

# BMH1003P22F2A

servo motor BMH - 8.4 Nm - 6000 rpm -  
untapped shaft - with brake - IP65/IP67



## Main

|                           |  |
|---------------------------|--|
| Product or component type | Servo motor  |
| Device short name         | BMH  |
| Maximum mechanical speed  | 6000 rpm   |
| Continuous stall torque   | 8.4 N.m for LXM32.D30N4 10 A at 400 V three phase<br>8.4 N.m for LXM32.D30N4 10 A at 480 V three phase   |
| Peak stall torque         | 25.1 N.m for LXM32.D30N4 10 A at 400 V three phase<br>25.1 N.m for LXM32.D30N4 10 A at 480 V three phase |
| Nominal output power      | 2700 W for LXM32.D30N4 10 A at 400 V three phase<br>2700 W for LXM32.D30N4 10 A at 480 V three phase     |
| Nominal torque            | 6.2 N.m for LXM32.D30N4 10 A at 400 V three phase<br>6.2 N.m for LXM32.D30N4 10 A at 480 V three phase   |
| Nominal speed             | 4000 rpm for LXM32.D30N4 10 A at 400 V three phase<br>4000 rpm for LXM32.D30N4 10 A at 480 V three phase |
| Product compatibility     | LXM32.D30N4 at 400...480 V three phase   |
| Shaft end                 | Untapped   |
| 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     | Rotatable right-angled connectors  |

## Complementary

|                           |                            |
|---------------------------|----------------------------|
| Range compatibility       | Lexium 32                  |
| [Us] rated supply voltage | 480 V                      |
| Network number of phases  | Three phase                |
| Continuous stall current  | 7.69 A                     |
| Continuous power          | 3.3 W                      |
| Maximum current Irms      | 29.1 A for LXM32.D30N4     |
| Maximum permanent current | 29.1 A                     |
| Second shaft              | Without second shaft end   |
| Shaft diameter            | 19 mm                      |
| Shaft length              | 40 mm                      |
| Feedback type             | Multiturn SinCos Hiperface |
| Holding torque            | 9 N.m (holding brake)      |
| Motor flange size         | 100 mm                     |
| Number of motor stacks    | 3                          |
| Torque constant           | 1 N.m/A at 120 °C          |

|                                       |  |
|---------------------------------------|--|
| Back emf constant                     | 63.5 V/krpm at 120 °C  |
| Number of motor poles                 | 10   |
| Rotor inertia                         | 10.3 kg.cm <sup>2</sup>  |
| Stator resistance                     | 0.63 Ohm at 20 °C  |
| Stator inductance                     | 4 mH at 20 °C  |
| Stator electrical time constant       | 6.3 ms at 20 °C  |
| Maximum radial force Fr               | 1050 N at 1000 rpm<br>830 N at 2000 rpm<br>730 N at 3000 rpm<br>660 N at 4000 rpm<br>610 N at 5000 rpm |
| Maximum axial force Fa                | 0.2 x Fr   |
| Brake pull-in power                   | 18 W   |
| Type of cooling                       | Natural convection   |
| Length                                | 234.3 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                        | 8.15 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 | 192               | 234            |

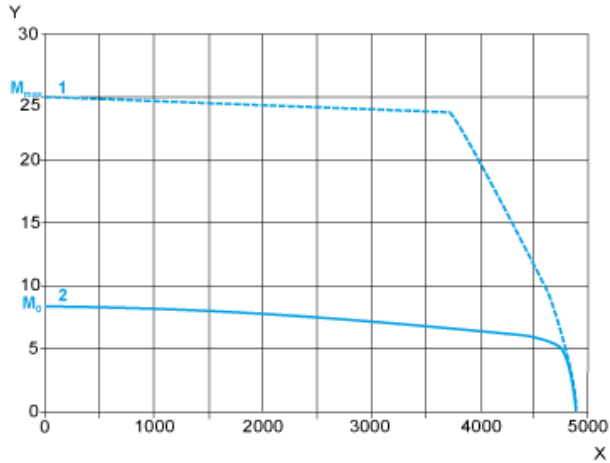
Dimensions in in.

| Straight connectors |      | Rotatable angled connectors |      | c (without brake) | c (with brake) |
|---------------------|------|-----------------------------|------|-------------------|----------------|
| b1                  | b2   | b1                          | b2   |                   |                |
| 1.55                | 1.00 | 1.55                        | 1.55 | 7.55              | 9.21           |

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