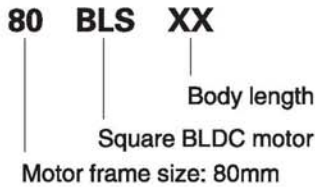


Brushless DC Motor

80BLS SERIES

● INDICATIONS OF THE MODELS



● GENERAL SPECIFICATIONS

| | |
|-----------------------|-----------------------------|
| Winding type | Delta |
| Hall effect angle | 120 degree electrical angle |
| Shaft run out | 0.05mm |
| Radial play | 0.02mm@450g |
| End play | 0.08mm@450g |
| Max. radial force | 115N@20mm from the flange |
| Max. axial force | 45N |
| Insulation class | Class F |
| Dielectric strength | 500VAC for one minute |
| Insulation resistance | 100MΩ Min., 500VDC |

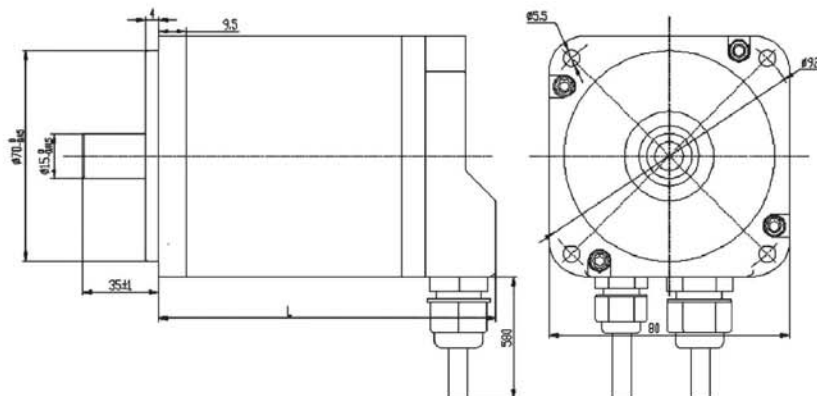
● ELECTRIC CONNECTION

| Lead No. | Lead Color | Lead Gauge | Function | Description |
|----------|------------|-----------------|----------|---|
| 1 | Red | UL1332 AWG22 | Vcc | POWER SUPPLY POSITIVE OF HALL: +5VDC---+24VDC |
| 2 | Blue | | Hall A | |
| 3 | Green | | Hall B | |
| 4 | White | | Hall C | |
| 5 | Black | UL3135 AWG14 | GND | POWER SUPPLY NEGATIVE OF HALL |
| 6 | Yellow | | Phase A | |
| 7 | Red | | Phase B | |
| 8 | Black | | Phase C | |

● ELECTRICAL SPECIFICATIONS

| Model | 80BLS84 | 80BLS105 | 80BLS120 | 80BLS140 |
|-----------------|-----------------------|------------------------|------------------------|------------------------|
| Number of poles | 8 | | | |
| Number of phase | 3 | | | |
| Rated voltage | VDC 48 | | | |
| Rated speed | RPM 3000 | | | |
| Rated torque | N.m 0.9 | N.m 1.7 | N.m 2.2 | N.m 3 |
| Rated power | W 280 | W 530 | W 700 | W 950 |
| Peak torque | N.m 2.5 | N.m 5 | N.m 6.5 | N.m 8.5 |
| Peak current | A 22 | A 45 | A 61 | A 78 |
| Resistance | ohms 0.25 | ohms 0.10 | ohms 0.07 | ohms 0.057 |
| Inductance | mH 1.3 | mH 0.6 | mH 0.4 | mH 0.3 |
| Torque constant | Nm/A 0.118 | Nm/A 0.113 | Nm/A 0.109 | Nm/A 0.111 |
| Back E.M.F | Vrms/KRPM 8.7 | Vrms/KRPM 8.4 | Vrms/KRPM 8.1 | Vrms/KRPM 8.2 |
| Rotor inertia | g.cm ² 544 | g.cm ² 1020 | g.cm ² 1360 | g.cm ² 1900 |
| Body length(L) | mm 84 | mm 105 | mm 120 | mm 140 |
| Weight | Kg 1.6 | Kg 2 | Kg 2.5 | Kg 2.9 |

● DIMENSIONS



*This motor can be designed & manufactured with customized request.