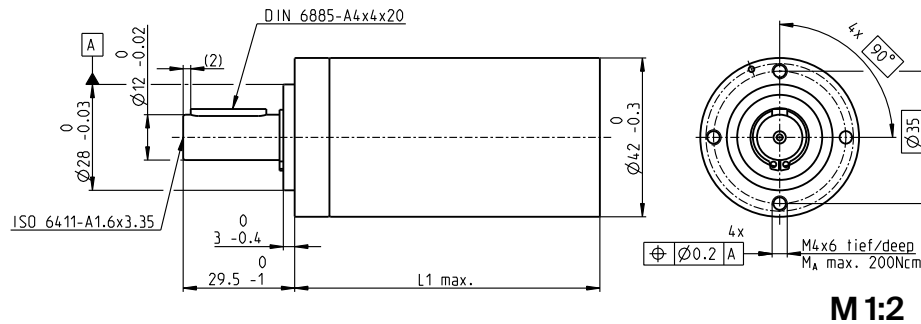


# Planetary Gearhead GP 42 C $\varnothing 42$ mm, 3.0–15.0 Nm

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<br>> 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         |

gear

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

## Part numbers

| Gearhead data                             | 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 Absolute reduction                      | $7\frac{1}{2}$   | $49\frac{1}{4}$  | 26              | $34\frac{3}{8}$    | $219\frac{1}{27}$ | 156              | $240\frac{1}{16}$ | $1537\frac{5}{64}$ | 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                |
| Part numbers                              | 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 Absolute reduction                      | $13\frac{1}{3}$  | $9\frac{1}{6}$   | $36\frac{1}{2}$ | $63\frac{1}{12}$   | 91                | $216\frac{1}{6}$ | $445\frac{9}{24}$ | $637\frac{1}{2}$   | $439\frac{4}{9}$ | 936               |
| 10 Mass inertia                           | gcm <sup>2</sup> | 9.1              | 15              | 5.0                | 15                | 15               | 5.0               | 15                 | 15               | 9.4               |
| 3 Max. motor shaft diameter               | mm               | 8                | 10              | 4                  | 10                | 10               | 4                 | 10                 | 10               | 8                 |
| Part numbers                              | 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 Absolute reduction                      | $6\frac{1}{4}$   | $169\frac{1}{9}$ |                 | $1183\frac{1}{18}$ | $338\frac{1}{3}$  |                  | $828\frac{1}{36}$ | $2856\frac{1}{81}$ | 546              | $1296\frac{1}{4}$ |
| 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                 |
| Part numbers                              |                  | 203118           |                 | 203123             | 203127            |                  | 203132            | 203136             | 203140           |                   |
| 1 Reduction                               |                  | 21:1             |                 | 74:1               | 126:1             |                  | 257:1             | 394:1              | 676:1            |                   |
| 2 Absolute reduction                      |                  | 21               |                 | $147\frac{1}{2}$   | 126               |                  | $1029\frac{1}{4}$ | $1183\frac{1}{3}$  | 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

