

# BMH2051P07F1A

servo motor BMH - 34.4 Nm - 3800 rpm -  
untapped shaft - with brake - IP54



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



## Main

Product or component type	Servo motor
Device short name	BMH
Maximum mechanical speed	3800 rpm
Continuous stall torque	304.47 Lbf.In (34.4 N.m) LXM32.D72N4 24 A, 400 V, three phase 304.47 lbf.in (34.4 N.m) LXM32.D72N4 24 A, 480 V, three phase
Peak stall torque	915.17 Lbf.In (103.4 N.m) LXM32.D72N4 24 A, 400 V, three phase 915.17 lbf.in (103.4 N.m) LXM32.D72N4 24 A, 480 V, three phase
Nominal output power	5400 W LXM32.D72N4 24 A, 400 V, three phase 5400 W LXM32.D72N4 24 A, 480 V, three phase
Nominal torque	228.35 Lbf.In (25.8 N.m) LXM32.D72N4 24 A, 400 V, three phase 228.35 lbf.in (25.8 N.m) LXM32.D72N4 24 A, 480 V, three phase
Nominal speed	2000 rpm LXM32.D72N4 24 A, 400 V, three phase 2000 rpm LXM32.D72N4 24 A, 480 V, three phase
Product compatibility	LXM32.D72N4 400...480 V three phase
Shaft end	Smooth shaft
IP degree of protection	IP54 standard
Speed feedback resolution	32768 points/turn x 4096 turns
Holding brake	With
Mounting support	International standard flange
Electrical connection	Straight connectors

## Complementary

Range compatibility	Lexium 32
[Us] rated supply voltage	480 V
Phase	Three phase
Continuous stall current	21.5 A
Continuous power	6.8 W
Maximum current Irms	72 A LXM32.D72N4
Maximum permanent current	78.1 A
Second shaft	Without second shaft end
Shaft diameter	1.50 in (38 mm)
Shaft length	3.15 in (80 mm)
Feedback type	Multiturn SinCos Hiperface
Holding torque	708.06 lbf.in (80 N.m) holding brake
Motor flange size	8.07 in (205 mm)
Number of motor stacks	1
Back emf constant	104 V/krpm 248 °F (120 °C)
Number of motor poles	10
Rotor inertia	87.4 kg.cm <sup>2</sup>
Stator resistance	0.3 Ohm 68 °F (20 °C)
Stator inductance	5.9 mH 68 °F (20 °C)

Stator electrical time constant	19.7 ms 68 °F (20 °C)
Maximum radial force Fr	3730 N 1000 rpm 2960 N 2000 rpm 2580 N 3000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	40 W
Type of cooling	Natural convection
Length	14.59 in (370.5 mm)
Centring collar diameter	7.09 in (180 mm)
Centring collar depth	0.16 in (4 mm)
Number of mounting holes	4
Mounting holes diameter	0.55 in (14 mm)
Circle diameter of the mounting holes	8.46 in (215 mm)
Net weight	83.56 lb(US) (37.9 kg)

## Ordering and shipping details

Category	18282 - LEXIUM 32 MOTORS
Discount Schedule	PC53
GTIN	03606485202921
Package weight(Lbs)	42.91 kg (94.6 lb(US))
Returnability	No
Country of origin	DE

## Offer Sustainability

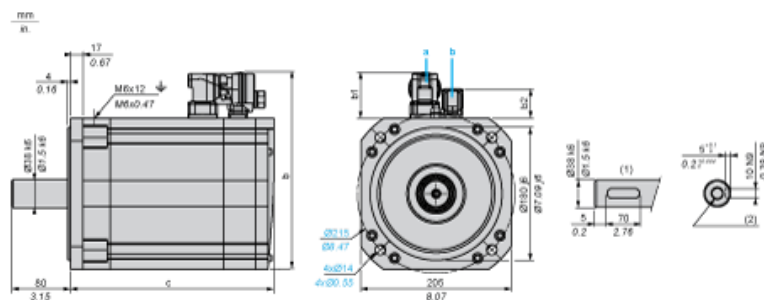
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds which is known to the State of California to cause Carcinogen & Reproductive harm. For more information go to <a href="http://www.p65warnings.ca.gov">www.p65warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
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.

## Contractual warranty

Warranty	18 months
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## 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)  
(2) For screw M12 x 28 mm/M12 x 1.10 in.

Dimensions in mm

Straight connectors			Rotatable angled connectors			c (without brake)	c (with brake)
b	b1	b2	b	b1	b2		
259	54	25.5	265	60	39.5	312	370.5

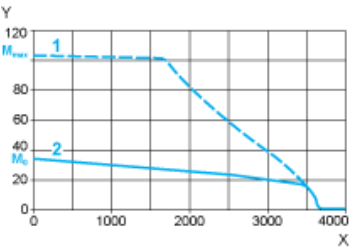
Dimensions in in.

Straight connectors			Rotatable angled connectors			c (without brake)	c (with brake)
b	b1	b2	b	b1	b2		
10.19	2.12	1.00	10.43	2.36	1.55	12.28	14.58

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D72N4 servo drive

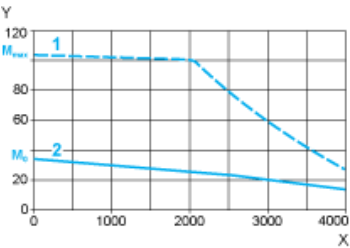


- X Speed in rpm  
Y Torque in Nm  
1 Peak torque  
2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D72N4 servo drive



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