Product data sheet
Characteristics

BMH0702P06A2A
servo motor BMH, Lexium 32, 2.5Nm, 8000rpm, untapped shaft, without brake, IP54, 16bit encoder, 3 phases

Main

Product or component type	Servo motor
Device short name	BMH
Maximum mechanical speed	8000 rpm
Continuous stall torque	2.5 N.M for LXM32.D12N4 at 3 A, 400 V, three phase 2.5 N.m for LXM32.D12N4 at 3 A, 480 V, three phase
Peak stall torque	7.4 N.M for LXM32.D12N4 at 3 A, 400 V, three phase 7.4 N.m for LXM32.D12N4 at 3 A, 480 V, three phase
Nominal output power	700 W for LXM32.D12N4 at 3 A, 400 V, three phase 700 W for LXM32.D12N4 at 3 A, 480 V, three phase
Nominal torque	2.2 N.M for LXM32.D12N4 at 3 A, 400 V, three phase 2.2 N.m for LXM32.D12N4 at 3 A, 480 V, three phase
Nominal speed	3000 rpm for LXM32.D12N4 at 3 A, 400 V, three phase 3000 rpm for LXM32.D12N4 at 3 A, 480 V, three phase
Product compatibility	LXM32.D12N4 at 400...480 V three phase
Shaft end	Smooth shaft
IP degree of protection	IP54 standard
Speed feedback resolution	32768 points/turn
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	2.94 A
Continuous power	1.51 W
Maximum current Irms	9.7 A for LXM32.D12N4
Maximum permanent current	9.68 A
Second shaft	Without second shaft end
Shaft diameter	11 mm
Shaft length	23 mm
Feedback type	Single turn SinCos Hiperface
Motor flange size	70 mm
Number of motor stacks	2
Torque constant	0.84 N.m/A at 120 °C
Back emf constant	54.08 V/krpm at 120 °C
Number of motor poles	10

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Rotor inertia	1.13 kg.cm²
Stator resistance	3.8 Ohm at 20 °C
Stator inductance	12.2 mH at 20 °C
Stator electrical time constant	3.2 ms at 20 °C
Maximum radial force Fr	710 N at 1000 rpm 560 N at 2000 rpm 490 N at 3000 rpm 450 N at 4000 rpm 410 N at 5000 rpm 390 N at 6000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	154 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	2.3 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	11.200 cm
Package 1 Width	19.000 cm
Package 1 Length	39.500 cm
Package 1 Weight	2.892 kg
Unit Type of Package 2	P06
Number of Units in Package 2	24
Package 2 Height	75.000 cm
Package 2 Width	60.000 cm
Package 2 Length	80.000 cm
Package 2 Weight	75.500 kg

Offer Sustainability

Sustainable offer status	Green Premium product
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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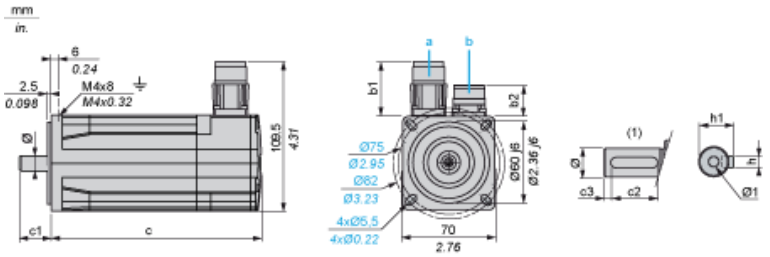
Servo Motors Dimensions

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	154	193	23	18	2.5	4 h9	$12.5^{+0}_{-0.13}$	11 k6	M4 x 14

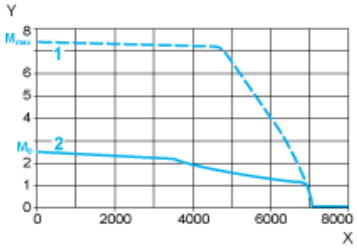
Dimensions in in.

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	6.06	7.59	0.90	0.70	0.09	0.16 h9	$0.49^{+0}_{-0.0051}$	0.43 k6	M4 x 0.55

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D12N4 servo drive

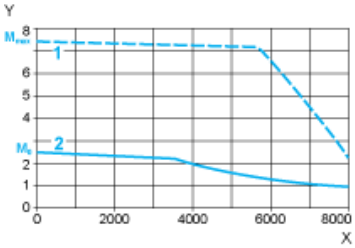


X Speed in rpm
Y Torque in Nm
1 Peak torque
2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D12N4 servo drive



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