

# Product datasheet

Specifications



servo motor BMH, Lexium 32,  
10.3Nm, 4000rpm, untapped shaft,  
with brake, IP65, IP67, 128 multiturn  
encoder, straight

BMH1401P22F1A

## 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 10.3 N.m for LXM32.D30N4 at 10 A, 400 V, three phase 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 30.8 N.m for LXM32.D30N4 at 10 A, 400 V, three phase 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 2400 W for LXM32.D30N4 at 10 A, 400 V, three phase 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 7.7 N.m for LXM32.D30N4 at 10 A, 400 V, three phase 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 3000 rpm for LXM32.D30N4 at 10 A, 400 V, three phase 3000 rpm for LXM32.D30N4 at 10 A, 480 V, three phase
Product compatibility	LXM32.D30M2 at 230 V single phase LXM32.D30N4 at 400...480 V three phase
Shaft end	Smooth shaft
IP degree of protection	IP65 standard IP67 with IP67 kit
Speed feedback resolution	131072 points/turn x 4096 turns
Holding brake	With
Mounting support	International standard flange
Electrical connection	Straight 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 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
Feedback type	Multiturn SinCos Hiperface
Holding torque	18 N.m holding brake
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	17.96 kg.cm <sup>2</sup>
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 1530 N at 2000 rpm 1340 N at 3000 rpm
Maximum axial force Fa	0.2 x Fr
Brake pull-in power	18 W
Type of cooling	Natural convection
Length	187 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	10.3 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	1.5 kg.cm <sup>2</sup> of brake 16.464 kg.cm <sup>2</sup> of motor

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	26.0 cm
Package 1 Width	20.0 cm
Package 1 Length	60.0 cm

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Package 1 Weight 10.6 kg

## Contractual warranty

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Warranty (in months) 18



## 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	2 667 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	77 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]	0.9 kg CO2 eq.

## Use Better



### Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
SCIP Number	A7df881f-135f-4256-b8c2-ea55d4c9a151
EU RoHS Directive	<a href="#">Compliant By Exemption</a>
REACH Regulation	<a href="#">Reference contains Substances of Very High Concern above the threshold</a>
PVC free	Yes

## Use Longer



### Lifetime extension

Repair	No
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## Use Again



### Repack and remanufacture

End of life manual availability	No need of specific recycling operations
Take-back	Yes
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins