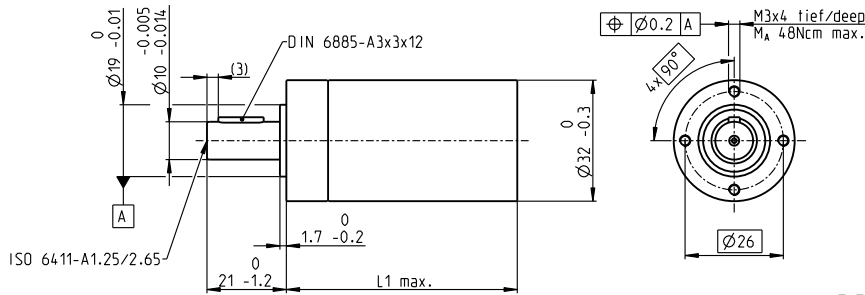


# Planetary Gearhead GP 32 HP Ø32 mm, 4.0–8.0 Nm

High Power

gear

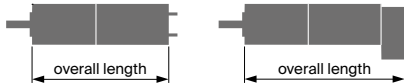


## Technical data

|                                        |                   |
|----------------------------------------|-------------------|
| Planetary Gearhead                     | straight teeth    |
| Output shaft                           | stainless steel   |
| Bearing at output                      | ball bearing      |
| Radial play, 10 mm from flange         | max. 0.14 mm      |
| Axial play                             | max. 0.4 mm       |
| Max. axial load (dynamic)              | 120 N             |
| Max. force for press fits              | 120 N             |
| Direction of rotation, drive to output | =                 |
| Max. continuous input speed            | 8000 rpm          |
| Recommended temperature range          | -40...+100°C      |
| Number of stages                       | 2 3 4             |
| Max. radial load, 10 mm from flange    | 200 N 250 N 300 N |

M 1:2

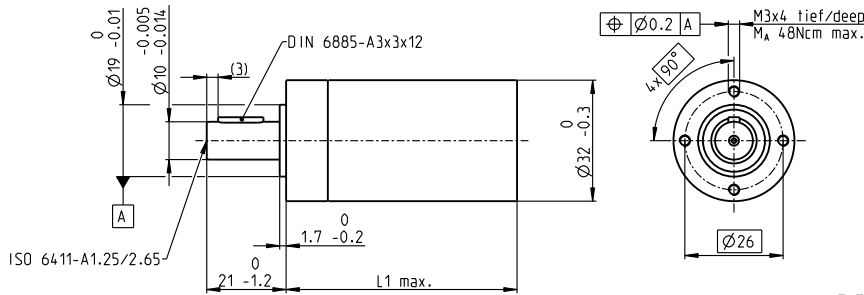
|               |                                         | Part numbers     |        |           |           |             |            |           |
|---------------|-----------------------------------------|------------------|--------|-----------|-----------|-------------|------------|-----------|
|               |                                         | 320247           | 326663 | 326664    | 326668    | 326672      | 324947     | 324952    |
| Gearhead data |                                         |                  |        |           |           |             |            |           |
| 1             | Reduction                               | 14:1             | 33:1   | 51:1      | 111:1     | 190:1       | 456:1      | 706:1     |
| 2             | Absolute reduction                      | 676/49           | 529/16 | 17576/343 | 13824/125 | 456976/2401 | 89401/196  | 15817/224 |
| 3             | Max. motor shaft diameter               | mm               | 6      | 3         | 6         | 4           | 6          | 3         |
| Part numbers  |                                         | 326659           |        | 326665    | 326669    | 324942      | 324948     | 324953    |
| 1             | Reduction                               | 18:1             |        | 66:1      | 123:1     | 246:1       | 492:1      | 762:1     |
| 2             | Absolute reduction                      | 624/35           |        | 16224/245 | 6877/66   | 421824/1715 | 86112/175  | 19044/25  |
| 3             | Max. motor shaft diameter               | mm               | 6      |           | 6         | 3           | 6          | 4         |
| Part numbers  |                                         | 326660           |        | 326666    | 326670    | 324944      | 324949     | 324954    |
