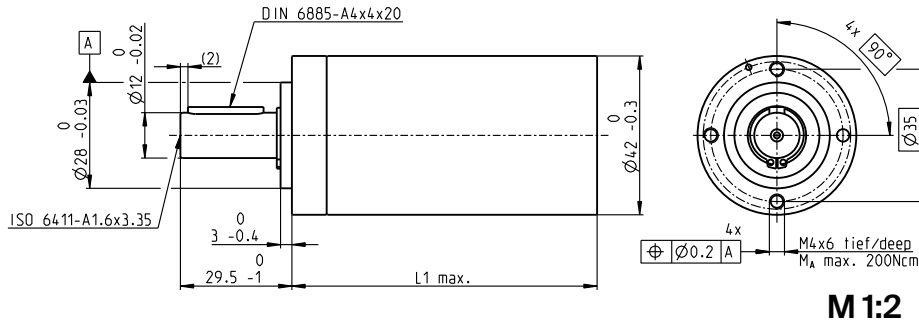


# Planetary Gearhead GP 42 A $\varnothing 42$ mm, 2.25–11.3 Nm

Ceramic Version

**NEW**

gear



### Technical data

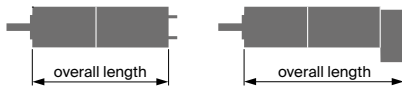
Planetary Gearhead	straight teeth
Output shaft	stainless steel
Bearing at output	preloaded ball bearings
Radial play, 12 mm from flange	max. 0.06 mm
Axial play at axial load	< 5 N 0 mm > 5 N max. 0.3 mm
Max. axial load (dynamic)	150 N
Max. force for press fits	300 N
Direction of rotation, drive to output	=
Max. continuous input speed	6000 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

Gearhead data	838267	838259	838250	838271	838257	838249	838246	838245	838263	838240
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		7/2	49/4	26 343/8	2197/27	156 2401/16	15379/64	441	756	
10 Mass inertia	gcm <sup>2</sup>	14	15	9.1	15	9.4	15	15	14	14
3 Max. motor shaft diameter	mm	10	10	8	10	8	10	10	10	10
<b>Part numbers</b>	<b>838252</b>	<b>838244</b>	838260*	838262	838269	838247*	838265	838264	838255	838242
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		9/6	36/1	637/12	91 216/1	4459/24	637/2	4394/9	936	
10 Mass inertia	gcm <sup>2</sup>	9.1	15	5.0	15	5.0	15	15	9.4	9.1
3 Max. motor shaft diameter	mm	8	10	4	10	4	10	10	8	8
<b>Part numbers</b>	<b>838268*</b>	<b>838272</b>		<b>838254</b>	<b>838243</b>		<b>838266</b>	<b>838258</b>	<b>838256</b>	<b>838239*</b>
1 Reduction	6:1	19:1		66:1	113:1		230:1	353:1	546:1	1296:1
2 Absolute reduction		6/1		1163/18	338/3		8281/36	28561/81	546	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>838248</b>		<b>838251</b>	<b>838253</b>		<b>838261</b>	<b>838241</b>	<b>838270</b>	
1 Reduction		21:1		74:1	126:1		257:1	394:1	676:1	
2 Absolute reduction		21		147/2	126		1029/4	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	2.25	5.6	5.6	11.3	11.3	11.3	11.3	11.3	11.3
6 Max. intermittent torque at gear output	Nm	3.40	8.5	8.5	19.9	19.9	19.9	19.9	19.9	19.9
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-1 40



