

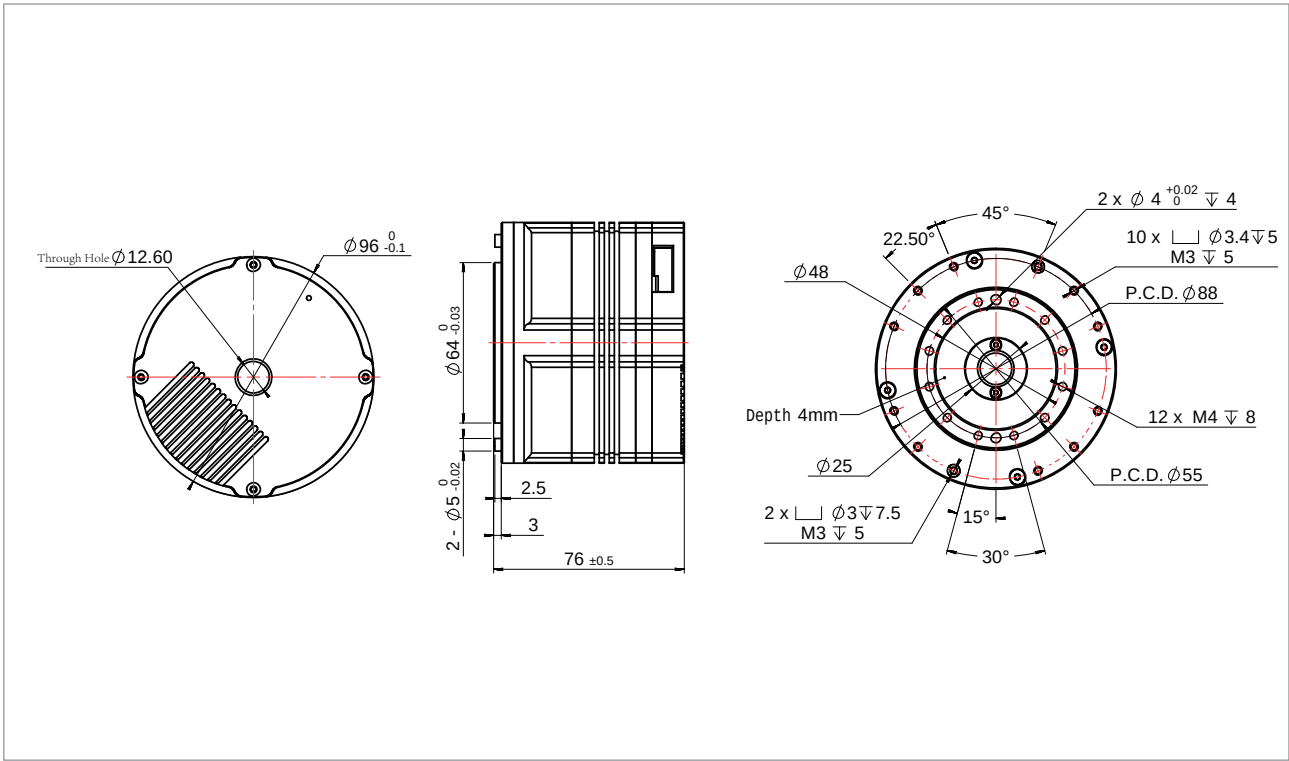
Series Name
RMD-X
Motor Simplified Name
X8-120



Dual encoder

Actuator Full Name	With Brake/Without Brake	Communication
RMD-X8-P20-120-E	N (without Brake)	EtherCAT & CAN BUS

Installation Drawing



Product Parameters

Parameters	Unit	X8-120
Reduction Ratio	—	19.612
Input Voltage	V	48
Voltage Range	V	20-55
No-Load Speed	RPM	158
No-Load Input Current	A	1.6
Rated Speed	RPM	127
Rated Torque	N.m	43
Rated Output Power	W	574
Rated Phase Current	A(rms)	17.6
Peak Torque	N.m	120
Peak Phase Current	A(rms)	43.8
Efficiency	%	79
Motor Back EMF Constant	Vdc/Krpm	19.2
Module Torque Constant	N.m/A	2.4
Line Resistance	Ω	0.18
Line Inductance	mH	0.31
Pole Pairs	—	10
Wiring Mode	—	Y
Backdrive Torque	N.m	1.5
Backlash	Arcmin	≤15
Output Bearing Type	—	Crossed Roller Bearings
Axial Load	Tensile load	KN
	Compressive load	KN
Radial Load	KN	4.5
Moment of Inertia	Kg.cm ²	1.5
Encoder Type	—	Dual Encoder ABS-17BIT (Input) / 17BIT (Output)
Control Accuracy	Degree	<0.01
Communication Interface	—	EtherCAT & CAN BUS
Weight	Kg	1.40
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 (°C)	Stall Time (s)	Phase Current (Arms)
X8-120	64.5	7	15	23.3
	86	10	10	31.1
	107.5	26	8	38.9
	129	30	5	43.8