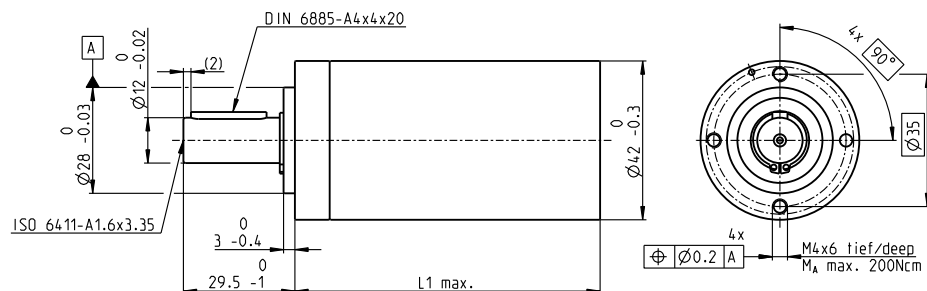


| Modular system  |      |                 |         |       |      |                                                                                        |       |       |       |       |
|-----------------|------|-----------------|---------|-------|------|----------------------------------------------------------------------------------------|-------|-------|-------|-------|
| + 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 |
| RE 35, 90 W     | 161  | ENX 32 IMR      | 506     |       |      | 123.5                                                                                  | 138.0 | 138.0 | 152.5 | 152.5 |
| RE 35, 90 W     | 161  | HED_5540        | 535/537 |       |      | 132.8                                                                                  | 147.3 | 147.3 | 161.8 | 161.8 |
| RE 35, 90 W     | 161  | DCT 22          | 542     |       |      | 130.2                                                                                  | 144.7 | 144.7 | 159.2 | 159.2 |
| RE 35, 90 W     | 161  |                 |         | AB 28 | 587  | 148.2                                                                                  | 162.7 | 162.7 | 177.2 | 177.2 |
| RE 35, 90 W     | 161  | HED_5540        | 535/537 | AB 28 | 587  | 165.4                                                                                  | 179.9 | 179.9 | 194.4 | 194.4 |
| RE 40, 150 W    | 163  |                 |         |       |      | 112.1                                                                                  | 126.6 | 126.6 | 141.1 | 141.1 |
| RE 40, 150 W    | 163  | ENX 32 IMR      | 506     |       |      | 123.5                                                                                  | 138.0 | 138.0 | 152.5 | 152.5 |
| RE 40, 150 W    | 163  | HED_5540        | 535/537 |       |      | 132.8                                                                                  | 147.3 | 147.3 | 161.8 | 161.8 |
| RE 40, 150 W    | 163  | HEDL 9140       | 540     |       |      | 166.2                                                                                  | 180.7 | 180.7 | 195.2 | 195.2 |
| RE 40, 150 W    | 163  |                 |         | AB 28 | 588  | 148.2                                                                                  | 162.7 | 162.7 | 177.2 | 177.2 |
| RE 40, 150 W    | 163  |                 |         | AB 28 | 588  | 156.2                                                                                  | 170.7 | 170.7 | 185.2 | 185.2 |
| RE 40, 150 W    | 163  | HED_5540        | 535/537 | AB 28 | 588  | 165.4                                                                                  | 179.9 | 179.9 | 194.4 | 194.4 |
| RE 40, 150 W    | 163  | HEDL 9140       | 540     | AB 28 | 588  | 176.7                                                                                  | 191.2 | 191.2 | 205.7 | 205.7 |
| EC 40, 170 W    | 272  |                 |         |       |      | 121.1                                                                                  | 135.6 | 135.6 | 150.1 | 150.1 |
