

PHG42S Series

Key Features

- High Torque
- Long Life
- High Precision
- ø36mm Gearbox



Stepper Motor Electrical Specifications

| Series Model | Rated Current (A) | Phase Resistance (Ω) | Phase Inductance (mH) | Lead Wire (No.) | Holding Torque (N.cm) | Motor Length L (mm) | Rotor Inertia (g.cm ²) | Motor Weight (g) | Step Angle (°) |
|--------------|-------------------|----------------------|-----------------------|-----------------|-----------------------|---------------------|------------------------------------|------------------|----------------|
| PHG42S40-420 | 2.3 | 0.9 | 1.3 | 4 | 40 | 43 | 54 | 280 | 1.8 |
| PHG42S48-420 | | 1.1 | 1.5 | | 50 | 51 | 68 | 350 | |
| PHG42S60-420 | | 1.4 | 2.5 | | 70 | 63 | 80 | 480 | |
| PHG42S63-420 | | 1.5 | 2.2 | | 80 | 66 | 85 | 500 | |

Planetary Gearbox Technical Data

| Gear Ratio | Length L1 (mm) | Efficiency | Rated Torque (N.m) | Permissible Torque (Max) (N.m) | Noise (dB) | Backlash min. at No-load | Weight (g) |
|------------|----------------|------------|--------------------|--------------------------------|--------------|--------------------------|------------|
| 1 Stage | 3.71 | 90% | 0.3 | 1.0 | @1m ≤60dB | ≤60arcmin | 182 |
| | 5.18 | | | | | | |
| | 6.75 | | | | | | |
| 2 Stage | 14 | 81% | 1.2 | 3.5 | | | 191 |
| | 19 | | | | | | |
| | 27 | | | | | | |
| | 35 | | | | | | |
| 3 Stage | 46 | 73% | 2.5 | 7.5 | 230 | | |
| | 51 | | | | | | |
| | 71 | | | | | | |
| | 100 | | | | | | |
| | 139 | | | | | | |
| | 181 | | | | | | |
| | 236 | | | | | | |
| | 307 | | | | | | |

Dimensions(Unit:mm)

