



## Main

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

## Complementary

|                           |   |
|---------------------------|---|
| Maximum mechanical speed  | 6000  |
| [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 | 6 A at 8 kHz  |
| Output current 3s peak    | 18 A at 230 V for 3 s   |
| Continuous stall current  | 6 A   |
| Continuous stall torque   | 6 N.m at 115...230 V, single phase  |
| Peak stall torque         | 14.5 N.m at 230 V, single phase<br>14.5 N.m at 115 V, single phase          |
| Nominal output power      | 1300 W at 230 V, single phase<br>750 W at 115 V, single phase               |
| Nominal torque            | 4.4 N.m at 230 V, single phase<br>5.4 N.m at 115 V, single phase            |
| Nominal speed             | 3000 rpm at 230 V, single phase<br>1400 rpm at 115 V, single phase          |
| Maximum current Irms      | 30 A at 230 V, single phase<br>30 A at 115 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            | 19 mm   |
| Shaft length              | 40 mm   |
| Feedback type             | Absolute single turn SinCos Hiperface                                       |
| Speed feedback resolution | 32768 points/turn   |
| Holding brake             | With  |
| Holding torque            | 5.5 N.m for holding brake   |
| Mounting support          | International standard flange   |
| Motor flange size         | 100 mm  |
| Electrical connection     | Printed circuit board connector   |
| Torque constant           | 0.89 N.m/A at 20 °C   |
| Back emf constant         | 58.5 V/krpm at 20 °C  |
| Number of motor poles     | 10  |

|                                       |   |
|---------------------------------------|---|
| Rotor inertia                         | 6.77 kg.cm <sup>2</sup>   |
| Stator resistance                     | 1.08 Ohm at 20 °C   |
| Stator inductance                     | 4.7 mH at 20 °C   |
| Stator electrical time constant       | 4.35 ms at 20 °C  |
| Maximum radial force Fr               | 580 N at 5000 rpm<br>620 N at 4000 rpm<br>690 N at 3000 rpm<br>790 N at 2000 rpm<br>990 N at 1000 rpm |
| Maximum axial force Fa                | 0.2 x Fr  |
| Brake pull-in power                   | 8 W   |
| Type of cooling                       | Natural convection  |
| Length                                | 282 mm  |
| Number of motor stacks                | 2   |
| Centring collar diameter              | 95 mm   |
| Centring collar depth                 | 3.5 mm  |
| Number of mounting holes              | 4   |
| Mounting holes diameter               | 9 mm  |
| Circle diameter of the mounting holes | 115 mm  |
| Distance shaft shoulder-flange        | 3.5 mm  |

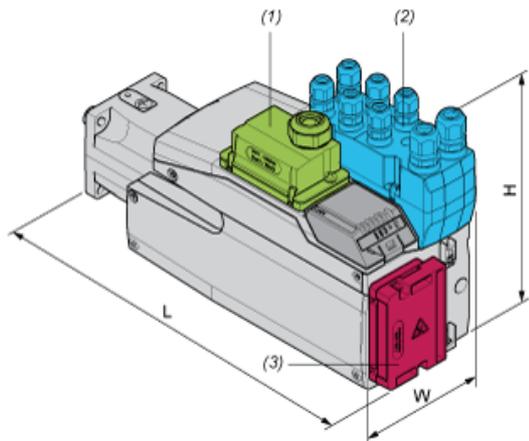
## Environment

|                         |                                    |
|-------------------------|------------------------------------|
| 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

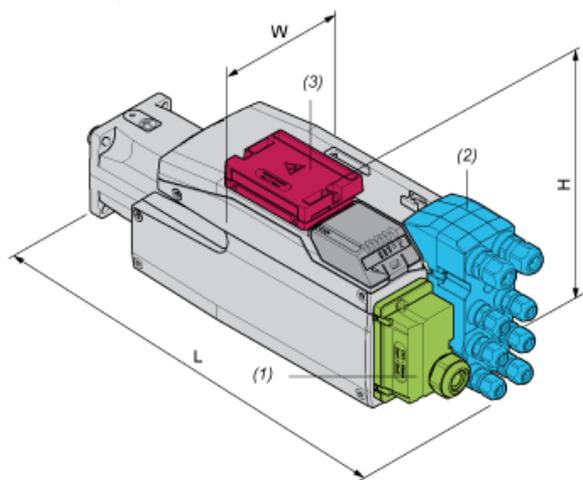
Dimensions in mm

| W     | H   | L   |
|-------|-----|-----|
| 132,6 | 217 | 337 |

Dimensions in in.

