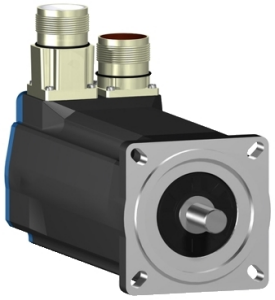
Product datasheet

Specifications



Discontinued

servo motor BSH, Lexium 05, 2.8N.m, 1500rpm, 70mm, keyed shaft, Sincos single turn, with brake, IP50, straight

BSH0703M11F1A

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	2.8 N.m for LXM05AD10M2, 200...240 V, single phase 2.8 N.m for LXM05BD10M2, 200...240 V, single phase 2.8 N.m for LXM05CD10M2, 200...240 V, single phase 2.8 N.m for LXM05AD10M3X, 200...240 V, three phase 2.8 N.m for LXM05AD14N4, 380...480 V, three phase 2.8 N.m for LXM05BD10M3X, 200...240 V, three phase 2.8 N.m for LXM05BD14N4, 380...480 V, three phase 2.8 N.m for LXM05CD10M3X, 200...240 V, three phase 2.8 N.m for LXM05CD14N4, 380...480 V, three phase
Peak stall torque	8.6 N.m for LXM05AD10M2, 200...240 V, single phase 8.6 N.m for LXM05BD10M2, 200...240 V, single phase 8.6 N.m for LXM05CD10M2, 200...240 V, single phase 8.6 N.m for LXM05AD10M3X, 200...240 V, three phase 8.6 N.m for LXM05AD14N4, 380...480 V, three phase 8.6 N.m for LXM05BD10M3X, 200...240 V, three phase 8.6 N.m for LXM05BD14N4, 380...480 V, three phase 8.6 N.m for LXM05CD10M3X, 200...240 V, three phase 8.6 N.m for LXM05CD14N4, 380...480 V, three phase
Nominal output power	400 W for LXM05AD10M2, 200...240 V, single phase 400 W for LXM05BD10M2, 200...240 V, single phase 400 W for LXM05CD10M2, 200...240 V, single phase 400 W for LXM05AD10M3X, 200...240 V, three phase 400 W for LXM05BD10M3X, 200...240 V, three phase 400 W for LXM05CD10M3X, 200...240 V, three phase 750 W for LXM05AD14N4, 380...480 V, three phase 750 W for LXM05BD14N4, 380...480 V, three phase 750 W for LXM05CD14N4, 380...480 V, three phase
Nominal torque	2.63 N.m for LXM05AD10M2, 200...240 V, single phase 2.63 N.m for LXM05BD10M2, 200...240 V, single phase 2.63 N.m for LXM05CD10M2, 200...240 V, single phase 2.4 N.m for LXM05AD14N4, 380...480 V, three phase 2.4 N.m for LXM05BD14N4, 380...480 V, three phase 2.4 N.m for LXM05CD14N4, 380...480 V, three phase 2.63 N.m for LXM05AD10M3X, 200...240 V, three phase 2.63 N.m for LXM05BD10M3X, 200...240 V, three phase 2.63 N.m for LXM05CD10M3X, 200...240 V, three phase
Nominal speed	1500 rpm for LXM05AD10M2, 200...240 V, single phase 1500 rpm for LXM05BD10M2, 200...240 V, single phase 1500 rpm for LXM05CD10M2, 200...240 V, single phase 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 3000 rpm for LXM05AD14N4, 380...480 V, three phase 3000 rpm for LXM05BD14N4, 380...480 V, three phase 3000 rpm for LXM05CD14N4, 380...480 V, three phase

Product compatibility	LXM05AD10M2 at 200...240 V single phase LXM05BD10M2 at 200...240 V single phase LXM05CD10M2 at 200...240 V single phase LXM05AD10M3X at 200...240 V three phase LXM05BD10M3X at 200...240 V three phase LXM05CD10M3X at 200...240 V three phase LXM05AD14N4 at 380...480 V three phase LXM05BD14N4 at 380...480 V three phase LXM05CD14N4 at 380...480 V three phase
Shaft end	Keyed
IP degree of protection	IP50 standard
Speed feedback resolution	131072 points/turn
Holding brake	With
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	2.1 A
maximum continuous power	1.7 W
Maximum current Irms	8.7 A for LXM05AD10M2 8.7 A for LXM05AD10M3X 8.7 A for LXM05AD14N4 8.7 A for LXM05BD10M2 8.7 A for LXM05BD10M3X 8.7 A for LXM05BD14N4 8.7 A for LXM05CD10M2 8.7 A for LXM05CD10M3X 8.7 A for LXM05CD14N4
Maximum permanent current	8.7 A
Switching frequency	4 kHz
Second shaft	Without second shaft end
Shaft diameter	14 mm
Shaft length	30 mm
Key width	20 mm
Feedback type	Single turn SinCos Hiperface
Holding torque	3 N.m holding brake
Motor flange size	70 mm
Torque constant	1.48 N.m/A at 120 °C
Back emf constant	95 V/krpm at 120 °C
Number of motor poles	6
Rotor inertia	0.81 kg.cm²
Stator resistance	10.2 Ohm at 20 °C
Stator inductance	49.2 mH at 20 °C
Stator electrical time constant	4.82 ms at 20 °C

Maximum radial force Fr	400 N at 6000 rpm 430 N at 5000 rpm 460 N at 4000 rpm 510 N at 3000 rpm 580 N at 2000 rpm 730 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	12 W
Type of cooling	Natural convection
Length	254 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	3.8 kg
Sizing reference	BSH0703M
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