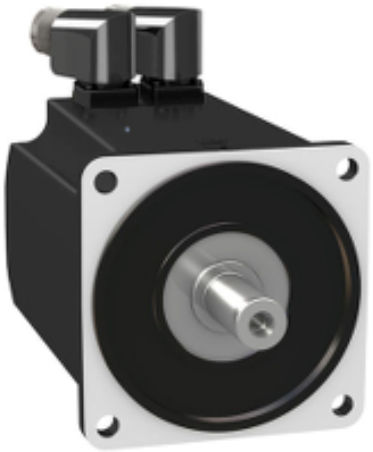
# Product data sheet
## Characteristics

# BMH1401P11A2A
servo motor BMH, Lexium 32, 10.3Nm, 4000rpm, keyed shaft, without brake, IP54, 128bit encoder



## Main

| | |
|---|---|
| Device short name | BMH |
| Product or component type | Servo motor |
| Maximum mechanical speed | 4000 Rpm |
| Continuous stall torque | 10.3 N.M for LXM32.D30M2 at 10 A, 230 V, single phase<br>10.3 N.M for LXM32.D30N4 at 10 A, 400 V, three phase<br>10.3 N.M for LXM32.D30N4 at 10 A, 480 V, three phase |
| Peak stall torque | 30.8 N.M for LXM32.D30M2 at 10 A, 230 V, single phase<br>30.8 N.M for LXM32.D30N4 at 10 A, 400 V, three phase<br>30.8 N.M for LXM32.D30N4 at 10 A, 480 V, three phase |
| Nominal output power | 1450 W for LXM32.D30M2 at 10 A, 230 V, single phase<br>2400 W for LXM32.D30N4 at 10 A, 400 V, three phase<br>2400 W for LXM32.D30N4 at 10 A, 480 V, three phase |
| Nominal torque | 6.9 N.M for LXM32.D30M2 at 10 A, 230 V, single phase<br>7.7 N.M for LXM32.D30N4 at 10 A, 400 V, three phase<br>7.7 N.M for LXM32.D30N4 at 10 A, 480 V, three phase |
| Nominal speed | 2000 rpm for LXM32.D30M2 at 10 A, 230 V, single phase<br>3000 rpm for LXM32.D30N4 at 10 A, 400 V, three phase<br>3000 rpm for LXM32.D30N4 at 10 A, 480 V, three phase |
| Product compatibility | LXM32.D30M2 at 230 V single phase<br>LXM32.D30N4 at 400...480 V three phase |
| Shaft end | Keyed |
| IP degree of protection | IP54 standard |
| Speed feedback resolution | 131072 points/turn |
| 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 |
| Network number of phases | Three phase |
| Continuous stall current | 8.58 A |
| Continuous power | 2.85 W |
| Maximum current Irms | 29.8 A for LXM32.D30M2<br>29.8 A for LXM32.D30N4 |
| Maximum permanent current | 29.8 A |
| Second shaft | Without second shaft end |
| Shaft diameter | 24 Mm |
| Shaft length | 50 Mm |

| | |
|---|---|
| Key width | 40 Mm |
| Feedback type | Single turn SinCos Hiperface |
| Motor flange size | 140 Mm |
| Number of motor stacks | 1 |
| Torque constant | 1.16 N.M/A at 120 °C |
| Back emf constant | 77.4 V/Krpm at 120 °C |
| Number of motor poles | 5.0 |
| Rotor inertia | 16.46 Kg.Cm² |
| Stator resistance | 0.69 Ohm at 20 °C |
| Stator inductance | 4.66 MH at 20 °C |
| Stator electrical time constant | 9.7 Ms at 20 °C |
| Maximum radial force Fr | 1930 N at 1000 rpm<br>1530 N at 2000 rpm<br>1340 N at 3000 rpm |
| Maximum axial force Fa | 0.2 x Fr |
| Type of cooling | Natural convection |
| Length | 152 Mm |
| Centring collar diameter | 130 Mm |
| Centring collar depth | 3.5 Mm |
| Number of mounting holes | 4 |
| Mounting holes diameter | 11 Mm |
| Circle diameter of the mounting holes | 165 Mm |
| Net weight | 8 Kg |
| Sizing reference | BMH1401P |
| Network number of phases | 3 |
| Accuracy error [angular] | 1.4 ° |
| Temperature copper hot | 135 °C |
| Temperature magnet hot | 100 °C |
| Temperature magnet rt | 20 °C |
| Output current 3s peak | 29.8 A |
| Inertia | 0.0 Kg.Cm² of brake<br>16.464 Kg.Cm² of motor |

## Packing Units

| | |
|---|---|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 20.0 Cm |
| Package 1 Width | 27.0 Cm |
| Package 1 Length | 59.0 Cm |
| Package 1 Weight | 9.864 Kg |
| Unit Type of Package 2 | P06 |
| Number of Units in Package 2 | 12 |
| Package 2 Height | 77.0 Cm |
| Package 2 Width | 80.0 Cm |
| Package 2 Length | 60.0 Cm |
| Package 2 Weight | 126.868 Kg |

## Offer Sustainability

| | |
|---|---|
| Total lifecycle Carbon footprint | 2 661 kg CO2 eq. |
| Carbon footprint of the manufacturing phase [A1 to A3] | 71.26848 |
| Carbon footprint of the manufacturing phase [A1 to A3] | 71 kg CO2 eq. |
| Carbon footprint of the distribution phase [A4] | 1.272672 |
| Carbon footprint of the distribution phase [A4] | 1 kg CO2 eq. |
| Carbon footprint of the installation phase [A5] | 0.07560288 |
| Carbon footprint of the installation phase [A5] | 0.1 kg CO2 eq. |
| Carbon footprint of the use phase [B2, B3, B4, B6] | 2588.049449619 |

| | |
|---|---|
| Carbon footprint of the use phase [B2, B3, B4, B6] | 2 588 kg CO2 eq. |
| Mercury free | Yes |
| Sustainable packaging | No |
| Carbon footprint of the end-of-life phase [C1 to C4] | 0.8038656 |
| Carbon footprint of the end-of-life phase [C1 to C4] | 0.8 kg CO2 eq. |
| Total lifecycle Carbon footprint | 2661 |
| Packaging made with recycled cardboard | Yes |
| Packaging without single use plastic | No |
| SCIP Number | A7df881f-135f-4256-b8c2-ea55d4c9a151 |
| REACh Regulation | Reference contains Substances of Very High Concern above the threshold |
| EU RoHS Directive | Compliant By Exemption |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Lead and lead compounds, wi |
| PVC free | Yes |
| End of life manual availability | No need of specific recycling operations |
| Take-back | No |
| WEEE Label | The product must be disposed on European Union markets following specific waste collection a |

## Contractual warranty

| | |
|---|---|
| Warranty (in months) | 18 |

Product Life Status : Commercialised