

Product datasheet

Specifications



servo motor BSH, Lexium 32,
0.38N.m, 9000rpm, 40mm, keyed
shaft, 16 Sincos single turn, with
brake, IP50

BSH0402P16F2A

Main

Device short name	BSH
Product or component type	Servo motor
Maximum mechanical speed	10000 rpm
Continuous stall torque	0.38 N.m for LXM32.U60N4 at 1.5 A, 480 V, three phase 0.38 N.m for LXM32.U60N4 at 1.5 A, 400 V, three phase 0.38 N.m for LXM32.U45M2 at 1.5 A, 230 V, single phase
Peak stall torque	1.37 N.m for LXM32.U60N4 at 1.5 A, 480 V, three phase 1.37 N.m for LXM32.U60N4 at 1.5 A, 400 V, three phase 1.37 N.m for LXM32.U45M2 at 1.5 A, 230 V, single phase
Nominal output power	275 W for LXM32.U60N4 at 1.5 A, 480 V, three phase 289 W for LXM32.U60N4 at 1.5 A, 400 V, three phase 152 W for LXM32.U45M2 at 1.5 A, 230 V, single phase
Nominal torque	0.292 N.m for LXM32.U60N4 at 1.5 A, 480 V, three phase 0.307 N.m for LXM32.U60N4 at 1.5 A, 400 V, three phase 0.364 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	Keyed
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	1.5 A
maximum continuous power	398 W
Maximum current Irms	6 A for LXM32.U60N4 at 480 V 6 A for LXM32.U60N4 at 400 V 6 A for LXM32.U45M2 at 230 V
Maximum permanent current	1.5 A
Switching frequency	8 kHz
Second shaft	Without second shaft end

Shaft diameter	8 mm
Shaft length	25 mm
Key width	12 mm
Feedback type	Single turn SinCos Hiperface
Holding torque	0.4 N.m holding brake
Motor flange size	40 mm
Number of motor stacks	2
Torque constant	0.26 N.m/A at 120 °C
Back emf constant	18 V/krpm at 20 °C
Number of motor poles	5.0
Rotor inertia	0.0588 kg.cm ²
Stator resistance	11.6 Ohm at 20 °C
Stator inductance	6.4 mH at 20 °C
Stator electrical time constant	1.1 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	119.4 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	0.8 kg
Sizing reference	BSH0402P
Network number of phases	3
Accuracy error [angular]	0.08 °
Temperature copper hot	120 °C
Temperature magnet hot	100 °C
Temperature magnet rt	20 °C
Output current 3s peak	7.2 A
Inertia	0.017 kg.cm ² of brake 0.042 kg.cm ² of motor

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

Contractual warranty

Warranty (in months)

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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 Better



Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
SCIP Number	8c11b0c9-e501-4810-83eb-05fc6605ede4
EU RoHS Directive	Compliant By Exemption
REACH Regulation	Reference contains Substances of Very High Concern above the threshold
PVC free	Yes

Use Longer




Lifetime extension

Repair	No
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Use Again



Repack and remanufacture

Take-back	Yes
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins