Product data sheet





servo motor BMI 1-phase untapped IP54 single turn -131072 p/t

BMI1002T01A

! Discontinued on: Jun 30, 2023



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

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 | |
| Phase | Single phase | |
| Supply Frequency | 50/60 Hz - 55 % | |
| Network Frequency Limits | 47.563 Hz | |
| Emc Filter | Integrated | |
| Continuous Output Current | 6 A 8 kHz | |
| Output Current 3S Peak | 18 A 230 V 3 s | |
| Continuous Stall Current | 6 A | |
| ontinuous Stall Torque 53.10 lbf.in (6 N.m) 115230 V single phase | | |
| eak Stall Torque 128.34 lbf.in (14.5 N.m) 115 V single phase 128.34 lbf.in (14.5 N.m) 230 V single phase | | |
| Nominal Output Power | 750 W 115 V single phase 1300 W 230 V single phase | |
| Nominal Torque | 47.79 lbf.in (5.4 N.m) 115 V single phase 38.94 lbf.in (4.4 N.m) 230 V single phase | |
| Nominal Speed | 1400 rpm 115 V single phase 3000 rpm 230 V single phase | |
| Maximum Current Irms | 30 A 115 V, single phase 30 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 | 0.75 in (19 mm) | |
| Shaft Length | 1.57 in (40 mm) | |

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

| Feedback Type | Absolute single turn SinCos Hiperface | |
|---------------------------------------|--|--|
| Speed Feedback Resolution | 131072 points/turn | |
| Holding Brake | Without | |
| Mounting Support | International standard flange | |
| Motor Flange Size | 3.94 in (100 mm) | |
| Electrical Connection | Printed circuit board connector | |
| Torque Constant | 0.89 N.m/A 68 °F (20 °C) | |
| Back Emf Constant | 58.5 V/krpm 68 °F (20 °C) | |
| Number Of Motor Poles | 10 | |
| Rotor Inertia | 6.28 kg.cm ² | |
| Stator Resistance | 1.08 Ohm 68 °F (20 °C) | |
| Stator Inductance | 4.7 mH 68 °F (20 °C) | |
| Stator Electrical Time Constant | 4.35 ms 68 °F (20 °C) | |
| Maximum Radial Force Fr | 990 N 1000 rpm 790 N 2000 rpm 690 N 3000 rpm 620 N 4000 rpm 580 N 5000 rpm | |
| Maximum Axial Force Fa | 0.2 x Fr | |
| Type Of Cooling | Natural convection | |
| Length | 10.75 in (273 mm) | |
| Number Of Motor Stacks | 2 | |
| Centring Collar Diameter | ameter 3.74 in (95 mm) | |
| Centring Collar Depth | 0.14 in (3.5 mm) | |
| Number Of Mounting Holes | 4 | |
| Mounting Holes Diameter | 0.35 in (9 mm) | |
| Circle Diameter Of The Mounting Holes | 4.53 in (115 mm) | |
| Distance Shaft Shoulder-Flange | 0.14 in (3.5 mm) | |

Environment

Ip Degree Of Protection Shaft IP54
Housing IP65

Ordering and shipping details

| Category | US1PC5618287 | |
|-------------------|---------------|--|
| Discount Schedule | PC56 | |
| Gtin | 3606485377247 | |
| 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 | 20.94 lb(US) (9.5 kg) | |

Contractual warranty

Warranty 18 months

Sustainability Green Premium*

Green PremiumTM **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-CO₂ 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

| Ø | Mercury Free | |
|----------|----------------------------|-----|
| | Rohs Exemption Information | Yes |
| ② | Pvc Free | |

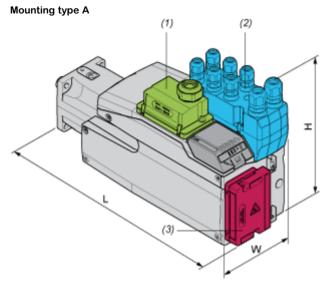
Certifications & Standards

| 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 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

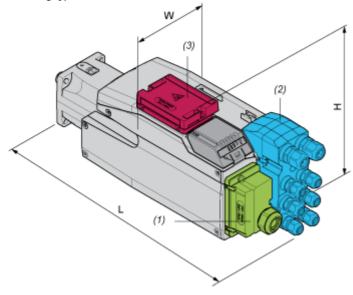
Dimensions in mm

| W | Н | L |
|-------|-----|-----|
| 132,6 | 217 | 294 |

Dimensions in in

| Difficitionis in in. | | |
|----------------------|------|-------|
| W | Н | L |
| 5,22 | 8,54 | 11,57 |

