

# Product data sheet

Specifications



## MH3 servomotor, 100mm, 2 stacks, smooth Shaft, SinCos Multiturn 128, Brake, angular, IP65

MH31002P02F2200

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

### Main

Range Compatibility	PacDrive 3
Device short name	MH3
Product or Component Type	Servo motor

### Complementary

Maximum mechanical speed	6000 rpm
[Us] rated supply voltage	115...480 V
Phase	Three phase
Continuous stall current	5.04 A
Continuous stall torque	53.1 lbf.in (6 N.m), 115...480 V, three phase
Continuous power	2270 W
Peak stall torque	159.3 lbf.in (18 N.m), 115...480 V, three phase
Nominal output power	0.59 W, 115 V 1.12 W, 230 V 1.95 W, 400 V 2.27 W, 480 V
Nominal torque	50.18 lbf.in (5.67 N.m) LXM52 4.81 mA, 115 V, three phase 47.17 lbf.in (5.33 N.m) LXM52 4.58 mA, 230 V, single phase 41.33 lbf.in (4.67 N.m) LXM52 4.1 mA, 400 V, three phase 37.2 lbf.in (4.2 N.m) LXM52 3.73 mA, 480 V, three phase 50.18 lbf.in (5.67 N.m) LXM62 4.81 mA, 115 V, single phase 47.17 lbf.in (5.33 N.m) LXM62 4.58 mA, 230 V, single phase 41.33 lbf.in (4.67 N.m) LXM62 4.1 mA, 400 V, three phase 37.2 lbf.in (4.2 N.m) LXM62 3.73 mA, 480 V, three phase
Nominal speed	1000 rpm LXM52 4.81 mA, 115 V, single phase 2000 rpm LXM52 4.58 mA, 230 V, single phase 4000 rpm LXM52 4.1 mA, 400 V, three phase 5000 rpm LXM52 3.73 mA, 480 V, three phase 1000 rpm LXM62 4.81 mA, 115 V, single phase 2000 rpm LXM62 4.58 mA, 230 V, single phase 4000 rpm LXM62 4.1 mA, 400 V, three phase 5000 rpm LXM62 3.73 mA, 480 V, three phase
Maximum current Irms	17.5 A
Shaft end	Smooth shaft
Second shaft	Without second shaft end
Shaft diameter	0.7 in (19 mm)
Shaft length	1.6 in (40 mm)
IP Degree of Protection	IP65 standard
Encoder type	Multiturn SinCos Hiperface
Speed feedback resolution	128 periods

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

<b>Holding brake</b>	With
<b>Holding torque</b>	48.7 lbf.in (5.5 N.m)
<b>Mounting Support</b>	International standard flange
<b>Motor flange size</b>	3.9 in (100 mm)
<b>Electrical Connection</b>	Rotatable right-angled connectors
<b>Torque constant</b>	1.19 N.m/A 248 °F (120 °C)
<b>Back emf constant</b>	78 V/krpm
<b>Number of motor poles</b>	5.0
<b>Rotor inertia</b>	6.77 kg.cm <sup>2</sup>
<b>Stator resistance</b>	1.97 Ohm
<b>Stator inductance</b>	8.24 mH
<b>Stator electrical time constant</b>	5 ms
<b>Maximum radial force Fr</b>	990 N 1000 rpm 790 N 2000 rpm 690 N 3000 rpm 620 N 4000 rpm 580 N 5000 rpm
<b>Brake pull-in power</b>	12 W
<b>Type of cooling</b>	Natural convection
<b>Length</b>	8.0 in (202.3 mm)
<b>Centring collar diameter</b>	3.7 in (95 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 (9 mm)
<b>Circle diameter of the mounting holes</b>	4.5 in (115 mm)
<b>Product Weight</b>	14.1 lb(US) (6.4 kg)
<b>Sizing reference</b>	MH31002P
<b>Temperature copper hot</b>	275 °F (135 °C)
<b>Output current 3s peak</b>	17.5 A
<b>Inertia</b>	0.49 kg.cm <sup>2</sup> of brake 6.28 kg.cm <sup>2</sup> of motor
<b>Nominal speed</b>	4000 rpm

## Ordering and shipping details

<b>Category</b>	US1PC5218359
<b>Discount Schedule</b>	PC52
<b>GTIN</b>	3606485396125
<b>Returnability</b>	Yes
<b>Country of origin</b>	DE

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Nbr. of units in pkg.</b>	1

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<b>Package 1 Height</b>	6.1 in (15.6 cm)
<b>Package 1 Width</b>	8.7 in (22.1 cm)
<b>Package 1 Length</b>	17.6 in (44.6 cm)
<b>Package weight(Lbs)</b>	12.39 lb(US) (5.62 kg)

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## **Contractual warranty**

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<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	2 212 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	41 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.7 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	2 170 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.5 kg CO2 eq.

## Use Better



### Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	<a href="#">Compliant By Exemption</a>
REACH Regulation	<a href="#">Reference contains Substances of Very High Concern above the threshold</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