### Modular system

+ Motor	Page	+ Sensor	Page	Brake	Page	Overall length [mm] = Motor length + gearhead length + (sensor/brake) + assembly parts									
RE 35, 90 W	161					112.1	126.6	126.6	141.1	141.1	141.1	155.6	155.6	155.6	155.6
RE 35, 90 W	161	ENX 32 IMR	506			123.5	138.0	138.0	152.5	152.5	152.5	167.0	167.0	167.0	167.0
RE 35, 90 W	161	HED_5540	535/537			132.8	147.3	147.3	161.8	161.8	161.8	176.3	176.3	176.3	176.3
RE 35, 90 W	161	DCT 22	542			130.2	144.7	144.7	159.2	159.2	159.2	173.7	173.7	173.7	173.7
RE 35, 90 W	161			AB 28	587	148.2	162.7	162.7	177.2	177.2	177.2	191.7	191.7	191.7	191.7
RE 35, 90 W	161	HED_5540	535/537	AB 28	587	165.4	179.9	179.9	194.4	194.4	194.4	208.9	208.9	208.9	208.9
RE 40, 150 W	163					112.1	126.6	126.6	141.1	141.1	141.1	155.6	155.6	155.6	155.6
RE 40, 150 W	163	ENX 32 IMR	506			123.5	138.0	138.0	152.5	152.5	152.5	167.0	167.0	167.0	167.0
RE 40, 150 W	163	HED_5540	535/537			132.8	147.3	147.3	161.8	161.8	161.8	176.3	176.3	176.3	176.3
RE 40, 150 W	163	HEDL 9140	540			166.2	180.7	180.7	195.2	195.2	195.2	209.7	209.7	209.7	209.7
RE 40, 150 W	163			AB 28	587	148.2	162.7	162.7	177.2	177.2	177.2	191.7	191.7	191.7	191.7
RE 40, 150 W	163			AB 28	588	156.2	170.7	170.7	185.2	185.2	185.2	199.7	199.7	199.7	199.7
RE 40, 150 W	163	HED_5540	535/537	AB 28	587	165.4	179.9	179.9	194.4	194.4	194.4	208.9	208.9	208.9	208.9
RE 40, 150 W	163	HEDL 9140	540	AB 28	588	176.7	191.2	191.2	205.7	205.7	205.7	220.2	220.2	220.2	220.2
EC 40, 170 W	272					121.1	135.6	135.6	150.1	150.1	150.1	164.6	164.6	164.6	164.6
EC 40, 170 W	272	HED_5540	536/538			144.5	159.0	159.0	173.5	173.5	173.5	188.0	188.0	188.0	188.0
EC 40, 170 W	272	Res 26	543			148.3	162.8	162.8	177.3	177.3	177.3	191.8	191.8	191.8	191.8
EC 40, 170 W	272			AB 32	589	163.8	178.3	178.3	192.8	192.8	192.8	207.3	207.3	207.3	207.3
EC 40, 170 W	272	HED_5540	536/538	AB 32	589	182.2	196.7	196.7	211.2	211.2	211.2	225.7	225.7	225.7	225.7
EC 45, 150 W	273					152.3	166.8	166.8	181.3	181.3	181.3	195.8	195.8	195.8	195.8
EC 45, 150 W	273	HEDL 9140	540			167.9	182.4	182.4	196.9	196.9	196.9	211.4	211.4	211.4	211.4
EC 45, 150 W	273	Res 26	543			152.3	166.8	166.8	181.3	181.3	181.3	195.8	195.8	195.8	195.8
EC 45, 150 W	273			AB 28	588	159.7	174.2	174.2	188.7	188.7	188.7	203.2	203.2	203.2	203.2
EC 45, 150 W	273	HEDL 9140	540	AB 28	588	176.7	191.2	191.2	205.7	205.7	205.7	220.2	220.2	220.2	220.2
EC 45, 250 W	274					185.1	199.6	199.6	214.1	214.1	214.1	228.6	228.6	228.6	228.6
EC 45, 250 W	274	HEDL 9140	540			200.7	215.2	215.2	229.7	229.7	229.7	244.2	244.2	244.2	244.2
EC 45, 250 W	274	Res 26	543			185.1	199.6	199.6	214.1	214.1	214.1	228.6	228.6	228.6	228.6
EC 45, 250 W	274			AB 28	588	192.5	207.0	207.0	221.5	221.5	221.5	236.0	236.0	236.0	236.0
EC 45, 250 W	274	HEDL 9140	540	AB 28	588	209.5	224.0	224.0	238.5	238.5	238.5	253.0	253.0	253.0	253.0

