Specifications



## servo motor BMH, Lexium 32, 1.2Nm, 8000rpm, keyed shaft, with brake, IP54, 128bit encoder

BMH0701P11F2A

### Main

Product Or Component Type	Servo motor
Device Short Name	ВМН
Maximum Mechanical Speed	8000 rpm
Continuous Stall Torque	1.2 N.m for LXM32.U60N4 at 1.5 A, 400 V, three phase
	1.2 N.m for LXM32.U60N4 at 1.5 A, 480 V, three phase
	1.4 N.m for LXM32.D12N4 at 3 A, 400 V, three phase
	1.4 N.m for LXM32.D12N4 at 3 A, 480 V, three phase
Peak Stall Torque	4.2 N.m for LXM32.U60N4 at 1.5 A, 400 V, three phase
	4.2 N.m for LXM32.U60N4 at 1.5 A, 480 V, three phase
	4.2 N.m for LXM32.D12N4 at 3 A, 400 V, three phase
	4.2 N.m for LXM32.D12N4 at 3 A, 480 V, three phase
Nominal Output Power	350 W for LXM32.U60N4 at 1.5 A, 400 V, three phase
	350 W for LXM32.U60N4 at 1.5 A, 480 V, three phase
	700 W for LXM32.D12N4 at 3 A, 400 V, three phase
	700 W for LXM32.D12N4 at 3 A, 480 V, three phase
Nominal Torque	1.1 N.m for LXM32.U60N4 at 1.5 A, 400 V, three phase
	1.1 N.m for LXM32.U60N4 at 1.5 A, 480 V, three phase
	1.3 N.m for LXM32.D12N4 at 3 A, 400 V, three phase
	1.3 N.m for LXM32.D12N4 at 3 A, 480 V, three phase
Nominal Speed	3000 rpm for LXM32.U60N4 at 1.5 A, 400 V, three phase
	3000 rpm for LXM32.U60N4 at 1.5 A, 480 V, three phase
	5000 rpm for LXM32.D12N4 at 3 A, 400 V, three phase
	5000 rpm for LXM32.D12N4 at 3 A, 480 V, three phase
Product Compatibility	LXM32.U60N4 at 400480 V three phase
	LXM32.D12N4 at 400480 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	Rotatable right-angled connectors

## Complementary

Range Compatibility	Lexium 32
[Us] Rated Supply Voltage	480 V
Network Number Of Phases	Three phase
Continuous Stall Current	1.78 A
Continuous Power	1.05 W
Maximum Current Irms	6 A for LXM32.U60N4 6 A for LXM32.D12N4

Maximum Permanent Current	5.97 A
Second Shaft	Without second shaft end
Shaft Diameter	11 mm
Shaft Length	23 mm
Key Width	18 mm
Feedback Type	Single turn SinCos Hiperface
Holding Torque	3 N.m holding brake
Motor Flange Size	70 mm
Number Of Motor Stacks	1
Torque Constant	0.79 N.m/A at 120 °C
Back Emf Constant	50.72 V/krpm at 120 °C
Number Of Motor Poles	10
Rotor Inertia	0.7 kg.cm <sup>2</sup>
Stator Resistance	8.3 Ohm at 20 °C
Stator Inductance	23.4 mH at 20 °C
Stator Electrical Time Constant	2.8 ms at 20 °C
Maximum Radial Force Fr	660 N at 1000 rpm 520 N at 2000 rpm 460 N at 3000 rpm 410 N at 4000 rpm 380 N at 5000 rpm 360 N at 6000 rpm
Maximum Axial Force Fa	0.2 x Fr
Brake Pull-In Power	7 W
Type Of Cooling	Natural convection
Length	161 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	2.6 kg

# **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	11.0 cm
Package 1 Width	20.0 cm
Package 1 Length	40.0 cm
Package 1 Weight	1.8 kg

## **Contractual warranty**

Warranty

18 months

## Sustainability

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >



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Transparency RoHS/REACh

### Well-being performance



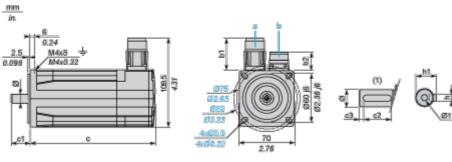
### **Certifications & Standards**

Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	No need of specific recycling operations
California Proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

#### **Dimensions Drawings**

#### **Servo Motors Dimensions**

#### **Example with Straight Connectors**



a: Power supply for servo motor brake

b: Power supply for servo motor encoder

(1) Shaft end, keyed slot (optional)

Dimensions in mm

Straight Rotatable angle connectors		•		c (with	` C1	c2	c3	h	h1	ø	Ø1 for	
b1	b2	b1	b2	brake)	brake)							screws
39.5	25.5	39.5	39.5	122	161	23	18	2.5	4 h9	12.5 <sup>+0</sup> _ 0.13	11 k6	M4 x 14

#### Dimensions in in.

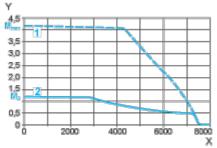
Straigh conneo		Rotatable angled connectors		c (without brake)	c (with brake)	c1	c2	c3	h	h1	Ø	Ø1 for screws
b1	b2	b1	b2	Diake)								
1.55	1	1.55	1.55	4.80	6.33	0.90	0.70	0.09	0.16 h9	0.49 <sup>+0</sup> _ 0.0051	0.43 k6	M4 x 0.55

#### Performance Curves

#### 400 V 3-Phase Supply Voltage

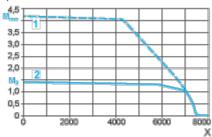
#### **Torque/Speed Curves**

Servo motor with LXM32•U60N4 servo drive



- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

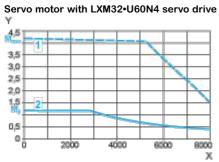
Servo motor with LXM32•D12N4 servo drive  $\Upsilon$ 



- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

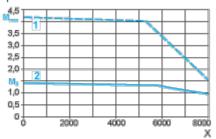
#### 480 V 3-Phase Supply Voltage

#### **Torque/Speed Curves**



- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

# Servo motor with LXM32•D12N4 servo drive $\Upsilon$



- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque