

NEW

Planetary Gearheads

High Torque

0,4 Nm

20 000 min⁻¹

Series 14GPT

Values at 22°C

| | | 1 | 2 | 3 | 4 |
|--|-------------------|----------------------------------|--|---|---|
| Number of gear stages | | 1 | 2 | 3 | 4 |
| Reduction ratio ¹⁾ (rounded) | | 3,3:1 4,9:1 5,8:1 7,1:1 | 11:1 16:1 19:1 23:1 29:1 35:1 41:1 50:1 | 54:1 63:1 78:1 95:1 116:1 136:1 166:1 203:1 248:1 | 313:1 384:1 468:1 573:1 671:1 822:1 1 002:1 1 228:1 1 437:1 |
| Continuous torque, max. | Nm | 0,06 | 0,25 | 0,35 | 0,4 |
| Intermittent torque, max. | Nm | 0,09 | 0,33 | 0,46 | 0,53 |
| Peak torque | Nm | 0,15 | 0,5 | 0,85 | 0,98 |
| Continuous input speed, max. ²⁾ | min ⁻¹ | 14 000 | 18 000 | 20 000 | 20 000 |
| Intermittent input speed, max. ²⁾ | min ⁻¹ | 17 000 | 22 000 | 24 000 | 24 000 |
| Continuous output power, max. | W | 5 | 3,2 | 2,5 | 2 |
| Intermittent output power, max. | W | 7 | 4,5 | 3,5 | 2,5 |
| Efficiency, max. | % | 91 | 82 | 70 | 60 |
| Input inertia with pinion, max. | gmm ² | 5,43 | 5,38 | 5,35 | 1,93 |
| Torsional stiffness, typical | Nm/° | 1 | 1 | 1 | 1 |
| Backlash, at no-load, typical | ° | 1,1 | 1,1 | 1,1 | 1,1 |
| Shaft load, max.: | | | | | |
| – radial (6,5 mm from mounting face) | N | 30 | 45 | 60 | 75 |
| – axial | N | 20 | 20 | 20 | 20 |
| Shaft press fit force, max. | N | 30 | 30 | 30 | 30 |
| Shaft play: | | | | | |
| – radial (6,5 mm from mounting face) | mm | ≤ 0,05 | ≤ 0,05 | ≤ 0,05 | ≤ 0,05 |
| – axial | mm | = 0 | = 0 | = 0 | = 0 |
| Length without motor L2 | mm | 15,2 | 19,7 | 24,1 | 28,6 |
| Mass without motor and flange | g | 13 | 17 | 21 | 25 |
| Operating temperature range | °C | -30 ... +120 | | | |
| Direction of rotation, drive to output | | = | | | |
| Housing material | | stainless steel | | | |
| Geartrain material | | stainless steel | | | |
| Bearings on output shaft | | ball bearings, preloaded | | | |

¹⁾ The reduction ratios are rounded, the exact values are available on request or at www.faulhaber.com.

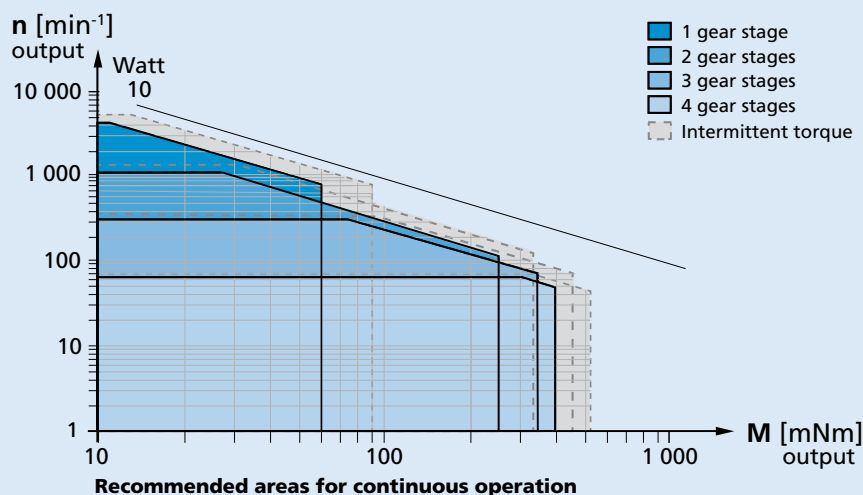
²⁾ Input speed of reduction ratios 11:1 and 54:1 are limited to 14'000 min⁻¹ and 17'000 min⁻¹ respectively in continuous and intermittent operation.

Note: These gearheads are available only with motors mounted.