| EC 40, 170 W    | 272  | HED_5540        | 535/537 |       |      | 144.5                                                                                  | 159.0 | 159.0 | 173.5 | 173.5 |
| EC 40, 170 W    | 272  | Res 26          | 543     |       |      | 148.3                                                                                  | 162.8 | 162.8 | 177.3 | 177.3 |
| EC 40, 170 W    | 272  |                 |         | AB 32 | 589  | 163.8                                                                                  | 178.3 | 178.3 | 192.8 | 192.8 |
| EC 40, 170 W    | 272  | HED_5540        | 536/538 | AB 32 | 589  | 182.2                                                                                  | 196.7 | 196.7 | 211.2 | 211.2 |
| EC 45, 150 W    | 273  |                 |         |       |      | 152.3                                                                                  | 166.8 | 166.8 | 181.3 | 181.3 |
| EC 45, 150 W    | 273  | HEDL 9140       | 540     |       |      | 167.9                                                                                  | 182.4 | 182.4 | 196.9 | 196.9 |
| EC 45, 150 W    | 273  | Res 26          | 543     |       |      | 152.3                                                                                  | 166.8 | 166.8 | 181.3 | 181.3 |
| EC 45, 150 W    | 273  |                 |         | AB 28 | 588  | 159.7                                                                                  | 174.2 | 174.2 | 188.7 | 188.7 |
| EC 45, 150 W    | 273  | HEDL 9140       | 540     | AB 28 | 588  | 176.7                                                                                  | 191.2 | 191.2 | 205.7 | 205.7 |
| EC 45, 250 W    | 274  |                 |         |       |      | 185.1                                                                                  | 199.6 | 199.6 | 214.1 | 214.1 |
| EC 45, 250 W    | 274  | HEDL 9140       | 540     |       |      | 200.7                                                                                  | 215.2 | 215.2 | 229.7 | 229.7 |
| EC 45, 250 W    | 274  | Res 26          | 543     |       |      | 185.1                                                                                  | 199.6 | 199.6 | 214.1 | 214.1 |
| EC 45, 250 W    | 274  |                 |         | AB 28 | 588  | 192.5                                                                                  | 207.0 | 207.0 | 221.5 | 221.5 |
| EC 45, 250 W    | 274  | HEDL 9140       | 540     | AB 28 | 588  | 209.5                                                                                  | 224.0 | 224.0 | 238.5 | 238.5 |
| EC-max 30, 60 W | 285  |                 |         |       |      | 105.1                                                                                  | 119.6 | 119.6 | 134.1 | 134.1 |
| EC-max 30, 60 W | 285  | 16 EASY/XT/Abs. | 509–511 |       |      | 116.2                                                                                  | 130.7 | 130.7 | 145.2 | 145.2 |

