# BCH2MBA533CA5C

servo motor BCH, Lexium 28, 40mm, 50W, 0.054kg.cm², with oil seal, with key, leads connection





#### 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	
Network number of phases	Three phase Single phase	
Continuous stall current	0.54 A	
Continuous stall torque	0.16 N.M for LXM26D at 0.64 A, 220 V, single phase 0.16 N.M for LXM26D at 0.64 A, 220 V, three phase 0.16 N.M for LXM28 at 0.64 A, 220 V, single phase 0.16 N.M for LXM28 at 0.64 A, 220 V, three phase 0.16 N.m for LXM28 at 1.2 A, 110 V, single phase	
Continuous power	50 W	
Peak stall torque	0.48 N.M for LXM26D at 0.64 A, 220 V, single phase 0.48 N.M for LXM26D at 0.64 A, 220 V, three phase 0.48 N.M for LXM28 at 0.64 A, 220 V, single phase 0.48 N.M for LXM28 at 0.64 A, 220 V, three phase 0.48 N.M for LXM28 at 1.64 A, 220 V, three phase 0.48 N.m for LXM28 at 1.2 A, 110 V, single phase	
Nominal output power	50 W for LXM26D at 0.64 A, 220 V, single phase 50 W for LXM26D at 0.64 A, 220 V, three phase 50 W for LXM28 at 0.64 A, 220 V, single phase 50 W for LXM28 at 0.64 A, 220 V, three phase 50 W for LXM28 at 1.2 A, 110 V, single phase	
Nominal torque	0.16 N.M for LXM26D at 0.64 A, 220 V, single phase 0.16 N.M for LXM26D at 0.64 A, 220 V, three phase 0.16 N.M for LXM28 at 0.64 A, 220 V, single phase 0.16 N.M for LXM28 at 0.64 A, 220 V, three phase 0.16 N.M for LXM28 at 1.2 A, 110 V, single phase	
Nominal speed	3000 rpm for LXM26D at 0.64 A, 220 V, single phase 3000 rpm for LXM26D at 0.64 A, 220 V, three phase 3000 rpm for LXM28 at 0.64 A, 220 V, single phase 3000 rpm for LXM28 at 0.64 A, 220 V, three phase 3000 rpm for LXM28 at 1.2 A, 110 V, single phase	
Maximum current Irms	1.77 A for LXM28 at 0.05 kW, 220 V 1.77 A for LXM28 at 0.05 kW, 110 V	
Maximum permanent current	0.59 A	
Product compatibility	LXM26D servo drive motor at 0.05 kW, 220 V, single phase LXM26D servo drive motor at 0.05 kW, 220 V, three phase LXM28 servo drive motor at 0.05 kW, 220 V, single phase LXM28 servo drive motor at 0.05 kW, 220 V, three phase LXM28 servo drive motor at 0.05 kW, 110 V, single phase	

