

Product data sheet

Specifications



servo motor BMH, Lexium 32, 1.2Nm, 8000rpm, untapped shaft, without brake, IP54, 16 multturn encoder

BMH0701P07A2A

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

Main

| | |
|---------------------------|--|
| Device short name | BMH |
| Product or Component Type | Servo motor |
| Maximum mechanical speed | 8000 rpm |
| Continuous stall torque | 10.6 lbf.in (1.2 N.m) LXM32.U60N4 1.5 A, 400 V, three phase 10.6 lbf.in (1.2 N.m) LXM32.U60N4 1.5 A, 480 V, three phase 12.4 lbf.in (1.4 N.m) LXM32.D12N4 3 A, 400 V, three phase 12.4 lbf.in (1.4 N.m) LXM32.D12N4 3 A, 480 V, three phase |
| Peak stall torque | 37.2 lbf.in (4.2 N.m) LXM32.U60N4 1.5 A, 400 V, three phase 37.2 lbf.in (4.2 N.m) LXM32.U60N4 1.5 A, 480 V, three phase 37.2 lbf.in (4.2 N.m) LXM32.D12N4 3 A, 400 V, three phase 37.2 lbf.in (4.2 N.m) LXM32.D12N4 3 A, 480 V, three phase |
| Nominal output power | 350 W LXM32.U60N4 1.5 A, 400 V, three phase 350 W LXM32.U60N4 1.5 A, 480 V, three phase 700 W LXM32.D12N4 3 A, 400 V, three phase 700 W LXM32.D12N4 3 A, 480 V, three phase |
| Nominal torque | 9.7 lbf.in (1.1 N.m) LXM32.U60N4 1.5 A, 400 V, three phase 9.7 lbf.in (1.1 N.m) LXM32.U60N4 1.5 A, 480 V, three phase 11.5 lbf.in (1.3 N.m) LXM32.D12N4 3 A, 400 V, three phase 11.5 lbf.in (1.3 N.m) LXM32.D12N4 3 A, 480 V, three phase |
| Nominal speed | 3000 rpm LXM32.U60N4 1.5 A, 400 V, three phase 3000 rpm LXM32.U60N4 1.5 A, 480 V, three phase 5000 rpm LXM32.D12N4 3 A, 400 V, three phase 5000 rpm LXM32.D12N4 3 A, 480 V, three phase |
| Product compatibility | LXM32.U60N4 400...480 V three phase LXM32.D12N4 400...480 V three phase |
| Shaft end | Smooth shaft |
| IP Degree of Protection | IP54 standard |
| Speed feedback resolution | 32768 points/turn x 4096 turns |
| Holding brake | Without |
| Mounting Support | International standard flange |
| Electrical Connection | Rotatable right-angled connectors |

Complementary

| | |
|---------------------------|-------------|
| Range Compatibility | Lexium 32 |
| [Us] rated supply voltage | 480 V |
| Phase | Three phase |
| Continuous stall current | 1.78 A |
| Continuous power | 1.05 W |

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

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|---------------------------------------|--|
| Maximum current Irms | 5.97 A LXM32.U60N4 6 A LXM32.D12N4 |
| Maximum permanent current | 5.97 A |
| Second shaft | Without second shaft end |
| Shaft diameter | 0.4 in (11 mm) |
| Shaft length | 0.9 in (23 mm) |
| Feedback type | Multiturn SinCos Hiperface |
| Motor flange size | 2.8 in (70 mm) |
| Number of motor stacks | 1 |
| Torque constant | 0.79 N.m/A 248 °F (120 °C) |
| Back emf constant | 50.72 V/krpm 248 °F (120 °C) |
| Number of motor poles | 5.0 |
| Rotor inertia | 0.59 kg.cm² |
| Stator resistance | 8.3 Ohm 68 °F (20 °C) |
| Stator inductance | 10.35 mH 68 °F (20 °C) |
| Stator electrical time constant | 2.8 ms 68 °F (20 °C) |
| Maximum radial force Fr | 660 N 1000 rpm 520 N 2000 rpm 460 N 3000 rpm 410 N 4000 rpm 380 N 5000 rpm 360 N 6000 rpm |
| Maximum axial force Fa | 0.2 x Fr |
| type of cooling | Natural convection |
| Length | 4.8 in (122 mm) |
| Centring collar diameter | 2.4 in (60 mm) |
| centring collar depth | 0.10 in (2.5 mm) |
| Number of mounting holes | 4 |
| Mounting holes diameter | 0.2 in (5.5 mm) |
| Circle diameter of the mounting holes | 3.2 in (82 mm) |
| Net Weight | 3.5 lb(US) (1.6 kg) |
| Sizing reference | BMH0701P |
| Network number of phases | 3 |
| Accuracy error [angular] | 4.8 ° |
| Temperature copper hot | 275 °F (135 °C) |
| Temperature magnet hot | 212 °F (100 °C) |
| Temperature magnet rt | 68 °F (20 °C) |

