Product data sheet Characteristics

BMI1002P07F

servo motor BMI 3-phase - untapped IP54 multiturn - 32768 p/t x 4096 t - brake



Main

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

Complementary

Complementary	
Maximum mechanical speed	6000
[Us] rated supply voltage	208480 V (- 1510 %)
Supply voltage limits	208480 V
Network number of phases	Three phase
Supply frequency	50/60 Hz (- 55 %)
Network frequency limits	47.563 Hz
EMC filter	Integrated
Continuous output current	4 A at 8 kHz
Output current 3s peak	12 A at 400 V for 3 s
Continuous stall current	4 A
Continuous stall torque	6 N.m at 208480 V, three phase
Peak stall torque	14 N.m at 480 V, three phase 14 N.m at 400 V, three phase 14 N.m at 208 V, three phase
Nominal output power	1900 W at 480 V, three phase 1900 W at 400 V, three phase 1000 W at 208 V, three phase
Nominal torque	4.1 N.m at 480 V, three phase 5.4 N.m at 208 V, three phase 5.1 N.m at 400 V, three phase
Nominal speed	4700 rpm at 480 V, three phase 3800 rpm at 400 V, three phase 1900 rpm at 208 V, three phase
Maximum current Irms	17.5 A at 480 V, three phase 17.5 A at 400 V, three phase 17.5 A at 208 V, three phase
Product compatibility	LXM32i drive control unit (EtherCAT) LXM32i drive control unit (CANopen)
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	32768 points/turn x 4096 turns
Holding brake	With
Holding torque	5.5 N.m for holding brake
Mounting support	International standard flange
Motor flange size	100 mm

Electrical connection	Printed circuit board connector
Torque constant	1.28 N.m/A at 20 °C
Back emf constant	84.52 V/krpm at 20 °C
Number of motor poles	10
Rotor inertia	6.77 kg.cm²
Stator resistance	2.347 Ohm at 20 °C
Stator inductance	9.79 mH at 20 °C
Stator electrical time constant	4.17 ms at 20 °C
Maximum radial force Fr	580 N at 5000 rpm 620 N at 4000 rpm 690 N at 3000 rpm 790 N at 2000 rpm 990 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	8 W
Type of cooling	Natural convection
Length	282 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	IP65 for housing IP54 for shaft	
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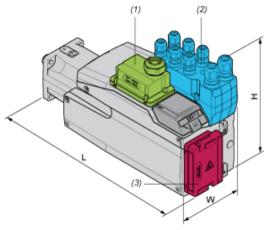


BMI1002P07F

External Dimensions

With Standard Braking Resistor

Mounting type A



- (1) Module for supply voltage
- (2) I/O module
- (3) Standard braking resistor

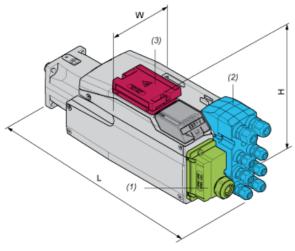
Dimensions in mm

W	н	L
132,6	217	337

Dimensions in in.

W	н	L
5,22	8,54	13,27

Mounting type B



- (1) Module for supply voltage
- (2) I/O module
- (3) Standard braking resistor

Dimensions in mm

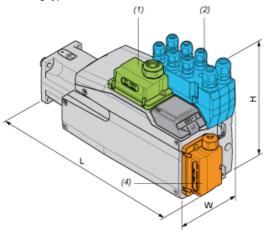
W	н	L
132,6	168	386

Dimensions in in.

W	н	L
5,22	6,61	15,2

With External Braking Resistor

Mounting type C



- Module for supply voltage I/O module
- (4) External braking resistor

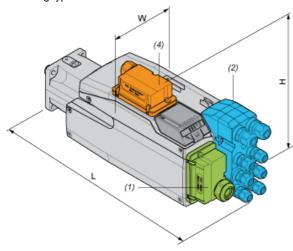
Dimensions in mm

W	Н	L
132,6	217	349

Dimensions in in.

W	Н	L
5,22	8,54	13,74

Mounting type D



- Module for supply voltage
- (2) I/O module(4) External braking resistor

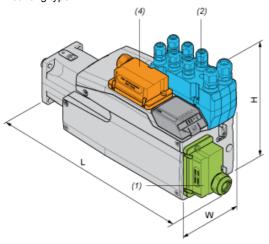
Dimensions in mm

W	Н	L
132,6	180	386

Dimensions in in.

W	Н	L
5,22	7,09	15,2

Mounting type E



- (1) (2) Module for supply voltage I/O module
- (4) External braking resistor

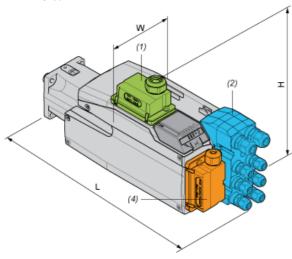
Dimensions in mm

Dimensions in in		
132,6	217	376
W	Н	L

Dimensions in in.

W	Н	L
5,22	8,54	14,8

Mounting type F



- (1) (2) Module for supply voltage
- I/O module
- (4) External braking resistor

Dimensions in mm

W	Н	L
132,6	206,5	386

Dimensions in in.

W	Н	L
5,22	8,13	15,2