# **Product datasheet**





servo motor BMH, Lexium 32, 3.4Nm, 8000rpm, keyed shaft, without brake, IP65, IP67, 16bit encoder, straight

BMH0703T36A1A



(!) Discontinued on: 30 Jun 2023

! Discontinued

#### Main

Device short name	ВМН
Product or component type	Servo motor
Maximum mechanical speed	8000 rpm
Continuous stall torque	3.4 N.m for LXM32.D30M2 at 10 A, 115 V, single phase 3.4 N.m for LXM32.D18M2 at 6 A, 230 V, single phase
Peak stall torque	8.7 N.m for LXM32.D30M2 at 10 A, 115 V, single phase 10.2 N.m for LXM32.D18M2 at 6 A, 230 V, single phase
Nominal output power	650 W for LXM32.D30M2 at 10 A, 115 V, single phase 900 W for LXM32.D18M2 at 6 A, 230 V, single phase
Nominal torque	3.1 N.m for LXM32.D30M2 at 10 A, 115 V, single phase 2.9 N.m for LXM32.D18M2 at 6 A, 230 V, single phase
Nominal speed	2000 rpm for LXM32.D30M2 at 10 A, 115 V, single phase 3000 rpm for LXM32.D18M2 at 6 A, 230 V, single phase
Product compatibility	LXM32.D30M2 at 115 V single phase LXM32.D18M2 at 230 V single phase
Shaft end	Keyed
IP degree of protection	IP65 standard IP67 with IP67 kit
Speed feedback resolution	32768 points/turn
Holding brake	Without
mounting support	International standard flange
Electrical connection	Straight connectors

## Complementary

Range compatibility	Lexium 32
[Us] rated supply voltage	240 V
Network number of phases	Three phase
Continuous stall current	5.55 A
Continuous power	1.68 W
Maximum current Irms	15 A for LXM32.D30M2 17.8 A for LXM32.D18M2
Maximum permanent current	17.84 A
Second shaft	Without second shaft end
Shaft diameter	14 mm

Shaft length	30 mm							
Key width	20 mm							
Feedback type	Single turn SinCos Hiperface							
Motor flange size	70 mm							
Number of motor stacks	3							
Torque constant	0.61 N.m/A at 120 °C							
Back emf constant	39.3 V/krpm at 120 °C							
Number of motor poles	10							
Rotor inertia	1.67 kg.cm²							
Stator resistance	1.32 Ohm at 20 °C							
Stator inductance	4.3 mH at 20 °C							
Stator electrical time constant	3.3 ms at 20 °C							
Maximum radial force Fr	730 N at 1000 rpm 580 N at 2000 rpm 510 N at 3000 rpm 460 N at 4000 rpm 430 N at 5000 rpm 400 N at 6000 rpm							
Maximum axial force Fa	0.2 x Fr							
Type of cooling	Natural convection							
Length	186 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	3 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	2.2 kg

# **Contractual warranty**

Warranty 18 months



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Transparency RoHS/REACh

#### Well-being performance

	Mercury Free	
<b>⊘</b>	Rohs Exemption Information	Yes
<b>②</b>	Pvc Free	

#### **Certifications & Standards**

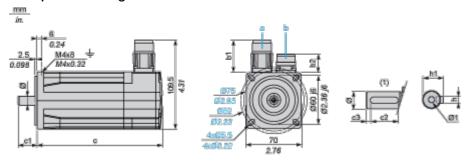
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	No need of specific recycling operations

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#### **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 angled connectors 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	186	225	30	20	5	5 h9	16 <sup>+0</sup> _ 0.13	14 k6	M5 x 17

#### Dimensions in in.

	Straight connectors		ble ctors	c (without	c (with brake)	c1	c2	c3	h	h1	Ø	Ø1 for screws
b1	b2	b1	b2	brake)								
1.55	1	1.55	1.55	7.32	8.85	1.18	0.78	0.19	0.20 h9	0.63 <sup>+0</sup> _ 0.0051	0.55 k6	M5 x 0.67

## **Product datasheet**

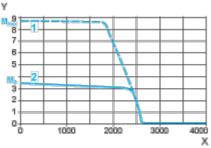
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#### Performance Curves

#### 115 V Single-Phase Supply Voltage

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

Servo motor with LXM32•D30M2 servo drive

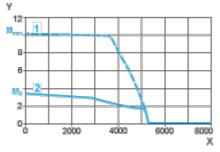


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

#### 230 V Single-Phase Supply Voltage

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

Servo motor with LXM32•D18M2 servo drive



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