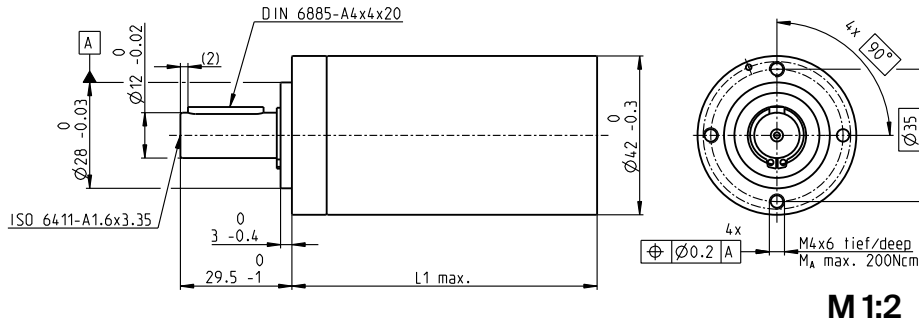


# Planetary Gearhead GP 42 A $\varnothing 42$ mm, 2.25–11.3 Nm

Ceramic Version

**NEW**

gear



### 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	6000 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

M 1:2

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

### Part numbers

Gearhead data	838267	838259	838250	838271	838257	838249	838246	838245	838263	838240
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	7/2	49/4	26	343/8	2197/27	156	2401/16	15379/64	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>838252</b>	<b>838244</b>	838260*	838262	838269	838247*	838265	838264	838255	838242
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	19/3	91/6	361	637/12	91	2161	4459/24	637/2	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>838268*</b>	<b>838272</b>		<b>838254</b>	<b>838243</b>		<b>838266</b>	<b>838258</b>	<b>838256</b>	<b>838239*</b>
1 Reduction	6:1	19:1		66:1	113:1		230:1	353:1	546:1	1296:1
2 Absolute reduction	61/10	169/9		1163/18	338/3		8281/36	28561/81	546	12961
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>838248</b>		<b>838251</b>	<b>838253</b>		<b>838261</b>	<b>838241</b>	<b>838270</b>	
1 Reduction		21:1		74:1	126:1		257:1	394:1	676:1	
2 Absolute reduction		21		147/2	126		1029/4	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	2.25	5.6	5.6	11.3	11.3	11.3	11.3	11.3	11.3
6 Max. intermittent torque at gear output	Nm	3.40	8.5	8.5	19.9	19.9	19.9	19.9	19.9	19.9
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-i 40