Shaft diameter         8 mm           Shaft length         25 mm           Key width         3 mm           Feedback type         20 bits single turn absolute encoder           Holding brake         Without           Mounting support         Asian standard flange           Motor flange size         40 mm           Electrical connection         Free lead           Torque constant         0.3 N.m/A at 20 °C           Back emf constant         18 V/krpm at 20 °C           Rotor inertia         0.054 kg.cm²           Stator restance         31 Ohm at 20 °C           Stator inductance         24.7 mH at 20 °C           Stator electrical time constant         0.8 ms at 20 °C           Maximum radial force Fr         85 N at 3000 rpm           Maximum axial force Fa         40 N           Brake pull-in power         4.35 W           Type of cooling         Natural convection           Length         82 mm           Number of motor stacks         1           Centring collar diameter         30 mm           Centring collar diameter         4.5 mm           Number of mounting holes         4           Mounting holes diameter         4.5 mm           Circle diameter of the mo	Shaft end	Keyed
Key width 3 mm Feedback type 20 bits single turn absolute encoder Holding brake Without Mounting support Asian standard flange Motor flange size 40 mm Electrical connection Free lead Torque constant 0.3 N.m/A at 20 °C Back emf constant 18 V/krpm at 20 °C Back emf constant 0.054 kg.cm² Stator resistance 31 0hm at 20 °C Stator inductance 24.7 mH at 20 °C Stator electrical time constant 0.8 ms at 20 °C Maximum radial force Fr 85 N at 3000 rpm Maximum axial force Fa 40 N Brake pull-in power 4.35 W Type of cooling Natural convection Length 82 mm Number of motor stacks 1 Centring collar diameter 30 mm Centring collar depth 3 mm Number of mounting holes 46 mm Distance shaft shoulder-flange 3 mm	Shaft diameter	8 mm
Feedback type 20 bits single turn absolute encoder Holding brake Without  Mounting support Asian standard flange Motor flange size 40 mm  Electrical connection Free lead Torque constant 0.3 N.m/A at 20 °C Back emf constant 18 V/krpm at 20 °C Back emf constant 0.054 kg.cm² Stator resistance 31 Ohm at 20 °C Stator inductance 24.7 mH at 20 °C Stator inductance 24.7 mH at 20 °C Stator electrical time constant 0.8 ms at 20 °C Maximum radial force Fr 85 N at 3000 rpm Maximum axial force Fa 40 N Brake pull-in power 4.35 W Type of cooling Natural convection Length 82 mm Number of motor stacks 1 Centring collar diameter 30 mm Centring collar depth 3 mm Number of mounting holes 4 Mounting holes diameter 4.5 mm Circle diameter of the mounting holes 46 mm Distance shaft shoulder-flange 3 mm	Shaft length	25 mm
Holding brake Without  Mounting support Asian standard flange  Motor flange size 40 mm  Electrical connection Free lead  Torque constant 0.3 N.m/A at 20 °C  Back emf constant 18 V/krpm at 20 °C  Rotor inertia 0.054 kg.cm²  Stator resistance 31 Ohm at 20 °C  Stator inductance 24.7 mH at 20 °C  Stator electrical time constant 0.8 ms at 20 °C  Maximum radial force Fr 85 N at 3000 rpm  Maximum axial force Fa 40 N  Brake pull-in power 4.35 W  Type of cooling Natural convection  Length 82 mm  Number of motor stacks 1  Centring collar diameter 30 mm  Centring collar depth 3 mm  Number of mounting holes 4  Mounting holes diameter 4.5 mm  Circle diameter of the mounting holes 46 mm  Distance shaft shoulder-flange 3 mm	Key width	3 mm
Mounting support Asian standard flange  Motor flange size 40 mm  Electrical connection Free lead  Torque constant 0.3 N.m/A at 20 °C  Back emf constant 18 V/krpm at 20 °C  Rotor inertia 0.054 kg.cm²  Stator resistance 31 Ohm at 20 °C  Stator inductance 24.7 mH at 20 °C  Stator electrical time constant 0.8 ms at 20 °C  Maximum radial force Fr 85 N at 3000 rpm  Maximum axial force Fa 40 N  Brake pull-in power 4.35 W  Type of cooling Length Number of motor stacks 1  Centring collar diameter 30 mm  Centring collar depth 3 mm  Number of mounting holes 4.5 mm  Circle diameter of the mounting holes 46 mm  Distance shaft shoulder-flange 3 mm	Feedback type	20 bits single turn absolute encoder
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Electrical connection Free lead  Torque constant 0.3 N.m/A at 20 °C  Back emf constant 18 V/krpm at 20 °C  Rotor inertia 0.054 kg.cm²  Stator resistance 31 Ohm at 20 °C  Stator inductance 24.7 mH at 20 °C  Stator electrical time constant 0.8 ms at 20 °C  Maximum radial force Fr 85 N at 3000 rpm  Maximum axial force Fa 40 N  Brake pull-in power 4.35 W  Type of cooling Natural convection  Length 82 mm  Number of motor stacks 1  Centring collar diameter 30 mm  Centring collar depth 3 mm  Number of mounting holes 4  Mounting holes diameter 4.5 mm  Circle diameter of the mounting holes 46 mm  Distance shaft shoulder-flange 3 mm	Mounting support	Asian standard flange
