# **Product data sheet**

Specification





## servo motor BMI 3-phase untapped IP54 multiturn - 131072 p/t x 4096 t

BMI0702P02A

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

Price\*: 2,431.84 USD

## Main

Range Compatibility	Lexium 32i
Product Or Component Type	Servo motor with power stage
Device Short Name	BMI

#### Complementary

•		
Maximum Mechanical Speed	8000 rpm	
[Us] Rated Supply Voltage	208480 V - 1510 %	
Supply Voltage Limits	208480 V	
Phase	Three phase	
Supply Frequency	50/60 Hz - 55 %	
Network Frequency Limits	47.563 Hz	
Emc Filter	Integrated	
Continuous Output Current	2 A 8 kHz	
Output Current 3S Peak	6 A 400 V 3 s	
Continuous Stall Current	2 A	
Continuous Stall Torque	21.95 lbf.in (2.48 N.m) 208480 V three phase	
Peak Stall Torque	60.18 lbf.in (6.8 N.m) 208 V three phase 60.18 lbf.in (6.8 N.m) 400 V three phase 60.18 lbf.in (6.8 N.m) 480 V three phase	
Nominal Output Power	400 W 208 V three phase 800 W 400 V three phase 900 W 480 V three phase	
Nominal Torque	21.24 lbf.in (2.4 N.m) 208 V three phase 19.47 lbf.in (2.2 N.m) 400 V three phase 17.70 lbf.in (2 N.m) 480 V three phase	
Nominal Speed	1800 rpm 208 V three phase 3600 rpm 400 V three phase 4400 rpm 480 V three phase	
Maximum Current Irms	9.6 A 208 V, three phase 9.6 A 400 V, three phase 9.6 A 480 V, three phase	
Product Compatibility	Drive control unit LXM32i CANopen Drive control unit LXM32i EtherCAT	
Shaft End	Untapped	
Second Shaft	Without second shaft end	

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

Shaft Diameter	0.43 in (11 mm)
Shaft Length	0.91 in (23 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	2.76 in (70 mm)
Electrical Connection	Printed circuit board connector
Torque Constant	1.15 N.m/A 68 °F (20 °C)
Back Emf Constant	77.18 V/krpm 68 °F (20 °C)
Number Of Motor Poles	10
Rotor Inertia	1.13 kg.cm²
Stator Resistance	8.89 Ohm 68 °F (20 °C)
Stator Inductance	25.75 mH 68 °F (20 °C)
Stator Electrical Time Constant	2.9 ms 68 °F (20 °C)
Maximum Radial Force Fr	710 N 1000 rpm 560 N 2000 rpm 490 N 3000 rpm 450 N 4000 rpm 410 N 5000 rpm 390 N 6000 rpm
Maximum Axial Force Fa	0.2 x Fr
Type Of Cooling	Natural convection
Length	10.55 in (268 mm)
Number Of Motor Stacks	2
Centring Collar Diameter	2.36 in (60 mm)
Centring Collar Depth	0.10 in (2.5 mm)
Number Of Mounting Holes	4
Mounting Holes Diameter	0.22 in (5.5 mm)
Circle Diameter Of The Mounting Holes	2.953.23 in (7582 mm)
Distance Shaft Shoulder-Flange	0.10 in (2.5 mm)

## **Environment**

Ip Degree Of Protection Shaft IP54
Housing IP65

# Ordering and shipping details

Category	US1PC5618287
Discount Schedule	PC56
Gtin	3606485375663
Returnability	No
Country Of Origin	DE

# **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	10.24 in (26.0 cm)
Package 1 Width	7.87 in (20.0 cm)
Package 1 Length	23.23 in (59.0 cm)
Package 1 Weight	11.90 lb(US) (5.4 kg)

## **Contractual warranty**

Warranty 18 months

## Sustainability Screen Premium

**Green Premium**<sup>TM</sup> **label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >





Transparency RoHS/REACh

## Well-being performance



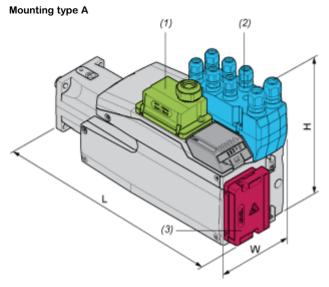
#### **Certifications & Standards**

Reach Regulation	REACh Declaration	
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)	
China Rohs Regulation	China RoHS declaration	
Environmental Disclosure	Product Environmental Profile	
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.	
Circularity Profile	End of Life Information	
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	

