# **Product data sheet**

Specification





# servo motor BMI 1-phase untapped IP65 multiturn - 131072 p/t x 4096 t - brake

BMI0703T22F

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

Price\*: 2,634.51 USD

### Main

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

# Complementary Maximum Mechanical Speed

Maximum Mechanical Speed	8000 rpm
[Us] Rated Supply Voltage	115230 V - 1510 %
Supply Voltage Limits	100240 V
Phase	Single phase
Supply Frequency	50/60 Hz - 55 %
Network Frequency Limits	47.563 Hz
Emc Filter	Integrated
Continuous Output Current	3.5 A 8 kHz
Output Current 3S Peak	10.5 A 230 V 3 s
Continuous Stall Current	3.5 A
Continuous Stall Torque	30.09 lbf.in (3.4 N.m) 115230 V single phase
Peak Stall Torque	76.12 lbf.in (8.6 N.m) 115 V single phase 76.12 lbf.in (8.6 N.m) 230 V single phase
Nominal Output Power	700 W 230 V single phase 400 W 115 V single phase
Nominal Torque	25.67 lbf.in (2.9 N.m) 115 V single phase 19.47 lbf.in (2.2 N.m) 230 V single phase
Nominal Speed	3200 rpm 230 V single phase 1400 rpm 115 V single phase
Maximum Current Irms	17.8 A 115 V, single phase 17.8 A 230 V, single phase
Product Compatibility	Drive control unit LXM32i CANopen Drive control unit LXM32i EtherCAT
Shaft End	Untapped
Second Shaft	Without second shaft end
Shaft Diameter	0.55 in (14 mm)
Shaft Length	1.18 in (30 mm)
Feedback Type	Absolute 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.

Speed Feedback Resolution	131072 points/turn x 4096 turns
Holding Brake	With
Holding Torque	26.55 lbf.in (3 N.m) holding brake
Mounting Support	International standard flange
Motor Flange Size	2.76 in (70 mm)
Electrical Connection	Printed circuit board connector
Torque Constant	0.81 N.m/A 68 °F (20 °C)
Back Emf Constant	54.44 V/krpm 68 °F (20 °C)
Number Of Motor Poles	10
Rotor Inertia	1.78 kg.cm²
Stator Resistance	2.58 Ohm 68 °F (20 °C)
Stator Inductance	2.28 mH 68 °F (20 °C)
Stator Electrical Time Constant	0.88 ms 68 °F (20 °C)
Maximum Radial Force Fr	730 N 1000 rpm 580 N 2000 rpm 510 N 3000 rpm 460 N 4000 rpm 430 N 5000 rpm 400 N 6000 rpm
Maximum Axial Force Fa	0.2 x Fr
Brake Pull-In Power	5 W
Type Of Cooling	Natural convection
Length	13.35 in (339 mm)
Number Of Motor Stacks	3
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 IP65

# Ordering and shipping details

Category	US1PC5618287
Discount Schedule	PC56
Gtin	3606485376790
Returnability	No
Country Of Origin	DE

# **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1

Package 1 Height	9.84 in (25.0 cm)
Package 1 Width	7.32 in (18.6 cm)
Package 1 Length	21.65 in (55.0 cm)
Package 1 Weight	14.33 lb(US) (6.5 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



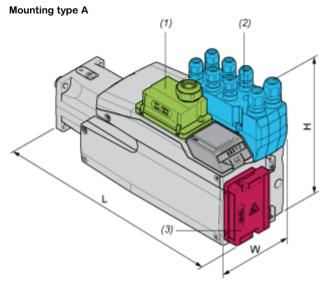
#### **Certifications & Standards**

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	
	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	