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Back emf constant  18 V/krpm at 20 °C  Rotor inertia  0.054 kg.cm²  Stator resistance  31 Ohm at 20 °C  Stator inductance  24.7 mH at 20 °C  Stator electrical time constant  0.8 ms at 20 °C  Maximum radial force Fr  85 N at 3000 rpm  Maximum axial force Fa  40 N  Brake pull-in power  4.35 W  Type of cooling  Natural convection  Length  82 mm  Number of motor stacks  1  Centring collar diameter  30 mm  Centring collar depth  3 mm  Number of mounting holes  4  Mounting holes diameter  4.5 mm  Circle diameter of the mounting holes  46 mm  Distance shaft shoulder-flange  3 mm	Electrical connection	Free lead
Rotor inertia 0.054 kg.cm²  Stator resistance 31 Ohm at 20 °C  Stator inductance 24.7 mH at 20 °C  Stator electrical time constant 0.8 ms at 20 °C  Maximum radial force Fr 85 N at 3000 rpm  Maximum axial force Fa 40 N  Brake pull-in power 4.35 W  Type of cooling Natural convection  Length 82 mm  Number of motor stacks 1  Centring collar diameter 30 mm  Centring collar depth 3 mm  Number of mounting holes 4  Mounting holes diameter 4.5 mm  Circle diameter of the mounting holes 46 mm  Distance shaft shoulder-flange 3 mm	Torque constant	0.3 N.m/A at 20 °C
Stator resistance 31 Ohm at 20 °C Stator inductance 24.7 mH at 20 °C Stator electrical time constant 0.8 ms at 20 °C Maximum radial force Fr 85 N at 3000 rpm Maximum axial force Fa 40 N Brake pull-in power 4.35 W Type of cooling Natural convection Length 82 mm Number of motor stacks 1 Centring collar diameter 30 mm Centring collar depth 3 mm Number of mounting holes 4 Mounting holes diameter 4.5 mm Circle diameter of the mounting holes 46 mm Distance shaft shoulder-flange 33 mm	Back emf constant	18 V/krpm at 20 °C
Stator inductance 24.7 mH at 20 °C  Stator electrical time constant 0.8 ms at 20 °C  Maximum radial force Fr 85 N at 3000 rpm  Maximum axial force Fa 40 N  Brake pull-in power 4.35 W  Type of cooling Natural convection  Length 82 mm  Number of motor stacks 1  Centring collar diameter 30 mm  Centring collar depth 3 mm  Number of mounting holes 4  Mounting holes diameter 4.5 mm  Circle diameter of the mounting holes 46 mm  Distance shaft shoulder-flange 3 mm	Rotor inertia	0.054 kg.cm²
Stator electrical time constant  0.8 ms at 20 °C  Maximum radial force Fr  85 N at 3000 rpm  Maximum axial force Fa  40 N  Brake pull-in power  4.35 W  Type of cooling  Natural convection  Length  82 mm  Number of motor stacks  1  Centring collar diameter  30 mm  Centring collar depth  3 mm  Number of mounting holes  4  Mounting holes diameter  4.5 mm  Circle diameter of the mounting holes  46 mm  Distance shaft shoulder-flange  3 mm	Stator resistance	31 Ohm at 20 °C
Maximum radial force Fr 85 N at 3000 rpm  Maximum axial force Fa 40 N  Brake pull-in power 4.35 W  Type of cooling Natural convection  Length 82 mm  Number of motor stacks 1  Centring collar diameter 30 mm  Centring collar depth 3 mm  Number of mounting holes 4  Mounting holes diameter 4.5 mm  Circle diameter of the mounting holes 46 mm  Distance shaft shoulder-flange 3 mm	Stator inductance	24.7 mH at 20 °C
Maximum axial force Fa 40 N  Brake pull-in power 4.35 W  Type of cooling Natural convection  Length 82 mm  Number of motor stacks 1  Centring collar diameter 30 mm  Centring collar depth 3 mm  Number of mounting holes 4  Mounting holes diameter 4.5 mm  Circle diameter of the mounting holes 46 mm  Distance shaft shoulder-flange 3 mm	Stator electrical time constant	0.8 ms at 20 °C
Brake pull-in power 4.35 W  Type of cooling Natural convection  Length 82 mm  Number of motor stacks 1  Centring collar diameter 30 mm  Centring collar depth 3 mm  Number of mounting holes 4  Mounting holes diameter 4.5 mm  Circle diameter of the mounting holes 46 mm  Distance shaft shoulder-flange 3 mm	Maximum radial force Fr	85 N at 3000 rpm
Type of cooling  Length  82 mm  Number of motor stacks  1  Centring collar diameter  30 mm  Centring collar depth  3 mm  Number of mounting holes  4  Mounting holes diameter  4.5 mm  Circle diameter of the mounting holes  46 mm  Distance shaft shoulder-flange  3 mm	Maximum axial force Fa	40 N
Length 82 mm  Number of motor stacks 1  Centring collar diameter 30 mm  Centring collar depth 3 mm  Number of mounting holes 4  Mounting holes diameter 4.5 mm  Circle diameter of the mounting holes 46 mm  Distance shaft shoulder-flange 3 mm	Brake pull-in power	4.35 W
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Centring collar diameter 30 mm  Centring collar depth 3 mm  Number of mounting holes 4  Mounting holes diameter 4.5 mm  Circle diameter of the mounting holes 46 mm  Distance shaft shoulder-flange 3 mm	Length	82 mm
Centring collar depth 3 mm  Number of mounting holes 4  Mounting holes diameter 4.5 mm  Circle diameter of the mounting holes 46 mm  Distance shaft shoulder-flange 3 mm	Number of motor stacks	1
Number of mounting holes 4  Mounting holes diameter 4.5 mm  Circle diameter of the mounting holes 46 mm  Distance shaft shoulder-flange 3 mm	Centring collar diameter	30 mm
Mounting holes diameter 4.5 mm  Circle diameter of the mounting holes 46 mm  Distance shaft shoulder-flange 3 mm	Centring collar depth	3 mm
Circle diameter of the mounting holes 46 mm  Distance shaft shoulder-flange 3 mm	Number of mounting holes	4
Distance shaft shoulder-flange 3 mm	Mounting holes diameter	4.5 mm
	Circle diameter of the mounting holes	46 mm
Net weight 0.4 kg	Distance shaft shoulder-flange	3 mm
	Net weight	0.4 kg

