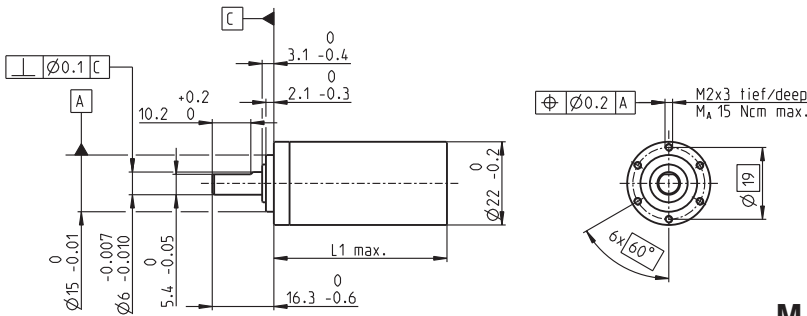


Planetary Gearhead GP 22 HP $\varnothing 22$ mm, 2.0–3.4 Nm

High Power



M 1:2

Technical Data

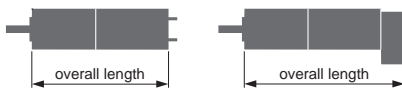
| | |
|--|---------------------------|
| Planetary Gearhead | straight teeth |
| Output shaft | stainless steel, hardened |
| Bearing at output | ball bearing |
| Radial play, 10 mm from flange | max. 0.2 mm |
| Axial play | max. 0.1 mm |
| Max. axial load (dynamic) | 100 N |
| Max. force for press fits | 100 N |
| Direction of rotation, drive to output | = |
| Max. continuous input speed | 12000 rpm |
| Recommended temperature range | -30...+100°C |
| Extended range as option | -40...+100°C |
| Number of stages | 1 2 3 4 |
| Max. radial load, 10 mm from flange | 55 N 85 N 100 N 110 N |

maxon gear

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

Part Numbers

| Gearhead Data (provisional) | 370683 | 370687 | 370690 | 370776 | 370780 | 370783 | 370792 | 370797 | 370802 | 370807 |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|
| 1 Reduction | 3.8:1 | 14:1 | 20:1 | 53:1 | 76:1 | 104:1 | 198:1 | 316:1 | 410:1 | 590:1 |
| 2 Absolute reduction | 15/4 | 225/16 | 81/4 | 3375/64 | 1215/16 | 87723/845 | 50625/256 | 2777895/8788 | 6561/16 | 59049/100 |
| 3 Max. motor shaft diameter mm | 4 | 4 | 4 | 4 | 4 | 3.2 | 4 | 3.2 | 4 | 4 |
| Part Numbers | 370685 | 370688 | 370691 | 370778 | 370781 | 370784 | 370794 | 370799 | 370803 | 370808 |
| 1 Reduction | 4.4:1 | 16:1 | 24:1 | 62:1 | 84:1 | 109:1 | 231:1 | 333:1 | 455:1 | 690:1 |
| 2 Absolute reduction | 57/13 | 855/52 | 1539/65 | 12825/208 | 185193/2197 | 2187/20 | 192375/632 | 69255/208 | 5000211/10985 | 1121931/1625 |
| 3 Max. motor shaft diameter mm | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 4 | 3.2 | 3.2 | 3.2 | 3.2 |
| Part Numbers | 370686 | 370689 | 370692 | 370779 | 370782 | 370785 | 370795 | 370800 | 370805 | 370809 |
| 1 Reduction | 5.4:1 | 19:1 | 29:1 | 72:1 | 89:1 | 128:1 | 270:1 | 370:1 | 479:1 | 850:1 |
| 2 Absolute reduction | 27/5 | 3249/169 | 729/25 | 48735/676 | 4617/52 | 41553/325 | 731025/2704 | 10556001/28561 | 124659/260 | 531441/625 |
| 3 Max. motor shaft diameter mm | 2.5 | 3.2 | 2.5 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 2.5 |
| Part Numbers | | | | | | 370786 | 370796 | 370801 | 370806 | |
| 1 Reduction | | | | | | 157:1 | 285:1 | 389:1 | 561:1 | |
| 2 Absolute reduction | | | | | | 19683/125 | 18225/64 | 263169/676 | 2368521/4225 | |
| 3 Max. motor shaft diameter mm | | | | | | 2.5 | 4 | 3.2 | 3.2 | |
| 4 Number of stages | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 4 | 4 |
| 5 Max. continuous torque Nm | 2 | 2.4 | 2.4 | 3 | 3 | 3 | 3.4 | 3.4 | 3.4 | 3.4 |
| 6 Max. intermittent torque at gear output Nm | 2.5 | 3 | 3 | 3.5 | 3.5 | 3.5 | 3.8 | 3.8 | 3.8 | 3.8 |
| 7 Max. efficiency % | 84 | 70 | 70 | 59 | 59 | 59 | 49 | 49 | 49 | 49 |
| 8 Weight g | 51 | 64 | 64 | 78 | 78 | 78 | 91 | 91 | 91 | 91 |
| 9 Average backlash no load ° | 1.0 | 1.2 | 1.2 | 1.6 | 1.6 | 1.6 | 2.0 | 2.0 | 2.0 | 2.0 |
| 10 Mass inertia gcm ² | 0.6 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| 11 Gearhead length L1 mm | 25.3 | 32.3 | 32.3 | 39.0 | 39.0 | 39.0 | 45.7 | 45.7 | 45.7 | 45.7 |



