



## Main

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

## Complementary

|                           |   |
|---------------------------|---|
| Maximum mechanical speed  | 8000  |
| [Us] rated supply voltage | 115...230 V (- 15...10 %)   |
| Supply voltage limits     | 100...240 V   |
| Network number of phases  | Single phase  |
| Supply frequency          | 50/60 Hz (- 5...5 %)  |
| Network frequency limits  | 47.5...63 Hz  |
| EMC filter                | Integrated  |
| Continuous output current | 2.6 A at 8 kHz  |
| Output current 3s peak    | 10.5 A at 230 V for 1 s   |
| Continuous stall current  | 2.6 A   |
| Continuous stall torque   | 2.48 N.m at 115...230 V, single phase                                       |
| Peak stall torque         | 6.6 N.m at 230 V, single phase<br>6.6 N.m at 115 V, single phase            |
| Nominal output power      | 400 W at 115 V, single phase<br>700 W at 230 V, single phase                |
| Nominal torque            | 1.7 N.m at 230 V, single phase<br>2.2 N.m at 115 V, single phase            |
| Nominal speed             | 1700 rpm at 115 V, single phase<br>4000 rpm at 230 V, single phase          |
| Maximum current Irms      | 17.7 A at 115 V, single phase<br>17.7 A at 230 V, single phase              |
| Product compatibility     | LXM32i drive control unit (EtherCAT)<br>LXM32i drive control unit (CANopen) |
| Shaft end                 | Untapped  |
| Second shaft              | Without second shaft end  |
| Shaft diameter            | 11 mm   |
| Shaft length              | 23 mm   |
| Feedback type             | Absolute single turn SinCos Hiperface                                       |
| Speed feedback resolution | 32768 points/turn   |
| Holding brake             | Without   |
| Mounting support          | International standard flange   |
| Motor flange size         | 70 mm   |
| Electrical connection     | Printed circuit board connector   |
| Torque constant           | 0.63 N.m/A at 20 °C   |
| Back emf constant         | 42.1 V/krpm at 20 °C  |
| Number of motor poles     | 10  |
| Rotor inertia             | 1.13 kg.cm <sup>2</sup>   |

|                                       |  |
|---------------------------------------|--|
| Stator resistance                     | 2.7 Ohm at 20 °C   |
| Stator inductance                     | 7.8 mH at 20 °C  |
| Stator electrical time constant       | 2.89 ms at 20 °C   |
| Maximum radial force Fr               | 390 N at 6000 rpm<br>410 N at 5000 rpm<br>450 N at 4000 rpm<br>490 N at 3000 rpm<br>560 N at 2000 rpm<br>710 N at 1000 rpm |
| Maximum axial force Fa                | 0.2 x Fr   |
| Type of cooling                       | Natural convection   |
| Length                                | 268 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   |

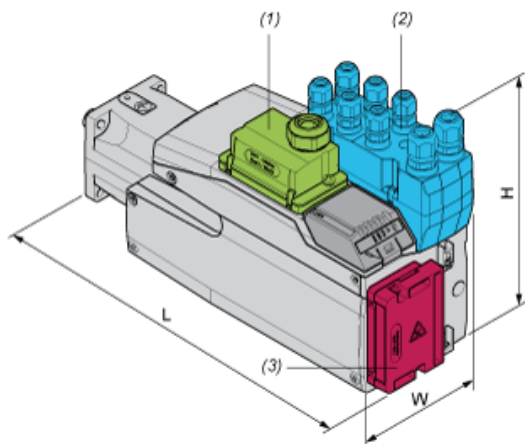
## Environment

|                         |                                    |
|-------------------------|------------------------------------|
| IP degree of protection | IP65 for housing<br>IP54 for shaft |
|-------------------------|------------------------------------|