## Environment

IP degree of protection	IP50 IM V3 IP65 IM B5, IM V1
Ambient air temperature for operation	-2040 °C

### Packing Units

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Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	8.0 cm
Package 1 Width	13.0 cm
Package 1 Length	24.0 cm
Package 1 Weight	643.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	3
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	2.286 kg

## Offer Sustainability

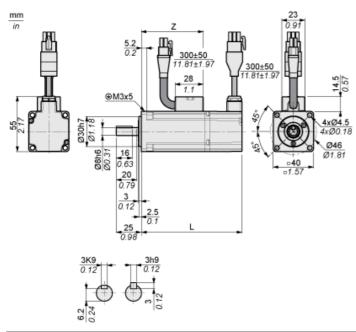
Sustainable offer status	Green Premium product	
REACh Regulation		
REACh free of SVHC	Yes	
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)	
Mercury free	Yes	
China RoHS Regulation	☑ China RoHS Declaration	

RoHS exemption information	₽¥Yes	
vironmental Disclosure Product Environmental Profile		
Circularity Profile	☑ End Of Life Information	
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins	
PVC free	Yes	

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### **Dimensions**

### **Dimensions of Motor**

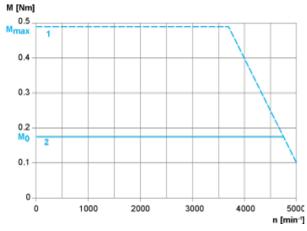


	mm	in.
L (without holding brake)	82	3.23
L (with holding brake)	112	4.41
Z	43.5	1.71

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

Servo Motor Without Shaft Sealing Ring and LXM28AUA5●●● Servo Drive

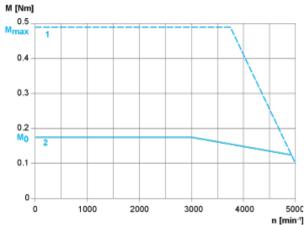


1: Peak torque

2: Continuous torque

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

Servo Motor with shaft sealing ring and LXM28AUA5●●● Servo Drive



1: Peak torque

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