

BSH1403T22F1P

AC servo motor BSH - 27.8 N.m - 3000 rpm -
untapped shaft - with brake - IP65



Main

| | |
|---------------------------|--|
| Product or component type | Servo motor |
| Device short name | BSH |
| Maximum mechanical speed | 4800 rpm |
| Continuous stall torque | 27.8 N.m for LXM32.D72N4 24 A at 400 V three phase 27.8 N.m for LXM32.D72N4 24 A at 480 V three phase |
| Peak stall torque | 90.2 N.m for LXM32.D72N4 24 A at 400 V three phase 90.2 N.m for LXM32.D72N4 24 A at 480 V three phase |
| Nominal output power | 4100 W for LXM32.D72N4 24 A at 400 V three phase 4100 W for LXM32.D72N4 24 A at 480 V three phase |
| Nominal torque | 12.9 N.m for LXM32.D72N4 24 A at 400 V three phase 12.9 N.m for LXM32.D72N4 24 A at 480 V three phase |
| Nominal speed | 3000 rpm for LXM32.D72N4 24 A at 400 V three phase 3000 rpm for LXM32.D72N4 24 A at 480 V three phase |
| Product compatibility | LXM32.D72N4 at 400 V three phase LXM32.D72N4 at 480 V three phase |
| Shaft end | Untapped |
| IP degree of protection | IP65 (standard) IP67 (with IP67 kit) |
| Speed feedback resolution | 131072 points/turn x 4096 turns |
| Holding brake | With |
| Mounting support | International standard |
| Electrical connection | Straight connectors |

Complementary

| | |
|---------------------------|----------------------------|
| Range compatibility | Lexium 32 |
| Supply voltage max | 480 V |
| Network number of phases | Three phase |
| Continuous stall current | 22.3 A |
| Maximum continuous power | 3.3 W |
| Maximum current Irms | 72 A for LXM32.D72N4 |
| Maximum permanent current | 81.3 A |
| Switching frequency | 8 kHz |
| Second shaft | Without second shaft end |
| Shaft diameter | 24 mm |
| Shaft length | 50 mm |
| Feedback type | Multiturn SinCos Hiperface |
| Holding torque | 36 N.m (holding brake) |
| Motor flange size | 140 mm |

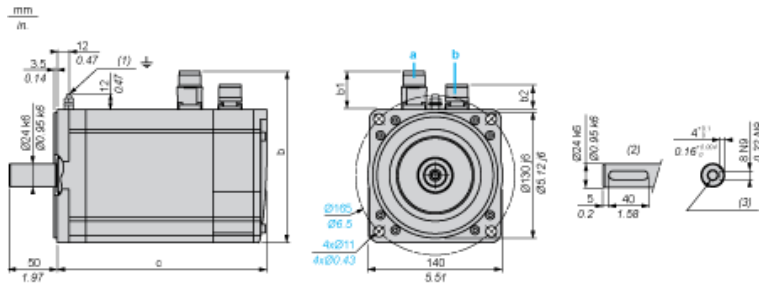
| | |
|---------------------------------------|--|
| Number of motor stacks | 3 |
| Torque constant | 1.58 N.m/A at 120 °C |
| Back emf constant | 105 V/krpm at 120 °C |
| Number of motor poles | 10 |
| Rotor inertia | 14.48 kg.cm ² |
| Stator resistance | 0.4 Ohm at 20 °C |
| Stator inductance | 5.1 mH at 20 °C |
| Stator electrical time constant | 12.75 ms at 20 °C |
| Maximum radial force Fr | 1780 N at 3000 rpm 2030 N at 2000 rpm 2560 N at 1000 rpm |
| Maximum axial force Fa | 0.2 x Fr |
| Brake pull-in power | 26 W |
| Type of cooling | Natural convection |
| Length | 365.5 mm |
| Centring collar diameter | 130 mm |
| Centring collar depth | 3.5 mm |
| Number of mounting holes | 4 |
| Mounting holes diameter | 11 mm |
| Circle diameter of the mounting holes | 165 mm |
| Product weight | 23 kg |

Offer Sustainability

| | |
|----------------------------------|---|
| Sustainable offer status | Green Premium product |
| RoHS (date code: YYWW) | Compliant - since 1018 - Schneider Electric declaration of conformity |
| REACH | Reference not containing SVHC above the threshold |
| Product environmental profile | Available Download Product Environmental |
| Product end of life instructions | Need no specific recycling operations |

Servo Motors Dimensions

Example with Straight Connectors



- a: Power supply for servo motor brake
- b: Power supply for servo motor encoder
- (1) M4 screw
- (2) Shaft end, keyed slot (optional)
- (3) For screws M8 x 19 mm/M8 x 0.75 in.

Dimensions in mm

| Straight connectors | | | Rotatable angled connectors | | | c (without brake) | c (with brake) |
|---------------------|----|------|-----------------------------|----|------|-------------------|----------------|
| b | b1 | b2 | b | b1 | b2 | | |
| 192.5 | 54 | 25.5 | 198.5 | 60 | 39.5 | 328 | 366 |

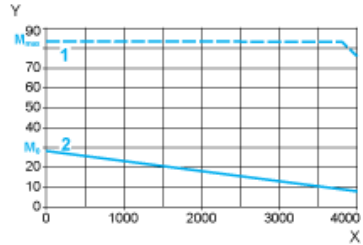
Dimensions in in.

| Straight connectors | | | Rotatable angled connectors | | | c (without brake) | c (with brake) |
|---------------------|------|------|-----------------------------|------|------|-------------------|----------------|
| b | b1 | b2 | b | b1 | b2 | | |
| 7.57 | 2.12 | 1.00 | 7.81 | 2.36 | 1.55 | 12.91 | 14.40 |

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D72N4 servo drive

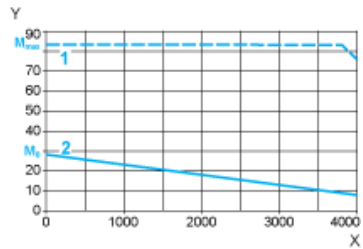


- X Speed in rpm
Y Torque in Nm
1 Peak torque
2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D72N4 servo drive



- X Speed in rpm
Y Torque in Nm
1 Peak torque
2 Continuous torque