

# BMH1904P31F2B

servo motor BMH, Lexium 32, 100Nm,  
3000rpm, untapped shaft, with brake, IP20,  
IP65, 128bit encoder



## Main

Product or Component Type	Servo motor
Device short name	BMH
Maximum mechanical speed	3000 rpm
Continuous stall torque	885.07 Lbf.In (100 N.m) LXM32MC10N4 40 A, 400 V, three phase 885.07 lbf.in (100 N.m) LXM32MC10N4 40 A, 480 V, three phase
Peak stall torque	2035.67 Lbf.In (230 N.m) LXM32MC10N4 40 A, 400 V, three phase 2035.67 lbf.in (230 N.m) LXM32MC10N4 40 A, 480 V, three phase
Nominal output power	16000 W LXM32MC10N4 40 A, 400 V, three phase 16000 W LXM32MC10N4 40 A, 480 V, three phase
Nominal torque	676.20 Lbf.In (76.4 N.m) LXM32MC10N4 40 A, 400 V, three phase 676.20 lbf.in (76.4 N.m) LXM32MC10N4 40 A, 480 V, three phase
Nominal speed	2000 rpm LXM32MC10N4 40 A, 400 V, three phase 2000 rpm LXM32MC10N4 40 A, 480 V, three phase
Shaft end	Smooth shaft
IP Degree of Protection	IP65 standard IP20 with fan module
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	480 V
Phase	Three phase
Continuous stall current	40 A
Maximum current Irms	100 A LXM32MC10N4 100 A
Maximum permanent current	100 A
Second shaft	Without second shaft end
Shaft diameter	1.50 in (38 mm)
Shaft length	3.15 in (80 mm)
Key width	0.39 in (10 mm)
Feedback type	Multiturn SinCos Hiperface
Holding torque	708.06 lbf.in (80 N.m) holding brake
Motor flange size	7.48 in (190 mm)
Number of motor stacks	4
Torque constant	2.5 N.m/A 248 °F (120 °C)
Back emf constant	168 V/krpm 248 °F (120 °C)
Number of motor poles	10
Rotor inertia	298.2 kg.cm <sup>2</sup>
Stator resistance	0.16 Ohm 68 °F (20 °C)

Stator inductance	4.74 mH 68 °F (20 °C)
Stator electrical time constant	29.6 ms 68 °F (20 °C)
Maximum radial force Fr	3800 N 1000 rpm 3700 N 2000 rpm 3600 N 3000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	40 W
Type of cooling	Fan
Length	20.59 in (523 mm)
Centring collar diameter	7.09 in (180 mm)
Centring collar depth	0.16 in (4 mm)
Number of mounting holes	4
Mounting holes diameter	0.55 in (14 mm)
Circle diameter of the mounting holes	8.46 in (215 mm)
Net Weight	141.54 lb(US) (64.2 kg)

## Ordering and shipping details

Category	18282-LEXIUM 32 MOTORS
Discount Schedule	PC53
GTIN	3606485458946
Returnability	No
Country of origin	DE

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	15.75 in (40.0 cm)
Package 1 Width	11.81 in (30.0 cm)
Package 1 Length	31.30 in (79.5 cm)
Package 1 Weight	141.54 lb(US) (64.2 kg)

## Offer Sustainability

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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	 <a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	 <a href="#">China RoHS Declaration</a>
RoHS exemption information	 Yes
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
PVC free	Yes