 W	155	HED_5540	267/269	AB 32	320	187.0	201.5	201.5	216.0	216.0	216.0	230.5	230.5	230.5	230.5
EC 45, 150 W	156					152.3	166.8	166.8	181.3	181.3	181.3	195.8	195.8	195.8	195.8
EC 45, 150 W	156	HEDL 9140	271			167.9	182.4	182.4	196.9	196.9	196.9	211.4	211.4	211.4	211.4
EC 45, 150 W	156	Res 26	277			152.3	166.8	166.8	181.3	181.3	181.3	195.8	195.8	195.8	195.8
EC 45, 150 W	156			AB 28	319	159.7	174.2	174.2	188.7	188.7	188.7	203.2	203.2	203.2	203.2
EC 45, 150 W	156	HEDL 9140	271	AB 28	319	176.7	191.2	191.2	205.7	205.7	205.7	220.2	220.2	220.2	220.2
EC 45 flat, 30 W	193					53.9	68.4	68.4	82.9	82.9	82.9	97.4	97.4	97.4	97.4
EC 45 flat, 50 W	194					58.8	73.3	73.3	87.8	87.8	87.8	102.3	102.3	102.3	102.3
EC 45 fl, IE, IP 00	195					72.7	87.2	87.2	101.7	101.7	101.7	116.2	116.2	116.2	116.2
EC 45 fl, IE, IP 40	195					74.9	89.4	89.4	103.9	103.9	103.9	118.4	118.4	118.4	118.4
EC 45 fl, IE, IP 00	196					77.7	92.2	92.2	106.7	106.7	106.7	121.2	121.2	121.2	121.2
EC 45 fl, IE, IP 40	196					79.9	94.4	94.4	108.9	108.9	108.9	123.4	123.4	123.4	123.4

Planetary Gearhead GP 42 C Ø42 mm, 3 - 15 Nm

Ceramic Version



Technical Data

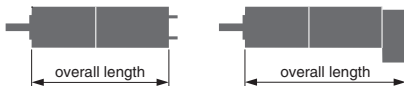
Planetary Gearhead	straight teeth
Output shaft	stainless steel
Bearing at output	preloaded ball bearings
Radial play, 12 mm from flange	max. 0.06 mm
Axial play at axial load	< 5 N 0 mm > 5 N max. 0.3 mm
Max. permissible axial load	150 N
Max. permissible force for press fits	300 N
Sense of rotation, drive to output	=
Recommended 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 150 N 150 N 150 N

M 1:4

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

Gearhead Data	Order Number									
	203113	203115	203119	203120	203124	203129	203128	203133	203137	203141
1 Reduction	3.5 : 1	12 : 1	26 : 1	43 : 1	81 : 1	156 : 1	150 : 1	285 : 1	441 : 1	756 : 1
2 Reduction absolute	7/2	49/4	26	343/8	2197/27	156	2401/16	15379/54	441	756
10 Mass inertia	14	15	9.1	15	9.4	9.1	15	15	14	14
3 Max. motor shaft diameter	10	10	8	10	8	8	10	10	10	10
Order Number	203114	203116	260552*	203121	203125	260553*	203130	203134	203138	203142
1 Reduction	4.3 : 1	15 : 1	36 : 1	53 : 1	91 : 1	216 : 1	186 : 1	319 : 1	488 : 1	936 : 1
2 Reduction absolute	13/3	91/6	36/1	637/12	91	216/1	4459/24	637/2	4394/9	936
10 Mass inertia	9.1	15	5.0	15	15	5.0	15	15	9.4	9.1
3 Max. motor shaft diameter	8	10	4	10	10	4	10	10	8	8
Order Number	260551*	203117		203122	203126		203131	203135	203139	260554*
1 Reduction	6 : 1	19 : 1		66 : 1	113 : 1		230 : 1	353 : 1	546 : 1	1296 : 1
2 Reduction absolute	6/1	169/9		1183/18	338/3		8281/36	28561/81	546	1296/1
10 Mass inertia	4.9	9.4		15	9.4		15	9.4	14	5.0
3 Max. motor shaft diameter	4	8		10	8		10	8	10	4
Order Number		203118		203123	203127		203132	203136	203140	
1 Reduction		21 : 1		74 : 1	126 : 1		257 : 1	394 : 1	676 : 1	
2 Reduction absolute		21		147/2	126		1029/4	1183/3	676	
10 Mass inertia		14		15	14		15	15	9.1	
3 Max. motor shaft diameter		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 Intermittently permissible 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 W and 250 W)



