

# BMH1904P22A2B

servo motor BMH, Lexium 32, 100Nm,  
3000rpm, untapped shaft, without brake, IP20,  
IP65, 128 multturn encoder, straight



## Main

|                           |                                                                                                                              |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Device short name         | BMH                                                                                                                          |
| Product or Component Type | Servo motor                                                                                                                  |
| Maximum mechanical speed  | 3000 rpm                                                                                                                     |
| Continuous stall torque   | 885.07 Lbf.In (100 N.m) LXM32MC10N4 40 A, 400 V, three phase<br>885.07 lbf.in (100 N.m) LXM32MC10N4 40 A, 480 V, three phase |
| Peak stall torque         | 2035.7 Lbf.In (230 N.m) LXM32MC10N4 40 A, 400 V, three phase<br>2035.7 lbf.in (230 N.m) LXM32MC10N4 40 A, 480 V, three phase |
| Nominal output power      | 9800 W LXM32MC10N4 40 A, 400 V, three phase<br>9800 W LXM32MC10N4 40 A, 480 V, three phase                                   |
| Nominal torque            | 414.2 Lbf.In (46.8 N.m) LXM32MC10N4 40 A, 400 V, three phase<br>414.2 lbf.in (46.8 N.m) LXM32MC10N4 40 A, 480 V, three phase |
| Nominal speed             | 2000 rpm LXM32MC10N4 40 A, 400 V, three phase<br>2000 rpm LXM32MC10N4 40 A, 480 V, three phase                               |
| Shaft end                 | Keyed                                                                                                                        |
| IP Degree of Protection   | IP65 standard<br>IP67 with IP67 kit                                                                                          |
| Speed feedback resolution | 131072 points/turn x 4096 turns                                                                                              |
| Holding brake             | Without                                                                                                                      |
| Mounting Support          | International standard flange                                                                                                |
| Electrical Connection     | Rotatable right-angled connectors                                                                                            |

## Complementary

|                           |                            |
|---------------------------|----------------------------|
| Range Compatibility       | Lexium 32                  |
| [Us] rated supply voltage | 480 V                      |
| Phase                     | Three phase                |
| Continuous stall current  | 40 A                       |
| Maximum current Irms      | 100 A LXM32MC10N4<br>100 A |
| Maximum permanent current | 100 A                      |
| Second shaft              | Without second shaft end   |
| Shaft diameter            | 1.5 in (38 mm)             |
| Shaft length              | 3.1 in (80 mm)             |
| Key width                 | 0.4 in (10 mm)             |
| Feedback type             | Multiturn SinCos Hiperface |
| Motor flange size         | 7.5 in (190 mm)            |
| Number of motor stacks    | 4                          |
| Torque constant           | 2.5 N.m/A 248 °F (120 °C)  |
| Back emf constant         | 168 V/krpm 248 °F (120 °C) |
| Number of motor poles     | 10                         |
| Rotor inertia             | 276.7 kg.cm <sup>2</sup>   |

|                                       |                                                       |
|---------------------------------------|-------------------------------------------------------|
| Stator resistance                     | 0.16 Ohm 68 °F (20 °C)                                |
| Stator inductance                     | 4.74 mH 68 °F (20 °C)                                 |
| Stator electrical time constant       | 29.6 ms 68 °F (20 °C)                                 |
| Maximum radial force Fr               | 3800 N 1000 rpm<br>3700 N 2000 rpm<br>3600 N 3000 rpm |
| Maximum axial force Fa                | 0.2 x Fr                                              |
| Type of cooling                       | Natural convection                                    |
| Length                                | 15.08 in (383 mm)                                     |
| Centring collar diameter              | 7.09 in (180 mm)                                      |
| Centring collar depth                 | 0.2 in (4 mm)                                         |
| Number of mounting holes              | 4                                                     |
| Mounting holes diameter               | 0.6 in (14 mm)                                        |
| Circle diameter of the mounting holes | 8.5 in (215 mm)                                       |
| Net Weight                            | 123.02 lb(US) (55.8 kg)                               |

## Ordering and shipping details

|                   |               |
|-------------------|---------------|
| Category          | US1PC5318282  |
| Discount Schedule | PC53          |
| GTIN              | 3606481041968 |
| Returnability     | No            |
| Country of origin | DE            |

## Packing Units

|                              |                        |
|------------------------------|------------------------|
| Unit Type of Package 1       | PCE                    |
| Number of Units in Package 1 | 1                      |
| Package 1 Height             | 15.7 in (40.0 cm)      |
| Package 1 Width              | 11.8 in (30.0 cm)      |
| Package 1 Length             | 31.3 in (79.5 cm)      |
| Package 1 Weight             | 126.5 lb(US) (57.4 kg) |

## 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)                                                                                                                                                                                                                                     |
| Mercury free               | Yes                                                                                                                                                                                                                                                                                            |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>                                                                                                                                                                                                                                                         |
| RoHS exemption information | <a href="#">Yes</a>                                                                                                                                                                                                                                                                            |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                                                                                                                                                                                                                  |
| Circularity Profile        | No need of specific recycling operations                                                                                                                                                                                                                                                       |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.                                                                                                                                                                   |
| PVC free                   | Yes                                                                                                                                                                                                                                                                                            |