

Product Datasheet

Characteristic

BSH0552T02F1A

servo motor BSH, Lexium 05, 0.9N.m, 6000rpm, 55mm, untapped shaft, Sincos multi turn, with brake, IP50, straight



Main

| | |
|---------------------------|---|
| Device short name | BSH |
| product or component type | Servo motor |
| Maximum mechanical speed | 9000 rpm |
| Continuous stall torque | 0.8 N.m for LXM32.U90M2 at 3 A, 115 V, single phase 0.8 N.m for LXM32.U90M2 at 3 A, 230 V, single phase 0.9 N.m for LXM05AD10M2, 200...240 V, single phase 0.9 N.m for LXM05BD10M2, 200...240 V, single phase 0.9 N.m for LXM05CD10M2, 200...240 V, single phase 0.9 N.m for LXM05AD10M3X, 200...240 V, three phase 0.9 N.m for LXM05BD10M3X, 200...240 V, three phase 0.9 N.m for LXM05CD10M3X, 200...240 V, three phase 0.9 N.m for LXM15LD13M3, 230 V, single phase 0.9 N.m for LXM15LD13M3, 230 V, three phase 0.77 N.m for LXM05CU70M2, 200...240 V, single phase 0.9 N.m for LXM05AD10F1, 110...120 V, single phase 0.9 N.m for LXM05AD17F1, 110...120 V, single phase 0.9 N.m for LXM05BD10F1, 110...120 V, single phase 0.9 N.m for LXM05BD17F1, 110...120 V, single phase 0.9 N.m for LXM05CD10F1, 110...120 V, single phase 0.9 N.m for LXM05CD17F1, 110...120 V, single phase |
| Peak stall torque | 1.9 N.m for LXM32.U90M2 at 3 A, 115 V, single phase 2.5 N.m for LXM32.U90M2 at 3 A, 230 V, single phase 1.5 N.m for LXM15LD13M3, 230 V, single phase 1.31 N.m for LXM05CU70M2, 200...240 V, single phase 1.77 N.m for LXM05AD10F1, 110...120 V, single phase 1.77 N.m for LXM05AD10M2, 200...240 V, single phase 2.7 N.m for LXM05AD17F1, 110...120 V, single phase 1.77 N.m for LXM05BD10F1, 110...120 V, single phase 1.77 N.m for LXM05BD10M2, 200...240 V, single phase 2.7 N.m for LXM05BD17F1, 110...120 V, single phase 1.77 N.m for LXM05CD10F1, 110...120 V, single phase 1.77 N.m for LXM05CD10M2, 200...240 V, single phase 2.7 N.m for LXM05CD17F1, 110...120 V, single phase 1.5 N.m for LXM15LD13M3, 230 V, three phase 1.77 N.m for LXM05AD10M3X, 200...240 V, three phase 1.77 N.m for LXM05BD10M3X, 200...240 V, three phase 1.77 N.m for LXM05CD10M3X, 200...240 V, three phase |
| Nominal output power | 250 W for LXM32.U90M2 at 3 A, 115 V, single phase 450 W for LXM32.U90M2 at 3 A, 230 V, single phase 240 W for LXM05CU70M2, 200...240 V, single phase 250 W for LXM05AD10F1, 110...120 V, single phase 250 W for LXM05AD17F1, 110...120 V, single phase |

