

# BMH2053P22A2A

servo motor BMH - 84 Nm - 3800 rpm -  
untapped shaft - without brake - IP65/IP67



## Main

Product or component type	Servo motor
Device short name	BMH
Maximum mechanical speed	3800 rpm
Continuous stall torque	84 N.m for LXM32.D72N4 24 A at 400 V three phase 84 N.m for LXM32.D72N4 24 A at 480 V three phase
Peak stall torque	232 N.m for LXM32.D72N4 24 A at 400 V three phase 232 N.m for LXM32.D72N4 24 A at 480 V three phase
Nominal output power	6500 W for LXM32.D72N4 24 A at 400 V three phase 6500 W for LXM32.D72N4 24 A at 480 V three phase
Nominal torque	52.2 N.m for LXM32.D72N4 24 A at 400 V three phase 52.2 N.m for LXM32.D72N4 24 A at 480 V three phase
Nominal speed	1200 rpm for LXM32.D72N4 24 A at 400 V three phase 1200 rpm for LXM32.D72N4 24 A at 480 V three phase
Product compatibility	LXM32.D72N4 at 400...480 V three phase
Shaft end	Untapped
IP degree of protection	IP65 (standard) IP67 (with IP67 kit)
Speed feedback resolution	131072 points/turn x 4096 turns
Holding brake	Without
Mounting support	International standard flange
Electrical connection	Rotatable right-angled connectors

## Complementary

Range compatibility	Lexium 32
[Us] rated supply voltage	480 V
Network number of phases	Three phase
Continuous stall current	25.2 A
Continuous power	9.6 W
Maximum current Irms	72 A for LXM32.D72N4
Maximum permanent current	107.4 A
Second shaft	Without second shaft end
Shaft diameter	38 mm
Shaft length	80 mm
Feedback type	Multiturn SinCos Hiperface
Motor flange size	205 mm
Number of motor stacks	3
Torque constant	3.5 N.m/A at 120 °C
Back emf constant	218 V/krpm at 120 °C

Number of motor poles	10
Rotor inertia	190 kg.cm <sup>2</sup>
Stator resistance	0.32 Ohm at 20 °C
Stator inductance	6.9 mH at 20 °C
Stator electrical time constant	21.6 ms at 20 °C
Maximum radial force Fr	4500 N at 1000 rpm 3570 N at 2000 rpm 3120 N at 3000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	489 mm
Centring collar diameter	180 mm
Centring collar depth	4 mm
Number of mounting holes	4
Mounting holes diameter	14 mm
Circle diameter of the mounting holes	215 mm
Product weight	67 kg

### Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0936 - <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available <a href="#">Download Product Environmental</a>
Product end of life instructions	Need no specific recycling operations

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	489	538.5

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	19.25	21.20

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400 V 3-Phase Supply Voltage

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Torque/Speed Curves

Servo motor with LXM32•D72N4 servo drive



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

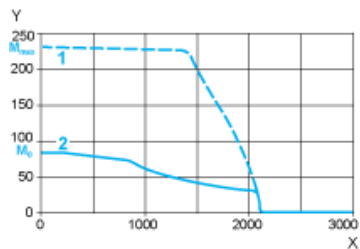
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480 V 3-Phase Supply Voltage

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Torque/Speed Curves

Servo motor with LXM32•D72N4 servo drive



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