

AC servo motor BSH - 2.12 N.m - 6000 rpm - keyed shaft - without brake - IP65

BSH0702T32A2A

! Discontinued on: 9 Feb 2023

① Discontinued

EAN Code: 3389118136779

Main

Device short name	BSH						
Product or component type	Servo motor						
Maximum mechanical speed	8000 rpm						
Continuous stall torque	2.2 N.m for LXM32.D30M2 at 10 A, 115 V, single phase						
	2.12 N.m for LXM05AD17M2, 200240 V, single phase						
	2.12 N.m for LXM05BD17M2, 200240 V, single phase						
	2.12 N.m for LXM05CD17M2, 200240 V, single phase						
	2.2 N.m for LXM32.D18M2 at 6 A, 230 V, single phase						
	2.12 N.m for LXM05AD17F1, 110120 V, single phase						
	2.12 N.m for LXM05AD28M2, 200240 V, single phase						
	2.12 N.m for LXM05BD17F1, 110120 V, single phase						
	2.12 N.m for LXM05BD28M2, 200240 V, single phase						
	2.12 N.m for LXM05CD17F1, 110120 V, single phase						
	2.12 N.m for LXM05CD28M2, 200240 V, single phase						
	2.12 N.m for LXM15LD17N4 at 6 A, 230 V, three phase						
	2.12 N.m for LXM15LD21M3, 230 V, three phase						
	2.12 N.m for LXM05AD42M3X, 200240 V, three phase						
	2.12 N.m for LXM05BD42M3X, 200240 V, three phase						
	2.12 N.m for LXM05CD42M3X, 200240 V, three phase						
Peak stall torque	6.1 N.m for LXM32.D30M2 at 10 A, 115 V, single phase						
	7.2 N.m for LXM32.D18M2 at 6 A, 230 V, single phase						
	4.14 N.m for LXM05AD17F1, 110120 V, single phase						
	4.14 N.m for LXM05AD17M2, 200240 V, single phase						
	4.14 N.m for LXM05BD17F1, 110120 V, single phase						
	4.14 N.m for LXM05BD17M2, 200240 V, single phase						
	4.14 N.m for LXM05CD17F1, 110120 V, single phase						
	4.14 N.m for LXM05CD17M2, 200240 V, single phase						
	6.8 N.m for LXM05AD28M2 at 6 A, 200240 V, single phase						
	6.8 N.m for LXM05BD28M2, 200240 V, single phase						
	6.8 N.m for LXM05CD28M2, 200240 V, single phase						
	4.47 N.m for LXM15LD17N4, 230 V, three phase 5.45 N.m for LXM15LD21M3, 230 V, three phase						
	6.8 N.m for LXM05AD42M3X, 200240 V, three phase						
	6.8 N.m for LXM05BD42M3X, 200240 V, three phase						
	6.8 N.m for LXM05CD42M3X, 200240 V, three phase						
Nominal output power	550 W for LXM32.D30M2 at 10 A, 115 V, single phase						
tommai output power	600 W for LXM05AD17M2, 200240 V, single phase						
	600 W for LXM05BD17M2 at 6 A, 200240 V, single phase						
	600 W for LXM05CD17M2, 200240 V, single phase						
	570 W for LXM05AD17F1, 110120 V, single phase						
	570 W for LXM05BD17F1, 110120 V, single phase						
	570 W for LXM05CD17F1, 110120 V, single phase						
	600 W for LXM05AD28M2, 200240 V, single phase						
	600 W for LXM05BD28M2, 200240 V, single phase						
	600 W for LXM05CD28M2, 200240 V, single phase						
	950 W for LXM32.D18M2 at 6 A, 230 V, single phase						
	1000 W for LXM15LD17N4, 230 V, three phase						
	1000 W for LXM15LD21M3, 230 V, three phase						
	600 W for LXM05AD42M3X, 200240 V, three phase						
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Nominal torque	2.07 N.m for LXM32.D30M2 at 10 A, 115 V, single phase
	1.9 N.m for LXM05AD17M2, 200240 V, single phase
	1.9 N.m for LXM05BD17M2 at 6 A, 200240 V, single phase 1.9 N.m for LXM05CD17M2, 200240 V, single phase
	1.83 N.m for LXM05AD17F1, 110120 V, single phase
	1.83 N.m for LXM05BD17F1, 110120 V, single phase
	1.83 N.m for LXM05CD17F1, 110120 V, single phase
	1.9 N.m for LXM05AD28M2, 200240 V, single phase
	1.9 N.m for LXM05BD28M2, 200240 V, single phase 1.9 N.m for LXM05CD28M2, 200240 V, single phase
	1.8 N.m for LXM32.D18M2 at 6 A, 230 V, single phase
	1.66 N.m for LXM15LD17N4, 230 V, three phase
	1.66 N.m for LXM15LD21M3, 230 V, three phase
	1.9 N.m for LXM05AD42M3X, 200240 V, three phase
	1.9 N.m for LXM05BD42M3X, 200240 V, three phase 1.9 N.m for LXM05CD42M3X, 200240 V, three phase
Nominal speed	2500 rpm for LXM32.D30M2 at 10 A, 115 V, single phase
	3000 rpm for LXM05AD17F1, 110120 V, single phase
	3000 rpm for LXM05BD17F1 at 6 A, 110120 V, single phase
	3000 rpm for LXM05CD17F1, 110120 V, single phase 3000 rpm for LXM05AD17M2, 200240 V, single phase
	3000 rpm for LXM05BD17M2, 200240 V, single phase
	3000 rpm for LXM05CD17M2, 200240 V, single phase
	3000 rpm for LXM05AD28M2, 200240 V, single phase
	3000 rpm for LXM05BD28M2, 200240 V, single phase
	3000 rpm for LXM05CD28M2, 200240 V, single phase
	5000 rpm for LXM32.D18M2 at 6 A, 230 V, single phase 3000 rpm for LXM05AD42M3X, 200240 V, three phase
	3000 rpm for LXM05BD42M3X, 200240 V, three phase
	3000 rpm for LXM05CD42M3X, 200240 V, three phase
	6000 rpm for LXM15LD17N4, 230 V, three phase
	6000 rpm for LXM15LD21M3, 230 V, three phase
Product compatibility	LXM05AD17F1 at 110120 V single phase
	LXM05AD17M2 at 200240 V single phase
	LXM05AD28M2 at 200240 V single phase
	LXM05BD17F1 at 110120 V single phase
	LXM05BD17M2 at 200240 V single phase
	LXM05BD28M2 at 200240 V single phase
	LXM05CD17F1 at 110120 V single phase
	LXM05CD17M2 at 200240 V single phase LXM05CD28M2 at 200240 V single phase
	LXM32.D30M2 at 115 V single phase
	LXM32.D18M2 at 230 V single phase
	LXM15LD21M3 at 230 V three phase
	LXM05AD42M3X at 200240 V three phase
	LXM05BD42M3X at 200240 V three phase
	LXM05CD42M3X at 200240 V three phase LXM15LD17N4 at 230 V three phase
Shaft end	Keyed
IP degree of protection	,
ii degree or 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
	Lexium 15
	Lexium 05
supply voltage max	480 V
Network number of phases	Three phase
Continuous stall current	4.9 A
maximum continuous power	1.51 W