| 1             | Reduction                               | 21:1             |        | 79:1      | 132:1     | 295:1       | 531:1      | 913:1     |
| 2             | Absolute reduction                      | 299/14           |        | 3887/49   | 3312/25   | 101062/343  | 331776/625 | 36501/40  |
| 3             | Max. motor shaft diameter               | mm               | 6      |           | 6         | 4           | 6          | 3         |
| Part numbers  |                                         | 326661           |        | 326667    | 326671    | 324945      | 324950     |           |
| 1             | Reduction                               | 23:1             |        | 86:1      | 159:1     | 318:1       | 589:1      |           |
| 2             | Absolute reduction                      | 576/25           |        | 14976/175 | 1587/10   | 389376/1225 | 20631/35   |           |
| 3             | Max. motor shaft diameter               | mm               | 4      |           | 6         | 3           | 6          | 6         |
| Part numbers  |                                         | 326662           |        | 320297    |           | 324946      | 324951     |           |
| 1             | Reduction                               | 28:1             |        | 103:1     |           | 411:1       | 636:1      |           |
| 2             | Absolute reduction                      | 139/6            |        | 3589/35   |           | 359424/675  | 79488/125  |           |
| 3             | Max. motor shaft diameter               | mm               | 4      |           | 6         |             | 6          | 4         |
| 4             | Number of stages                        |                  | 2      | 2         | 3         | 3           | 4          | 4         |
| 5             | Max. continuous torque                  | Nm               | 4      | 4         | 8         | 8           | 8          | 8         |
| 6             | Max. intermittent torque at gear output | Nm               | 6      | 6         | 12        | 12          | 12         | 12        |
| 7             | Max. efficiency                         | %                | 75     | 75        | 70        | 70          | 60         | 60        |
| 8             | Weight                                  | g                | 178    | 178       | 213       | 213         | 249        | 249       |
| 9             | Average backlash no load                | °                | 0.8    | 0.8       | 1.0       | 1.0         | 1.0        | 1.0       |
| 10            | Mass inertia                            | gcm <sup>2</sup> | 1.6    | 0.5       | 1.5       | 0.7         | 1.5        | 0.7       |
| 11            | Gearhead length L1                      | mm               | 48.3   | 48.3      | 55.0      | 55.0        | 61.7       | 61.7      |



