# Product datasheet Characteristics

### BMI1002T02A

servo motor BMI 1-phase - untapped IP54 multiturn - 131072 p/t x 4096 t





#### Main

Range compatibility	Lexium 32i
Product or component type	Servo motor with power stage
Device short name	BMI

## Complementary

Maximum mechanical speed	6000 rpm	
[Us] rated supply voltage	115230 V - 1510 %	
Supply voltage limits	100240 V	:
Network number of phases	Single phase	
Supply frequency	50/60 Hz - 55 %	
Network frequency limits	47.563 Hz	
EMC filter	Integrated	
Continuous output current	6 A at 8 kHz	
Output current 3s peak	18 A at 230 V for 3 s	
Continuous stall current	6 A	
Continuous stall torque	6 N.m at 115230 V single phase	
Peak stall torque	14.5 N.m at 115 V single phase	
	14.5 N.m at 230 V single phase	
Nominal output power	750 W at 115 V single phase	
	1300 W at 230 V single phase	
Nominal torque	5.4 N.m at 115 V single phase	
	4.4 N.m at 230 V single phase	
Nominal speed	1400 rpm at 115 V single phase	
	3000 rpm at 230 V single phase	
Maximum current Irms	30 A at 115 V, single phase	
	30 A at 230 V, single phase	
Product compatibility	Drive control unit LXM32i CANopen	
	Drive control unit LXM32i EtherCAT	I
Shaft end	Untapped	
-		

Second shaft	Without second shaft end
Shaft diameter	19 mm
Shaft length	40 mm
Feedback type	Absolute multiturn SinCos Hiperface
Speed feedback resolution	131072 points/turn x 4096 turns
Holding brake	Without
Mounting support	International standard flange
Motor flange size	100 mm
Electrical connection	Printed circuit board connector
Torque constant	0.89 N.m/A at 20 °C
Back emf constant	58.5 V/krpm at 20 °C
Number of motor poles	10
Rotor inertia	6.28 kg.cm²
Stator resistance	1.08 Ohm at 20 °C
Stator inductance	4.7 mH at 20 °C
Stator electrical time constant	4.35 ms at 20 °C
Maximum radial force Fr	990 N at 1000 rpm 790 N at 2000 rpm 690 N at 3000 rpm 620 N at 4000 rpm 580 N at 5000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	273 mm
Number of motor stacks	2
Centring collar diameter	95 mm
Centring collar depth	3.5 mm
Number of mounting holes	4
Mounting holes diameter	9 mm
Circle diameter of the mounting holes	115 mm
Distance shaft shoulder-flange	3.5 mm

### Environment

IP degree of protection Shaft: IP54
Housing: IP65

### Offer Sustainability

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

### Contractual warranty

Warranty 18 months