

Product data sheet

Characteristics

BMH1904P21F2B

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



Main

Device short name	BMH
Product or component type	Servo motor
Maximum mechanical speed	3000 rpm
Continuous stall torque	100 N.M for LXM32MC10N4 at 40 A, 400 V, three phase 100 N.m for LXM32MC10N4 at 40 A, 480 V, three phase
Peak stall torque	230 N.M for LXM32MC10N4 at 40 A, 400 V, three phase 230 N.m for LXM32MC10N4 at 40 A, 480 V, three phase
Nominal output power	9800 W for LXM32MC10N4 at 40 A, 400 V, three phase 9800 W for LXM32MC10N4 at 40 A, 480 V, three phase
Nominal torque	46.8 N.M for LXM32MC10N4 at 40 A, 400 V, three phase 46.8 N.m for LXM32MC10N4 at 40 A, 480 V, three phase
Nominal speed	2000 rpm for LXM32MC10N4 at 40 A, 400 V, three phase 2000 rpm for LXM32MC10N4 at 40 A, 480 V, three phase
Shaft end	Smooth shaft
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
Network number of phases	Three phase
Continuous stall current	40 A
Maximum current I_{rms}	100 A for LXM32MC10N4 100 A
Maximum permanent current	100 A
Second shaft	Without second shaft end
Shaft diameter	38 mm
Shaft length	80 mm
Key width	10 mm
Feedback type	Multiturn SinCos Hiperface
Holding torque	80 N.m holding brake
Motor flange size	190 mm
Number of motor stacks	4
Torque constant	2.5 N.m/A at 120 °C
Back emf constant	168 V/krpm at 120 °C

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Number of motor poles	10
Rotor inertia	298.2 kg.cm ²
Stator resistance	0.16 Ohm at 20 °C
Stator inductance	4.74 mH at 20 °C
Stator electrical time constant	29.6 ms at 20 °C
Maximum radial force Fr	3800 N at 1000 rpm 3700 N at 2000 rpm 3600 N at 3000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	40 W
Type of cooling	Natural convection
Length	456 mm
Centring collar diameter	180 mm
Centring collar depth	4 mm
Number of mounting holes	4
Mounting holes diameter	14 mm
Circle diameter of the mounting holes	215 mm
Net weight	62.6 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	40 cm
Package 1 Width	30 cm
Package 1 Length	79.5 cm
Package 1 Weight	64.2 kg

Offer Sustainability

REACH Regulation	 REACH Declaration
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
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes
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