maxon Modular System

| + Motor | Page | + Sensor/Brake | Page | Overall length [mm] = Motor length + gearhead length + (sensor/brake) + assembly parts | | | | | | | | | |
|--------------------|------|----------------|------|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| EC 22, 40 W | 207 | | | 69.9 | 76.9 | 76.9 | 83.6 | 83.6 | 83.6 | 90.3 | 90.3 | 90.3 | 90.3 |
| EC 22, 40 W | 207 | MR | 354 | 75.9 | 82.9 | 82.9 | 89.6 | 89.6 | 89.6 | 96.3 | 96.3 | 96.3 | 96.3 |
| EC 22, 100 W | 209 | | | 88.1 | 95.1 | 95.1 | 101.8 | 101.8 | 101.8 | 108.5 | 108.5 | 108.5 | 108.5 |
| EC 22, 100 W | 209 | MR | 354 | 94.1 | 101.1 | 101.1 | 107.8 | 107.8 | 107.8 | 114.5 | 114.5 | 114.5 | 114.5 |
| EC-max 22, 12 W | 224 | | | 57.4 | 64.4 | 64.4 | 71.1 | 71.1 | 71.1 | 77.8 | 77.8 | 77.8 | 77.8 |
| EC-max 22, 12 W | 224 | MR | 354 | 67.0 | 74.0 | 74.0 | 80.7 | 80.7 | 80.7 | 87.4 | 87.4 | 87.4 | 87.4 |
| EC-max 22, 12 W | 224 | AB 20 | 406 | 93.0 | 100.0 | 100.0 | 106.7 | 106.7 | 106.7 | 113.4 | 113.4 | 113.4 | 113.4 |
| EC-max 22, 25 W | 225 | | | 73.9 | 80.9 | 80.9 | 87.6 | 87.6 | 87.6 | 94.3 | 94.3 | 94.3 | 94.3 |
| EC-max 22, 25 W | 225 | MR | 354 | 83.5 | 90.5 | 90.5 | 97.2 | 97.2 | 97.2 | 103.9 | 103.9 | 103.9 | 103.9 |
| EC-max 22, 25 W | 225 | AB 20 | 406 | 109.5 | 116.5 | 116.5 | 123.2 | 123.2 | 123.2 | 129.9 | 129.9 | 129.9 | 129.9 |
| EC-4pole 22, 90 W | 233 | | | 74.0 | 81.0 | 81.0 | 87.7 | 87.7 | 87.7 | 94.4 | 94.4 | 94.4 | 94.4 |
| EC-4pole 22, 90 W | 233 | HEDL 5540 | 367 | 95.5 | 102.5 | 102.5 | 109.2 | 109.2 | 109.2 | 115.9 | 115.9 | 115.9 | 115.9 |
| EC-4pole 22, 120 W | 234 | | | 91.4 | 98.4 | 98.4 | 105.1 | 105.1 | 105.1 | 111.8 | 111.8 | 111.8 | 111.8 |
| EC-4pole 22, 120 W | 234 | HEDL 5540 | 367 | 112.9 | 119.9 | 119.9 | 126.6 | 126.6 | 126.6 | 133.3 | 133.3 | 133.3 | 133.3 |