

Product data sheet

Specifications



servo motor BMI 3-phase - keyed IP54 single turn - 131072 p/t - brake

BMI0702P11F

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 | 208...480 V - 15...10 % |
| Supply Voltage Limits | 208...480 V |
| Network Number Of Phases | Three phase |
| Supply Frequency | 50/60 Hz - 5...5 % |
| Network Frequency Limits | 47.5...63 Hz |
| Emc Filter | Integrated |
| Continuous Output Current | 2 A at 8 kHz |
| Output Current 3S Peak | 6 A at 400 V for 3 s |
| Continuous Stall Current | 2 A |
| Continuous Stall Torque | 2.48 N.m at 208...480 V three phase |
| Peak Stall Torque | 6.8 N.m at 208 V three phase 6.8 N.m at 400 V three phase 6.8 N.m at 480 V three phase |
| Nominal Output Power | 400 W at 208 V three phase 800 W at 400 V three phase 900 W at 480 V three phase |
| Nominal Torque | 2.4 N.m at 208 V three phase 2.2 N.m at 400 V three phase 2 N.m at 480 V three phase |
| Nominal Speed | 1800 rpm at 208 V three phase 3600 rpm at 400 V three phase 4400 rpm at 480 V three phase |
| Maximum Current Irms | 9.6 A at 208 V, three phase 9.6 A at 400 V, three phase 9.6 A at 480 V, three phase |
| Product Compatibility | Drive control unit LXM32i CANopen Drive control unit LXM32i EtherCAT |
| Shaft End | Keyed |
| Second Shaft | Without second shaft end |
| Shaft Diameter | 11 mm |
| Shaft Length | 23 mm |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

| | |
|---------------------------------------|--|
| Key Width | 4 mm |
| Feedback Type | Absolute single turn SinCos Hiperface |
| Speed Feedback Resolution | 131072 points/turn |
| Holding Brake | With |
| Holding Torque | 3 N.m holding brake |
| Mounting Support | International standard flange |
| Motor Flange Size | 70 mm |
| Electrical Connection | Printed circuit board connector |
| Torque Constant | 1.15 N.m/A at 20 °C |
| Back Emf Constant | 77.18 V/krpm at 20 °C |
| Number Of Motor Poles | 10 |
| Rotor Inertia | 1.24 kg.cm² |
| Stator Resistance | 8.89 Ohm at 20 °C |
| Stator Inductance | 25.75 mH at 20 °C |
| Stator Electrical Time Constant | 2.9 ms at 20 °C |
| Maximum Radial Force Fr | 710 N at 1000 rpm 560 N at 2000 rpm 490 N at 3000 rpm 450 N at 4000 rpm 410 N at 5000 rpm 390 N at 6000 rpm |
| Maximum Axial Force Fa | 0.2 x Fr |
| Brake Pull-In Power | 5 W |
| Type Of Cooling | Natural convection |
| Length | 306 mm |
| Number Of Motor Stacks | 2 |
| Centring Collar Diameter | 60 mm |
| Centring Collar Depth | 2.5 mm |
| Number Of Mounting Holes | 4 |
| Mounting Holes Diameter | 5.5 mm |
| Circle Diameter Of The Mounting Holes | 75...82 mm |
| Distance Shaft Shoulder-Flange | 2.5 mm |

Environment

| | |
|-------------------------|------------------------------|
| Ip Degree Of Protection | Shaft: IP54 Housing: IP65 |
|-------------------------|------------------------------|

Packing Units

| | |
|------------------------------|---------|
| Unit Type Of Package 1 | PCE |
| Number Of Units In Package 1 | 1 |
| Package 1 Height | 26.0 cm |
| Package 1 Width | 20.0 cm |
| Package 1 Length | 59.0 cm |
| Package 1 Weight | 5.4 kg |

Contractual warranty

| | |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class 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

✓ Mercury Free

✓ Rohs Exemption Information [Yes](#)

