Product data sheet
Characteristics

BMH0702T12F2A
servo motor BMH - 2.5 Nm - 8000 rpm - keyed shaft - with brake - IP54

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.D30M2 10 A at 115 V single phase 2.5 N.m for LXM32.D18M2 6 A at 230 V single phase
Peak stall torque	6.4 N.m for LXM32.D30M2 10 A at 115 V single phase 7.4 N.m for LXM32.D18M2 6 A at 230 V single phase
Nominal output power	600 W for LXM32.D30M2 10 A at 115 V single phase 900 W for LXM32.D18M2 6 A at 230 V single phase
Nominal torque	2.3 N.m for LXM32.D30M2 10 A at 115 V single phase 2.1 N.m for LXM32.D18M2 6 A at 230 V single phase
Nominal speed	2500 rpm for LXM32.D30M2 10 A at 115 V single phase 4000 rpm for LXM32.D18M2 6 A at 230 V single phase
Product compatibility	LXM32.D30M2 at 115 V single phase LXM32.D18M2 at 230 V single phase
Shaft end	Keyed
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	240 V
Network number of phases	Three phase
Continuous stall current	5.38 A
Continuous power	1.51 W
Maximum current Irms	15 A for LXM32.D30M2 17.5 A for LXM32.D18M2
Maximum permanent current	17.71 A
Second shaft	Without second shaft end
Shaft diameter	11 mm
Shaft length	23 mm
Key width	18 mm
Feedback type	Multiturn SinCos Hiperface
Holding torque	3 N.m (holding brake)
Motor flange size	70 mm
Number of motor stacks	2

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Torque constant	0.46 N.m/A at 120 °C
Back emf constant	29.6 V/krpm at 120 °C
Number of motor poles	10
Rotor inertia	1.24 kg.cm²
Stator resistance	1.15 Ohm at 20 °C
Stator inductance	3.6 mH at 20 °C
Stator electrical time constant	3.1 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
Brake pull-in power	7 W
Type of cooling	Natural convection
Length	193 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
Product weight	3.3 kg

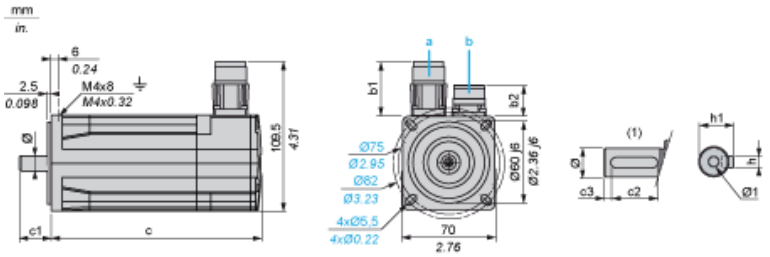
Offer Sustainability

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

BMH0702T12F2A

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

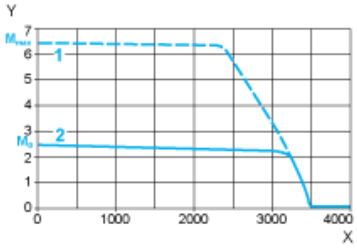
Dimensions in in.

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

115 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30M2 servo drive

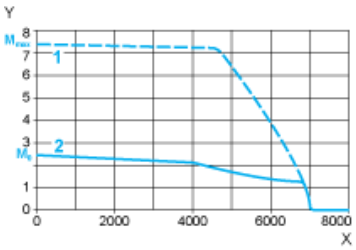


X Speed in rpm
Y Torque in Nm
1 Peak torque
2 Continuous torque

230 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D18M2 servo drive



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