

# Product data sheet

Specifications



servo motor BMH, Lexium 32,  
1.4Nm, 8000rpm, untapped shaft,  
with brake, IP54, 16bit encoder

BMH0701T06F2A

**Product availability: Non-Stock - Not normally stocked in distribution facility**

## Main

Device short name	BMH
Product or Component Type	Servo motor
Maximum mechanical speed	8000 rpm
Continuous stall torque	12.4 lbf.in (1.4 N.m) LXM32.U90M2 3 A, 230 V, single phase 12.4 lbf.in (1.4 N.m) LXM32.D18M2 6 A, 115 V, single phase
Peak stall torque	35.4 lbf.in (4 N.m) LXM32.U90M2 3 A, 230 V, single phase 37.2 lbf.in (4.2 N.m) LXM32.D18M2 6 A, 115 V, single phase
Nominal output power	450 W LXM32.U90M2 3 A, 230 V, single phase 350 W LXM32.D18M2 6 A, 115 V, single phase
Nominal torque	9.7 lbf.in (1.1 N.m) LXM32.U90M2 3 A, 230 V, single phase 11.95 lbf.in (1.35 N.m) LXM32.D18M2 6 A, 115 V, single phase
Nominal speed	4000 rpm LXM32.U90M2 3 A, 230 V, single phase 2500 rpm LXM32.D18M2 6 A, 115 V, single phase
Product compatibility	LXM32.D18M2 115 V single phase LXM32.U90M2 230 V single phase
Shaft end	Smooth shaft
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

Range Compatibility	Lexium 32
[Us] rated supply voltage	240 V
Phase	Three phase
Continuous stall current	2.85 A
Continuous power	1.05 W
Maximum current Irms	9.56 A LXM32.D18M2 9.6 A LXM32.U90M2
Maximum permanent current	9.56 A
Second shaft	Without second shaft end
Shaft diameter	0.4 in (11 mm)
Shaft length	0.9 in (23 mm)
Feedback type	Single turn SinCos Hiperface

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

<b>Holding torque</b>	26.6 lbf.in (3 N.m) holding brake
<b>Motor flange size</b>	2.8 in (70 mm)
<b>Number of motor stacks</b>	1
<b>Torque constant</b>	0.49 N.m/A 248 °F (120 °C)
<b>Back emf constant</b>	31.17 V/krpm 248 °F (120 °C)
<b>Number of motor poles</b>	5.0
<b>Rotor inertia</b>	0.7 kg.cm <sup>2</sup>
<b>Stator resistance</b>	3.2 Ohm 68 °F (20 °C)
<b>Stator inductance</b>	4.045 mH 68 °F (20 °C)
<b>Stator electrical time constant</b>	2.8 ms 68 °F (20 °C)
<b>Maximum radial force Fr</b>	660 N 1000 rpm 520 N 2000 rpm 460 N 3000 rpm 410 N 4000 rpm 380 N 5000 rpm 360 N 6000 rpm
<b>Maximum axial force Fa</b>	0.2 x Fr
<b>Brake pull-in power</b>	7 W
<b>Type of cooling</b>	Natural convection
<b>Length</b>	6.3 in (161 mm)
<b>Centring collar diameter</b>	2.4 in (60 mm)
<b>Centring collar depth</b>	0.10 in (2.5 mm)
<b>Number of mounting holes</b>	4
<b>Mounting holes diameter</b>	0.2 in (5.5 mm)
<b>Circle diameter of the mounting holes</b>	3.2 in (82 mm)
<b>Product Weight</b>	5.7 lb(US) (2.6 kg)
<b>Sizing reference</b>	BMH0701T
<b>Network number of phases</b>	3
<b>Accuracy error [angular]</b>	4.8 °
<b>Temperature copper hot</b>	275 °F (135 °C)
<b>Temperature magnet hot</b>	212 °F (100 °C)
<b>Temperature magnet rt</b>	68 °F (20 °C)

