Product data sheet

Specifications



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

BMH1904P22F2B

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

Main

Device short name	BMH
Product or Component Type	Servo motor
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	2035.7 lbf.in (230 N.m) LXM32MC10N4 40 A, 400 V, three phase 2035.7 lbf.in (230 N.m) LXM32MC10N4 40 A, 480 V, three phase
Nominal output power	9800 W LXM32MC10N4 40 A, 400 V, three phase 9800 W LXM32MC10N4 40 A, 480 V, three phase
Nominal torque	414.2 lbf.in (46.8 N.m) LXM32MC10N4 40 A, 400 V, three phase 414.2 lbf.in (46.8 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	Keyed
IP Degree of Protection	IP65 standard IP67 with IP67 kit
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	1.5 in (38 mm)
Shaft length	3.1 in (80 mm)
Key width	0.4 in (10 mm)
Feedback type	Multiturn SinCos Hiperface

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

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Holding torque	708.06 lbf.in (80 N.m) holding brake
Motor flange size	7.5 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	5.0
Rotor inertia	298.2 kg.cm²
Stator resistance	0.16 Ohm 68 °F (20 °C)
Stator inductance	2.37 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	Natural convection
Length	18.0 in (456 mm)
Centring collar diameter	7.09 in (180 mm)
Centring collar depth	0.2 in (4 mm)
Number of mounting holes	4
Mounting holes diameter	0.6 in (14 mm)
Circle diameter of the mounting holes	8.5 in (215 mm)
Product Weight	138.009 lb(US) (62.6 kg)
Sizing reference	BMH1904P
Network number of phases	3
Accuracy error [angular]	1.4 °
Temperature copper hot	275 °F (135 °C)
Temperature magnet hot	266 °F (130 °C)
Temperature magnet rt	68 °F (20 °C)
Output current 3s peak	100.0 A
Inertia	21.5 kg.cm² of brake 276.7 kg.cm² of motor

Ordering and shipping details

Category	US1PC5318282
Discount Schedule	PC53
GTIN	3606485458922
Returnability	No
Country of origin	DE

Packing Units

Unit Type of Package 1	PCE

Nbr. of units in pkg.	1
Package 1 Height	15.7 in (40 cm)
Package 1 Width	11.8 in (30 cm)
Package 1 Length	31.3 in (79.5 cm)
Package weight(Lbs)	141.5 lb(US) (64.2 kg)

Contractual warranty

Warranty (in months)	18

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 >

Environmental footprint

Total lifecycle Carbon footprint	**10 828 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**281 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**8 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0.6 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**10 532 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**6 kg CO2 eq.**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**No**
SCIP Number	**A7df881f-135f-4256-b8c2-ea55d4c9a151**
EU RoHS Directive	**Compliant By Exemption**
REACh Regulation	**Reference contains Substances of Very High Concern above the threshold**
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 www.P65Warnings.ca.gov**
PVC free	**Yes**

Use Longer

Lifetime extension

Repair	**No**

Use Again

Repack and remanufacture

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