

# Product datasheet

Specifications



servo motor BMH, Lexium 32,  
34.4Nm, 3800rpm, keyed shaft, with  
brake, IP54, 128bit encoder, straight

BMH2051P11F1A

⚠ Discontinued on: 9 Feb 2023

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## Main

Device short name	BMH
Product or component type	Servo motor
Maximum mechanical speed	3800 rpm
Continuous stall torque	34.4 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 34.4 N.m for LXM32.D72N4 at 24 A, 480 V, three phase
Peak stall torque	103.4 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 103.4 N.m for LXM32.D72N4 at 24 A, 480 V, three phase
Nominal output power	5400 W for LXM32.D72N4 at 24 A, 400 V, three phase 5400 W for LXM32.D72N4 at 24 A, 480 V, three phase
Nominal torque	25.8 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 25.8 N.m for LXM32.D72N4 at 24 A, 480 V, three phase
Nominal speed	2000 rpm for LXM32.D72N4 at 24 A, 400 V, three phase 2000 rpm for LXM32.D72N4 at 24 A, 480 V, three phase
Product compatibility	LXM32.D72N4 at 400...480 V three phase
Shaft end	Keyed
IP degree of protection	IP54 standard
Speed feedback resolution	131072 points/turn
Holding brake	With
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 for LXM32.D72N4
Maximum permanent current	78.1 A
Second shaft	Without second shaft end
Shaft diameter	38 mm
Shaft length	80 mm
Key width	70 mm

<b>Feedback type</b>	Single turn SinCos Hiperface
<b>Holding torque</b>	80 N.m holding brake
<b>Motor flange size</b>	205 mm
<b>Number of motor stacks</b>	1
<b>Back emf constant</b>	104 V/krpm at 120 °C
<b>Number of motor poles</b>	10
<b>Rotor inertia</b>	87.4 kg.cm <sup>2</sup>
<b>Stator resistance</b>	0.3 Ohm at 20 °C
<b>Stator inductance</b>	5.9 mH at 20 °C
<b>Stator electrical time constant</b>	19.7 ms at 20 °C
<b>Maximum radial force Fr</b>	3730 N at 1000 rpm 2960 N at 2000 rpm 2580 N at 3000 rpm
<b>Maximum axial force Fa</b>	0.2 x Fr
<b>Brake pull-in power</b>	40 W
<b>Type of cooling</b>	Natural convection
<b>Length</b>	370.5 mm
<b>Centring collar diameter</b>	180 mm
<b>Centring collar depth</b>	4 mm
<b>Number of mounting holes</b>	4
<b>Mounting holes diameter</b>	14 mm
<b>Circle diameter of the mounting holes</b>	215 mm
<b>Net weight</b>	37.9 kg
<b>Sizing reference</b>	BMH2051P
<b>Network number of phases</b>	3
<b>Accuracy error [angular]</b>	1.4 °
<b>Temperature copper hot</b>	135 °C
<b>Temperature magnet hot</b>	100 °C
<b>Temperature magnet rt</b>	20 °C

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	36.0 cm
<b>Package 1 Width</b>	31.0 cm
<b>Package 1 Length</b>	58.0 cm
<b>Package 1 Weight</b>	43.0 kg

## Contractual warranty

<b>Warranty (in months)</b>	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

End of life manual availability

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