

# BMH1002P11A1A

servo motor BMH - 6.2 Nm - 6000 rpm - keyed  
shaft - without brake - IP54



## Main

|                           |                                                                                                        |
|---------------------------|--------------------------------------------------------------------------------------------------------|
| Product or component type | Servo motor                                                                                            |
| Device short name         | BMH                                                                                                    |
| Maximum mechanical speed  | 6000 rpm                                                                                               |
| Continuous stall torque   | 6.2 N.m for LXM32.D18N4 6 A at 400 V three phase<br>6.2 N.m for LXM32.D18N4 6 A at 480 V three phase   |
| Peak stall torque         | 18.4 N.m for LXM32.D18N4 6 A at 400 V three phase<br>18.4 N.m for LXM32.D18N4 6 A at 480 V three phase |
| Nominal output power      | 1600 W for LXM32.D18N4 6 A at 400 V three phase<br>1600 W for LXM32.D18N4 6 A at 480 V three phase     |
| Nominal torque            | 3.9 N.m for LXM32.D18N4 6 A at 400 V three phase<br>3.9 N.m for LXM32.D18N4 6 A at 480 V three phase   |
| Nominal speed             | 4000 rpm for LXM32.D18N4 6 A at 400 V three phase<br>4000 rpm for LXM32.D18N4 6 A at 480 V three phase |
| Product compatibility     | LXM32.D18N4 at 400...480 V three phase                                                                 |
| Shaft end                 | Keyed                                                                                                  |
| IP degree of protection   | IP54 (standard)                                                                                        |
| Speed feedback resolution | 131072 points/turn                                                                                     |
| Holding brake             | Without                                                                                                |
| Mounting support          | International standard flange                                                                          |
| Electrical connection     | Straight connectors                                                                                    |

## Complementary

|                           |                              |
|---------------------------|------------------------------|
| Range compatibility       | Lexium 32                    |
| [Us] rated supply voltage | 480 V                        |
| Network number of phases  | Three phase                  |
| Continuous stall current  | 5.04 A                       |
| Continuous power          | 2.36 W                       |
| Maximum current Irms      | 18 A for LXM32.D18N4         |
| Maximum permanent current | 18.23 A                      |
| Second shaft              | Without second shaft end     |
| Shaft diameter            | 19 mm                        |
| Shaft length              | 40 mm                        |
| Key width                 | 30 mm                        |
| Feedback type             | Single turn SinCos Hiperface |
| Motor flange size         | 100 mm                       |
| Number of motor stacks    | 2                            |
| Torque constant           | 1.2 N.m/A at 120 °C          |
| Back emf constant         | 77 V/krpm at 120 °C          |
| Number of motor poles     | 10                           |
| Rotor inertia             | 6.28 kg.cm <sup>2</sup>      |
| Stator resistance         | 1.51 Ohm at 20 °C            |
| Stator inductance         | 7.5 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                                                                                              |
| Type of cooling                       | Natural convection                                                                                    |
| Length                                | 160.6 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                        | 4.92 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            |

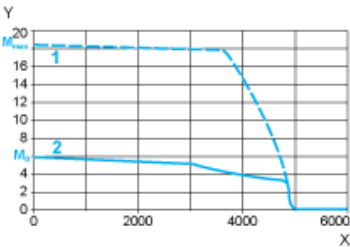
Dimensions in in.

| 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           |

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D18N4 servo drive

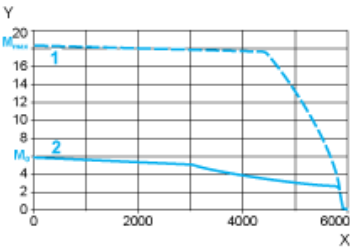


- X Speed in rpm  
Y Torque in Nm  
1 Peak torque  
2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D18N4 servo drive



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