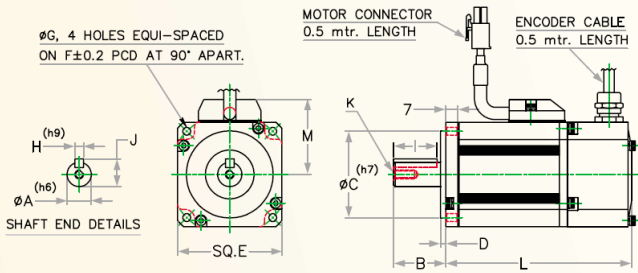


JAYASHREE ELECTRODEVICES – BRUSHLESS AC SERVO MOTORS



Mechanical Specifications

| Type | A | B | C | D | E | F | G | H | I | J | K | L | M |
|-----------|----|----|----|---|----|----|-----|---|----|------|------|-----|----|
| BS48-0.1E | 8 | 24 | 22 | 2 | 42 | 48 | 3.4 | 3 | 14 | 9.3 | M3 x | 74 | 34 |
| BS48-0.2E | | | | | | | | | | 9.2 | 6 | 88 | |
| BS48-0.3E | | | | | | | | | | DEEP | 102 | | |
| BS70-0.4E | 14 | 30 | 50 | 3 | 60 | 70 | 4.5 | 5 | 25 | 16.1 | M5 x | 107 | 43 |
| BS70-0.7E | | | | | | | | | | 16.0 | 10 | 121 | |
| BS70-1.3E | | | | | | | | | | DEEP | 135 | | |

Standard Low Voltage AC Servo Motors Data

| Low Voltage Drive | | BM48 | | | BM70 | | | |
|---------------------------------|-------------------|----------|----------|----------|----------|----------|----------|----------|
| | | 0.1E | 0.2E | 0.3E | 0.4E | 0.7E | 1.3E | 1.3E |
| Terminal Voltage | Volts (rms) | 12.5 | 16.0 | 20.0 | 17.0 | 24.0 | 35.0 | 25.0 |
| Peak Torque | Nm | 0.27 | 0.54 | 0.87 | 0.96 | 1.92 | 3.81 | 3.81 |
| Rated Torque | Nm | 0.09 | 0.18 | 0.29 | 0.32 | 0.64 | 1.27 | 1.27 |
| Cont. stall torque | Nm | 0.1 | 0.2 | 0.3 | 0.4 | 0.7 | 1.3 | 1.3 |
| Rated Speed | RPM | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 |
| Rated Current | Amp (rms) | 1.65 | 2.72 | 2.78 | 3.87 | 6.23 | 7.68 | 9.97 |
| Rated Power | Watt | 30 | 60 | 90 | 100 | 200 | 400 | 400 |
| Torque Constant | Nm/Amp | 0.055 | 0.066 | 0.104 | 0.083 | 0.103 | 0.165 | 0.127 |
| Back EMF | Volts(rms)/K RPM | 3.3 | 4.0 | 6.3 | 5.0 | 7.0 | 10.0 | 7.7 |
| Terminal Resistance | Ohm | 1.50 | 0.75 | 1.00 | 0.45 | 0.33 | 0.72 | 0.25 |
| Terminal Inductance | mH | 1.26 | 0.97 | 1.31 | 0.80 | 0.52 | 1.98 | 0.69 |
| Rotor Inertia | Kg-m ² | 1.24E-06 | 2.25E-06 | 3.23E-06 | 1.37E-05 | 2.25E-05 | 3.08E-05 | 3.08E-05 |
| Motor Weight | gram | 405 | 533 | 646 | 921 | 1188 | 1457 | 1457 |
| Number of Poles | | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Electrical Time Constant | mSec | 0.84 | 1.29 | 1.31 | 1.78 | 1.57 | 2.75 | 2.72 |
| Mechanical Time Constant | mSec | 0.62 | 0.39 | 0.30 | 0.90 | 0.70 | 0.81 | 0.48 |

