Series Name
RMD-X

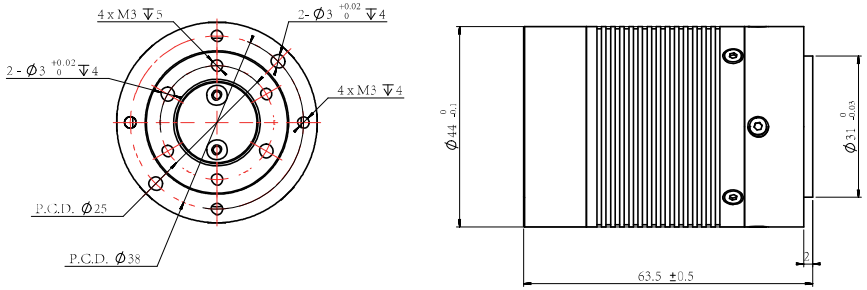
Motor Simplified Name
X2-7



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	0.25
	Compressive load	KN	0.25
Radial Load		KN	1
Moment of Inertia		Kg.cm²	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