Product data sheet
Characteristics

BMH0702P27A2A
servo motor BMH, Lexium 32, 2.5Nm, 8000rpm, untapped shaft, without brake, IP65, IP67, 16 multiturn encoder, 3 phases

Main

Product or Component Type	Servo motor
Device short name	BMH
Maximum mechanical speed	8000 rpm
Continuous stall torque	22.13 Lbf.In (2.5 N.m) LXM32.D12N4 3 A, 400 V, three phase 22.13 lbf.in (2.5 N.m) LXM32.D12N4 3 A, 480 V, three phase
Peak stall torque	65.50 Lbf.In (7.4 N.m) LXM32.D12N4 3 A, 400 V, three phase 65.50 lbf.in (7.4 N.m) LXM32.D12N4 3 A, 480 V, three phase
Nominal output power	700 W LXM32.D12N4 3 A, 400 V, three phase 700 W LXM32.D12N4 3 A, 480 V, three phase
Nominal torque	19.47 Lbf.In (2.2 N.m) LXM32.D12N4 3 A, 400 V, three phase 19.47 lbf.in (2.2 N.m) LXM32.D12N4 3 A, 480 V, three phase
Nominal speed	3000 rpm LXM32.D12N4 3 A, 400 V, three phase 3000 rpm LXM32.D12N4 3 A, 480 V, three phase
Product compatibility	LXM32.D12N4 400...480 V three phase
Shaft end	Smooth shaft
IP Degree of Protection	IP65 standard IP67 with IP67 kit
Speed feedback resolution	32768 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
Phase	Three phase
Continuous stall current	2.94 A
Continuous power	1.51 W
Maximum current Irms	9.7 A LXM32.D12N4
Maximum permanent current	9.68 A
Second shaft	Without second shaft end
Shaft diameter	0.43 in (11 mm)
Shaft length	0.91 in (23 mm)
Feedback type	Multiturn SinCos Hiperface
Motor flange size	2.76 in (70 mm)
Number of motor stacks	2
Torque constant	0.84 N.m/A 248 °F (120 °C)
Back emf constant	54.08 V/krpm 248 °F (120 °C)
Number of motor poles	10
Rotor inertia	1.13 kg.cm²
Stator resistance	3.8 Ohm 68 °F (20 °C)

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This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications.
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Stator inductance	12.2 mH 68 °F (20 °C)
Stator electrical time constant	3.2 ms 68 °F (20 °C)
Maximum radial force Fr	710 N 1000 rpm 560 N 2000 rpm 490 N 3000 rpm 450 N 4000 rpm 410 N 5000 rpm 390 N 6000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	6.06 in (154 mm)
Centring collar diameter	2.36 in (60 mm)
Centring collar depth	0.10 in (2.5 mm)
Number of mounting holes	4
Mounting holes diameter	0.22 in (5.5 mm)
Circle diameter of the mounting holes	3.23 in (82 mm)
Net Weight	5.07 lb(US) (2.3 kg)

Ordering and shipping details

Category	18282-LEXIUM 32 MOTORS
Discount Schedule	PC53
GTIN	3606485193939
Returnability	No
Country of origin	DE

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.33 in (11.0 cm)
Package 1 Width	7.87 in (20.0 cm)
Package 1 Length	15.75 in (40.0 cm)
Package 1 Weight	4.41 lb(US) (2.0 kg)

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 cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
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

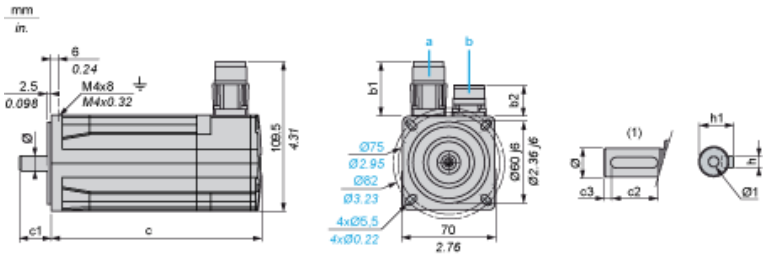
Contractual warranty

Warranty	18 months

BMH0702P27A2A

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

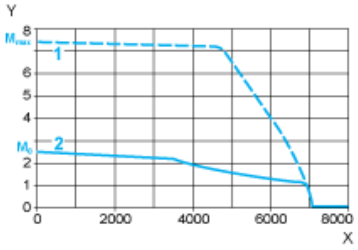
Dimensions in in.

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

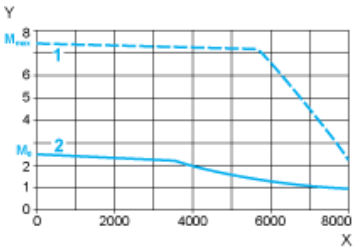


X Speed in rpm
Y Torque in Nm
1 Peak torque
2 Continuous torque

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