| W    | H    | L     |
|------|------|-------|
| 5,22 | 8,54 | 13,27 |

Mounting type B



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

Dimensions in mm

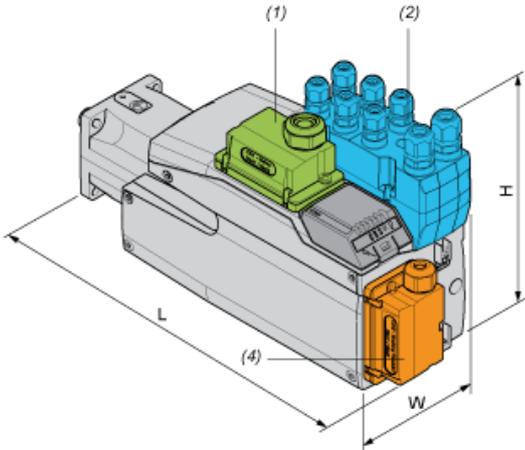
| W     | H   | L   |
|-------|-----|-----|
| 132,6 | 168 | 386 |

Dimensions in in.

| W    | H    | L    |
|------|------|------|
| 5,22 | 6,61 | 15,2 |

**With External Braking Resistor**

Mounting type C



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

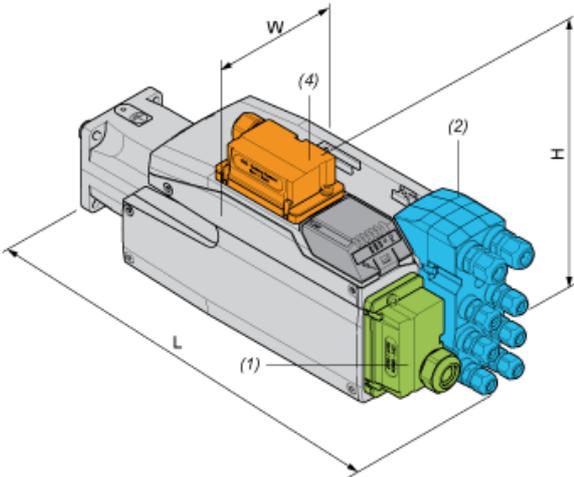
Dimensions in mm

| W     | H   | L   |
|-------|-----|-----|
| 132,6 | 217 | 349 |

Dimensions in in.

| W    | H    | L     |
|------|------|-------|
| 5,22 | 8,54 | 13,74 |

Mounting type D



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

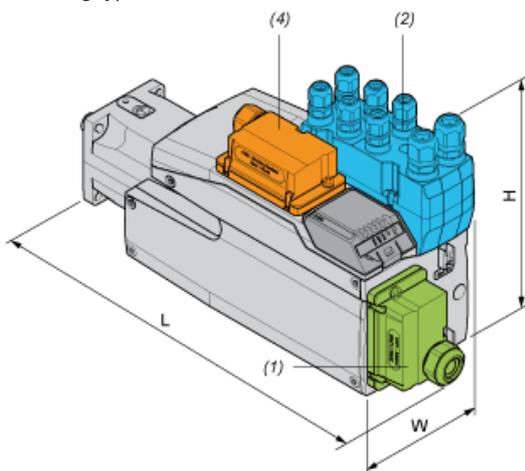
Dimensions in mm

| W     | H   | L   |
|-------|-----|-----|
| 132,6 | 180 | 386 |

Dimensions in in.

| W    | H    | L    |
|------|------|------|
| 5,22 | 7,09 | 15,2 |

### Mounting type E



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

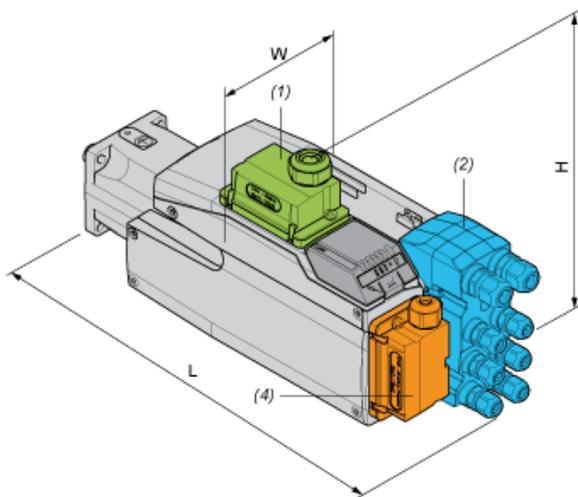
Dimensions in mm

| W     | H   | L   |
|-------|-----|-----|
| 132,6 | 217 | 376 |

Dimensions in in.

| W    | H    | L    |
|------|------|------|
| 5,22 | 8,54 | 14,8 |

### Mounting type F



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

Dimensions in mm

| W     | H     | L   |
|-------|-------|-----|
| 132,6 | 206,5 | 386 |

Dimensions in in.

| W    | H    | L    |
|------|------|------|
| 5,22 | 8,13 | 15,2 |