### **Dimensions Drawings**

#### **External Dimensions**

### With Standard Braking Resistor



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

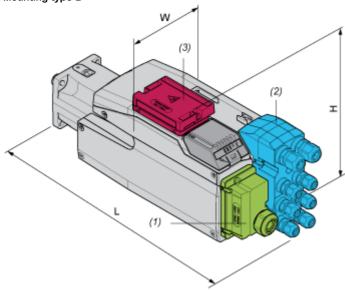
#### Dimensions in mm

W	Н	L
99	187	360

#### Dimensions in in.

W	Н	L
3,90	7,36	14,17

#### Mounting type B



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

(3) Standard braking resistor

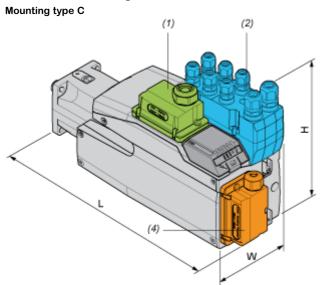
Dimensions in mm

W	Н	L
99	138,5	409

#### Dimensions in in.

W	Н	L
3,90	5,45	16,1

### 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	372

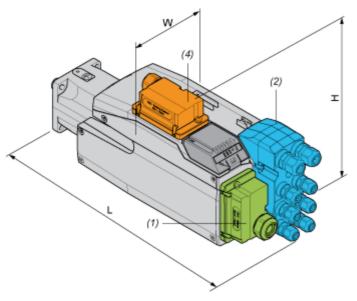
Dimensions in in.

D				
W	Н	L		
3,90	7,36	14,65		

## Mounting type D

# **Product data sheet**

# BMI0703T22F



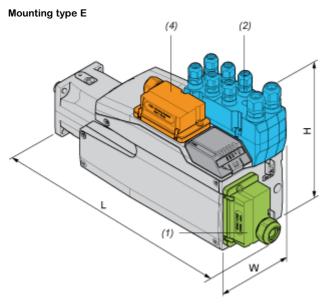
- (1) Module for supply voltage
- (2) I/O module
- External braking resistor (4)

#### Dimensions in mm

W	Н	L
99	160	409

#### Dimensions in in.

W	Н	L		
3,90	6,3	16,1		



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

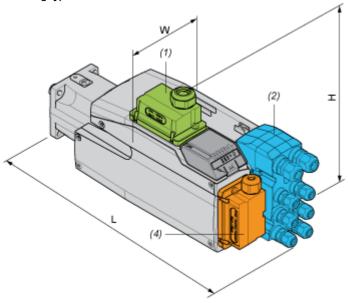
### Dimensions in mm

W	Н	L
99	187	399

Dimensions in in.

W	Н	L	
3,90	7,36	15,71	

#### Mounting type F



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

#### Dimensions in mm

W	Н	L
99	180	409

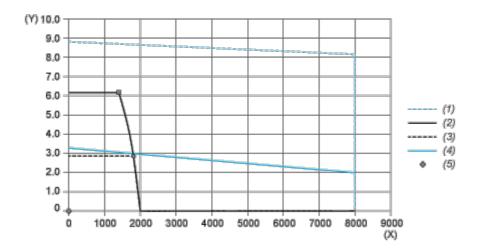
#### Dimensions in in

W	Н	L	
3,90	7,09	16,1	

#### Performance Curves

## **Performance Curves**

#### Torque/Speed Curves with 115 V Single Phase Supply Voltage

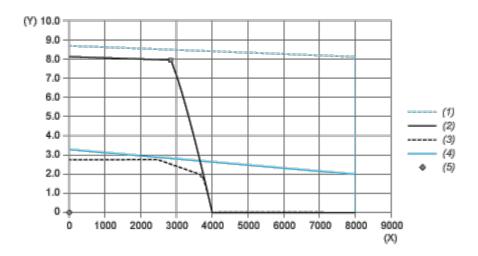


- (X) Speed (rpm)
- (Y) Torque (N.m)
- (1) Motor peak
- (2) Drive peak
- (3) Drive cont
- (4) Motor cont
- (5) Operating point

		Power	At Speed	With Torque
max. Peak Power		889 W	1360 rpm	6.24 N.m
max Cont. Power (Drive)	•	501 W	1680 rpm	2.85 N.m

#### **Performance Curves**

#### Torque/Speed Curves with 230 V Single Phase 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		2314 W	2800 rpm	7.89 N.m
max Cont. Power (Drive)	•	738 W	3600 rpm	1.96 N.m