

# Product data sheet

Specifications



servo motor BCH; Lexium 28;  
40mm; 100W; 0.075kg.cm<sup>2</sup>; with oil  
seal; with key; leads connection

BCH2MB0133CA5C

**Product availability: Non-Stock - Not normally stocked in  
distribution facility**

## Main

Range Compatibility	Lexium 28
Device short name	BCH2
Product or Component Type	Servo motor

## Complementary

Maximum mechanical speed	5000 rpm
[Us] rated supply voltage	220 V 110 V
Phase	Single phase Three phase
Continuous stall current	0.81 A
Continuous stall torque	2.83 lbf.in (0.32 N.m) LXM26D 0.9 A, 220 V, single phase 2.83 lbf.in (0.32 N.m) LXM26D 0.9 A, 220 V, three phase 2.83 lbf.in (0.32 N.m) LXM28 0.9 A, 220 V, single phase 2.83 lbf.in (0.32 N.m) LXM28 0.9 A, 220 V, three phase 2.83 lbf.in (0.32 N.m) LXM28 1.8 A, 110 V, single phase
Continuous power	100 W
Peak stall torque	8.50 lbf.in (0.96 N.m) LXM26D 0.9 A, 220 V, single phase 8.50 lbf.in (0.96 N.m) LXM26D 0.9 A, 220 V, three phase 8.50 lbf.in (0.96 N.m) LXM28... 0.9 A, 220 V, single phase 8.50 lbf.in (0.96 N.m) LXM28... 0.9 A, 220 V, three phase 8.50 lbf.in (0.96 N.m) LXM28... 1.8 A, 110 V, single phase
Nominal output power	100 W LXM26D 0.9 A, 220 V, single phase 100 W LXM26D 0.9 A, 220 V, three phase 100 W LXM28... 0.9 A, 220 V, single phase 100 W LXM28... 0.9 A, 220 V, three phase 100 W LXM28... 1.8 A, 110 V, single phase
Nominal torque	2.83 lbf.in (0.32 N.m) LXM26D 0.9 A, 220 V, single phase 2.83 lbf.in (0.32 N.m) LXM26D 0.9 A, 220 V, three phase 2.83 lbf.in (0.32 N.m) LXM28... 0.9 A, 220 V, single phase 2.83 lbf.in (0.32 N.m) LXM28... 0.9 A, 220 V, three phase 2.83 lbf.in (0.32 N.m) LXM28... 1.8 A, 110 V, single phase
Nominal speed	3000 rpm LXM26D 0.9 A, 220 V, single phase 3000 rpm LXM26D 0.9 A, 220 V, three phase 3000 rpm LXM28... 0.9 A, 220 V, single phase 3000 rpm LXM28... 0.9 A, 220 V, three phase 3000 rpm LXM28... 1.8 A, 110 V, single phase
Maximum current Irms	2.65 A LXM28... 0.1 kW, 220 V 2.65 A LXM28... 0.1 kW, 110 V
Maximum permanent current	0.89 A