External Dimensions

With Standard Braking Resistor

Mounting type A



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

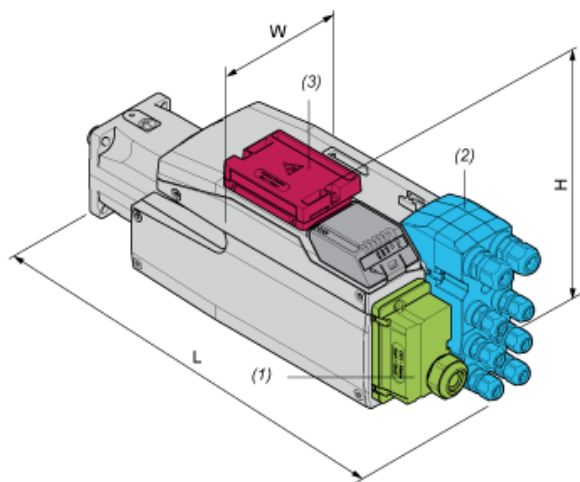
Dimensions in mm

| W  | H   | L   |
|----|-----|-----|
| 99 | 187 | 289 |

Dimensions in in.

| W   | H    | L     |
|-----|------|-------|
| 3,9 | 7,36 | 11,38 |

Mounting type B



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

Dimensions in mm

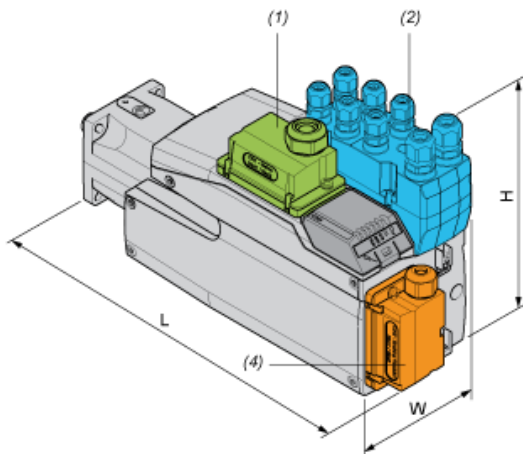
| W  | H     | L   |
|----|-------|-----|
| 99 | 138,5 | 338 |

Dimensions in in.

| W   | H    | L     |
|-----|------|-------|
| 3,9 | 5,45 | 13,31 |

### With External Braking Resistor

Mounting type C



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

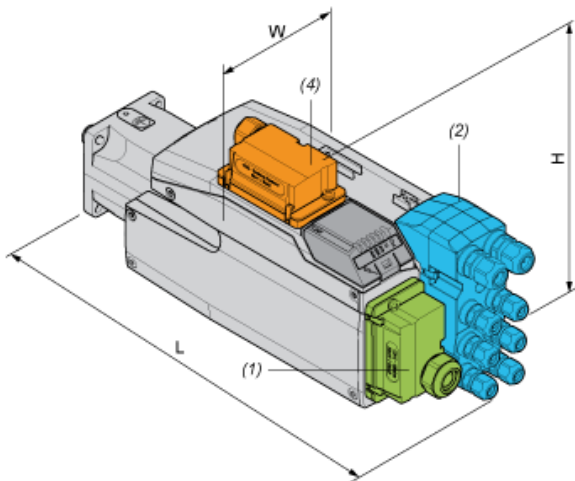
Dimensions in mm

| W  | H   | L   |
|----|-----|-----|
| 99 | 187 | 301 |

Dimensions in in.

| W   | H    | L     |
|-----|------|-------|
| 3,9 | 7,36 | 11,85 |

Mounting type D



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

Dimensions in mm

| W  | H   | L   |
|----|-----|-----|
| 99 | 160 | 338 |

Dimensions in in.

| W   | H   | L     |
|-----|-----|-------|
| 3,9 | 6,3 | 13,31 |

### Mounting type E



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

Dimensions in mm

| W  | H   | L   |
|----|-----|-----|
| 99 | 187 | 328 |

Dimensions in in.

| W   | H    | 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  | H   | L   |
|----|-----|-----|
| 99 | 180 | 338 |

Dimensions in in.

| W   | H    | L     |
|-----|------|-------|
| 3,9 | 7,09 | 13,31 |