

Product datasheet

Specifications



servo motor BSH, Lexium 05,
1.4N.m, 1500rpm, 70mm, untapped
shaft, Sincos single turn, without
brake, IP65, straight

BSH0701M21A1A

! Discontinued

! Discontinued on: 18 Apr 2024

! To be end-of-service on: 18 Apr 2026

Main

| | |
|---------------------------|---|
| Device short name | BSH |
| Product or component type | Servo motor |
| Maximum mechanical speed | 8000 rpm |
| Continuous stall torque | 1.4 N.m for LXM05AD10M3X, 200...240 V, three phase 1.4 N.m for LXM05BD10M3X, 200...240 V, three phase 1.4 N.m for LXM05CD10M3X, 200...240 V, three phase |
| Peak stall torque | 2.66 N.m for LXM05AD10M3X, 200...240 V, three phase 2.66 N.m for LXM05BD10M3X, 200...240 V, three phase 2.66 N.m for LXM05CD10M3X, 200...240 V, three phase |
| Nominal output power | 210 W for LXM05AD10M3X, 200...240 V, three phase 210 W for LXM05BD10M3X, 200...240 V, three phase 210 W for LXM05CD10M3X, 200...240 V, three phase |
| Nominal torque | 1.36 N.m for LXM05AD10M3X, 200...240 V, three phase 1.36 N.m for LXM05BD10M3X, 200...240 V, three phase 1.36 N.m for LXM05CD10M3X, 200...240 V, three phase |
| Nominal speed | 1500 rpm for LXM05AD10M3X, 200...240 V, three phase 1500 rpm for LXM05BD10M3X, 200...240 V, three phase 1500 rpm for LXM05CD10M3X, 200...240 V, three phase |
| Product compatibility | LXM05AD10M3X at 200...240 V three phase LXM05BD10M3X at 200...240 V three phase LXM05CD10M3X at 200...240 V three phase |
| Shaft end | Untapped |
| IP degree of protection | IP65 standard IP67 with IP67 kit |
| Speed feedback resolution | 131072 points/turn |
| Holding brake | Without |
| Mounting support | International standard flange |
| Electrical connection | Straight connectors |

Complementary

| | |
|--------------------------|-------------|
| Range compatibility | Lexium 05 |
| supply voltage max | 480 V |
| Network number of phases | Three phase |
| Continuous stall current | 1 A |
| maximum continuous power | 1.06 W |

| | |
|--|--|
| Maximum current Irms | 3.1 A for LXM05AD10M3X 3.1 A for LXM05BD10M3X 3.1 A for LXM05CD10M3X |
| Maximum permanent current | 3.1 A |
| Switching frequency | 4 kHz |
| Second shaft | Without second shaft end |
| Shaft diameter | 11 mm |
| Shaft length | 23 mm |
| Feedback type | Single turn SinCos Hiperface |
| Motor flange size | 70 mm |
| Torque constant | 1.4 N.m/A at 120 °C |
| Back emf constant | 85 V/krpm at 120 °C |
| Rotor inertia | 0.25 kg.cm ² |
| Stator resistance | 35.4 Ohm at 20 °C |
| Stator inductance | 131.9 mH at 20 °C |
| Stator electrical time constant | 3.73 ms at 20 °C |
| Maximum radial force Fr | 360 N at 6000 rpm 380 N at 5000 rpm 410 N at 4000 rpm 460 N at 3000 rpm 520 N at 2000 rpm 660 N at 1000 rpm |
| Maximum axial force Fa | 0.2 x Fr |
| Type of cooling | Natural convection |
| Length | 154 mm |
| Centring collar diameter | 60 mm |
| Centring collar depth | 2.5 mm |
| Number of mounting holes | 4 |
| Mounting holes diameter | 5.5 mm |
| Circle diameter of the mounting holes | 82 mm |
| Net weight | 2.2 kg |
| Sizing reference | BSH0701M |
| Network number of phases | 3 |
| Accuracy error [angular] | 1.4 ° |
| Temperature copper hot | 120 °C |
| Temperature magnet hot | 100 °C |
| Temperature magnet rt | 20 °C |

Packing Units

| | |
|-------------------------------------|-----|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |

Contractual warranty

| | |
|-----------------------------|----|
| Warranty (in months) | 18 |
|-----------------------------|----|



Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

Use Longer



Lifetime extension

Repair

No