Mounting type B



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

BMI1002T01A

(3) Standard braking resistor

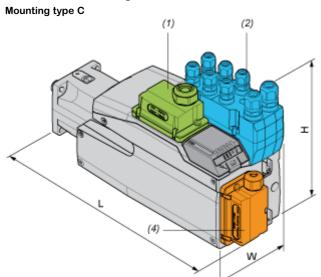
| Dimensions in mm | |
|------------------|--|
| | |

| W | Н | L |
|-------|-----|-----|
| 132,6 | 168 | 343 |

Dimensions in in.

| W | V H L | |
|------|-------|------|
| 5,22 | 6,61 | 13,5 |

With External Braking Resistor



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

Dimensions in mm

| W | Н | L | |
|-------|-----|-----|--|
| 132,6 | 217 | 306 | |

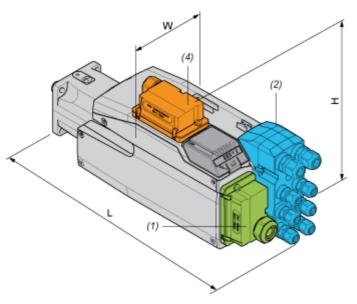
Dimensions in in.

| W | Н | L |
|------|------|-------|
| 5,22 | 8,54 | 12,05 |

Mounting type D

Product data sheet

BMI1002T01A



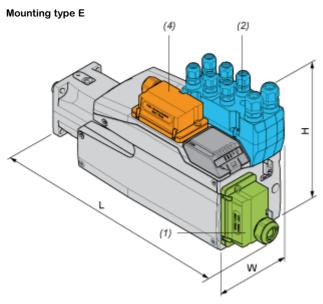
- (1) Module for supply voltage
- (2) I/O module
- (4) External braking resistor

Dimensions in mm

| W | Н | L | |
|-------|-----|-----|--|
| 132,6 | 180 | 343 | |

Dimensions in in.

| W H L | | | | |
|-------|------|------|--|--|
| 5,22 | 7,09 | 13,5 | | |



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

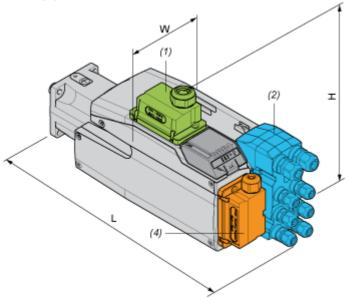
Dimensions in mm

| W | Н | L | |
|-------|-----|-----|--|
| 132,6 | 217 | 333 | |

Dimensions in in.

| W | Н | L |
|------|------|-------|
| 5,22 | 8,54 | 13,11 |

Mounting type F



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

Dimensions in mm

| Difficitations in thirt | | | |
|-------------------------|-------|-----|--|
| W | Н | L | |
| 132,6 | 206,5 | 343 | |

Dimensions in in.

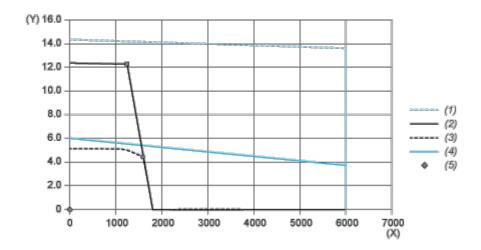
| W | H L | | | |
|------|------|------|--|--|
| 5,22 | 8,13 | 13,5 | | |

BMI1002T01A

Performance Curves

Performance Curves

Torque/Speed Curves with 115 V Single Phase Supply Voltage

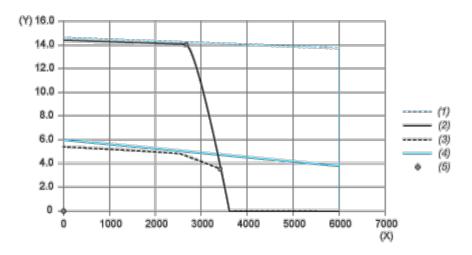


- (X) Speed (rpm)
- (Y) Torque (N.m)
- (1) Motor peak
- (2) Drive peak
- (3) Drive cont
- (4) Motor cont
- (5) Operating point

| | | Power | At Speed | With Torque |
|-------------------------|---|--------|----------|-------------|
| max. Peak Power | | 1721 W | 1380 rpm | 11.91 N.m |
| max Cont. Power (Drive) | • | 757 W | 1620 rpm | 4.46 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 | | 4069 W | 2760 rpm | 14.08 N.m |
| max Cont. Power (Drive) | • | 1257 W | 3420 rpm | 3.51 N.m |