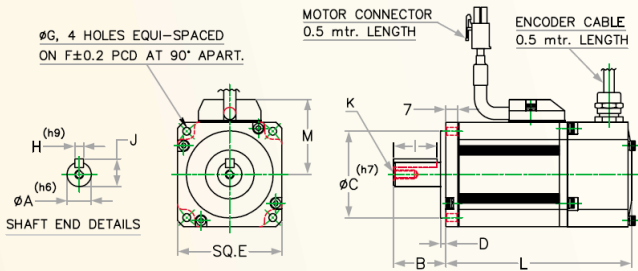
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JAYASHREE ELECTRODEVICES – BRUSHLESS AC SERVO MOTORS



Mechanical Specifications

| Type | A | B | C | D | E | F | G | H | I | J | K | L | M |
|-------------|----|----|-----|---|-----|-----|-----|---|----|------|------------|-------|----|
| BS48-0.1E | 8 | 24 | 22 | 2 | 42 | 48 | 3.4 | 3 | 14 | 9.3 | M3x6 DEEP | 74 | 34 |
| BS48-0.2E | | | | | | | | | | 88 | | | |
| BS48-0.3E | | | | | | | | | | 102 | | | |
| BS70-0.4E | 14 | 30 | 50 | 3 | 60 | 70 | 4.5 | 5 | 25 | 16.1 | M5x10 DEEP | 107 | 43 |
| BS70-0.7E | | | | | | | | | | 121 | | | |
| BS70-1.3E | | | | | | | | | | 135 | | | |
| BS90-2.5E | 19 | 38 | 70 | 3 | 80 | 90 | 6 | 6 | 25 | 21.6 | M5x10 DEEP | 154.5 | 53 |
| | | | | | | | | | | 21.5 | | | |
| BS130-5.0E | 22 | 55 | 110 | 3 | 120 | 130 | 9 | 8 | 45 | 25.1 | - | 172.5 | - |
| BS130-10.0E | 22 | 55 | 110 | 3 | 120 | 130 | 9 | 8 | 45 | 25.1 | - | 212.5 | - |

Standard 230V AC Servo Motors Data

| 230V AC Drive | | BM70 | BM90 | BM130 | |
|---------------------------------|-------------------|----------|----------|----------|----------|
| | | 1.3E | 2.5E | 5.0E | 10.0E |
| Terminal Voltage | Volts(rms) | 110.0 | 125.0 | 160.0 | 160.0 |
| Peak Torque | Nm | 3.81 | 7.20 | 14.10 | 28.65 |
| Rated Torque | Nm | 1.27 | 2.40 | 4.70 | 9.55 |
| Cont. stall torque | Nm | 1.3 | 2.5 | 5.0 | 10.0 |
| Rated Speed | RPM | 3000 | 3000 | 3000 | 3000 |
| Rated Current | Amp(rms) | 2.56 | 3.92 | 5.68 | 12.83 |
| Rated Power | Watt | 400 | 750 | 1500 | 3000 |
| Torque Constant | Nm/Amp | 0.496 | 0.612 | 0.827 | 0.744 |
| Back EMF | Volts(rms)/KRPM | 30.0 | 37.0 | 50.0 | 45.0 |
| Terminal Resistance | Ohm | 3.60 | 2.13 | 1.03 | 0.78 |
| Terminal Inductance | mH | 9.50 | 9.44 | 10.00 | 8.01 |
| Rotor Inertia | Kg-m ² | 3.08E-05 | 1.21E-04 | 2.46E-04 | 3.05E-04 |
| Motor Weight | gram | 1495 | 2850 | 5600 | 9500 |
| Number of Poles | | 8 | 8 | 8 | 8 |
| Electrical Time Constant | mSec | 2.64 | 4.43 | 9.71 | 10.27 |
| Mechanical Time Constant | mSec | 0.45 | 0.69 | 0.37 | 0.43 |

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