

Main

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|---------------------------|-----------------------|
| Range Compatibility | Lexium SD3 |
| Product or Component Type | Motion control motor |
| Device short name | BRS3 |
| Maximum mechanical speed | 3000 rpm |
| Motor Type | 3-phase stepper motor |
| Number of motor poles | 6 |
| Supply voltage limits | 230 V AC 325 V DC |
| Mounting Support | Flange |
| Motor flange size | 3.35 in (85 mm) |
| Length | 5.55 in (141 mm) |
| Centring collar diameter | 2.36 in (60 mm) |

Complementary

| | |
|---------------------------------------|---|
| Centring collar depth | 0.08 in (2 mm) |
| Number of mounting holes | 4 |
| Mounting holes diameter | 0.26 in (6.5 mm) |
| Circle diameter of the mounting holes | 3.90 in (98.99 mm) |
| Electrical Connection | Connector |
| Holding brake | Without |
| Shaft end | Woodruff key |
| Second shaft | Without second shaft end |
| Shaft diameter | 0.47 in (12 mm) |
| Shaft length | 1.18 in (30 mm) |
| Nominal torque | 35.40 lbf.in (4 N.m) |
| Holding torque | 42.48 lbf.in (4.8 N.m) |
| Rotor inertia | 2.2 kg.cm ² |
| Resolution | 1.8 °, 0.9 °, 0.72 °, 0.36 °, 0.18 °, 0.09 °, 0.072 °, 0.036 ° step angle 200, 400, 500, 1000, 2000, 4000, 5000, 10000 steps number of full steps per revolution |
| Accuracy error | +/- 6 arc min |
| Maximum starting frequency | 5.3 kHz |
| Line Rated Current | 5.8 A |
| Resistance | 0.55 Ohm winding) |
| Time constant | 9 ms |
| Maximum radial force Fr | 110 N first shaft end) 50 N second shaft end) |
| Maximum axial force Fa | 175 N tensile force) 30 N force pressure) |
| Service life in hours | 20000 h bearing) |
| Angular acceleration | 200000 rad/s ² |
| Net Weight | 7.05 lb(US) (3.2 kg) |

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Environment

| | |
|---------------------------------------|---|
| Standards | IEC 60072-1 IEC 50347 |
| Type of cooling | Natural convection |
| Ambient Air Temperature for Operation | -13...104 °F (-25...40 °C) |
| Ambient Air Temperature for Storage | -13...158 °F (-25...70 °C) |
| Operating altitude | <= 3280.84 ft (1000 m) without power derating |
| Relative humidity | 15...85 % without condensation |
| Vibration resistance | 20 m/s ² maximum A IEC 60034-14 |
| IP degree of protection | Total except shaft bushing IP56 IEC 60034-5 Shaft bushing without shaft seal ring IP41 IEC 60034-5 |
| Temperature class | F winding IEC 60034-1 |

Ordering and shipping details

| | |
|-------------------|----------------------|
| Category | 18284-STEPPER MOTORS |
| Discount Schedule | PC55 |
| GTIN | 3389119223874 |
| Returnability | No |
| Country of origin | DE |

Packing Units

| | |
|------------------------------|---------------------------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 8.66 in (22 cm) |
| Package 1 Width | 7.48 in (19 cm) |
| Package 1 Length | 15.75 in (40 cm) |
| Package 1 Weight | 9.22 lb(US) (4.18 kg) |
| Unit Type of Package 2 | S06 |
| Number of Units in Package 2 | 12 |
| Package 2 Height | 28.94 in (73.5 cm) |
| Package 2 Width | 23.62 in (60 cm) |
| Package 2 Length | 31.50 in (80 cm) |
| Package 2 Weight | 123.26 lb(US) (55.912 kg) |
| Unit Type of Package 3 | P06 |
| Number of Units in Package 3 | 12 |
| Package 3 Height | 30.31 in (77 cm) |
| Package 3 Width | 31.50 in (80 cm) |
| Package 3 Length | 23.62 in (60 cm) |
| Package 3 Weight | 129.32 lb(US) (58.66 kg) |

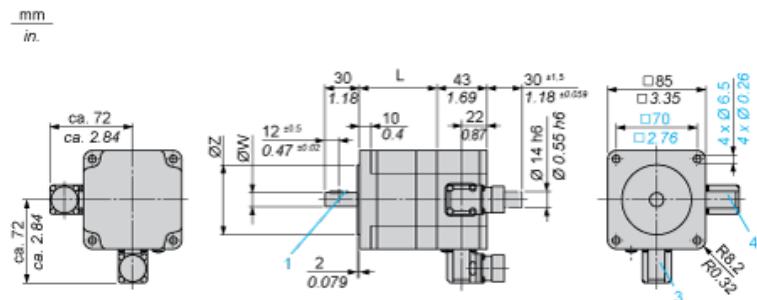
Offer Sustainability

| | |
|----------------------------|---|
| Sustainable offer status | Green Premium product |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov |
| REACH Regulation | REACH Declaration |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) |
| Mercury free | Yes |
| China RoHS Regulation | China RoHS Declaration |
| RoHS exemption information | Yes |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | No need of specific recycling operations |

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|-----------------------------|--|
| WEEE | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins. |
| PVC free | Yes |
| Contractual warranty | |
| Warranty | 18 months |

Dimensions

3-Phase Stepper Motor in Connector Version



- 3 : Motor connection 6 poles
- 4 : Motor connection (optional) 12 poles

Dimensions in mm

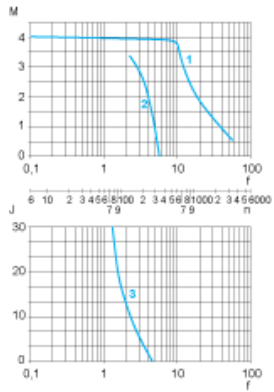
| L | Shaft diameter ØW | Centring collar ØZ | Woodruff key DIN 6888 (1) |
|--------------------|-------------------|--------------------|---------------------------|
| 97.5 (+0.6) (-0.8) | 12 h6 | 60 h8 | 4 x 6.5 |

Dimensions in in.

| L | Shaft diameter ØW | Centring collar ØZ | Woodruff key DIN 6888 (1) |
|------------------------|-------------------|--------------------|---------------------------|
| 3.84 (+0.023) (-0.031) | 0.47 h6 | 2.36 h8 | 0.16 x 0.25 |

Torque Characteristics

Measurement at 1000 Steps/Revolution, Nominal Voltage DC Bus U_N and Phase Current I_N



- M : Torque in Nm
- n : Speed in rpm
- f : Frequency in kHz
- J : Rotor inertia in kg.cm²
- 1 : Pull-out torque
- 2 : Pull-in torque
- 3 : Maximum load inertia