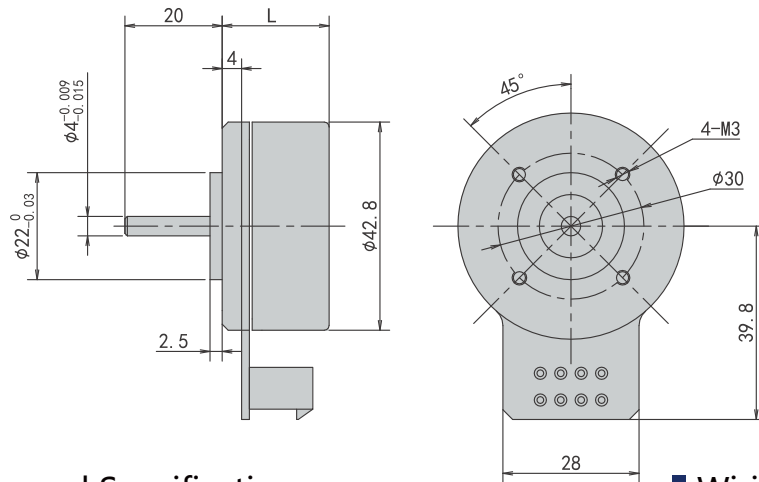


PBLR42EHL Series

Outer Rotor BLDC Motor



Options



General Specifications

| | |
|-----------------------|--------------------------------|
| Winding Type | Star/Delta |
| Hall Effect Angle | Electrical Angle of 120 degree |
| Radial Play | 0.02mm@450g |
| Axial Play | 0.08mm@450g |
| Max radial force | 20N,10mm From the flange |
| Max axial force | 10N |
| Dielectric Strength | 600VAC/1S |
| Insulation Resistance | 100M Ω ,500VDC |
| Ambient Temperature | -20°C~+50°C |
| Insulation Class | Class B |

Wiring Connection

| Type | Color | Function |
|-----------------|--------|----------|
| UL1007 AWG26 | Red | Vcc |
| | Yellow | Hu |
| | Green | Hv |
| | Blue | Hw |
| | Black | GND |
| UL1007 AWG22 | Yellow | Phase U |
| | Green | Phase V |
| | Blue | Phase W |

Electrical Specifications

| Motor Model | Unit | PBLR42EHL243550 | PBLR42EHL245050 | PBLR42EHL247050 |
|----------------------|--------------------|-----------------|-----------------|-----------------|
| Number of Phase | | 3 | | |
| Number of Poles | | 16 | | |
| Rated Voltage | VDC | 24 | | |
| Rated Speed | Rpm | 5000 | | |
| Rated Torque | N.m | 0.06 | 0.1 | 0.13 |
| Rated Power | W | 35 | 50 | 70 |
| Rated Current | A | 2.2 | 3.2 | 4.4 |
| Peak Current | A | 6.6 | 9.6 | 13.2 |
| Peak Torque | N.m | 0.18 | 0.3 | 0.39 |
| Rotor Inertia | kg.cm ² | 0.13 | 0.23 | 0.33 |
| Torque Constant | N.m/A | 0.03 | 0.03 | 0.03 |
| Torque Constant | V/krpm | 2.8 | 2.8 | 2.8 |
| Line-Line Resistance | Ω | 2.0 | 1.5 | 1.0 |
| Line-Line Inductance | mH | 1.5 | 1.0 | 0.5 |
| Length | mm | 21.3 | 26.3 | 31.3 |
| Weight | kg | 0.12 | 0.18 | 0.24 |