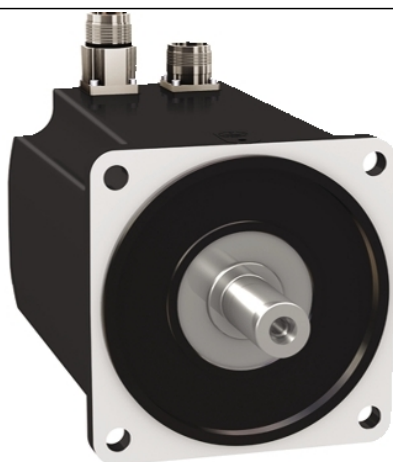


# BMH1401P22F1A

servo motor BMH - 10.3 Nm - 4000 rpm -  
untapped shaft - with brake - IP65/IP67



## Main

|                           |  |
|---------------------------|--|
| Product or component type | Servo motor  |
| Device short name         | BMH  |
| Maximum mechanical speed  | 4000 rpm   |
| Continuous stall torque   | 91.16 Lbf.in (10.3 N.m) LXM32.D30M2 10 A, 230 V, single phase<br>91.16 Lbf.in (10.3 N.m) LXM32.D30N4 10 A, 400 V, three phase<br>91.16 lbf.in (10.3 N.m) LXM32.D30N4 10 A, 480 V, three phase    |
| Peak stall torque         | 272.60 Lbf.in (30.8 N.m) LXM32.D30M2 10 A, 230 V, single phase<br>272.60 Lbf.in (30.8 N.m) LXM32.D30N4 10 A, 400 V, three phase<br>272.60 lbf.in (30.8 N.m) LXM32.D30N4 10 A, 480 V, three phase |
| Nominal output power      | 1450 W LXM32.D30M2 10 A, 230 V, single phase<br>2400 W LXM32.D30N4 10 A, 400 V, three phase<br>2400 W LXM32.D30N4 10 A, 480 V, three phase   |
| Nominal torque            | 61.07 Lbf.in (6.9 N.m) LXM32.D30M2 10 A, 230 V, single phase<br>68.15 Lbf.in (7.7 N.m) LXM32.D30N4 10 A, 400 V, three phase<br>68.15 lbf.in (7.7 N.m) LXM32.D30N4 10 A, 480 V, three phase       |
| Nominal speed             | 2000 rpm LXM32.D30M2 10 A, 230 V, single phase<br>3000 rpm LXM32.D30N4 10 A, 400 V, three phase<br>3000 rpm LXM32.D30N4 10 A, 480 V, three phase   |
| Product compatibility     | LXM32.D30M2 230 V single phase<br>LXM32.D30N4 400...480 V three phase  |
| Shaft end                 | Smooth shaft   |
| IP degree of protection   | IP65 standard<br>IP67 with IP67 kit  |
| Speed feedback resolution | 131072 points/turn x 4096 turns  |
| Holding brake             | With   |
| Mounting support          | International standard flange  |
| Electrical connection     | Straight connectors  |

## Complementary

|                           |  |
|---------------------------|--|
| Range compatibility       | Lexium 32                                |
| [Us] rated supply voltage | 480 V                                    |
| Phase                     | Three phase                              |
| Continuous stall current  | 8.58 A                                   |
| Continuous power          | 2.85 W                                   |
| Maximum current Irms      | 29.8 A LXM32.D30M2<br>29.8 A LXM32.D30N4 |
| Maximum permanent current | 29.8 A                                   |
| Second shaft              | Without second shaft end                 |
| Shaft diameter            | 0.94 in (24 mm)                          |
| Shaft length              | 1.97 in (50 mm)                          |
| Feedback type             | Multiturn SinCos Hiperface               |
| Holding torque            | 159.31 lbf.in (18 N.m) holding brake     |

|                                       |   |
|---------------------------------------|---|
| Motor flange size                     | 5.51 in (140 mm)                                      |
| Number of motor stacks                | 1   |
| Torque constant                       | 1.2 N.m/A 248 °F (120 °C)                             |
| Back emf constant                     | 77.4 V/krpm 248 °F (120 °C)                           |
| Number of motor poles                 | 10  |
| Rotor inertia                         | 17.96 kg.cm <sup>2</sup>                              |
| Stator resistance                     | 0.69 Ohm 68 °F (20 °C)                                |
| Stator inductance                     | 6.7 mH 68 °F (20 °C)                                  |
| Stator electrical time constant       | 9.7 ms 68 °F (20 °C)                                  |
| Maximum radial force Fr               | 1930 N 1000 rpm<br>1530 N 2000 rpm<br>1340 N 3000 rpm |
| Maximum axial force Fa                | 0.2 x Fr  |
| Brake pull-in power                   | 18 W  |
| Type of cooling                       | Natural convection                                    |
| Length                                | 7.36 in (187 mm)                                      |
| Centring collar diameter              | 5.12 in (130 mm)                                      |
| Centring collar depth                 | 0.14 in (3.5 mm)                                      |
| Number of mounting holes              | 4   |
| Mounting holes diameter               | 0.43 in (11 mm)                                       |
| Circle diameter of the mounting holes | 6.50 in (165 mm)                                      |
| Net weight                            | 22.71 lb(US) (10.3 kg)                                |

