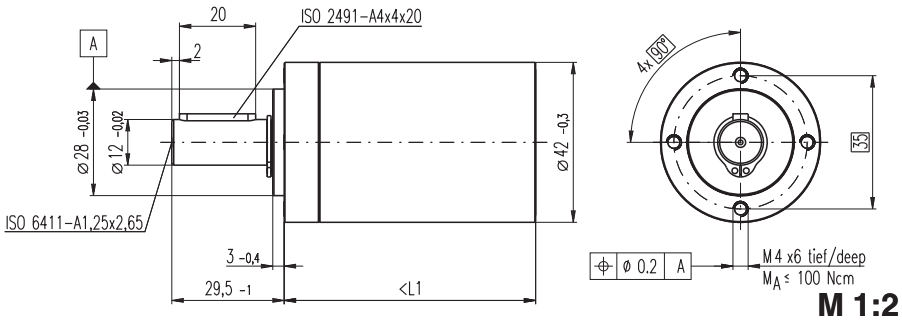
Planetary Gearhead GP 42 C ∅42 mm, 3 - 15 Nm

Ceramic Version



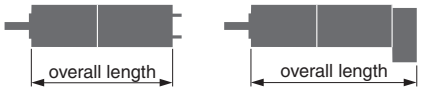
M 1:2

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. 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				-20 ... +100°C
Extended area as option				-35 ... +100°C
Number of stages	1	2	3	4
Max. radial load, 12 mm from flange	120 N	150 N	150 N	150 N

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
3	Mass inertia	gcm²	14	15	9.1	15	9.4	9.1	15	15	14	14
4	Max. motor shaft diameter	mm	10	10	8	10	8	8	10	10	10	10
	Order Number		**203114**	**203116**		203121	203125		203130	**203134**	203138	**203142**
1	Reduction		4.3 : 1	15 : 1		53 : 1	91 : 1		186 : 1	319 : 1	488 : 1	936 : 1
2	Reduction absolute		13/3	91/6		637/12	91		4459/24	637/2	4394/9	936
3	Mass inertia	gcm²	9.1	15		15	15		15	15	9.4	9.1
4	Max. motor shaft diameter	mm	8	10		10	10		10	10	8	8
	Order Number			203117		203122	**203126**		**203131**	203135	**203139**	
1	Reduction			19 : 1		66 : 1	113 : 1		230 : 1	353 :1	546 : 1	
2	Reduction absolute			169/9		1183/18	338/3		8281/36	28561/81	546	
3	Mass inertia	gcm²		9.4		15	9.4		15	9.4	14	
4	Max. motor shaft diameter	mm		8		10	8		10	8	10	
	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	
3	Mass inertia	gcm²		14		15	14		15	15	9.1	
4	Max. motor shaft diameter	mm		10		10	10		10	10	8	
5	Number of stages		1	2	2	3	3	3	4	4	4	4
6	Max. continuous torque	Nm	3.0	7.5	7.5	15.0	15.0	15.0	15.0	15.0	15.0	15.0
7	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	22.5
8	Max. efficiency	%	90	81	81	72	72	72	64	64	64	64
9	Weight	g	260	360	360	460	460	460	560	560	560	560
10	Average backlash no load	°	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
11	Gearhead length L1	mm	40.9	55.4	55.4	69.9	69.9	69.9	84.4	84.4	84.4	84.4



maxon Modular System

+ Motor	Page	+ Sensor	Page	+ Brake	Page	Overall length [mm] = Motor length + gearhead length + (sensor / brake) + assembly parts									
EC 45, 250 W	159					185.0	199.5	199.5	214.0	214.0	214.0	228.5	228.5	228.5	228.5
EC 45, 250 W	159	HEDL 9140	273			200.6	215.1	215.1	229.6	229.6	229.6	244.1	244.1	244.1	244.1
EC 45, 250 W	159	Res 26	278			185.0	199.5	199.5	214.0	214.0	214.0	228.5	228.5	228.5	228.5
EC 45, 250 W	159			AB 28	317	192.4	206.9	206.9	221.4	221.4	221.4	235.9	235.9	235.9	235.9
EC 45, 250 W	159	HEDL 9140	273	AB 28	317	209.4	223.9	223.9	238.4	238.4	238.4	252.9	252.9	252.9	252.9
EC-max 30, 60 W	171					105.0	119.5	119.5	134.0	134.0	134.0	148.5	148.5	148.5	148.5
EC-max 30, 60 W	171	MR	264			117.2	131.7	131.7	146.2	146.2	146.2	160.7	160.7	160.7	160.7
EC-max 30, 60 W	171	HEDL 5540	271			125.6	140.1	140.1	154.6	154.6	154.6	169.1	169.1	169.1	169.1
EC-max 30, 60 W	171			AB 20	314	140.6	155.1	155.1	169.6	169.6	169.6	184.1	184.1	184.1	184.1
EC-max 30, 60 W	171	HEDL 5540	271	AB 20	314	164.6	179.1	179.1	193.6	193.6	193.6	208.1	208.1	208.1	208.1
EC-max 40, 70 W	172					99.0	113.5	113.5	128.0	128.0	128.0	142.5	142.5	142.5	142.5
EC-max 40, 70 W	172	MR	265			114.9	129.4	129.4	143.9	143.9	143.9	158.4	158.4	158.4	158.4
EC-max 40, 70 W	172	HEDL 5540	271			122.4	136.9	136.9	151.4	151.4	151.4	165.9	165.9	165.9	165.9
EC-max 40, 70 W	172			AB 28	315	139.0	153.5	153.5	168.0	168.0	168.0	182.5	182.5	182.5	182.5
EC-max 40, 70 W	173	HEDL 5540	271	AB 28	315	162.4	176.9	176.9	191.4	191.4	191.4	205.9	205.9	205.9	205.9
EC-power 30, 100 W	179					88.0	102.5	102.5	117.0	117.0	117.0	131.5	131.5	131.5	131.5
EC-power 30, 100 W	179	MR	264			100.2	114.7	114.7	129.2	129.2	129.2	143.7	143.7	143.7	143.7
EC-power 30, 100 W	179	HEDL 5540	272			108.6	123.1	123.1	137.6	137.6	137.6	152.1	152.1	152.1	152.1
EC-power 30, 100 W	179			AB 20	314	124.2	138.7	138.7	153.2	153.2	153.2	167.7	167.7	167.7	167.7
EC-power 30, 100 W	179	HEDL 5540	272	AB 20	314	145.0	159.5	159.5	174.0	174.0	174.0	188.5	188.5	188.5	188.5
EC-power 30, 200 W	180					105.0	119.5	119.5	134.0	134.0	134.0	148.5	148.5	148.5	148.5
EC-power 30, 200 W	180	MR	264			117.2	131.7	131.7	146.2	146.2	146.2	160.7	160.7	160.7	160.7
EC-power 30, 200 W	180	HEDL 5540	272			125.6	140.1	140.1	154.6	154.6	154.6	169.1	169.1	169.1	169.1
EC-power 30, 200 W	180			AB 20	314	141.2	155.7	155.7	170.2	170.2	170.2	184.7	184.7	184.7	184.7
EC-power 30, 200 W	180	HEDL 5540	272	AB 20	314	162.0	176.5	176.5	191.0	191.0	191.0	205.5	205.5	205.5	205.5
MCD EPOS, 60 W	311					161.0	175.5	175.5	190.0	190.0	190.0	204.5	204.5	204.5	204.5
MCD EPOS P, 60 W	311					161.0	175.5	175.5	190.0	190.0	190.0	204.5	204.5	204.5	204.5