Ordering and shipping details

| | |
|-------------------|---------------|
| Category | US1PC5318282 |
| Discount Schedule | PC53 |
| GTIN | 3606485193441 |
| Returnability | No |
| Country of origin | DE |

Packing Units

| | |
|------------------------------|----------------------------|
| Unit Type of Package 1 | PCE |
| Nbr. of units in pkg. | 1 |
| Package 1 Height | 4.33 in (11.000 cm) |
| Package 1 Width | 7.48 in (19.000 cm) |
| Package 1 Length | 15.55 in (39.500 cm) |
| Package weight(Lbs) | 4.773 lb(US) (2.165 kg) |
| Unit Type of Package 2 | P06 |
| Number of Units in Package 2 | 24 |
| Package 2 Height | 29.53 in (75.000 cm) |
| Package 2 Width | 23.62 in (60.000 cm) |
| Package 2 Length | 31.50 in (80.000 cm) |
| Package 2 Weight | 135.434 lb(US) (61.432 kg) |

Contractual warranty

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|----------|-----------|
| Warranty | 18 months |
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Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing "Use Better, Use Longer, Use Again" campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

Environmental footprint

| | |
|--|-----|
| Carbon footprint (kg CO2 eq, Total Life cycle) | 780 |
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|--------------------------|---|
| Environmental Disclosure | Product Environmental Profile |
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Use Better

Materials and Substances

| | |
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| Packaging made with recycled cardboard | Yes |
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|--------------------------------------|----|
| Packaging without single use plastic | No |
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|-----------------------------------|--|
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) |
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| | |
|-------------|--------------------------------------|
| SCIP Number | A7df881f-135f-4256-b8c2-ea55d4c9a151 |
|-------------|--------------------------------------|

| | |
|------------------|-----------------------------------|
| REACH Regulation | REACH Declaration |
|------------------|-----------------------------------|

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

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| PVC free | Yes |
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Use Again

Repack and remanufacture

| | |
|---------------------|--|
| Circularity Profile | No need of specific recycling operations |
|---------------------|--|

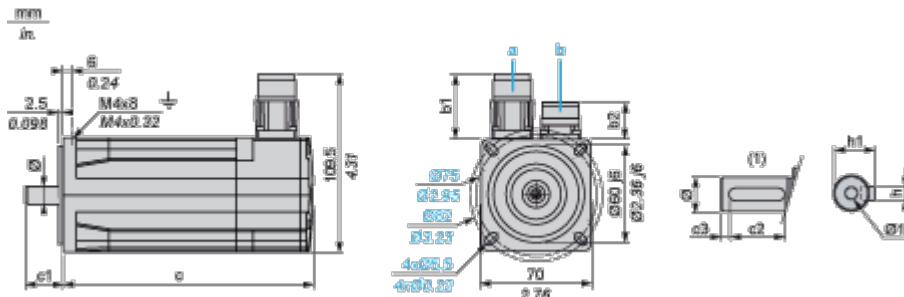
| | |
|-----------|----|
| Take-back | No |
|-----------|----|

