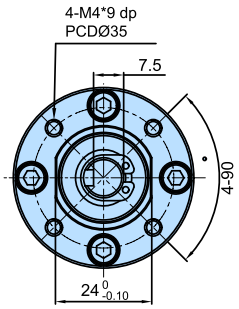
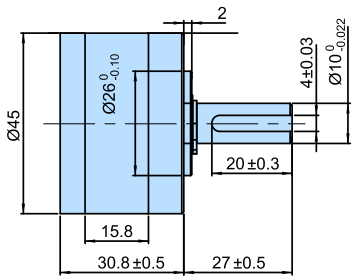
## PG45

Ø45 mm · 14 ratios · 5 housing lengths






Shown: L = 30.8 mm. All dimension drawings are on Sheet 2. Dimensions in mm.

### RATIO SELECTION & PERFORMANCE

| Model | Ratio :1 | Gear stages | Length L mm | Max. cont. torque kgf.cm | Breaking torque kgf.cm | Efficiency % | Reference weight g |
|---|---|---|---|---|---|---|---|
| PG45-3.7K | 3.7 | 1 | 30.8 | 50 | 150 | 90 | 256 |
| PG45-4.3K | 4.3 | 1 | 30.8 | 50 | 150 | 90 | 256 |
| PG45-16K | 16 | 2 | 44.6 | 100 | 300 | 81 | 369 |
| PG45-22K | 22 | 2 | 44.6 | 100 | 300 | 81 | 369 |
| PG45-59K | 59 | 3 | 55.6 | 200 | 600 | 72 | 477 |
| PG45-83K | 83 | 3 | 55.6 | 200 | 600 | 72 | 477 |
| PG45-116K | 116 | 3 | 55.6 | 200 | 600 | 72 | 477 |
| PG45-219K | 219 | 4 | 66.9 | 200 | 600 | 60 | 596 |
| PG45-307K | 307 | 4 | 66.9 | 200 | 600 | 60 | 596 |
| PG45-429K | 429 | 4 | 66.9 | 200 | 600 | 60 | 596 |
| PG45-600K | 600 | 4 | 66.9 | 200 | 600 | 60 | 596 |
| PG45-813K | 813 | 5 | 78.2 | 200 | 600 | 50 | 707 |
| PG45-1137K | 1137 | 5 | 78.2 | 200 | 600 | 50 | 707 |
| PG45-1590K | 1590 | 5 | 78.2 | 200 | 600 | 50 | 707 |

Reference weights are based on one measured gear ratio per stage configuration.

### MECHANICAL, MATERIALS & OPERATION

| | | | |
|---|---|---|---|
| Gearbox diameter | 45 mm | Operating temperature | -30 ~ 65 °C |
| Output shaft diameter | 10 mm | Housing material | Powder Metallurgy (Fe) |
| Pinion hole diameter | φ5 mm | Gear material | Powder Metallurgy (Fe) / Plastics |
| Axial play | ≤ 0.2 mm | Gear design | Helical Gear / Spur Gear |
| Radial play | ≤ 0.1 mm | Output shaft bearing | Ball Bearing |
| Backlash | ≤ 1.5° | Lubricant | Graphene oil |
| Gear module | 0.6 | | |

### CONFIGURATION | COMPATIBLE MOTORS

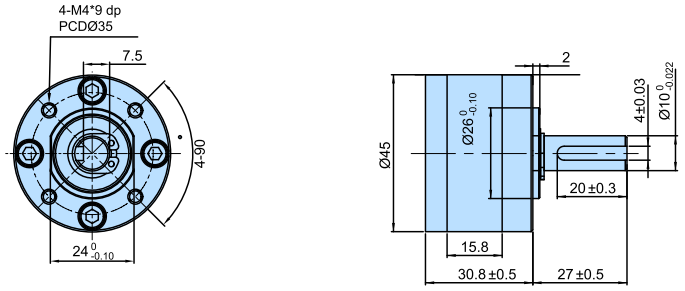
| Motor type | Model | Combination |
|---|---|---|
| Brushed DC motor | DC775 | PG45 + DC775 |
| Brushless DC motor | BL42 | PG45 + BL42 |

Mounting pattern and motor interface must match the selected assembly.

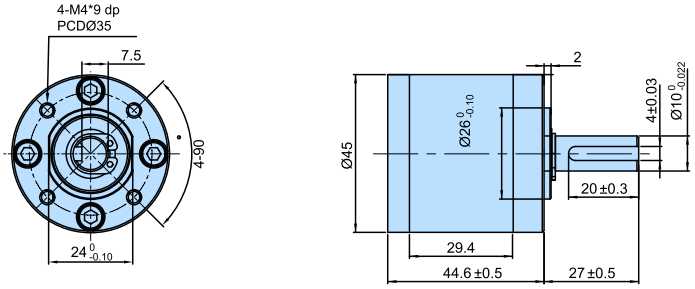
# PG45 | DIMENSIONS & MOUNTING

Dimensions in mm · Do not scale · Housing length includes mounting plate

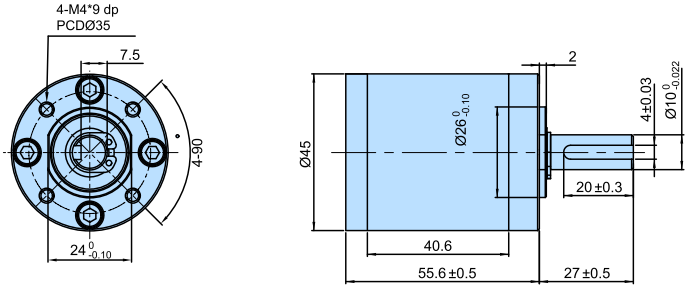
**L = 30.8 mm** Ratio 3.7 / 4.3 :1



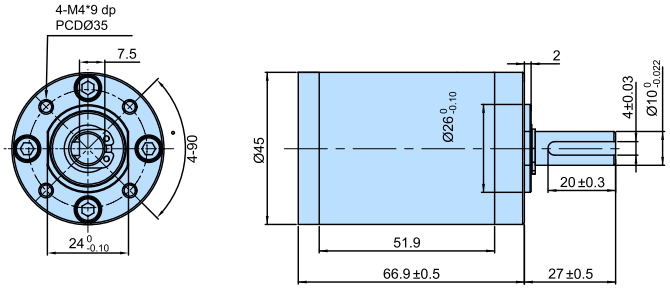

**L = 44.6 mm** Ratio 16 / 22 :1




**L = 55.6 mm** Ratio 59 / 83 / 116 :1




**L = 66.9 mm** Ratio 219 / 307 / 429 / 600 :1




**L = 78.2 mm** Ratio 813 / 1137 / 1590 :1