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

<b>Product compatibility</b>	LXM26D servo drive 0.1 kW, 220 V, single phase LXM26D servo drive 0.1 kW, 220 V, three phase LXM28... servo drive 0.1 kW, 220 V, single phase LXM28... servo drive 0.1 kW, 220 V, three phase LXM28... servo drive 0.1 kW, 110 V, single phase
<b>Shaft end</b>	Keyed
<b>Shaft diameter</b>	0.3 in (8 mm)
<b>Shaft length</b>	1.0 in (25 mm)
<b>Key width</b>	0.1 in (3 mm)
<b>Feedback type</b>	20 bits single turn absolute encoder
<b>Holding brake</b>	Without
<b>Mounting Support</b>	Asian standard flange
<b>Motor flange size</b>	1.6 in (40 mm)
<b>Electrical connection</b>	Free lead
<b>Torque constant</b>	0.4 N.m/A 68 °F (20 °C)
<b>Back emf constant</b>	24 V/krpm 68 °F (20 °C)
<b>Number of motor poles</b>	4.0
<b>Rotor inertia</b>	0.075 kg.cm <sup>2</sup>
<b>Stator resistance</b>	23.4 Ohm 68 °F (20 °C)
<b>Stator inductance</b>	20.6 mH 68 °F (20 °C)
<b>Stator electrical time constant</b>	0.88 ms 68 °F (20 °C)
<b>Maximum radial force Fr</b>	85 N 3000 rpm
<b>Maximum axial force Fa</b>	40 N
<b>Brake pull-in power</b>	4.35 W
<b>Type of cooling</b>	Natural convection
<b>Length</b>	3.9 in (100 mm)
<b>Number of motor stacks</b>	2
<b>Centring collar diameter</b>	1.2 in (30 mm)
<b>Centring collar depth</b>	0.1 in (3 mm)
<b>Number of mounting holes</b>	4
<b>Mounting holes diameter</b>	0.2 in (4.5 mm)
<b>Circle diameter of the mounting holes</b>	1.8 in (46 mm)
<b>Distance shaft shoulder-flange</b>	0.1 in (3 mm)
<b>Net Weight</b>	1.23 lb(US) (0.56 kg)
<b>Sizing reference</b>	BCH2
<b>Network number of phases</b>	1
<b>Accuracy error [angular]</b>	0.044 °
<b>Temperature copper hot</b>	275 °F (135 °C)
<b>Temperature magnet hot</b>	212 °F (100 °C)
<b>Temperature magnet rt</b>	68 °F (20 °C)

## Environment

<b>IP Degree of Protection</b>	IP50 IM V3 IP65 IM B5, IM V1
<b>Ambient Air Temperature for Operation</b>	-4...104 °F (-20...40 °C)

## Ordering and shipping details

<b>Category</b>	US1PC5318281
<b>Discount Schedule</b>	PC53
<b>GTIN</b>	3606480733468
<b>Returnability</b>	No
<b>Country of origin</b>	CN

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Nbr. of units in pkg.</b>	1
<b>Package 1 Height</b>	3.150 in (8.000 cm)
<b>Package 1 Width</b>	5.197 in (13.200 cm)
<b>Package 1 Length</b>	9.449 in (24.000 cm)
<b>Package weight(Lbs)</b>	28.254 oz (801.000 g)
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	3
<b>Package 2 Height</b>	5.906 in (15.000 cm)
<b>Package 2 Width</b>	11.811 in (30.000 cm)
<b>Package 2 Length</b>	15.748 in (40.000 cm)
<b>Package 2 Weight</b>	6.124 lb(US) (2.778 kg)



## Environmental Data

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 >](#)

 <b>Environmental footprint</b>	
Carbon footprint (kg CO2 eq, Total Life cycle)	1071
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

### Use Better

 <b>Materials and Substances</b>	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
<a href="#">EU RoHS Directive</a>	Pro-active compliance (Product out of EU RoHS legal scope)
REACH Regulation	<a href="#">REACH Declaration</a>
California proposition 65	<b>WARNING:</b> 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
PVC free	Yes