✓ Pvc Free

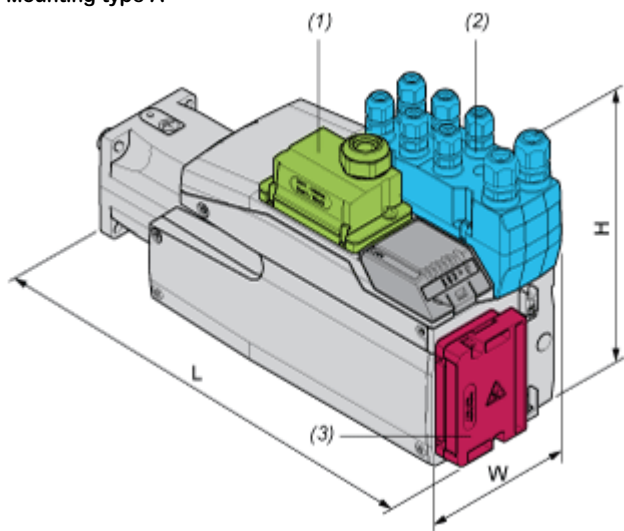
Certifications & Standards

| | |
|---------------------------|---|
| 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
Mounting type A



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

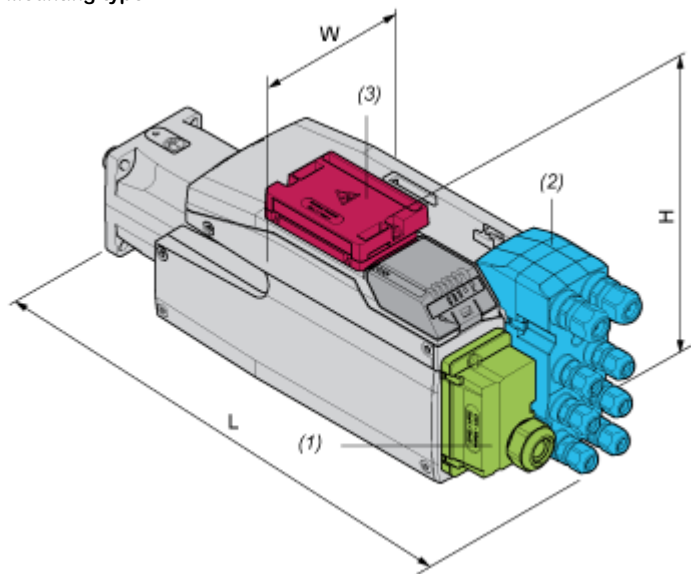
Dimensions in mm

| W | H | L |
|----|-----|-----|
| 99 | 187 | 327 |

Dimensions in in.

| W | H | L |
|------|------|-------|
| 3,90 | 7,36 | 12,87 |

Mounting type B



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

(3) Standard braking resistor

Dimensions in mm

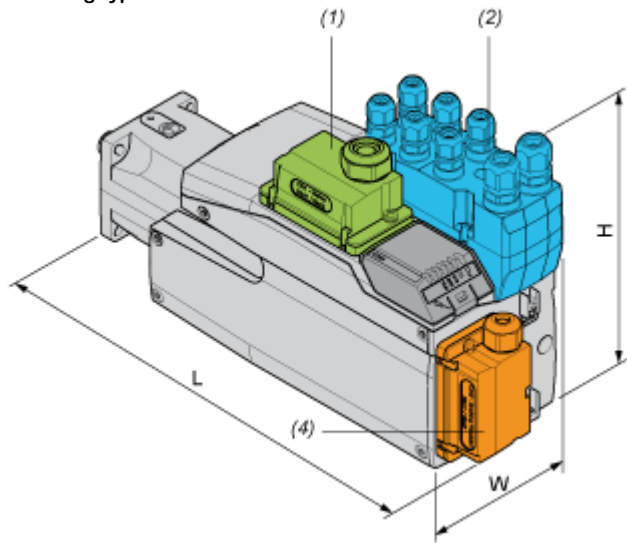
| W | H | L |
|----|-------|-----|
| 99 | 138,5 | 376 |

Dimensions in in.