| | |
|---------------------------|---|
| | <p>250 W for LXM05BD10F1, 110...120 V, single phase 250 W for LXM05BD17F1, 110...120 V, single phase 250 W for LXM05CD10F1, 110...120 V, single phase 250 W for LXM05CD17F1, 110...120 V, single phase 450 W for LXM05AD10M2, 200...240 V, single phase 450 W for LXM05BD10M2, 200...240 V, single phase 450 W for LXM05CD10M2, 200...240 V, single phase 450 W for LXM15LD13M3, 230 V, single phase 450 W for LXM05AD10M3X, 200...240 V, three phase 450 W for LXM05BD10M3X, 200...240 V, three phase 450 W for LXM05CD10M3X, 200...240 V, three phase 570 W for LXM15LD13M3, 230 V, three phase</p> |
| Nominal torque | <p>0.77 N.m for LXM32.U90M2 at 3 A, 115 V, single phase 0.74 N.m for LXM32.U90M2 at 3 A, 230 V, single phase 0.72 N.m for LXM15LD13M3, 230 V, single phase 0.77 N.m for LXM05CU70M2, 200...240 V, single phase 0.9 N.m for LXM05AD10F1, 110...120 V, single phase 0.9 N.m for LXM05AD10M2, 200...240 V, single phase 0.9 N.m for LXM05AD17F1, 110...120 V, single phase 0.9 N.m for LXM05BD10F1, 110...120 V, single phase 0.9 N.m for LXM05BD10M2, 200...240 V, single phase 0.9 N.m for LXM05BD17F1, 110...120 V, single phase 0.9 N.m for LXM05CD10F1, 110...120 V, single phase 0.9 N.m for LXM05CD10M2, 200...240 V, single phase 0.9 N.m for LXM05CD17F1, 110...120 V, single phase 0.68 N.m for LXM15LD13M3, 230 V, three phase 0.9 N.m for LXM05AD10M3X, 200...240 V, three phase 0.9 N.m for LXM05BD10M3X, 200...240 V, three phase 0.9 N.m for LXM05CD10M3X, 200...240 V, three phase</p> |
| Nominal speed | <p>3000 rpm for LXM32.U90M2 at 3 A, 115 V, single phase 6000 rpm for LXM32.U90M2 at 3 A, 230 V, single phase 3000 rpm for LXM05AD10F1, 110...120 V, single phase 3000 rpm for LXM05BD10F1, 110...120 V, single phase 3000 rpm for LXM05CD10F1, 110...120 V, single phase 3000 rpm for LXM05CU70M2, 200...240 V, single phase 6000 rpm for LXM05AD10M2, 200...240 V, single phase 6000 rpm for LXM05BD10M2, 200...240 V, single phase 6000 rpm for LXM05CD10M2, 200...240 V, single phase 6000 rpm for LXM05AD10M3X, 200...240 V, three phase 6000 rpm for LXM05BD10M3X, 200...240 V, three phase 6000 rpm for LXM05CD10M3X, 200...240 V, three phase 8000 rpm for LXM15LD13M3, 230 V, three phase 3000 rpm for LXM05AD17F1, 110...120 V, single phase 3000 rpm for LXM05BD17F1, 110...120 V, single phase 3000 rpm for LXM05CD17F1, 110...120 V, single phase 6000 rpm for LXM15LD13M3, 230 V, single phase</p> |
| Product compatibility | <p>LXM05AD10F1 at 110...120 V single phase LXM05AD10M2 at 200...240 V single phase LXM05AD17F1 at 110...120 V single phase LXM05BD10F1 at 110...120 V single phase LXM05BD10M2 at 200...240 V single phase LXM05BD17F1 at 110...120 V single phase LXM05CD10F1 at 110...120 V single phase LXM05CD10M2 at 200...240 V single phase LXM05CD17F1 at 110...120 V single phase LXM05CU70M2 at 200...240 V single phase LXM15LD13M3 at 230 V single phase LXM32.U90M2 at 115 V single phase LXM32.U90M2 at 230 V single phase LXM05AD10M3X at 200...240 V three phase LXM05BD10M3X at 200...240 V three phase LXM05CD10M3X at 200...240 V three phase LXM15LD13M3 at 230 V three phase</p> |
| Shaft end | Untapped |
| IP degree of protection | IP50 standard |
| Speed feedback resolution | 131072 points/turn x 4096 turns |
| Holding brake | With |
| mounting support | International standard flange |
| Electrical connection | Straight connectors |
| Complementary | |
| Range compatibility | <p>Lexium 32 Lexium 05 Lexium 15</p> |

| | |
|---------------------------------------|--|
| [Us] rated supply voltage | 480 V |
| Network number of phases | Three phase |
| Continuous stall current | 2.2 A |
| Continuous power | 0.67 W |
| Maximum current I _{rms} | 6 A for LXM32.U90M2 at 115 V 8.8 A for LXM32.U90M2 at 230 V 10.3 A for LXM15LD13M3 8.8 A for LXM05AD10F1 8.8 A for LXM05AD17F1 8.8 A for LXM05CU70M2 8.8 A for LXM05AD10M2 8.8 A for LXM05AD10M3X 8.8 A for LXM05BD10F1 8.8 A for LXM05BD17F1 8.8 A for LXM05BD10M2 8.8 A for LXM05BD10M3X 8.8 A for LXM05CD10F1 8.8 A for LXM05CD17F1 8.8 A for LXM05CD10M2 8.8 A for LXM05CD10M3X |
| Maximum permanent current | 8.8 A |
| Switching frequency | 8 kHz |
| Second shaft | Without second shaft end |
| Shaft diameter | 9 mm |
| Shaft length | 20 mm |
| Feedback type | Multiturn SinCos Hiperface |
| Holding torque | 0.8 N.m holding brake |
| Motor flange size | 55 mm |
| Number of motor stacks | 2 |
| Torque constant | 0.36 N.m/A at 120 °C |
| Back emf constant | 22 V/krpm at 120 °C |
| Number of motor poles | 6 |
| Rotor inertia | 0.1173 kg.cm ² |
| Stator resistance | 5.2 Ohm at 20 °C |
| Stator inductance | 10.6 mH at 20 °C |
| Stator electrical time constant | 2.04 ms at 20 °C |
| Maximum radial force Fr | 190 N at 7000 rpm 190 N at 8000 rpm 200 N at 6000 rpm 220 N at 5000 rpm 230 N at 4000 rpm 260 N at 3000 rpm 290 N at 2000 rpm 370 N at 1000 rpm |
| Maximum axial force Fa | 0.2 x Fr |
| Brake pull-in power | 10 W |
| Type of cooling | Natural convection |
| Length | 181 mm |
| Centring collar diameter | 40 mm |
| Centring collar depth | 2 mm |
| Number of mounting holes | 4 |
| Mounting holes diameter | 5.5 mm |
| Circle diameter of the mounting holes | 63 mm |
| net weight | 1.6 kg |

Packing Units

| | |
|------------------------------|---------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 12.3 cm |
| Package 1 Width | 12.8 cm |
| Package 1 Length | 37.7 cm |
| Package 1 Weight | 1.25 kg |

Offer Sustainability

| | |
|----------------------------|---|
| Sustainable offer status | Green Premium product |
| REACH Regulation | Reference contains Substances of Very High Concern above the threshold |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) |
| Mercury free | Yes |
| China RoHS Regulation | X |
| RoHS exemption information | Yes |
| Environmental Disclosure | ENVPEP111049EN |
| Circularity Profile | N/A |
| WEEE | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |
| PVC free | Yes |