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|------|--|
| WEEE | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins. |
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Dimensions Drawings

Servo Motors Dimensions

Example with Straight Connectors



- a: Power supply for servo motor brake
- b: Power supply for servo motor encoder
- (1) Shaft end, keyed slot (optional)

Dimensions in mm

| Straight connectors | | Rotatable angled connectors | | c (without brake) | c (with brake) | c1 | c2 | c3 | h | h1 | Ø | Ø1 for screws |
|---------------------|------|-----------------------------|------|-------------------|----------------|----|----|-----|------|---------------------|-------|---------------|
| b1 | b2 | b1 | b2 | | | | | | | | | |
| 39.5 | 25.5 | 39.5 | 39.5 | 122 | 161 | 23 | 18 | 2.5 | 4 h9 | $12.5^{+0}_{-0.13}$ | 11 k6 | M4 x 14 |

Dimensions in in.

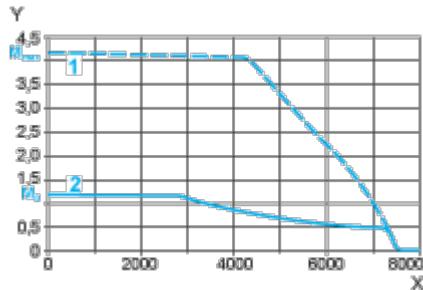
| Straight connectors | | Rotatable angled connectors | | c (without brake) | c (with brake) | c1 | c2 | c3 | h | h1 | Ø | Ø1 for screws |
|---------------------|----|-----------------------------|------|-------------------|----------------|------|------|------|---------|-----------------------|---------|---------------|
| b1 | b2 | b1 | b2 | | | | | | | | | |
| 1.55 | 1 | 1.55 | 1.55 | 4.80 | 6.33 | 0.90 | 0.70 | 0.09 | 0.16 h9 | $0.49^{+0}_{-0.0051}$ | 0.43 k6 | M4 x 0.55 |

Performance Curves

400 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•U60N4 servo drive



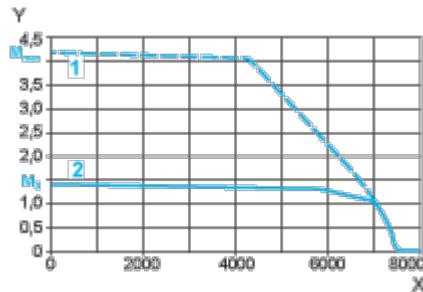
X Speed in rpm

Y Torque in Nm

1 Peak torque

2 Continuous torque

Servo motor with LXM32•D12N4 servo drive



X Speed in rpm

Y Torque in Nm

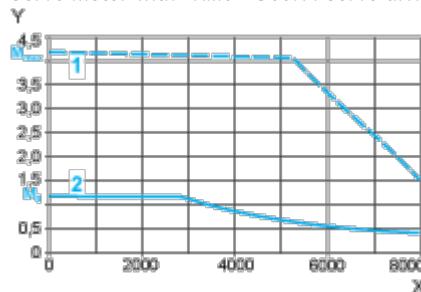
1 Peak torque

2 Continuous torque

480 V 3-Phase Supply Voltage

Torque/Speed Curves

Servo motor with LXM32•U60N4 servo drive



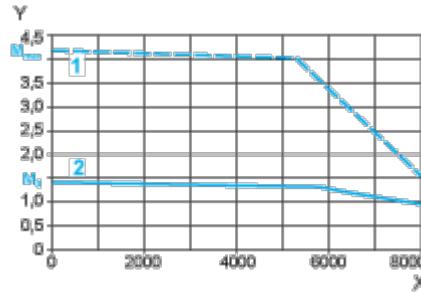
X Speed in rpm

Y Torque in Nm

1 Peak torque

2 Continuous torque

Servo motor with LXM32•D12N4 servo drive



X Speed in rpm

Y Torque in Nm

1 Peak torque

2 Continuous torque