

# Product data sheet

Specifications



servo motor BMH, Lexium 32,  
10.3Nm, 4000rpm, untapped shaft,  
without brake, IP65, IP67, 16  
multiturn encoder, straight

BMH1401P27A1A

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

## Main

Device short name	BMH
Product or Component Type	Servo motor
Maximum mechanical speed	4000 rpm
Continuous stall torque	91.2 lbf.in (10.3 N.m) LXM32.D30M2 10 A, 230 V, single phase 91.2 lbf.in (10.3 N.m) LXM32.D30N4 10 A, 400 V, three phase 91.2 lbf.in (10.3 N.m) LXM32.D30N4 10 A, 480 V, three phase
Peak stall torque	272.6 lbf.in (30.8 N.m) LXM32.D30M2 10 A, 230 V, single phase 272.6 lbf.in (30.8 N.m) LXM32.D30N4 10 A, 400 V, three phase 272.6 lbf.in (30.8 N.m) LXM32.D30N4 10 A, 480 V, three phase
Nominal output power	1450 W LXM32.D30M2 10 A, 230 V, single phase 2400 W LXM32.D30N4 10 A, 400 V, three phase 2400 W LXM32.D30N4 10 A, 480 V, three phase
Nominal torque	61.07 lbf.in (6.9 N.m) LXM32.D30M2 10 A, 230 V, single phase 68.2 lbf.in (7.7 N.m) LXM32.D30N4 10 A, 400 V, three phase 68.2 lbf.in (7.7 N.m) LXM32.D30N4 10 A, 480 V, three phase
Nominal speed	2000 rpm LXM32.D30M2 10 A, 230 V, single phase 3000 rpm LXM32.D30N4 10 A, 400 V, three phase 3000 rpm LXM32.D30N4 10 A, 480 V, three phase
Product compatibility	LXM32.D30M2 230 V single phase LXM32.D30N4 400...480 V three phase
Shaft end	Smooth shaft
IP Degree of Protection	IP65 standard IP67 with IP67 kit
Speed feedback resolution	32768 points/turn x 4096 turns
Holding brake	Without
Mounting Support	International standard flange
Electrical Connection	Straight connectors

## Complementary

Range Compatibility	Lexium 32
[Us] rated supply voltage	480 V
Phase	Three phase
Continuous stall current	8.58 A
Continuous power	2.85 W
Maximum current Irms	29.8 A LXM32.D30M2 29.8 A LXM32.D30N4
Maximum permanent current	29.8 A

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

<b>Second shaft</b>	Without second shaft end
<b>Shaft diameter</b>	0.9 in (24 mm)
<b>Shaft length</b>	2.0 in (50 mm)
<b>Feedback type</b>	Multiturn SinCos Hiperface
<b>Motor flange size</b>	5.5 in (140 mm)
<b>Number of motor stacks</b>	1
<b>Torque constant</b>	1.16 N.m/A 248 °F (120 °C)
<b>Back emf constant</b>	77.4 V/krpm 248 °F (120 °C)
<b>Number of motor poles</b>	5.0
<b>Rotor inertia</b>	16.46 kg.cm <sup>2</sup>
<b>Stator resistance</b>	0.69 Ohm 68 °F (20 °C)
<b>Stator inductance</b>	4.66 mH 68 °F (20 °C)
<b>Stator electrical time constant</b>	9.7 ms 68 °F (20 °C)
<b>Maximum radial force Fr</b>	1930 N 1000 rpm 1530 N 2000 rpm 1340 N 3000 rpm
<b>Maximum axial force Fa</b>	0.2 x Fr
<b>Type of cooling</b>	Natural convection
<b>Length</b>	6.0 in (152 mm)
<b>Centring collar diameter</b>	5.1 in (130 mm)
<b>Centring collar depth</b>	0.1 in (3.5 mm)
<b>Number of mounting holes</b>	4
<b>Mounting holes diameter</b>	0.4 in (11 mm)
<b>Circle diameter of the mounting holes</b>	6.5 in (165 mm)
<b>Net Weight</b>	17.6 lb(US) (8 kg)
<b>Sizing reference</b>	BMH1401P
<b>Network number of phases</b>	3
<b>Accuracy error [angular]</b>	4.8 °
<b>Temperature copper hot</b>	275 °F (135 °C)
<b>Temperature magnet hot</b>	212 °F (100 °C)
<b>Temperature magnet rt</b>	68 °F (20 °C)
<b>Output current 3s peak</b>	29.8 A
<b>Inertia</b>	0.0 kg.cm <sup>2</sup> of brake 16.464 kg.cm <sup>2</sup> of motor

## Ordering and shipping details

<b>Category</b>	US1PC5318282
<b>Discount Schedule</b>	PC53
<b>GTIN</b>	3606485198576
<b>Returnability</b>	No

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Nbr. of units in pkg.</b>	1
<b>Package 1 Height</b>	10.2 in (26.0 cm)
<b>Package 1 Width</b>	7.9 in (20.0 cm)
<b>Package 1 Length</b>	23.6 in (60.0 cm)
<b>Package weight(Lbs)</b>	18.3 lb(US) (8.3 kg)

## **Contractual warranty**

<b>Warranty (in months)</b>	18
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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

Total lifecycle Carbon footprint	2 650 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	60 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	1 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.1 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	2 588 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.7 kg CO2 eq.

## Use Better



### Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
<a href="#">EU RoHS Directive</a>	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	A7df881f-135f-4256-b8c2-ea55d4c9a151
REACH Regulation	<a href="#">REACH Declaration</a>
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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
PVC free	Yes

## Use Longer



### Lifetime extension

Repair	No
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## Use Again



### Repack and remanufacture

Circularity Profile	No need of specific recycling operations
Take-back	No
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.