## **Dimensions Drawings**

#### **External Dimensions**

#### With Standard Braking Resistor



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

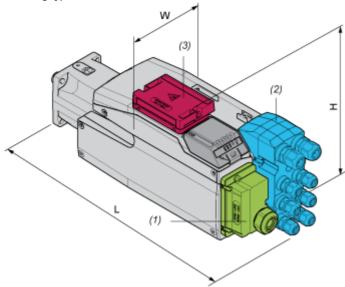
#### Dimensions in mm

W	Н	L
99	187	289

#### Dimensions in in

Diffierisions in in.		
W H L		L
3,9	7,36	11,38

#### Mounting type B



- (1) Module for supply voltage
- (2) I/O module

(3) Standard braking resistor

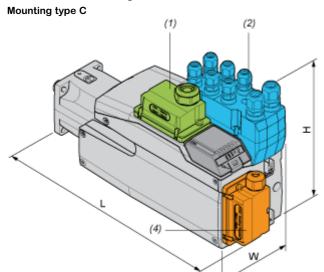
nsions	

W	Н	L
99	138,5	338

#### Dimensions in in.

W	Н	L
3,9	5,45	13,31

## With External Braking Resistor



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

Dimensions in mm

W	Н	L
99	187	301

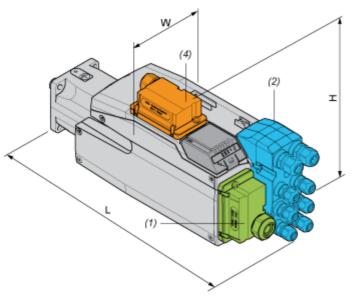
Dimensions in in.

Ī	W	Н	1
ľ	**		_
	3,9	7,36	11,85

#### Mounting type D

## **Product data sheet**

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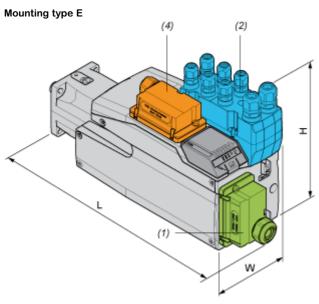
- (1) Module for supply voltage
- (2) I/O module
- (4) External braking resistor

#### Dimensions in mm

W	L	
99	160	338

#### Dimensions in in.

W	Н	L		
3,9	6,3	13,31		



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

#### Dimensions in mm

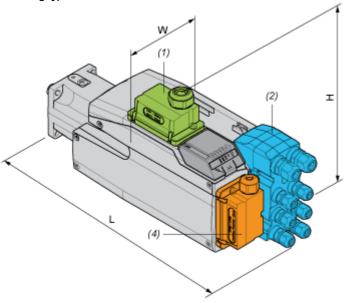
W	Н	L
99	187	328

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Dimensions in in.

W	Н	L		
3,9	7,36	12,91		

#### Mounting type F



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

#### Dimensions in mm

W	W H L	
99	180	338

#### Dimensions in in.

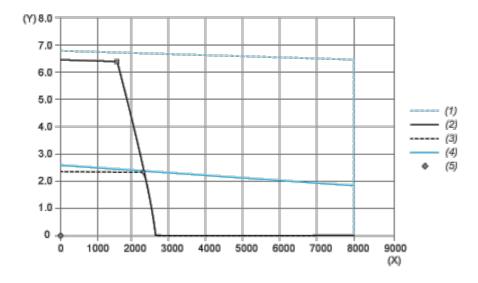
W	Н	L	
3,9	7,09	13,31	

## BMI0702P02A

#### Performance Curves

## **Performance Curves**

#### Torque/Speed Curves with 208 V Three Phases Supply Voltage

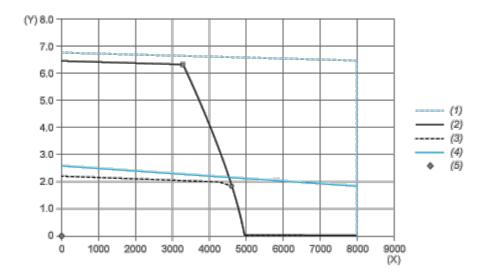


- (X) Speed (rpm)
- (Y) Torque (N.m)
- (1) Motor peak
- (2) Drive peak
- (3) Drive cont
- (4) Motor cont
- (5) Operating point

		Power	At Speed	With Torque
max. Peak Power		1013 W	1520 rpm	6.36 N.m
max Cont. Power (Drive)	•	519 W	2240 rpm	2.21 N.m

#### **Performance Curves**

#### Torque/Speed Curves with 400 V Three Phases Supply Voltage

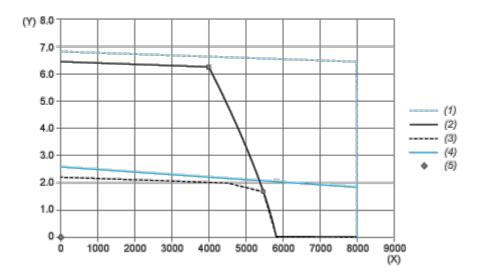


- (X) Speed (rpm)
- (Y) Torque (N.m)
- (1) Motor peak
- (2) Drive peak
- (3) Drive cont
- (4) Motor cont
- (5) Operating point

		Power	At Speed	With Torque
max. Peak Power		2161 W	3280 rpm	6.29 N.m
max Cont. Power (Drive)	•	892 W	4560 rpm	1.87 N.m

#### **Performance Curves**

#### Torque/Speed Curves with 480 V Three Phases Supply Voltage



- (X) Speed (rpm)
- (Y) Torque (N.m)
- (1) Motor peak
- (2) Drive peak
- (3) Drive cont
- (4) Motor cont
- (5) Operating point

		Power	At Speed	With Torque
max. Peak Power		2623 W	4000 rpm	6.26 N.m
max Cont. Power (Drive)	•	943 W	5600 rpm	1.61 N.m