

# BMH1002T06F2A

servo motor BMH - 6 Nm - 6000 rpm -  
untapped shaft - with brake - IP54



## Main

|                           |                                                                                                            |
|---------------------------|------------------------------------------------------------------------------------------------------------|
| Product or component type | Servo motor                                                                                                |
| Device short name         | BMH                                                                                                        |
| Maximum mechanical speed  | 6000 rpm                                                                                                   |
| Continuous stall torque   | 6 N.m for LXM32.D30M2 10 A at 115 V single phase<br>6 N.m for LXM32.D30M2 10 A at 230 V single phase       |
| Peak stall torque         | 10.3 N.m for LXM32.D30M2 10 A at 115 V single phase<br>18.4 N.m for LXM32.D30M2 10 A at 230 V single phase |
| Nominal output power      | 750 W for LXM32.D30M2 10 A at 115 V single phase<br>1450 W for LXM32.D30M2 10 A at 230 V single phase      |
| Nominal torque            | 3.5 N.m for LXM32.D30M2 10 A at 115 V single phase<br>4.6 N.m for LXM32.D30M2 10 A at 230 V single phase   |
| Nominal speed             | 2000 rpm for LXM32.D30M2 10 A at 115 V single phase<br>3000 rpm for LXM32.D30M2 10 A at 230 V single phase |
| Product compatibility     | LXM32.D30M2 at 115 V single phase<br>LXM32.D30M2 at 230 V single phase                                     |
| Shaft end                 | Untapped                                                                                                   |
| IP degree of protection   | IP54 (standard)                                                                                            |
| Speed feedback resolution | 32768 points/turn                                                                                          |
| Holding brake             | With                                                                                                       |
| Mounting support          | International standard flange                                                                              |
| Electrical connection     | Rotatable right-angled connectors                                                                          |

## Complementary

|                           |                                                                |
|---------------------------|----------------------------------------------------------------|
| Range compatibility       | Lexium 32                                                      |
| [Us] rated supply voltage | 240 V                                                          |
| Network number of phases  | Three phase                                                    |
| Continuous stall current  | 8.65 A                                                         |
| Continuous power          | 2.39 W                                                         |
| Maximum current Irms      | 15 A for LXM32.D30M2 at 115 V<br>30 A for LXM32.D30M2 at 230 V |
| Maximum permanent current | 30.24 A                                                        |
| Second shaft              | Without second shaft end                                       |
| Shaft diameter            | 19 mm                                                          |
| Shaft length              | 40 mm                                                          |
| Feedback type             | Single turn SinCos Hiperface                                   |
| Holding torque            | 5.5 N.m (holding brake)                                        |
| Motor flange size         | 100 mm                                                         |
| Number of motor stacks    | 2                                                              |
| Torque constant           | 0.72 N.m/A at 120 °C                                           |

|                                       |                                                                                                       |
|---------------------------------------|-------------------------------------------------------------------------------------------------------|
| Back emf constant                     | 46.2 V/krpm at 120 °C                                                                                 |
| Number of motor poles                 | 10                                                                                                    |
| Rotor inertia                         | 6.77 kg.cm <sup>2</sup>                                                                               |
| Stator resistance                     | 0.54 Ohm at 20 °C                                                                                     |
| Stator inductance                     | 2.7 mH at 20 °C                                                                                       |
| Stator electrical time constant       | 5 ms at 20 °C                                                                                         |
| Maximum radial force Fr               | 990 N at 1000 rpm<br>790 N at 2000 rpm<br>690 N at 3000 rpm<br>620 N at 4000 rpm<br>580 N at 5000 rpm |
| Maximum axial force Fa                | 0.2 x Fr                                                                                              |
| Brake pull-in power                   | 12 W                                                                                                  |
| Type of cooling                       | Natural convection                                                                                    |
| Length                                | 202.3 mm                                                                                              |
| Centring collar diameter              | 95 mm                                                                                                 |
| Centring collar depth                 | 3.5 mm                                                                                                |
| Number of mounting holes              | 4                                                                                                     |
| Mounting holes diameter               | 9 mm                                                                                                  |
| Circle diameter of the mounting holes | 115 mm                                                                                                |
| Product weight                        | 6.4 kg                                                                                                |

### Offer Sustainability

|                                  |                                                                                       |
|----------------------------------|---------------------------------------------------------------------------------------|
| Sustainable offer status         | Green Premium product                                                                 |
| RoHS (date code: YYWW)           | Compliant - since 0936 - <a href="#">Schneider Electric declaration of conformity</a> |
| REACH                            | Reference not containing SVHC above the threshold                                     |
| Product environmental profile    | Available <a href="#">Download Product Environmental</a>                              |
| 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) Shaft end, keyed slot (optional)
- (2) For screw M6 x 21 mm/M6 x 0.83 in.

Dimensions in mm

| Straight connectors |      | Rotatable angled connectors |      | c (without brake) | c (with brake) |
|---------------------|------|-----------------------------|------|-------------------|----------------|
| b1                  | b2   | b1                          | b2   |                   |                |
| 39.5                | 25.5 | 39.5                        | 39.5 | 160               | 202            |

Dimensions in in.

| Straight connectors |      | Rotatable angled connectors |      | c (without brake) | c (with brake) |
|---------------------|------|-----------------------------|------|-------------------|----------------|
| b1                  | b2   | b1                          | b2   |                   |                |
| 1.55                | 1.00 | 1.55                        | 1.55 | 6.29              | 7.95           |

115 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30M2 servo drive



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

230 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30M2 servo drive



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