## BMH0701P02F2A

servo motor BMH, Lexium 32, 1.2Nm, 8000rpm, untapped shaft, with brake, IP54, 128 multiturn encoder





#### Main

IVIAIII	
Device short name	ВМН
Product or Component Type	Servo motor
Maximum mechanical speed	8000 rpm
Continuous stall torque	10.6 Lbf.In (1.2 N.m) LXM32.U60N4 1.5 A, 400 V, three phase 10.6 Lbf.In (1.2 N.m) LXM32.U60N4 1.5 A, 480 V, three phase 12.4 Lbf.In (1.4 N.m) LXM32.D12N4 3 A, 400 V, three phase 12.4 lbf.in (1.4 N.m) LXM32.D12N4 3 A, 480 V, three phase
Peak stall torque	37.2 Lbf.In (4.2 N.m) LXM32.U60N4 1.5 A, 400 V, three phase 37.2 Lbf.In (4.2 N.m) LXM32.U60N4 1.5 A, 480 V, three phase 37.2 Lbf.In (4.2 N.m) LXM32.D12N4 3 A, 400 V, three phase 37.2 lbf.in (4.2 N.m) LXM32.D12N4 3 A, 480 V, three phase
Nominal output power	350 W LXM32.U60N4 1.5 A, 400 V, three phase 350 W LXM32.U60N4 1.5 A, 480 V, three phase 700 W LXM32.D12N4 3 A, 400 V, three phase 700 W LXM32.D12N4 3 A, 480 V, three phase
Nominal torque	9.7 Lbf.In (1.1 N.m) LXM32.U60N4 1.5 A, 400 V, three phase 9.7 Lbf.In (1.1 N.m) LXM32.U60N4 1.5 A, 480 V, three phase 11.5 Lbf.In (1.3 N.m) LXM32.D12N4 3 A, 400 V, three phase 11.5 lbf.in (1.3 N.m) LXM32.D12N4 3 A, 480 V, three phase
Nominal speed	3000 rpm LXM32.U60N4 1.5 A, 400 V, three phase 3000 rpm LXM32.U60N4 1.5 A, 480 V, three phase 5000 rpm LXM32.D12N4 3 A, 400 V, three phase 5000 rpm LXM32.D12N4 3 A, 480 V, three phase
Product compatibility	LXM32.U60N4 400480 V three phase LXM32.D12N4 400480 V three phase
Shaft end	Smooth shaft
IP Degree of Protection	IP54 standard
Speed feedback resolution	131072 points/turn x 4096 turns
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
Phase	Three phase
Continuous stall current	1.78 A
Continuous power	1.05 W

Maximum current Irms	6 A LXM32.U60N4 6 A LXM32.D12N4						
Maximum permanent current	5.97 A						
Second shaft	Without second shaft end						
Shaft diameter	0.4 in (11 mm)						
Shaft length	0.9 in (23 mm)						
Feedback type	Multiturn SinCos Hiperface						
Holding torque	26.6 lbf.in (3 N.m) holding brake						
Motor flange size	2.8 in (70 mm)						
Number of motor stacks	1						
Torque constant	0.79 N.m/A 248 °F (120 °C)						
Back emf constant	50.72 V/krpm 248 °F (120 °C)						
Number of motor poles	10						
Rotor inertia	0.7 kg.cm²						
Stator resistance	8.3 Ohm 68 °F (20 °C)						
Stator inductance	23.4 mH 68 °F (20 °C)						
Stator electrical time constant	2.8 ms 68 °F (20 °C)						
Maximum radial force Fr	660 N 1000 rpm 520 N 2000 rpm 460 N 3000 rpm 410 N 4000 rpm 380 N 5000 rpm 360 N 6000 rpm						
Maximum axial force Fa	0.2 x Fr						
Brake pull-in power	7 W						
Type of cooling	Natural convection						
Length	6.3 in (161 mm)						
Centring collar diameter	2.4 in (60 mm)						
Centring collar depth	0.10 in (2.5 mm)						
Number of mounting holes	4						
Mounting holes diameter	0.2 in (5.5 mm)						
Circle diameter of the mounting holes	3.2 in (82 mm)						

## Ordering and shipping details

Category	US1PC5318282					
Discount Schedule	PC53					
GTIN	3606485193175					
Returnability	No					
Country of origin	US					

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.3 in (11.0 cm)
Package 1 Width	7.9 in (20.0 cm)
Package 1 Length	15.7 in (40.0 cm)
Package 1 Weight	6.08 lb(US) (2.758 kg)



## Offer Sustainability

Sustainable offer status	Green Premium product  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				
California proposition 65					
REACh Regulation	☑ REACh Declaration				
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)				
Mercury free	Yes				
China RoHS Regulation	China RoHS Declaration				
RoHS exemption information	€Yes				
Environmental Disclosure	Product Environmental Profile				
Circularity Profile	No need of specific recycling operations				
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.				
PVC free	Yes				

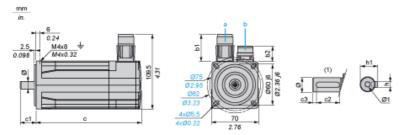
## Contractual warranty

Warranty 18 months	
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# BMH0701P02F2A

#### Servo Motors Dimensions

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



- Power supply for servo motor brake
- Power supply for servo motor encoder Shaft end, keyed slot (optional) b:
- (1)

#### Dimensions in mm

Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)	с1	c2	с3	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> <sub>-0.13</sub>	11 k6	M4 x 14

#### Dimensions in in.

Straight connectors		Rotatable angled connectors		c (without brake)	c (with brake)	c1	c2	с3	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> <sub>-0.0051</sub>	0.43 k6	M4 x 0.55

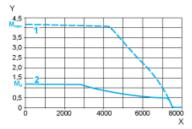
# Product data sheet Performance Curves

## BMH0701P02F2A

#### 400 V 3-Phase Supply Voltage

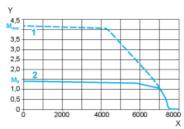
#### Torque/Speed Curves

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

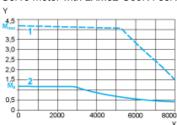


- X Speed in rpm
- Y Torque in Nm
- Peak torque
- 2 Continuous torque

## 480 V 3-Phase Supply Voltage

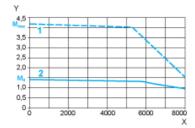
#### Torque/Speed Curves

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



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