

# servo motor BMH - 2.5 Nm - 8000 rpm - keyed shaft - with brake - IP54

BMH0702P16F2A

EAN Code: 3606485193809

# Main

Device short name	ВМН
Product or component type	Servo motor
Maximum mechanical speed	8000 rpm
Continuous stall torque	2.5 N.m for LXM32.D12N4 at 3 A, 400 V, three phase 2.5 N.m for LXM32.D12N4 at 3 A, 480 V, three phase
Peak stall torque	7.4 N.m for LXM32.D12N4 at 3 A, 400 V, three phase 7.4 N.m for LXM32.D12N4 at 3 A, 480 V, three phase
Nominal output power	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	2.2 N.m for LXM32.D12N4 at 3 A, 400 V, three phase 2.2 N.m for LXM32.D12N4 at 3 A, 480 V, three phase
Nominal speed	3000 rpm for LXM32.D12N4 at 3 A, 400 V, three phase 3000 rpm for LXM32.D12N4 at 3 A, 480 V, three phase
Product compatibility	LXM32.D12N4 at 400480 V three phase
Shaft end	Keyed
IP degree of protection	IP54 standard
Speed feedback resolution	32768 points/turn
Holding brake	With
Mounting support	International standard flange
Electrical connection	Rotatable right-angled connectors

# Complementary

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Range compatibility	Lexium 32
[Us] rated supply voltage	480 V
Network number of phases	Three phase
Continuous stall current	2.94 A
Continuous power	1.51 W
Maximum current Irms	9.65 A for LXM32.D12N4
Maximum permanent current	9.68 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	2
Torque constant	0.84 N.m/A at 120 °C
Back emf constant	54.08 V/krpm at 120 °C
Number of motor poles	5.0
Rotor inertia	1.24 kg.cm²
Stator resistance	3.8 Ohm at 20 °C
Stator inductance	5.89 mH at 20 °C
Stator electrical time constant	3.2 ms at 20 °C
Maximum radial force Fr	710 N at 1000 rpm 560 N at 2000 rpm 490 N at 3000 rpm 450 N at 4000 rpm 410 N at 5000 rpm 390 N at 6000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	7 W
type of cooling	Natural convection
Length	193 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	5.5 mm 82 mm
Circle diameter of the mounting	
Circle diameter of the mounting holes	82 mm
Circle diameter of the mounting holes  Net weight	82 mm 3.3 kg
Circle diameter of the mounting holes  Net weight  Sizing reference	82 mm 3.3 kg BMH0702P
Circle diameter of the mounting holes  Net weight  Sizing reference  Network number of phases	82 mm  3.3 kg  BMH0702P  3
Circle diameter of the mounting holes  Net weight  Sizing reference  Network number of phases  Accuracy error [angular]	82 mm  3.3 kg  BMH0702P  3  4.8 °

# **Packing Units**

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	11 cm
Package 1 Width	20 cm
Package 1 Length	40 cm
Package 1 Weight	2.8 kg
Unit Type of Package 2	P06
Number of Units in Package 2	36
Package 2 Height	105.0 cm

Package 2 Width	80.0 cm	
Package 2 Length	60.0 cm	
Package 2 Weight	107.8 kg	

# **Logistical informations**

Country of origin

DE

# **Contractual warranty**

Warranty

18 months



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 >

Environmental footprint							
Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	785						
Environmental Disclosure	Product Environmental Profile						

#### **Use Better**

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	A7df881f-135f-4256-b8c2-ea55d4c9a151
REACh Regulation	REACh Declaration
PVC free	Yes

#### Use Again

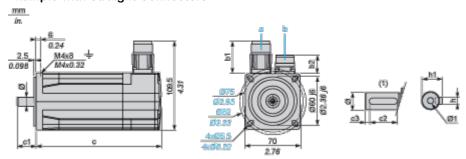
○ Repack and remanufacture	
Circularity Profile	No need of specific recycling operations
Take-back	No
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

## BMH0702P16F2A

#### **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 connectors		Rotatable angled connectors		c (without	c (with	c1	c2	сЗ	h	h1	ø	Ø1 for
b1	b2	b1	b2	brake)	brake)							screws
39.5	25.5	39.5	39.5	154	193	23	18	2.5	4 h9	12.5 <sup>+0</sup> _ 0.13	11 k6	M4 x 14

#### Dimensions in in

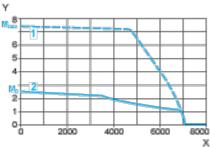
- 1	differsions in in.												
	Straight connectors		Rotatable angled connectors		c (without	c (with brake)	c1	c2	сЗ	h	h1	Ø	Ø1 for screws
	b1	b2	b1	b2	brake)								
	1.55	1	1.55	1.55	6.06	7.59	0.90	0.70	0.09	0.16 h9	0.49 <sup>+0</sup> _ 0.0051	0.43 k6	M4 x 0.55

#### Performance Curves

## 400 V 3-Phase Supply Voltage

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

Servo motor with LXM32•D12N4 servo drive

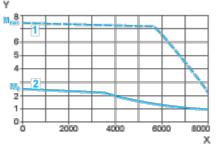


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

#### 480 V 3-Phase Supply Voltage

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

Servo motor with LXM32•D12N4 servo drive



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