| W | H | L |
|------|------|------|
| 3,90 | 5,45 | 14,8 |

With External Braking Resistor

Mounting type C



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

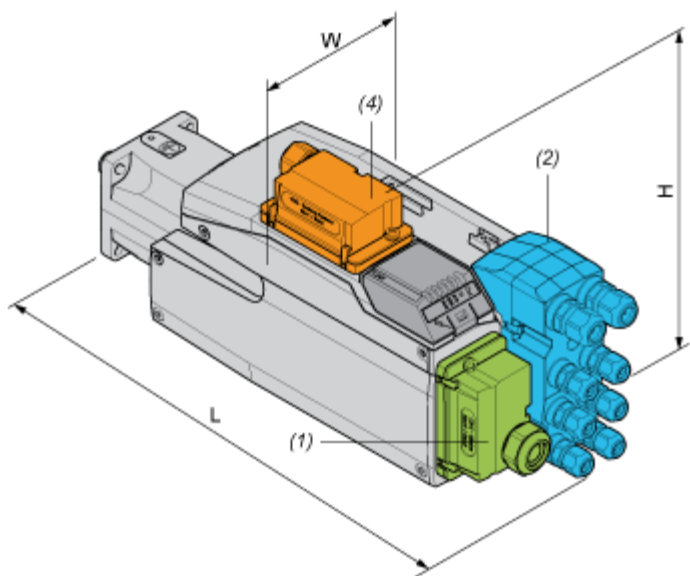
Dimensions in mm

| W | H | L |
|----|-----|-----|
| 99 | 187 | 339 |

Dimensions in in.

| W | H | L |
|------|------|-------|
| 3,90 | 7,36 | 13,35 |

Mounting type D



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

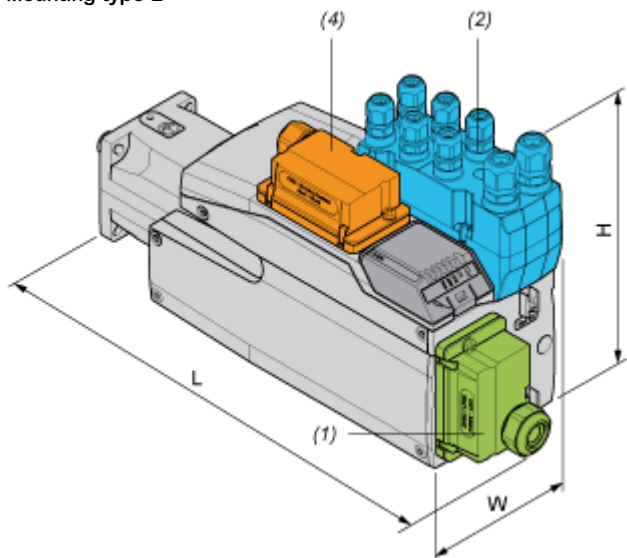
Dimensions in mm

| W | H | L |
|----|-----|-----|
| 99 | 160 | 376 |

Dimensions in in.

| W | H | L |
|------|-----|------|
| 3,90 | 6,3 | 14,8 |

Mounting type E



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

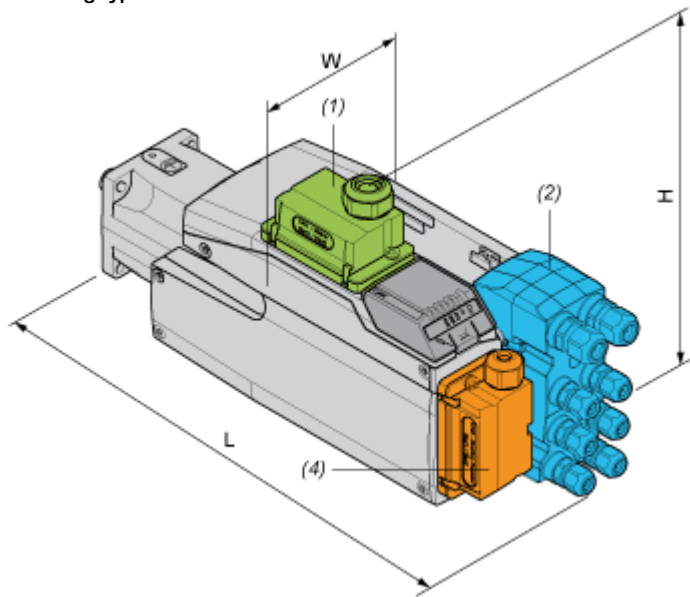
Dimensions in mm

| W | H | L |
|----|-----|-----|
| 99 | 187 | 366 |

Dimensions in in.

| W | H | L |
|------|------|-------|
| 3,90 | 7,36 | 14,41 |

Mounting type F



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

Dimensions in mm

| W | H | L |
|----|-----|-----|
| 99 | 180 | 376 |

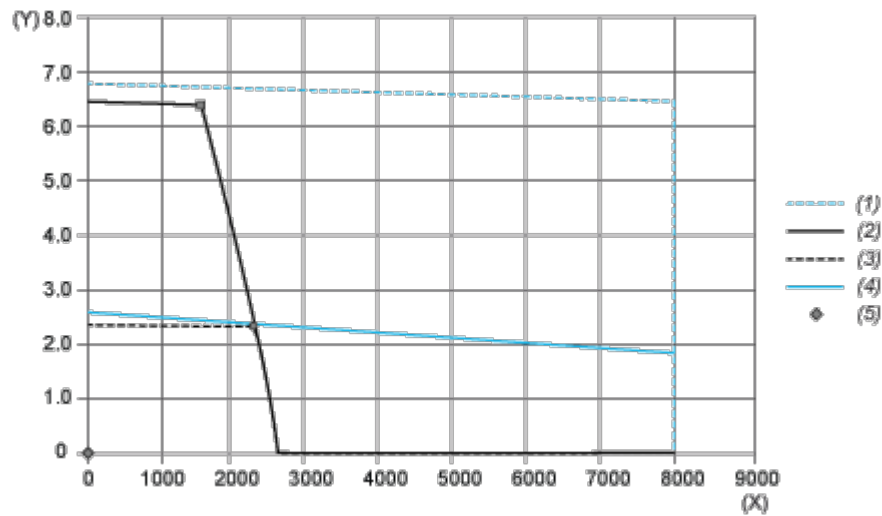
Dimensions in in.

| W | H | L |
|------|------|------|
| 3,90 | 7,09 | 14,8 |

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

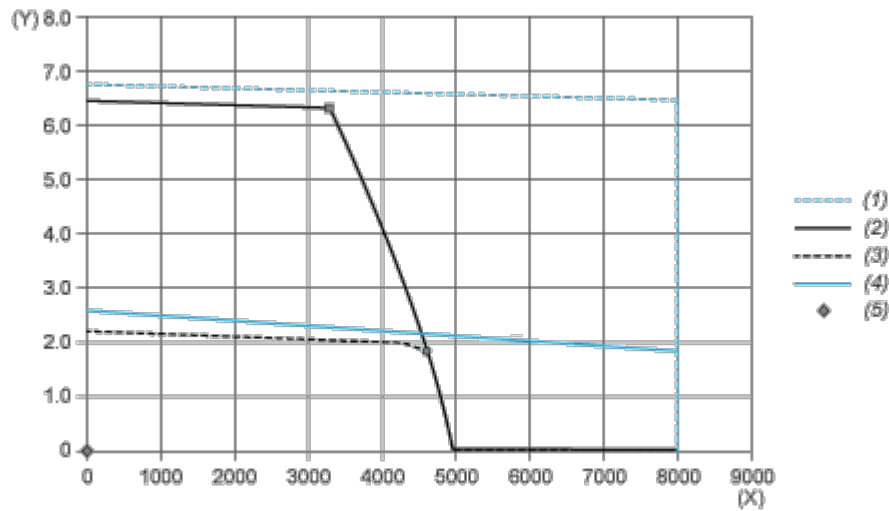
(4) Motor cont

(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

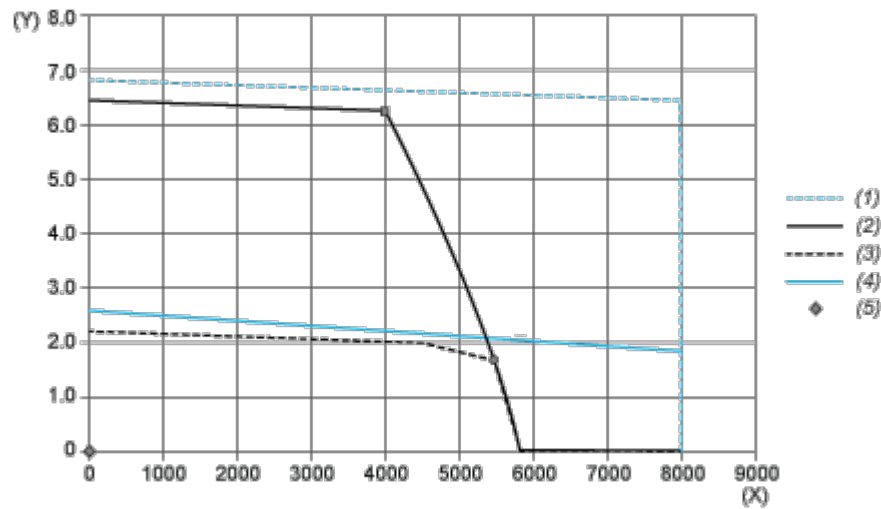


- (X) Speed (rpm)
- (Y) Torque (N.m)
- (1) Motor peak
- (2) Drive peak
- (3) Drive cont
- (4) Motor cont
- (5) Operating point

| | | 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 |