Series Name
RMD-X

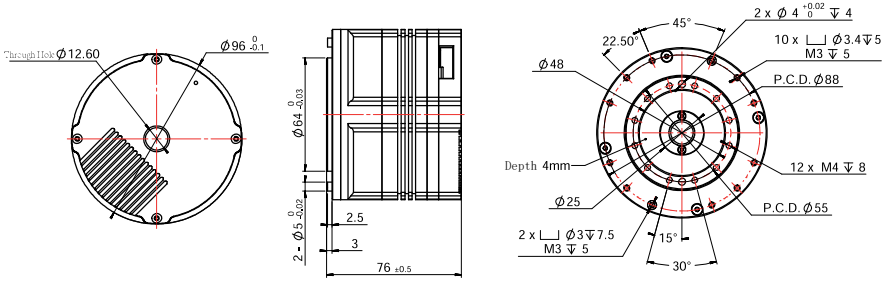
Motor Simplified Name
X8-120



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	4
	Compressive load	KN	1
Radial Load		KN	4.5
Moment of Inertia		Kg.cm²	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 (℃)	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