# Planetary Gearhead GP 42 C Ø42 mm, 3.0–15.0 Nm

Ceramic Version

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            | 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

| Gearhead data                             | 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 Absolute reduction                      | 7/2                  | 49/4   | 26      | 343/8   | 2197/27 | 156     | 2401/6  | 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      |
| Part numbers                              | 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 Absolute reduction                      | 13/3                 | 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      | 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       |
| Part numbers                              | 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 Absolute reduction                      | 6/1                  | 169/9  |         | 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       |
| Part numbers                              |                      | 203118 |         | 203123  | 203127  |         | 203132  | 203136   | 203140 |         |
| 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                   | 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    |

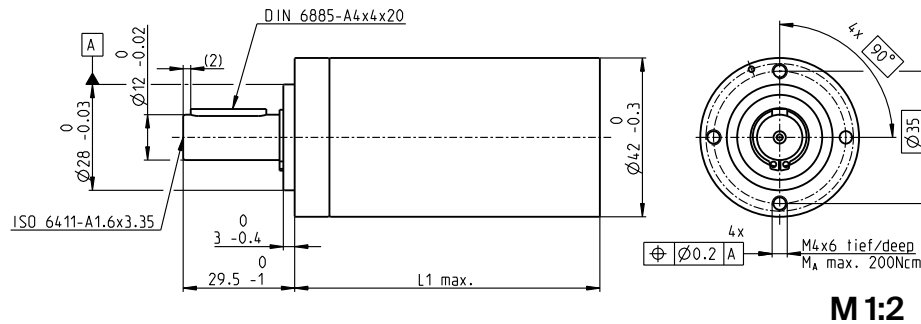
\*no combination with EC 45 (150/250 W) and EC-1 40



