

Product data sheet

Specifications



servo motor BMH, Lexium 32,
34.4Nm, 3800rpm, keyed shaft,
without brake, IP54, 128 multiturn
encoder, straight

BMH2051P12A1A

⚠ Discontinued on: Jun 30, 2023

⚠ Discontinued

Main

Device short name	BMH
Product or component type	Servo motor
Maximum mechanical speed	3800 rpm
Continuous stall torque	304.5 lbf.in (34.4 N.m) LXM32.D72N4 24 A, 400 V, three phase 304.5 lbf.in (34.4 N.m) LXM32.D72N4 24 A, 480 V, three phase
Peak stall torque	915.2 lbf.in (103.4 N.m) LXM32.D72N4 24 A, 400 V, three phase 915.2 lbf.in (103.4 N.m) LXM32.D72N4 24 A, 480 V, three phase
Nominal output power	5400 W LXM32.D72N4 24 A, 400 V, three phase 5400 W LXM32.D72N4 24 A, 480 V, three phase
Nominal torque	228.3 lbf.in (25.8 N.m) LXM32.D72N4 24 A, 400 V, three phase 228.3 lbf.in (25.8 N.m) LXM32.D72N4 24 A, 480 V, three phase
Nominal speed	2000 rpm LXM32.D72N4 24 A, 400 V, three phase 2000 rpm LXM32.D72N4 24 A, 480 V, three phase
Product compatibility	LXM32.D72N4 400...480 V three phase
Shaft end	Keyed
IP degree of protection	IP54 standard
Speed feedback resolution	131072 points/turn x 4096 turns
Holding brake	Without
Mounting support	International standard flange
Electrical connection	Straight connectors

Complementary

Range compatibility	Lexium 32
[Us] rated supply voltage	480 V
Network number of phases	Three phase
Continuous stall current	21.5 A
Continuous power	6.8 W
Maximum current Irms	72 A LXM32.D72N4
Maximum permanent current	78.1 A
Second shaft	Without second shaft end
Shaft diameter	1.5 in (38 mm)
Shaft length	3.1 in (80 mm)

Key width	2.8 in (70 mm)
Feedback type	Multiturn SinCos Hiperface
Motor flange size	8.07 in (205 mm)
Number of motor stacks	1
Back emf constant	104 V/krpm 248 °F (120 °C)
Number of motor poles	10
Rotor inertia	71.4 kg.cm ²
Stator resistance	0.3 Ohm 68 °F (20 °C)
Stator inductance	5.9 mH 68 °F (20 °C)
Stator electrical time constant	19.7 ms 68 °F (20 °C)
Maximum radial force Fr	3730 N 1000 rpm 2960 N 2000 rpm 2580 N 3000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	12.6 in (321 mm)
Centring collar diameter	7.09 in (180 mm)
Centring collar depth	0.2 in (4 mm)
Number of mounting holes	4
Mounting holes diameter	0.6 in (14 mm)
Circle diameter of the mounting holes	8.5 in (215 mm)
Net weight	72.8 lb(US) (33 kg)
Sizing reference	BMH2051P
Network number of phases	3
Accuracy error [angular]	1.4 °
Temperature copper hot	275 °F (135 °C)
Temperature magnet hot	212 °F (100 °C)
Temperature magnet rt	68 °F (20 °C)

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	14.2 in (36.0 cm)
Package 1 Width	12.2 in (31.0 cm)
Package 1 Length	22.8 in (58.0 cm)
Package 1 Weight	86.0 lb(US) (39.0 kg)

Contractual warranty

Warranty (in months)	18
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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

EU RoHS Directive

[Compliant By Exemption](#)

PVC free

Yes

Use Longer



Lifetime extension

Repair

No

Use Again



Repack and remanufacture

Circularity Profile

No need of specific recycling operations

WEEE Label



The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins