

# Product data sheet

Specifications



servo motor BMH, Lexium 32,  
8.2Nm, 6000rpm, untapped shaft,  
with brake, IP65, IP67, 128bit  
encoder, straight

BMH1003T21F1A

Discontinued

Discontinued on: Jun 30, 2023

Product availability: Non-Stock - Not normally stocked in  
distribution facility

## Main

|                           |                                                                |
|---------------------------|----------------------------------------------------------------|
| Device short name         | BMH                                                            |
| Product or Component Type | Servo motor                                                    |
| Maximum mechanical speed  | 6000 rpm                                                       |
| Continuous stall torque   | 72.58 lbf.in (8.2 N.m) LXM32.D30M2 10 A, 230 V, single phase   |
| Peak stall torque         | 201.80 lbf.in (22.8 N.m) LXM32.D30M2 10 A, 230 V, single phase |
| Nominal output power      | 1450 W LXM32.D30M2 10 A, 230 V, single phase                   |
| Nominal torque            | 49.56 lbf.in (5.6 N.m) LXM32.D30M2 10 A, 230 V, single phase   |
| Nominal speed             | 2500 rpm LXM32.D30M2 10 A, 230 V, single phase                 |
| Product compatibility     | LXM32.D30M2 230 V single phase                                 |
| Shaft end                 | Smooth shaft                                                   |
| IP Degree of Protection   | IP65 standard<br>IP67 with IP67 kit                            |
| Speed feedback resolution | 131072 points/turn                                             |
| Holding brake             | With                                                           |
| Mounting Support          | International standard flange                                  |
| Electrical Connection     | Straight connectors                                            |

## Complementary

|                           |                              |
|---------------------------|------------------------------|
| Range Compatibility       | Lexium 32                    |
| [Us] rated supply voltage | 240 V                        |
| Phase                     | Three phase                  |
| Continuous stall current  | 10 A                         |
| Continuous power          | 2.62 W                       |
| Maximum current Irms      | 30 A LXM32.D30M2             |
| Maximum permanent current | 33.85 A                      |
| Second shaft              | Without second shaft end     |
| Shaft diameter            | 0.7 in (19 mm)               |
| Shaft length              | 1.6 in (40 mm)               |
| Feedback type             | Single turn SinCos Hiperface |

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

|                                       |                                                                                         |
|---------------------------------------|-----------------------------------------------------------------------------------------|
| Holding torque                        | 79.7 lbf.in (9 N.m) holding brake                                                       |
| Motor flange size                     | 3.9 in (100 mm)                                                                         |
| Number of motor stacks                | 3                                                                                       |
| Torque constant                       | 0.851 N.m/A 248 °F (120 °C)                                                             |
| Back emf constant                     | 54.8 V/krpm 248 °F (120 °C)                                                             |
| Number of motor poles                 | 10                                                                                      |
| Rotor inertia                         | 10.3 kg.cm²                                                                             |
| Stator resistance                     | 0.47 Ohm 68 °F (20 °C)                                                                  |
| Stator inductance                     | 3 mH 68 °F (20 °C)                                                                      |
| Stator electrical time constant       | 6.4 ms 68 °F (20 °C)                                                                    |
| Maximum radial force Fr               | 1050 N 1000 rpm<br>830 N 2000 rpm<br>730 N 3000 rpm<br>660 N 4000 rpm<br>610 N 5000 rpm |
| Maximum axial force Fa                | 0.2 x Fr                                                                                |
| Brake pull-in power                   | 18 W                                                                                    |
| Type of cooling                       | Natural convection                                                                      |
| Length                                | 9.2 in (234.3 mm)                                                                       |
| Centring collar diameter              | 3.7 in (95 mm)                                                                          |
| Centring collar depth                 | 0.1 in (3.5 mm)                                                                         |
| Number of mounting holes              | 4                                                                                       |
| Mounting holes diameter               | 0.4 in (9 mm)                                                                           |
| Circle diameter of the mounting holes | 4.5 in (115 mm)                                                                         |
| Net Weight                            | 17.97 lb(US) (8.15 kg)                                                                  |

## Ordering and shipping details

|                   |               |
|-------------------|---------------|
| Category          | US1PC5318282  |
| Discount Schedule | PC53          |
| GTIN              | 3606485201023 |
| Returnability     | No            |
| Country of origin | DE            |

## Packing Units

|                              |                        |
|------------------------------|------------------------|
| Unit Type of Package 1       | PCE                    |
| Number of Units in Package 1 | 1                      |
| Package 1 Height             | 8.7 in (22.0 cm)       |
| Package 1 Width              | 7.9 in (20.0 cm)       |
| Package 1 Length             | 15.7 in (40.0 cm)      |
| Package 1 Weight             | 18.63 lb(US) (8.45 kg) |

## Contractual warranty

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

Sustainability



**Green Premium™** label is Schneider Electric’s commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

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[Guide to assess a product’s sustainability >](#)



Transparency   RoHS/REACH

## Well-being performance

✓ Mercury Free

✓ Rohs Exemption Information   [Yes](#)

✓ Pvc Free

## Certifications & Standards

|                           |                                                                                                                                                                                                                                                                                             |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reach Regulation          | <a href="#">REACH Declaration</a>                                                                                                                                                                                                                                                           |
| Eu Rohs Directive         | Pro-active compliance (Product out of EU RoHS legal scope)                                                                                                                                                                                                                                  |
| 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.                                                                                                                                                                |
| Circularity Profile       | No need of specific recycling operations                                                                                                                                                                                                                                                    |
| 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> |