

# BSH0402P16F2A

AC servo motor BSH, Lexium 32, 0.38N.m, 9000rpm, keyed shaft, with brake, IP50



## Main

|                           |                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product or component type | Servo motor                                                                                                                                                                 |
| Device short name         | BSH                                                                                                                                                                         |
| Maximum mechanical speed  | 10000 rpm                                                                                                                                                                   |
| Continuous stall torque   | 0.38 N.M for LXM32.U60N4 at 1.5 A, 480 V, three phase<br>0.38 N.M for LXM32.U60N4 at 1.5 A, 400 V, three phase<br>0.38 N.m for LXM32.U45M2 at 1.5 A, 230 V, single phase    |
| Peak stall torque         | 1.37 N.M for LXM32.U60N4 at 1.5 A, 480 V, three phase<br>1.37 N.M for LXM32.U60N4 at 1.5 A, 400 V, three phase<br>1.37 N.m for LXM32.U45M2 at 1.5 A, 230 V, single phase    |
| Nominal output power      | 275 W for LXM32.U60N4 at 1.5 A, 480 V, three phase<br>289 W for LXM32.U60N4 at 1.5 A, 400 V, three phase<br>152 W for LXM32.U45M2 at 1.5 A, 230 V, single phase             |
| Nominal torque            | 0.292 N.M for LXM32.U60N4 at 1.5 A, 480 V, three phase<br>0.307 N.M for LXM32.U60N4 at 1.5 A, 400 V, three phase<br>0.364 N.m for LXM32.U45M2 at 1.5 A, 230 V, single phase |
| Nominal speed             | 9000 rpm for LXM32.U60N4 at 1.5 A, 480 V, three phase<br>9000 rpm for LXM32.U60N4 at 1.5 A, 400 V, three phase<br>4000 rpm for LXM32.U45M2 at 1.5 A, 230 V, single phase    |
| Shaft end                 | Keyed                                                                                                                                                                       |
| IP degree of protection   | IP50 standard                                                                                                                                                               |
| Speed feedback resolution | 32768 points/turn                                                                                                                                                           |
| Holding brake             | With                                                                                                                                                                        |
| Mounting support          | International standard flange                                                                                                                                               |
| Electrical connection     | Rotatable right-angled connectors                                                                                                                                           |

## Complementary

|                           |                                                                                              |
|---------------------------|----------------------------------------------------------------------------------------------|
| Range compatibility       | Lexium 32                                                                                    |
| Supply voltage max        | 400 V                                                                                        |
| Network number of phases  | Three phase                                                                                  |
| Continuous stall current  | 1.5 A                                                                                        |
| Maximum continuous power  | 398 W                                                                                        |
| Maximum current Irms      | 6 A for LXM32.U60N4 at 480 V<br>6 A for LXM32.U60N4 at 400 V<br>6 A for LXM32.U45M2 at 230 V |
| Maximum permanent current | 1.5 A                                                                                        |
| Switching frequency       | 8 kHz                                                                                        |
| Second shaft              | Without second shaft end                                                                     |
| Shaft diameter            | 8 mm                                                                                         |

|                                       |                              |
|---------------------------------------|------------------------------|
| Shaft length                          | 25 mm                        |
| Key width                             | 12 mm                        |
| Feedback type                         | Single turn SinCos Hiperface |
| Holding torque                        | 0.4 N.m holding brake        |
| Motor flange size                     | 40 mm                        |
| Number of motor stacks                | 2                            |
| Torque constant                       | 0.253 N.m/A at 120 °C        |
| Back emf constant                     | 18 V/krpm at 20 °C           |
| Number of motor poles                 | 10                           |
| Rotor inertia                         | 0.0588 kg.cm <sup>2</sup>    |
| Stator resistance                     | 11.6 Ohm at 20 °C            |
| Stator inductance                     | 12.8 mH at 20 °C             |
| Stator electrical time constant       | 1.1 ms at 20 °C              |
| Maximum axial force Fa                | 0.2 x Fr                     |
| Brake pull-in power                   | 5.8 W                        |
| Type of cooling                       | Natural convection           |
| Length                                | 119.4 mm                     |
| Centring collar diameter              | 30 mm                        |
| Centring collar depth                 | 2.5 mm                       |
| Number of mounting holes              | 4                            |
| Mounting holes diameter               | 4.5 mm                       |
| Circle diameter of the mounting holes | 46 mm                        |
| Net weight                            | 0.8 kg                       |

### Packing Units

|                              |         |
|------------------------------|---------|
| Unit Type of Package 1       | PCE     |
| Number of Units in Package 1 | 1       |
| Package 1 Height             | 11.0 cm |
| Package 1 Width              | 17.0 cm |
| Package 1 Length             | 24.0 cm |
| Package 1 Weight             | 627.0 g |

### Offer Sustainability

|                            |                                                                                                                             |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| 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 |  Yes                                     |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |
| PVC free                   | Yes                                                                                                                         |