Maximum current Irms	20.6 A for LXM15LD21M3
	20.6 A for LXM15LD17N4
	19.9 A for LXM05AD17F1
	19.9 A for LXM05AD17M2
	19.9 A for LXM05AD28M2
	19.9 A for LXM05AD42M3X
	19.9 A for LXM05BD17F1
	19.9 A for LXM05BD17M2
	19.9 A for LXM05BD28M2
	19.9 A for LXM05BD42M3X
	19.9 A for LXM05CD17F1
	19.9 A for LXM05CD17M2 19.9 A for LXM05CD28M2
	19.9 A for LXM05CD26M2 19.9 A for LXM05CD42M3X
	15 A for LXM32.D30M2
	18 A for LXM32.D18M2
Maximum permanent current	19.9 A
Switching frequency	8 kHz
Second shaft	Without second shaft end
Shaft diameter	11 mm
Shaft length	23 mm
key width	18 mm
Feedback type	Multiturn SinCos Hiperface
Motor flange size	70 mm
Number of motor stacks	2
Torque constant	0.45 N.m/A at 120 °C
Back emf constant	28 V/krpm at 120 °C
Number of motor poles	3.0
Rotor inertia	0.41 kg.cm²
Stator resistance	1.5 Ohm at 20 °C
Stator inductance Stator electrical time constant	3.75 mH at 20 °C 4.47 ms at 20 °C
Maximum radial force Fr	390 N at 6000 rpm
	410 N at 5000 rpm
	450 N at 4000 rpm
	490 N at 3000 rpm
	560 N at 2000 rpm
	710 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
type of cooling	Natural convection
Length	187 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	2.89 kg
Sizing reference	BSH0702T
Network number of phases	3
Accuracy error [angular]	1.4 °

Temperature copper hot	120 °C	
Temperature magnet hot	100 °C	
Temperature magnet rt	20 °C	

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	12.3 cm
Package 1 Width	12.8 cm
Package 1 Length	37.7 cm
Package 1 Weight	2.8 kg

Contractual warranty

Warranty 18 months

1 Jul 2025



Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing "Use Better, Use Longer, Use Again" campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

☑ Environmental footprint	
Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	1103
Environmental Disclosure	Product Environmental Profile

Use Better

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
REACh Regulation	REACh Declaration
PVC free	Yes

Use Again

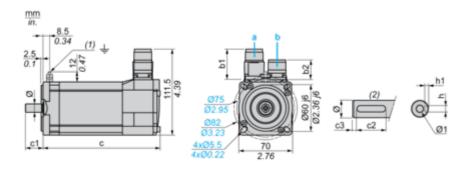
○ Repack and remanufacture	
Circularity Profile	No need of specific recycling operations
Take-back	No
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

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Dimensions Drawings

Servo Motors Dimensions

Example with Straight Connectors



- a: Power supply for servo motor brake
- b: Power supply for servo motor encoder
- (1) M4 screw
- (2) Shaft end, keyed slot (optional)

Dimensions in mm

Straight	connectors connectors		c (without brake)	c (with	c1	c2	сЗ	h	h1	Ø	Ø1 for	
b1	b2	b1	b2	brake) brake)								screws
39.5	25.5	39.5	39.5	187	213	23	18	2.5	4 N9	2.5 ^{+0.1} ₀	11 k6	M4 x 10

Dimensions in in.

Straigh		Rotatal angled connec		c (without brake)	c (with brake)	c1	c2	c3	h	h1	Ø	Ø1 for screws
b1	b2	b1	b2	Diake)	,							
1.55	1.00	1.55	1.55	7.36	8.38	0.90	0.70	0.09	0.16 N9	0.01 ^{+0.004} 0	0.43 k6	M4 x 0.39

Product datasheet

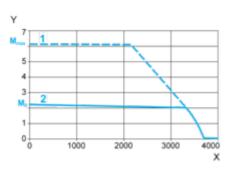
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Performance Curves

115 V Single-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•D30M2 servo drive

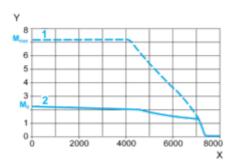


- X Speed in rpm
- Y Torque in Nm
- 1 Peak torque
- 2 Continuous torque

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