maxon Modular System

+ Motor	Page	+ Sensor	Page	Brake	Page	Overall length [mm] = Motor length + gearhead length + (sensor / brake) + assembly parts									
EC 45, 250 W	157					185.1	199.6	199.6	214.1	214.1	214.1	228.6	228.6	228.6	228.6
EC 45, 250 W	157	HEDL 9140	271			200.7	215.2	215.2	229.7	229.7	229.7	244.2	244.2	244.2	244.2
EC 45, 250 W	157	Res 26	277			185.1	199.6	199.6	214.1	214.1	214.1	228.6	228.6	228.6	228.6
EC 45, 250 W	157			AB 28	319	192.5	207.0	207.0	221.5	221.5	221.5	236.0	236.0	236.0	236.0
EC 45, 250 W	157	HEDL 9140	271	AB 28	319	209.5	224.0	224.0	238.5	238.5	238.5	253.0	253.0	253.0	253.0
EC-max 30, 60 W	167					105.1	119.6	119.6	134.1	134.1	134.1	148.6	148.6	148.6	148.6
EC-max 30, 60 W	167	MR	262			117.3	131.8	131.8	146.3	146.3	146.3	160.8	160.8	160.8	160.8
EC-max 30, 60 W	167	HEDL 5540	269			125.7	140.2	140.2	154.7	154.7	154.7	169.2	169.2	169.2	169.2
EC-max 30, 60 W	167			AB 20	316	141.3	155.8	155.8	170.3	170.3	170.3	184.8	184.8	184.8	184.8
EC-max 30, 60 W	167	HEDL 5540	269	AB 20	316	162.1	176.6	176.6	191.1	191.1	191.1	205.6	205.6	205.6	205.6
EC-max 40, 70 W	168					99.1	113.6	113.6	128.1	128.1	128.1	142.6	142.6	142.6	142.6
EC-max 40, 70 W	168	MR	263			115.0	129.5	129.5	144.0	144.0	144.0	158.5	158.5	158.5	158.5
EC-max 40, 70 W	168	HEDL 5540	269			122.5	137.0	137.0	151.5	151.5	151.5	166.0	166.0	166.0	166.0
EC-max 40, 70 W	168			AB 28	317	139.1	153.6	153.6	168.1	168.1	168.1	182.6	182.6	182.6	182.6
EC-max 40, 70 W	168	HEDL 5540	269	AB 28	317	162.5	177.0	177.0	191.5	191.5	191.5	206.0	206.0	206.0	206.0
EC-4pole 30, 100 W	175					88.1	102.6	102.6	117.1	117.1	117.1	131.6	131.6	131.6	131.6
EC-4pole 30, 100 W	175	MR	262			100.3	114.8	114.8	129.3	129.3	129.3	143.8	143.8	143.8	143.8
EC-4pole 30, 100 W	175	HEDL 5540	270			108.7	123.2	123.2	137.7	137.7	137.7	152.2	152.2	152.2	152.2
EC-4pole 30, 100 W	175			AB 20	316	124.3	138.8	138.8	153.3	153.3	153.3	167.8	167.8	167.8	167.8
EC-4pole 30, 100 W	175	HEDL 5540	270	AB 20	316	145.1	159.6	159.6	174.1	174.1	174.1	188.6	188.6	188.6	188.6
EC-4pole 30, 200 W	176					105.1	119.6	119.6	134.1	134.1	134.1	148.6	148.6	148.6	148.6
EC-4pole 30, 200 W	176	MR	262			117.3	131.8	131.8	146.3	146.3	146.3	160.8	160.8	160.8	160.8
EC-4pole 30, 200 W	176	HEDL 5540	270			125.7	140.2	140.2	154.7	154.7	154.7	169.2	169.2	169.2	169.2
EC-4pole 30, 200 W	176			AB 20	316	141.3	155.8	155.8	170.3	170.3	170.3	184.8	184.8	184.8	184.8
EC-4pole 30, 200 W	176	HEDL 5540	270	AB 20	316	162.1	176.6	176.6	191.1	191.1	191.1	205.6	205.6	205.6	205.6
MCD EPOS, 60 W	313					161.1	175.6	175.6	190.1	190.1	190.1	204.6	204.6	204.6	204.6
MCD EPOS P, 60 W	313					161.1	175.6	175.6	190.1	190.1	190.1	204.6	204.6	204.6	204.6