## Ordering and shipping details

<b>Category</b>	US1PC5318282
<b>Discount Schedule</b>	PC53
<b>GTIN</b>	3606485194264
<b>Returnability</b>	No
<b>Country of origin</b>	DE

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Nbr. of units in pkg.</b>	1

<b>Package 1 Height</b>	4.33 in (11.0 cm)
<b>Package 1 Width</b>	7.17 in (18.2 cm)
<b>Package 1 Length</b>	15.55 in (39.5 cm)
<b>Package weight(Lbs)</b>	5.891 lb(US) (2.672 kg)
<b>Unit Type of Package 2</b>	P06
<b>Number of Units in Package 2</b>	36
<b>Package 2 Height</b>	41.34 in (105.0 cm)
<b>Package 2 Width</b>	31.50 in (80.0 cm)
<b>Package 2 Length</b>	23.62 in (60.0 cm)
<b>Package 2 Weight</b>	227.500 lb(US) (103.192 kg)

## Contractual warranty

<b>Warranty</b>	18 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 >](#)

### Environmental footprint

Carbon footprint (kg CO2 eq, Total Life cycle) 516

Environmental Disclosure [Product Environmental Profile](#)

## Use Better

### Materials and Substances

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](#)

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](http://www.P65Warnings.ca.gov)

PVC free Yes

## Use Again

### Repack and remanufacture

Circularity Profile No need of specific recycling operations

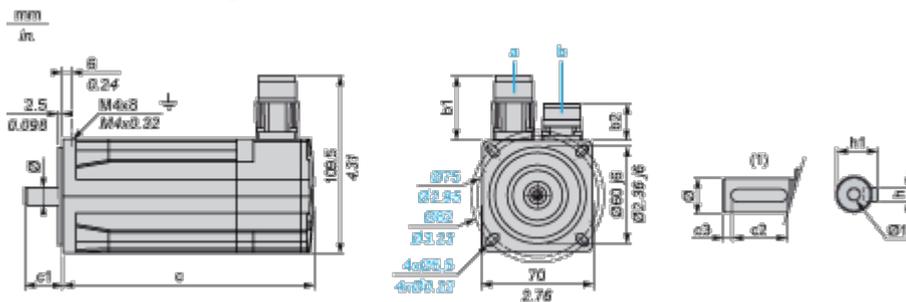
Take-back No

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

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 brake)	c (with brake)	c1	c2	c3	h	h1	Ø	Ø1 for screws
b1	b2	b1	b2									
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.

Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)	c1	c2	c3	h	h1	Ø	Ø1 for screws
b1	b2	b1	b2									
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

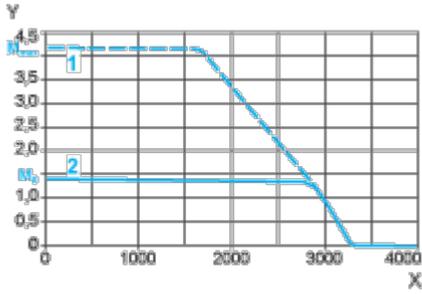
Performance Curves

115 V Single-Phase Supply Voltage

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Torque/Speed Curves

Servo motor with LXM32-D18M2 servo drive



X Speed in rpm

Y Torque in Nm

1 Peak torque

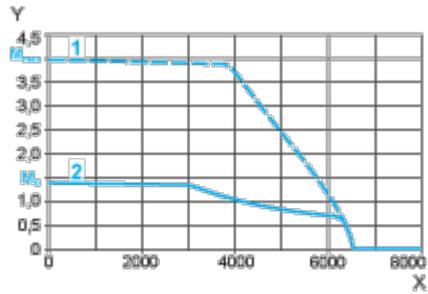
2 Continuous torque

230 V Single-Phase Supply Voltage

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Torque/Speed Curves

Servo motor with LXM32-U90M2 servo drive



X Speed in rpm

Y Torque in Nm

1 Peak torque

2 Continuous torque