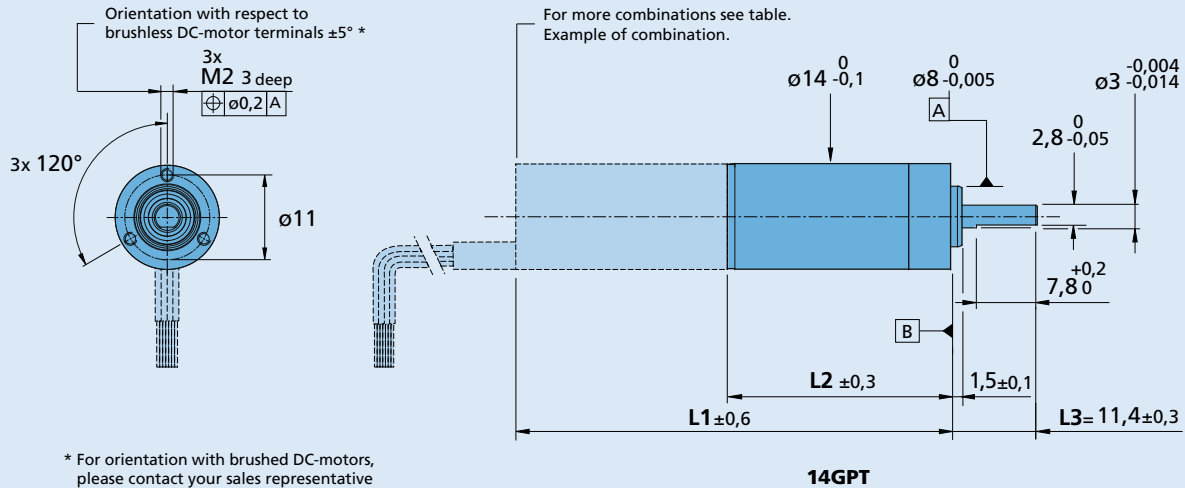
Note:

The display shows the range of possible operation points of the drives at a given ambient temperature of 22°C.

The diagram indicates the recommended output speed in relation to the available torque at the output shaft.



Dimensional drawing



Options

Example product designation: **14GPT 95:1 KS5KL1**

| Option | Type | Description |
|--------|--------------------|---|
| KS1 | Output shaft | Round plain shaft, L3= 11,4 mm |
| KS2 | Output shaft | Longer round plain shaft, L3= 20 mm |
| KS3 | Output shaft | Shaft with double flat shape of 7,8 mm length on opposite sides, L3= 11,4 mm |
| KL1 | Ambient conditions | Low temperature range of -55°C ... +100°C |
| KL2 | Ambient conditions | Vacuum down to 10 ⁻⁵ Pa @ 22°C |
| KL3 | Ambient conditions | Temperature range of -55°C ... +150°C and vacuum down to 10 ⁻⁵ Pa @ 60°C |
| KC1 | Cable orientation | Motor cable/wires or terminals oriented at 15° CCW vs gearhead front threads |
| KC2 | Cable orientation | Motor cable/wires or terminals oriented at 30° CCW vs gearhead front threads |
| KC3 | Cable orientation | Motor cable/wires or terminals oriented at 45° CCW vs gearhead front threads |
| KC4 | Cable orientation | Motor cable/wires or terminals oriented at 60° CCW vs gearhead front threads |
| KC5 | Cable orientation | Motor cable/wires or terminals oriented at 75° CCW vs gearhead front threads |
| KC6 | Cable orientation | Motor cable/wires or terminals oriented at 90° CCW vs gearhead front threads |
| KC7 | Cable orientation | Motor cable/wires or terminals oriented at 105° CCW vs gearhead front threads |

Note: Specified values may differ from the standard values depending on the option. Please consult your sales representative for further information.

Product combination

| Number of gear stages | 1 | 2 | 3 | 4 |
|--------------------------------|-------------|-------------|------------|-------------|
| L2 [mm] = length without motor | 15,2 | 19,7 | 24,1 | 28,6 |
| L1 [mm] = length with motor | 34,1 | 38,6 | 43,0 | 47,5 |
| | 1218X...SXR | 1228X...SXR | 1331X...SR | 1336X...CXR |
| | 44,1 | 48,6 | 53,0 | 57,5 |
| | 48,6 | 53,1 | 57,5 | 62,0 |
| | 53,4 | 57,9 | 62,3 | 66,8 |
| | 1226X...B | 41,8 | 46,3 | 50,7 |
| | | | | 55,2 |