# BSH0401P07A2A

servo motor BSH, Lexium 32, 0.21N.m, 9000rpm, 40mm, untapped shaft, 16 Sincos Multi turn, without brake, IP50





## Main

| Mairi                     |   |
|---------------------------|---|
| 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 0.21 N.M for LXM32.U60N4 at 1.5 A, 400 V, three phase 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 0.8 N.M for LXM32.U60N4 at 1.5 A, 400 V, three phase 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 166 W for LXM32.U60N4 at 1.5 A, 400 V, three phase 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 0.176 N.M for LXM32.U60N4 at 1.5 A, 400 V, three phase 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 9000 rpm for LXM32.U60N4 at 1.5 A, 400 V, three phase 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 x 4096 turns  |
| Holding brake             | Without   |
| 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                         | Multiturn SinCos Hiperface |
| 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                         | 0.0232 kg.cm²              |
| 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                   |
| Type of cooling                       | Natural convection         |
| Length                                | 73.4 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                            | 0.4 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

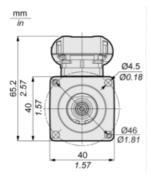
| Sustainable offer status   | Green Premium product   |  |
|----------------------------|---|--|
| REACh Regulation           | ☑ REACh Declaration   |  |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)  |  |
| Mercury free               | Yes   |  |
| China RoHS Regulation      | ☐ China RoHS Declaration  |  |
| RoHS exemption information | ₫Yes  |  |
| Environmental Disclosure   | Product Environmental Profile   |  |
| 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   |  |

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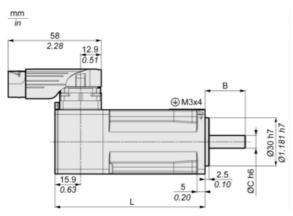
## Servo Motors Dimensions

## For Servo Motor without Brake

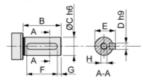
#### Front view



#### Left view



#### DIN 6885 A



|   | Dimensions in mm  | Dimensions in in. |
|---|-------------------|-------------------|
| L | 73.4              | 2.89              |
| В | 25                | 0.98              |
| С | 8                 | 0.31              |
| D | 3                 | 0.12              |
| E | 9.2               | 0.36              |
| F | 12                | 0.47              |
| G | 4                 | 0.16              |
| Н | DIN 332 DS M3 x 9 |                   |
| А | DIN 6885-A3x3x12  |                   |