

# BSH0401P06F2A

servo motor BSH, Lexium 32, 0.21N.m,  
9000rpm, 40mm, untapped shaft, 16 Sincos  
single turn, with brake, IP50



## Main

|                           |                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product or component type | Servo motor                                                                                                                                                                 |
| Device short name         | BSH                                                                                                                                                                         |
| Maximum mechanical speed  | 10000 rpm                                                                                                                                                                   |
| Continuous stall torque   | 0.21 N.M for LXM32.U60N4 at 1.5 A, 480 V, three phase<br>0.21 N.M for LXM32.U60N4 at 1.5 A, 400 V, three phase<br>0.21 N.m for LXM32.U45M2 at 1.5 A, 230 V, single phase    |
| Peak stall torque         | 0.8 N.M for LXM32.U60N4 at 1.5 A, 480 V, three phase<br>0.8 N.M for LXM32.U60N4 at 1.5 A, 400 V, three phase<br>0.8 N.m for LXM32.U45M2 at 1.5 A, 230 V, single phase       |
| Nominal output power      | 166 W for LXM32.U60N4 at 1.5 A, 480 V, three phase<br>166 W for LXM32.U60N4 at 1.5 A, 400 V, three phase<br>77 W for LXM32.U45M2 at 1.5 A, 230 V, single phase              |
| Nominal torque            | 0.176 N.M for LXM32.U60N4 at 1.5 A, 480 V, three phase<br>0.176 N.M for LXM32.U60N4 at 1.5 A, 400 V, three phase<br>0.184 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                 | Smooth shaft                                                                                                                                                                |
| 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  | 1.12 A                                                                                             |
| Maximum continuous power  | 220 W                                                                                              |
| Maximum current Irms      | 4.7 A for LXM32.U60N4 at 480 V<br>4.7 A for LXM32.U60N4 at 400 V<br>4.7 A for LXM32.U45M2 at 230 V |
| Maximum permanent current | 1.12 A                                                                                             |

|                                       |                              |
|---------------------------------------|------------------------------|
| Switching frequency                   | 8 kHz                        |
| Second shaft                          | Without second shaft end     |
| Shaft diameter                        | 8 mm                         |
| Shaft length                          | 25 mm                        |
| Feedback type                         | Single turn SinCos Hiperface |
| Holding torque                        | 0.4 N.m holding brake        |
| Motor flange size                     | 40 mm                        |
| Number of motor stacks                | 1                            |
| Torque constant                       | 0.19 N.m/A at 120 °C         |
| Back emf constant                     | 13.6 V/krpm at 20 °C         |
| Number of motor poles                 | 10                           |
| Rotor inertia                         | 0.04 kg.cm <sup>2</sup>      |
| Stator resistance                     | 17.2 Ohm at 20 °C            |
| Stator inductance                     | 14.6 mH at 20 °C             |
| Stator electrical time constant       | 0.85 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                                | 99.4 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                            | 0.6 kg                       |

### Packing Units

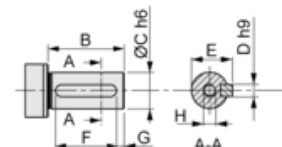
|                              |         |
|------------------------------|---------|
| Unit Type of Package 1       | PCE     |
| Number of Units in Package 1 | 1       |
| Package 1 Height             | 11.0 cm |
| Package 1 Width              | 17.0 cm |
| Package 1 Length             | 24.0 cm |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

### Offer Sustainability

|                            |                                                                                                                                   |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                             |
| 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                                                                                                                               |

### For Servo Motor with Brake

Front view



|   | Dimensions in mm  | Dimensions in in. |
|---|-------------------|-------------------|
| L | 99.4              | 3.91              |
| B | 25                | 0.98              |
| C | 8                 | 0.31              |
| D | 3                 | 0.12              |
| E | 9.2               | 0.36              |
| F | 12                | 0.47              |
| G | 4                 | 0.16              |
| H | DIN 332 DS M3 x 9 |                   |
| A | DIN 6885-A3x3x12  |                   |