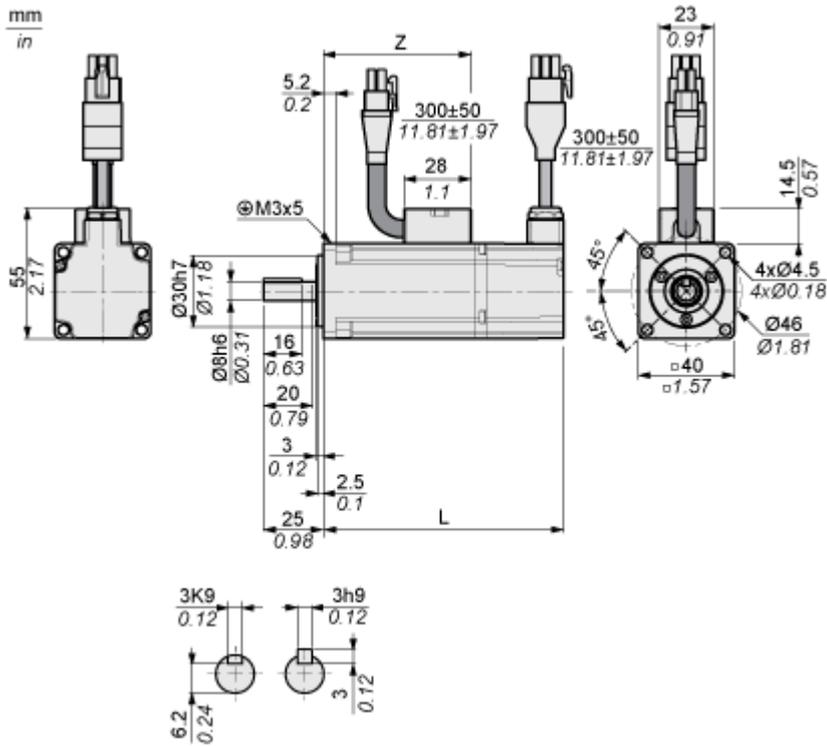
### Use Again

 <b>Repack and remanufacture</b>	
Circularity Profile	<a href="#">End of Life Information</a>
Take-back	No

Dimensions Drawings

Dimensions

Dimensions of Motor

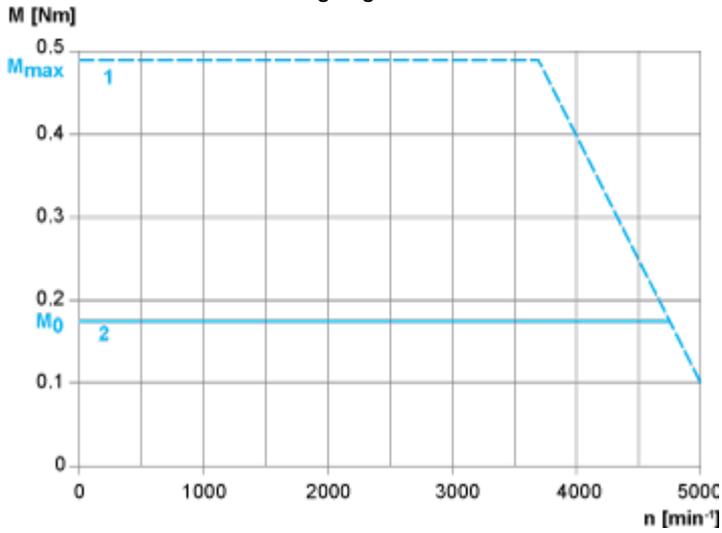


	mm	in.
L (without holding brake)	100	3.94
L (with holding brake)	130	5.12
Z	61.5	2.42

Performance Curves

Torque/Speed Curves with 230 V Single/Three Phase Supply Voltage

Servo Motor without shaft sealing ring and LXM28AU01 Servo Drive



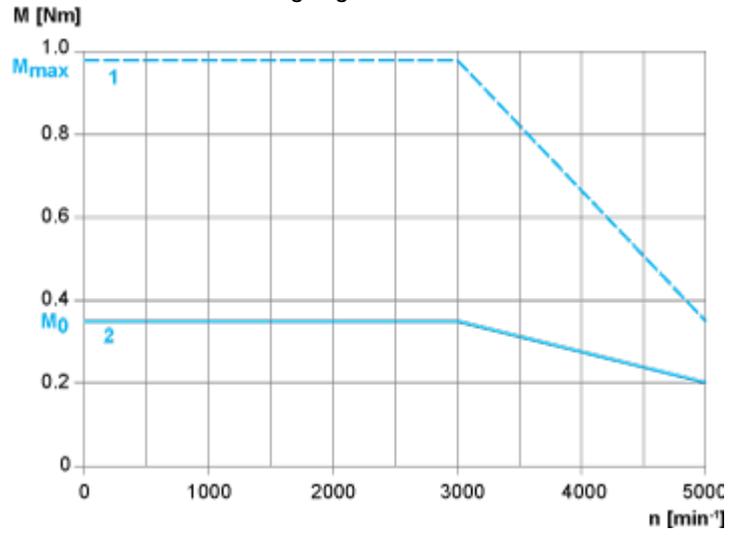
1 : Peak torque

2 : Continuous torque

Torque/Speed Curves with 230 V Single/Three Phase Supply Voltage

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Servo Motor with shaft sealing ring and LXM28AU01 Servo Drive



- 1 : Peak torque
- 2 : Continuous torque