| Modular system     |      |                 |         |       |      |                                                                                        |       |       |       |       |       |
|--------------------|------|-----------------|---------|-------|------|----------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|
| + Motor            | Page | + Sensor        | Page    | Brake | Page | Overall length [mm] = Motor length + gearhead length + (sensor/brake) + assembly parts |       |       |       |       |       |
| EC-max 30, 60 W    | 285  | 16 EASY Abs. XT | 512     |       |      | 116.7                                                                                  | 131.2 | 131.2 | 145.7 | 145.7 | 160.2 |
| EC-max 30, 60 W    | 285  | HEDL 5540       | 539     |       |      | 125.7                                                                                  | 140.2 | 140.2 | 154.7 | 154.7 | 169.2 |
| EC-max 30, 60 W    | 285  |                 |         | AB 20 | 584  | 140.7                                                                                  | 155.2 | 155.2 | 169.7 | 169.7 | 184.2 |
| EC-max 30, 60 W    | 285  | HEDL 5540       | 539     | AB 20 | 584  | 161.3                                                                                  | 175.8 | 175.8 | 190.3 | 190.3 | 204.8 |
| EC-max 40, 70 W    | 286  |                 |         |       |      | 99.1                                                                                   | 113.6 | 113.6 | 128.1 | 128.1 | 142.6 |
| EC-max 40, 70 W    | 286  | 16 EASY/XT/Abs. | 509–511 |       |      | 110.0                                                                                  | 124.5 | 124.5 | 139.0 | 139.0 | 153.5 |
| EC-max 40, 70 W    | 286  | 16 EASY Abs. XT | 512     |       |      | 110.5                                                                                  | 125.0 | 125.0 | 139.5 | 139.5 | 154.0 |
| EC-max 40, 70 W    | 286  | HEDL 5540       | 539     |       |      | 122.5                                                                                  | 137.0 | 137.0 | 151.5 | 151.5 | 166.0 |
| EC-max 40, 70 W    | 286  |                 |         | AB 28 | 586  | 133.5                                                                                  | 148.0 | 148.0 | 162.5 | 162.5 | 177.0 |
| EC-max 40, 70 W    | 286  | HEDL 5540       | 539     | AB 28 | 586  | 151.8                                                                                  | 166.3 | 166.3 | 180.8 | 180.8 | 195.3 |
| EC-max 40, 120 W   | 287  |                 |         |       |      | 129.1                                                                                  | 143.6 | 143.6 | 158.1 | 158.1 | 172.6 |
| EC-max 40, 120 W   | 287  | 16 EASY/XT/Abs. | 509–511 |       |      | 140.0                                                                                  | 154.5 | 154.5 | 169.0 | 169.0 | 183.5 |
| EC-max 40, 120 W   | 287  | 16 EASY Abs. XT | 512     |       |      | 140.5                                                                                  | 155.0 | 155.0 | 169.5 | 169.5 | 184.0 |
| EC-max 40, 120 W   | 287  | HEDL 5540       | 539     |       |      | 152.5                                                                                  | 167.0 | 167.0 | 181.5 | 181.5 | 196.0 |
| EC-max 40, 120 W   | 287  |                 |         | AB 28 | 586  | 163.5                                                                                  | 178.0 | 178.0 | 192.5 | 192.5 | 207.0 |
| EC-max 40, 120 W   | 287  | HEDL 5540       | 539     | AB 28 | 586  | 181.8                                                                                  | 196.3 | 196.3 | 210.8 | 210.8 | 225.3 |
| EC-4pole 30, 100 W | 293  |                 |         |       |      | 88.1                                                                                   | 102.6 | 102.6 | 117.1 | 117.1 | 131.6 |
| EC-4pole 30, 100 W | 293  | ENX 22 EMT      | 518     |       |      | 116.0                                                                                  | 130.5 | 130.5 | 145.0 | 145.0 | 159.5 |
| EC-4pole 30, 100 W | 293  | 16 EASY/XT/Abs. | 509–511 |       |      | 102.0                                                                                  | 116.5 | 116.5 | 131.0 | 131.0 | 145.5 |
| EC-4pole 30, 100 W | 293  | 16 EASY Abs. XT | 512     |       |      | 102.5                                                                                  | 117.0 | 117.0 | 131.5 | 131.5 | 146.0 |
| EC-4pole 30, 100 W | 293  | 16 RIO          | 519     |       |      | 100.5                                                                                  | 115.0 | 115.0 | 129.5 | 129.5 | 144.0 |
| EC-4pole 30, 100 W | 293  |                 |         | AB 20 | 584  | 124.3                                                                                  | 138.8 | 138.8 | 153.3 | 153.3 | 167.8 |
| EC-4pole 30, 100 W | 293  | ENX 22 EMT      | 518     | AB 20 | 584  | 155.5                                                                                  | 170.0 | 170.0 | 184.5 | 184.5 | 199.0 |
| EC-4pole 30, 100 W | 293  | 16 EASY/XT/Abs. | 509–511 | AB 20 | 584  | 138.4                                                                                  | 152.9 | 152.9 | 167.4 | 167.4 | 181.9 |
| EC-4pole 30, 100 W | 293  | 16 EASY Abs. XT | 512     | AB 20 | 584  | 138.9                                                                                  | 153.4 | 153.4 | 167.9 | 167.9 | 182.4 |
| EC-4pole 30, 100 W | 293  | 16 RIO          | 519     | AB 20 | 584  | 136.9                                                                                  | 151.4 | 151.4 | 165.9 | 165.9 | 180.4 |
| EC-4pole 30, 200 W | 295  |                 |         |       |      | 105.1                                                                                  | 119.6 | 119.6 | 134.1 | 134.1 | 148.6 |
| EC-4pole 30, 200 W | 295  | ENX 22 EMT      | 518     |       |      | 133.0                                                                                  | 147.5 | 147.5 | 162.0 | 162.0 | 176.5 |
| EC-4pole 30, 200 W | 295  | 16 EASY/XT/Abs. | 509–511 |       |      | 119.0                                                                                  | 133.5 | 133.5 | 148.0 | 148.0 | 162.5 |

