

Mercury specifications

October
2023

v.1

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[1. Specifications table](#)

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Description	Value
Dimensions	Crossed roller bearing OD: 70mm Flange OD: 93mm Body OD: 70mm Total length: 93mm
Weight	890g
Reduction mechanism	Strain wave gear output stage.
Total reduction ratio	80:1
Total backlash	< 5 arcminutes
Peak torque	45 Nm
Rated torque	25 Nm
Backdriving torque	5 Nm
Maximum rpm	30.55 rpm
Crossed roller bearing basic static rated load (Co)	8.4 KN
Crossed roller bearing basic dynamic rated load (C)	6.1 KN
Input voltage	48V DC
Standby current	100mA
Motor type	Brushless DC, 28 pole, 3 phase
Ambient temperature range	10→55°
Communications mechanism	Half duplex asynchronous serial (TTL) CAN bus (CANopen protocol) USB 2.0B
Maximum baud rate	1 Mbps
Servo ID range	0→252 (254 for broadcast ID)
Measured quantities	Position, angular velocity, acceleration, torque, temperature, voltage, current...
Control algorithms	Position P, velocity PI, Current PI, Feedforward, trapezoidal velocity profile, torque mode, dead zone, home calibration...

Electrical connections

- 1 x 2-way XH series comms io connector
- 1 x 2-way XH series CAN bus connector
- 1 x 5-way XH series opto-isolated io connector
- 1 x USB 2.0B connector
- 1 x 2-way WR-TBL 311