| Modular system     |      |                       |         |                                                                                        |       |       |       |       |       |
|--------------------|------|-----------------------|---------|----------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|
| + Motor            | Page | + Sensor/Brake        | Page    | Overall length [mm] = Motor length + gearhead length + (sensor/brake) + assembly parts |       |       |       |       |       |
| RE 35, 90 W        | 161  |                       |         | 119.4                                                                                  | 119.4 | 126.1 | 126.1 | 132.8 | 132.8 |
| RE 35, 90 W        | 161  | ENX 32 IMR            | 506     | 130.8                                                                                  | 130.8 | 137.5 | 137.5 | 144.2 | 144.2 |
| RE 35, 90 W        | 161  | HEDL 5540             | 535/537 | 140.1                                                                                  | 140.1 | 146.8 | 146.8 | 153.5 | 153.5 |
| RE 35, 90 W        | 161  | DCT 22                | 542     | 137.5                                                                                  | 137.5 | 144.2 | 144.2 | 150.9 | 150.9 |
| RE 35, 90 W        | 161  | AB 28                 | 587     | 155.5                                                                                  | 155.5 | 162.2 | 162.2 | 168.9 | 168.9 |
| RE 35, 90 W        | 161  | HEDS 5540/AB 28       | 535/587 | 172.7                                                                                  | 172.7 | 179.4 | 179.4 | 186.1 | 186.1 |
| EC-max 30, 40 W    | 284  |                       |         | 90.4                                                                                   | 90.4  | 97.1  | 97.1  | 103.8 | 103.8 |
| EC-max 30, 40 W    | 284  | 16 EASY/XT/Abs.       | 509-511 | 101.5                                                                                  | 101.5 | 108.2 | 108.2 | 114.9 | 114.9 |
| EC-max 30, 40 W    | 284  | 16 EASY Abs. XT       | 512     | 102.0                                                                                  | 102.0 | 108.7 | 108.7 | 115.4 | 115.4 |
| EC-max 30, 40 W    | 284  | HEDL 5540             | 539     | 111.0                                                                                  | 111.0 | 117.7 | 117.7 | 124.4 | 124.4 |
| EC-max 30, 40 W    | 284  | HEDL 5540/AB 20       | 539/584 | 146.6                                                                                  | 146.6 | 153.3 | 153.3 | 160.0 | 160.0 |
| EC-max 30, 60 W    | 285  |                       |         | 112.4                                                                                  | 112.4 | 119.1 | 119.1 | 125.8 | 125.8 |
| EC-max 30, 60 W    | 285  | 16 EASY/XT/Abs.       | 509-511 | 123.5                                                                                  | 123.5 | 130.2 | 130.2 | 136.9 | 136.9 |
| EC-max 30, 60 W    | 285  | 16 EASY Abs. XT       | 512     | 124.0                                                                                  | 124.0 | 130.7 | 130.7 | 137.4 | 137.4 |
| EC-max 30, 60 W    | 285  | HEDL 5540             | 539     | 133.0                                                                                  | 133.0 | 139.7 | 139.7 | 146.4 | 146.4 |
| EC-max 30, 60 W    | 285  | AB 20                 | 584     | 148.0                                                                                  | 148.0 | 154.7 | 154.7 | 161.4 | 161.4 |
| EC-max 30, 60 W    | 285  | HEDL 5540/AB 20       | 539/584 | 168.6                                                                                  | 168.6 | 175.3 | 175.3 | 182.0 | 182.0 |
| EC-4pole 30, 100 W | 293  |                       |         | 95.4                                                                                   | 94.5  | 102.1 | 102.1 | 108.8 | 108.8 |
| EC-4pole 30, 100 W | 293  | 22 EMT                | 518     | 123.3                                                                                  | 123.3 | 130.0 | 130.0 | 136.7 | 136.7 |
| EC-4pole 30, 100 W | 293  | 16 EASY/XT/Abs.       | 509-511 | 109.3                                                                                  | 109.3 | 116.0 | 116.0 | 122.7 | 122.7 |
| EC-4pole 30, 100 W | 293  | 16 EASY Abs. XT       | 512     | 109.8                                                                                  | 109.8 | 116.5 | 116.5 | 123.2 | 123.7 |
| EC-4pole 30, 100 W | 293  | 16 RIO                | 519     | 107.8                                                                                  | 107.8 | 114.5 | 114.5 | 121.2 | 121.2 |
| EC-4pole 30, 100 W | 293  | AB 20                 | 584     | 131.6                                                                                  | 131.6 | 138.3 | 138.3 | 145.0 | 145.0 |
| EC-4pole 30, 100 W | 293  | 22 EMT/AB20           | 518/584 | 162.8                                                                                  | 162.8 | 169.5 | 169.5 | 176.2 | 176.2 |
| EC-4pole 30, 100 W | 293  | 16 EASY/XT/Abs./AB 20 | 509/584 | 145.7                                                                                  | 145.7 | 152.4 | 152.4 | 159.1 | 159.1 |
| EC-4pole 30, 100 W | 293  | 16 EASY Abs. XT/AB 20 | 512/584 | 146.2                                                                                  | 146.2 | 152.9 | 152.9 | 159.6 | 159.6 |
| EC-4pole 30, 100 W | 293  | 16 RIO/AB 20          | 519/584 | 144.2                                                                                  | 144.2 | 150.9 | 150.9 | 157.6 | 157.6 |
| EC-4pole 30, 200 W | 295  |                       |         | 112.4                                                                                  | 112.4 | 119.1 | 119.1 | 125.8 | 125.8 |
| EC-4pole 30, 200 W | 295  | 22 EMT                | 518     | 140.3                                                                                  | 140.3 | 147.0 | 147.0 | 153.7 | 153.7 |
| EC-4pole 30, 200 W | 295  | 16 EASY/XT/Abs.       | 509-511 | 126.3                                                                                  | 126.3 | 133.0 | 133.0 | 139.7 | 139.7 |
| EC-4pole 30, 200 W | 295  | 16 EASY Abs. XT       | 512     | 126.8                                                                                  | 126.8 | 133.5 | 133.5 | 140.2 | 140.2 |

# Planetary Gearhead GP 32 HP Ø32 mm, 4.0–8.0 Nm

High Power



## Technical data

|                                        |                   |
|----------------------------------------|-------------------|
| Planetary Gearhead                     | straight teeth    |
| Output shaft                           | stainless steel   |
| Bearing at output                      | ball bearing      |
| Radial play, 10 mm from flange         | max. 0.14 mm      |
| Axial play                             | max. 0.4 mm       |
| Max. axial load (dynamic)              | 120 N             |
| Max. force for press fits              | 120 N             |
| Direction of rotation, drive to output | =                 |
| Max. continuous input speed            | 8000 rpm          |
| Recommended temperature range          | -40...+100°C      |
| Number of stages                       | 2 3 4             |
| Max. radial load, 10 mm from flange    | 200 N 250 N 300 N |

gear

M 1:2

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

## Part numbers

| Gearhead data                             | 320247               | 326663 | 326664    | 326668    | 326672      | 324947     | 324952    |
|-------------------------------------------|----------------------|--------|-----------|-----------|-------------|------------|-----------|
| 1 Reduction                               | 14:1                 | 33:1   | 51:1      | 111:1     | 190:1       | 456:1      | 706:1     |
| 2 Absolute reduction                      | 678/49               | 529/16 | 17578/343 | 13824/125 | 456976/2401 | 89401/196  | 15817/224 |
| 3 Max. motor shaft diameter               | mm 6                 | 3      | 6         | 4         | 6           | 3          | 3         |
| Part numbers                              | 326659               |        | 326665    | 326669    | 324942      | 324948     | 324953    |
| 1 Reduction                               | 18:1                 |        | 66:1      | 123:1     | 246:1       | 492:1      | 762:1     |
| 2 Absolute reduction                      | 624/35               |        | 16224/245 | 6877/66   | 421824/1715 | 86112/175  | 19044/25  |
| 3 Max. motor shaft diameter               | mm 6                 |        | 6         | 3         | 6           | 6          | 4         |
| Part numbers                              | 326660               |        | 326666    | 326670    | 324944      | 324949     | 324954    |
| 1 Reduction                               | 21:1                 |        | 79:1      | 132:1     | 295:1       | 531:1      | 913:1     |
| 2 Absolute reduction                      | 299/14               |        | 3887/49   | 3312/25   | 101062/343  | 331776/625 | 36501/40  |
| 3 Max. motor shaft diameter               | mm 6                 |        | 6         | 4         | 6           | 4          | 3         |
| Part numbers                              | 326661               |        | 326667    | 326671    | 324945      | 324950     |           |
| 1 Reduction                               | 23:1                 |        | 86:1      | 159:1     | 318:1       | 589:1      |           |
| 2 Absolute reduction                      | 578/25               |        | 14976/175 | 1587/10   | 389376/1225 | 20631/35   |           |
| 3 Max. motor shaft diameter               | mm 4                 |        | 6         | 3         | 6           | 6          |           |
| Part numbers                              | 326662               |        | 320297    |           | 324946      | 324951     |           |
| 1 Reduction                               | 28:1                 |        | 103:1     |           | 411:1       | 636:1      |           |
| 2 Absolute reduction                      | 138/5                |        | 3588/35   |           | 359424/675  | 79488/125  |           |
| 3 Max. motor shaft diameter               | mm 4                 |        | 6         |           | 6           | 4          |           |
| 4 Number of stages                        | 2                    | 2      | 3         | 3         | 4           | 4          | 4         |
| 5 Max. continuous torque                  | Nm 4                 | 4      | 8         | 8         | 8           | 8          | 8         |
| 6 Max. intermittent torque at gear output | Nm 6                 | 6      | 12        | 12        | 12          | 12         | 12        |
| 7 Max. efficiency                         | % 75                 | 75     | 70        | 70        | 60          | 60         | 60        |
| 8 Weight                                  | g 178                | 178    | 213       | 213       | 249         | 249        | 249       |
| 9 Average backlash no load                | ° 0.8                | 0.8    | 1.0       | 1.0       | 1.0         | 1.0        | 1.0       |
| 10 Mass inertia                           | gcm <sup>2</sup> 1.6 | 0.5    | 1.5       | 0.7       | 1.5         | 1.5        | 0.7       |
| 11 Gearhead length L1                     | mm 48.3              | 48.3   | 55.0      | 55.0      | 61.7        | 61.7       | 61.7      |



## Modular system

| + Motor            | Page | + Sensor/Brake        | Page    | Overall length [mm] = Motor length + gearhead length + (sensor/brake) + assembly parts |       |       |       |       |       |       |
|--------------------|------|-----------------------|---------|----------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|
| EC-4pole 30, 200 W | 295  | 16 RIO                | 519     | 124.8                                                                                  | 124.8 | 131.5 | 131.5 | 138.2 | 138.2 | 138.2 |
| EC-4pole 30, 200 W | 295  | AB 20                 | 584     | 148.6                                                                                  | 148.6 | 155.3 | 155.3 | 162.0 | 162.0 | 162.0 |
| EC-4pole 30, 200 W | 295  | 22 EMT/AB 20          | 518/584 | 179.8                                                                                  | 179.8 | 186.5 | 186.5 | 193.2 | 193.2 | 193.2 |
| EC-4pole 30, 200 W | 295  | 16 EASY/XT/Abs./AB 20 | 509/584 | 162.7                                                                                  | 162.7 | 169.4 | 169.4 | 176.1 | 176.1 | 176.1 |
| EC-4pole 30, 200 W | 295  | 16 EASY Abs. XT/AB 20 | 512/584 | 163.2                                                                                  | 163.2 | 169.9 | 169.9 | 176.6 | 176.6 | 176.6 |
| EC-4pole 30, 200 W | 295  | 16 RIO/AB 20          | 519/584 | 161.2                                                                                  | 161.2 | 167.9 | 167.9 | 174.6 | 174.6 | 174.6 |