# Planetary Gearhead GP 42 C $\varnothing 42$ mm, 3.0–15.0 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<br>> 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         |

gear

- 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                      |                  | 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>                       |                  | 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 Absolute reduction                      |                  | 13/3         | 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      | 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>                       |                  | 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 Absolute reduction                      |                  | 6/1          | 169/9  |         | 1183/18 | 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>                       |                  |              | 203118 |         | 203123  | 203127  |         | 203132  | 203136   | 203140 |         |
| 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      | 4       |
| 5 Max. continuous torque                  | Nm               | 3.0          | 7.5    | 7.5     | 15.0    | 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   | 22.5    |
| 7 Max. efficiency                         | %                | 90           | 81     | 81      | 72      | 72      | 72      | 64      | 64       | 64     | 64      |
| 8 Weight                                  | g                | 260          | 360    | 360     | 460     | 460     | 460     | 560     | 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    | 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   | 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-4pole30,200W 295 |         | 16 EASY Abs. XT | 512     |       |      | 119.5                                                                                  | 134.0 | 134.0 | 148.5 | 148.5 | 163.0 |
| EC-4pole30,200W 295 |         | 16 RIO          | 519     |       |      | 117.5                                                                                  | 132.0 | 132.0 | 146.5 | 146.5 | 161.0 |
| EC-4pole30,200W 295 |         |                 |         | AB 20 | 584  | 141.3                                                                                  | 155.8 | 155.8 | 170.3 | 170.3 | 184.8 |
| EC-4pole30,200W 295 |         | ENX22 EMT       | 518     | AB 20 | 584  | 172.5                                                                                  | 187.0 | 187.0 | 201.5 | 201.5 | 216.0 |
| EC-4pole30,200W 295 |         | 16 EASY/XT/Abs. | 509–511 | AB 20 | 584  | 155.4                                                                                  | 169.9 | 169.9 | 184.4 | 184.4 | 198.9 |
| EC-4pole30,200W 295 |         | 16 EASY Abs. XT | 512     | AB 20 | 584  | 155.9                                                                                  | 170.4 | 170.4 | 184.9 | 184.9 | 199.4 |
| EC-4pole30,200W 295 |         | 16 RIO          | 519     | AB 20 | 584  | 153.9                                                                                  | 168.4 | 168.4 | 182.9 | 182.9 | 197.4 |
| EC-i 40, 50 W       | 306/307 |                 |         |       |      | 67.1                                                                                   | 81.6  | 81.6  | 96.1  | 96.1  | 110.6 |
| EC-i 40, 50 W       | 306/307 | 22 EMT          | 518     |       |      | 95.1                                                                                   | 109.6 | 109.6 | 124.1 | 124.1 | 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 | 122.3 |
| EC-i 40, 50 W       | 306/307 | 16 EASY/Abs.    | 509/511 |       |      | 78.8                                                                                   | 93.3  | 93.3  | 107.8 | 107.8 | 122.3 |
| EC-i 40, 50 W       | 306/307 | 16 RIO          | 519     |       |      | 81.6                                                                                   | 96.1  | 96.1  | 110.6 | 110.6 | 125.1 |
| EC-i 40, 70 W       | 308/309 |                 |         |       |      | 77.1                                                                                   | 91.6  | 91.6  | 106.1 | 106.1 | 120.6 |
| EC-i 40, 70 W       | 308/309 | 22 EMT          | 518     |       |      | 105.1                                                                                  | 119.6 | 119.6 | 134.1 | 134.1 | 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 | 132.3 |
| EC-i 40, 70 W       | 308/309 | 16 EASY/Abs.    | 509/511 |       |      | 88.8                                                                                   | 103.8 | 103.8 | 117.8 | 117.8 | 132.3 |
| EC-i 40, 70 W       | 308/309 | 16 RIO          | 519     |       |      | 91.6                                                                                   | 106.1 | 106.1 | 120.6 | 120.6 | 135.1 |
| EC-i 40, 100 W      | 310     |                 |         |       |      | 97.1                                                                                   | 111.6 | 111.6 | 126.1 | 126.1 | 140.6 |
| EC-i 40, 100 W      | 310     | ENX22 EMT       | 518     |       |      | 125.1                                                                                  | 139.6 | 139.6 | 154.1 | 154.1 | 168.6 |
| EC-i 40, 100 W      | 310     | TSX 40 MAG/RIO  | 526–527 |       |      | 108.8                                                                                  | 123.3 | 123.3 | 137.8 | 137.8 | 152.3 |
| EC-i 40, 100 W      | 310     | 16 EASY/XT/Abs. | 509–511 |       |      | 108.8                                                                                  | 123.3 | 123.3 | 137.8 | 137.8 | 152.3 |
| EC-i 40, 100 W      | 310     | 16 EASY Abs. XT | 512     |       |      | 109.3                                                                                  | 123.8 | 123.8 | 138.3 | 138.3 | 152.8 |
| EC-i 40, 100 W      | 310     | 16 RIO          | 519     |       |      | 111.6                                                                                  | 126.1 | 126.1 | 140.6 | 140.6 | 155.1 |
| EC-i 40, 130 W      | 311     |                 |         |       |      | 131.9                                                                                  | 146.4 | 146.4 | 160.9 | 160.9 | 175.4 |
| EC-i 40, 130 W      | 311     | ENX22 EMT       | 518     |       |      | 159.9                                                                                  | 174.4 | 174.4 | 188.9 | 188.9 | 203.4 |
| EC-i 40, 130 W      | 311     | TSX 40 MAG/RIO  | 526–527 |       |      | 143.6                                                                                  | 158.1 | 158.1 | 172.6 | 172.6 | 187.1 |
| EC-i 40, 130 W      | 311     | 16 EASY/XT/Abs. | 509–511 |       |      | 143.6                                                                                  | 158.1 | 158.1 | 172.6 | 172.6 | 187.1 |
| EC-i 40, 130 W      | 311     | 16 EASY Abs. XT | 512     |       |      | 144.1                                                                                  | 158.6 | 158.6 | 173.1 | 173.1 | 187.6 |
| EC-i 40, 130 W      | 311     | 16 RIO          | 519     |       |      | 146.4                                                                                  | 160.9 | 160.9 | 175.4 | 175.4 | 189.9 |