### Modular system

+ Motor	Page	+ Sensor	Page	Brake	Page	Overall length [mm] = Motor length + gearhead length + (sensor/brake) + assembly parts
EC-4pole 30, 200 W 295		ENX 22 EMT	518			133.0 147.5 147.5 162.0 162.0 162.0 176.5 176.5 176.5 176.5
EC-4pole 30, 200 W 295		16 EASY/XT/Abs.	509-511			119.0 133.5 133.5 148.0 148.0 148.0 162.5 162.5 162.5 162.5
EC-4pole 30, 200 W 295		16 EASY Abs. XT	512			119.5 134.0 134.0 148.5 148.5 148.5 163.0 163.0 163.0 163.0
EC-4pole 30, 200 W 295		16 RIO	519			117.5 132.0 132.0 146.5 146.5 146.5 161.0 161.0 161.0 161.0
EC-4pole 30, 200 W 295				AB 20	584	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 295		ENX 22 EMT	518	AB 20	584	172.5 187.0 187.0 201.5 201.5 205.1 216.0 216.0 216.0 216.0
EC-4pole 30, 200 W 295		16 EASY/XT/Abs.	509-511	AB 20	584	155.4 169.9 169.9 184.4 184.4 184.4 198.9 198.9 198.9 198.9
EC-4pole 30, 200 W 295		16 EASY Abs. XT	512	AB 20	584	155.9 170.4 170.4 184.9 184.9 184.9 199.4 199.4 199.4 199.4
EC-4pole 30, 200 W 295		16 RIO	519	AB 20	584	153.9 168.4 168.4 182.9 182.9 182.9 197.4 197.4 197.4 197.4
EC-i 40, 50 W	306/307					67.1 81.6 81.6 96.1 96.1 96.1 110.6 110.6 110.6 110.6
EC-i 40, 50 W	306/307	ENX 22 EMT	518			95.1 109.6 109.6 124.1 124.1 124.1 138.6 138.6 138.6 138.6
EC-i 40, 50 W	306/307	TSX 40 MAG/RIO	526-527			78.8 93.3 93.3 107.8 107.8 107.8 122.3 122.3 122.3 122.3
EC-i 40, 50 W	306/307	16 EASY/Abs.	509/511			78.8 93.3 93.3 107.8 107.8 107.8 122.3 122.3 122.3 122.3
EC-i 40, 50 W	306/307	16 RIO	519			81.6 96.1 96.1 110.6 110.6 110.6 125.1 125.1 125.1 125.1
EC-i 40, 70 W	308/309					77.1 91.6 91.6 106.1 106.1 106.1 120.6 120.6 120.6 120.6
EC-i 40, 70 W	308/309	ENX 22 EMT	518			105.1 119.6 119.6 134.1 134.1 134.1 148.6 148.6 148.6 148.6
EC-i 40, 70 W	308/309	TSX 40 MAG/RIO	526-527			88.8 103.8 103.8 117.8 117.8 117.8 132.3 132.3 132.3 132.3
EC-i 40, 70 W	308/309	16 EASY/Abs.	509/511			88.8 103.3 103.3 117.8 117.8 117.8 132.3 132.3 132.3 132.3
EC-i 40, 70 W	308/309	16 RIO	519			91.6 106.1 106.1 120.6 120.6 120.6 135.1 135.1 135.1 135.1
EC-i 40, 100 W	310					97.1 111.6 111.6 126.1 126.1 126.1 140.6 140.6 140.6 140.6
EC-i 40, 100 W	310	ENX 22 EMT	518			125.1 139.6 139.6 154.1 154.1 154.1 168.6 168.6 168.6 168.6
EC-i 40, 100 W	310	TSX 40 MAG/RIO	526-527			108.8 123.3 123.3 137.8 137.8 137.8 152.3 152.3 152.3 152.3
EC-i 40, 100 W	310	16 EASY/XT/Abs.	509-511			108.8 123.3 123.3 137.8 137.8 137.8 152.3 152.3 152.3 152.3
EC-i 40, 100 W	310	16 EASY Abs. XT	512			109.3 123.8 123.8 138.3 138.3 138.3 152.8 152.8 152.8 152.8
EC-i 40, 100 W	310	16 RIO	519			111.6 126.1 126.1 140.6 140.6 140.6 155.1 155.1 155.1 155.1
EC-i 40, 130 W	311					131.9 146.4 146.4 160.9 160.9 160.9 175.4 175.4 175.4 175.4
EC-i 40, 130 W	311	ENX22 EMT	518			159.9 174.4 174.4 188.9 188.9 188.9 203.4 203.4 203.4 203.4
EC-i 40, 130 W	311	TSX 40 MAG/RIO	526-527			143.6 158.1 158.1 172.6 172.6 172.6 187.1 187.1 187.1 187.1
EC-i 40, 130 W	311	16 EASY/XT/Abs.	509-511			143.6 158.1 158.1 172.6 172.6 172.6 187.1 187.1 187.1 187.1
EC-i 40, 130 W	311	16 EASY Abs. XT	512			144.1 158.6 158.6 173.1 173.1 173.1 187.6 187.6 187.6 187.6
EC-i 40, 130 W	311	16 RIO	519			146.4 160.9 160.9 175.4 175.4 175.4 189.9 189.9 189.9 189.9