

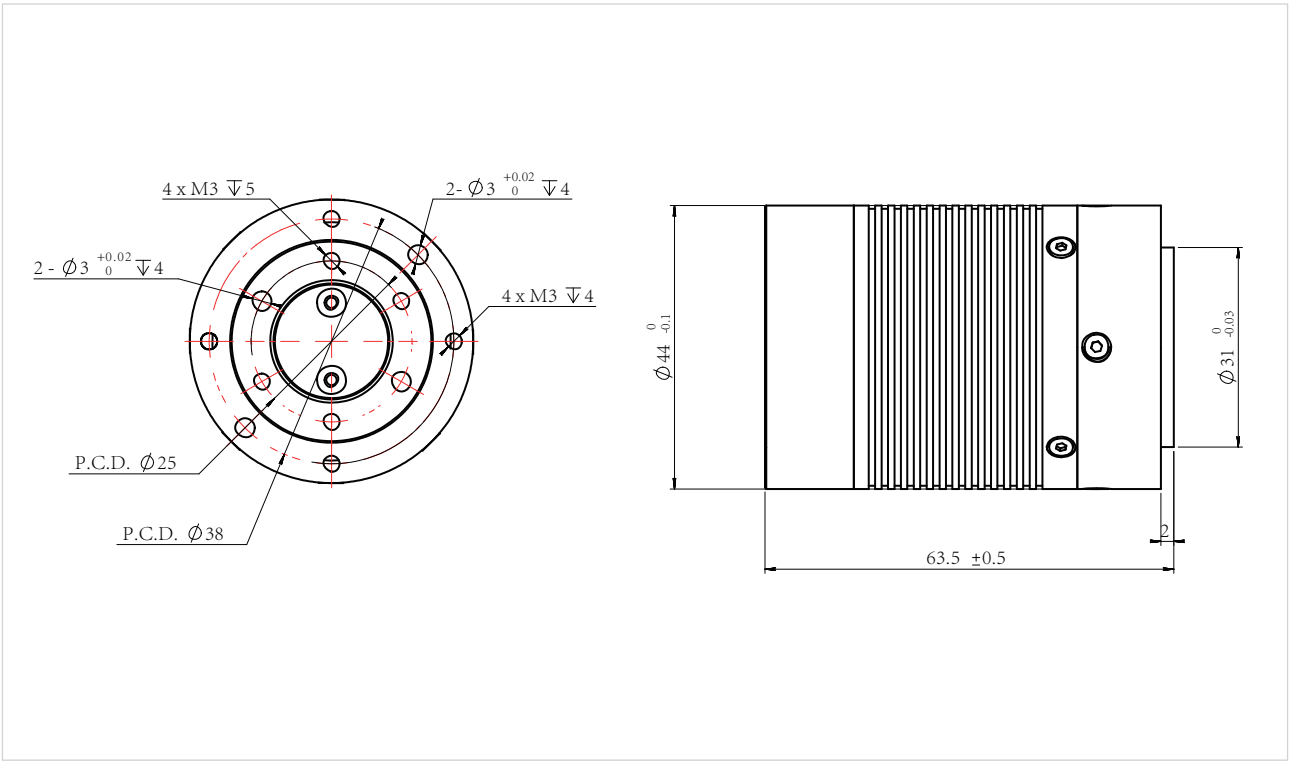
Series Name
RMD-X
Motor Simplified Name
X2-7



Dual encoder

Actuator Full Name	With Brake/Without Brake	Communication
RMD-X2-P28-7-E	N (without Brake)	EtherCAT & CAN BUS

Installation Drawing



Product Parameters

Parameters	Unit	X2-7
Reduction Ratio	—	28.17
Input Voltage	V	24
Voltage Range	V	20-55
No-Load Speed	RPM	178
No-Load Current	A	1
Rated Speed	RPM	142
Rated Torque	N.m	2.5
Rated Power	W	37
Rated Current	A	3
Peak Torque	N.m	7
Peak Current	A	8.1
Efficiency	%	63
Back EMF Constant	Vdc/Krpm	4.3
Torque Constant	N.m/A	0.8
Line Resistance	Ω	0.61
Line Inductance	mH	0.13
Pole Pairs	—	13
Wiring Mode	—	Y
Backdrive Torque	N.m	0.4
Backlash	Arcmin	≤15
Output Bearing Type	—	Deep Groove Ball Bearings
Axial Load	Tensile load	KN
	Compressive load	KN
Radial Load	KN	1
Moment of Inertia	Kg.cm ²	0.17
Encoder Type	—	Dual Encoder ABS-17BIT(Input) / 18BIT(Output)
Control Accuracy	Degree	<0.01
Communication Interface	—	EtherCAT & CAN BUS
Weight	Kg	0.26
Insulation Class	—	F

Note:

- 1.The maximum operating voltage of the motor is 55V. It is recommended that customers add an external capacitor to regulate voltage, so as to ensure stable battery power supply and protect the PCB from damage caused by voltage fluctuations.
2. If voltage exceeds the rated value, the operating speed must not exceed the motor's rated speed.

Stall Torque Data

	Torque (N.m)	Temperature Rise (℃)	Stall Time (s)	Phase Current (Arms)
X2-7	3.75	20	15	4.3
	5	48	10	5.7
	6.25	31	8	7.4
	7.5	59	5	8.6