### Ordering and shipping details

|                       |                          |
|-----------------------|--------------------------|
| Category              | 18282 - LEXIUM 32 MOTORS |
| Discount Schedule     | PC53                     |
| GTIN                  | 03606485198309           |
| Nbr. of units in pkg. | 1                        |
| Package weight(Lbs)   | 23.32 lb(US) (10.58 kg)  |
| Returnability         | No                       |
| Country of origin     | DE                       |

### Packing Units

|                        |                  |
|------------------------|------------------|
| Unit Type of Package 1 | PCE              |
| Package 1 Height       | 10.24 in (26 cm) |
| Package 1 width        | 7.87 in (20 cm)  |
| Package 1 Length       | 23.62 in (60 cm) |

### 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>  |
| Mercury free               | Yes   |
| RoHS exemption information | <a href="#">Yes</a>   |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>  |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>   |
| 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

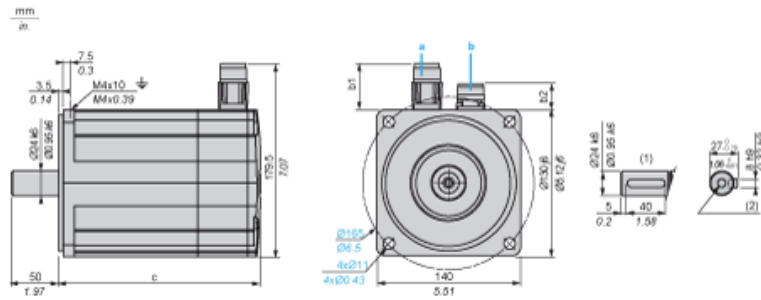
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|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

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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 M8 x 25 mm/M8 x 0.98 in.

Dimensions in mm

| Straight connectors |      | Rotatable angled connectors |      | c (without brake) | c (with brake) |
|---------------------|------|-----------------------------|------|-------------------|----------------|
| b                   | b1   | b                           | b1   |                   |                |
| 39.5                | 25.5 | 39.5                        | 39.5 | 152               | 187            |

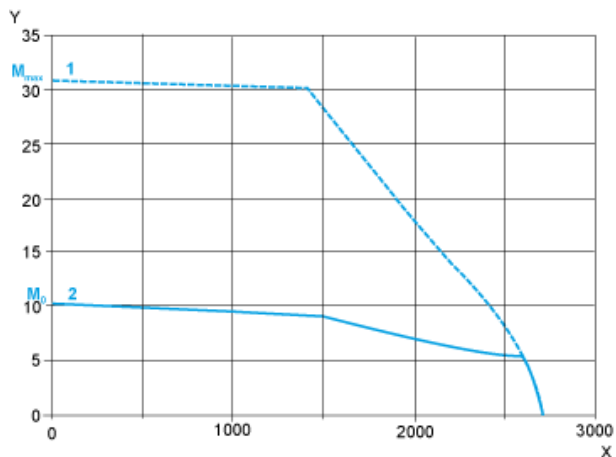
Dimensions in in.

| Straight connectors |      | Rotatable angled connectors |      | c (without brake) | c (with brake) |
|---------------------|------|-----------------------------|------|-------------------|----------------|
| b                   | b1   | b                           | b1   |                   |                |
| 1.55                | 1.00 | 1.55                        | 1.55 | 5.98              | 7.36           |

230 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32-D30M2 servo drive

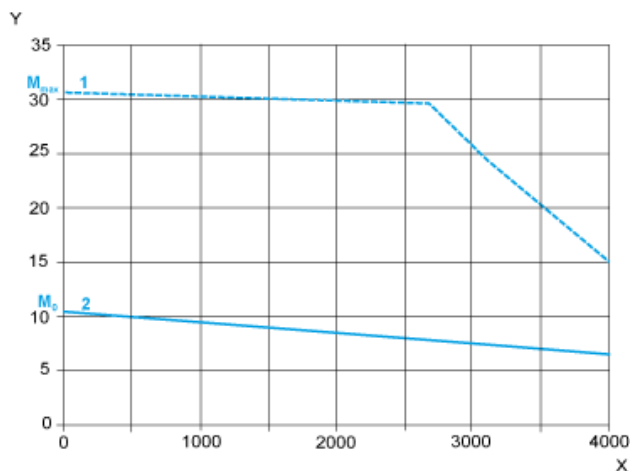


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32-D30N4 servo drive

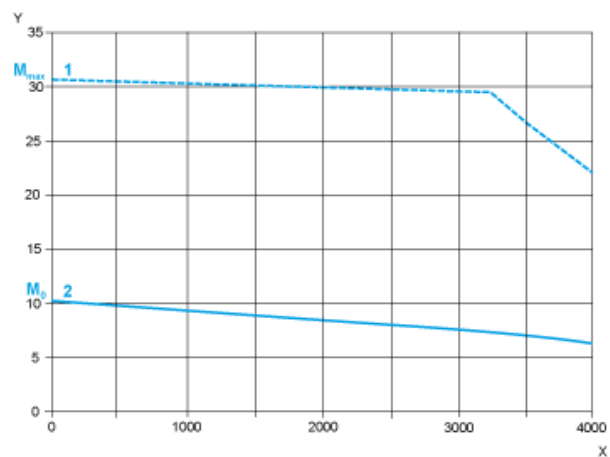


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

480 V 3-Phase Supply Voltage

## Torque/Speed Curves

Servo motor with LXM32•D30N4 servo drive



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