

VAXOR

30mm Micro Joint Module Specifications



30mm
Micro Joint Module



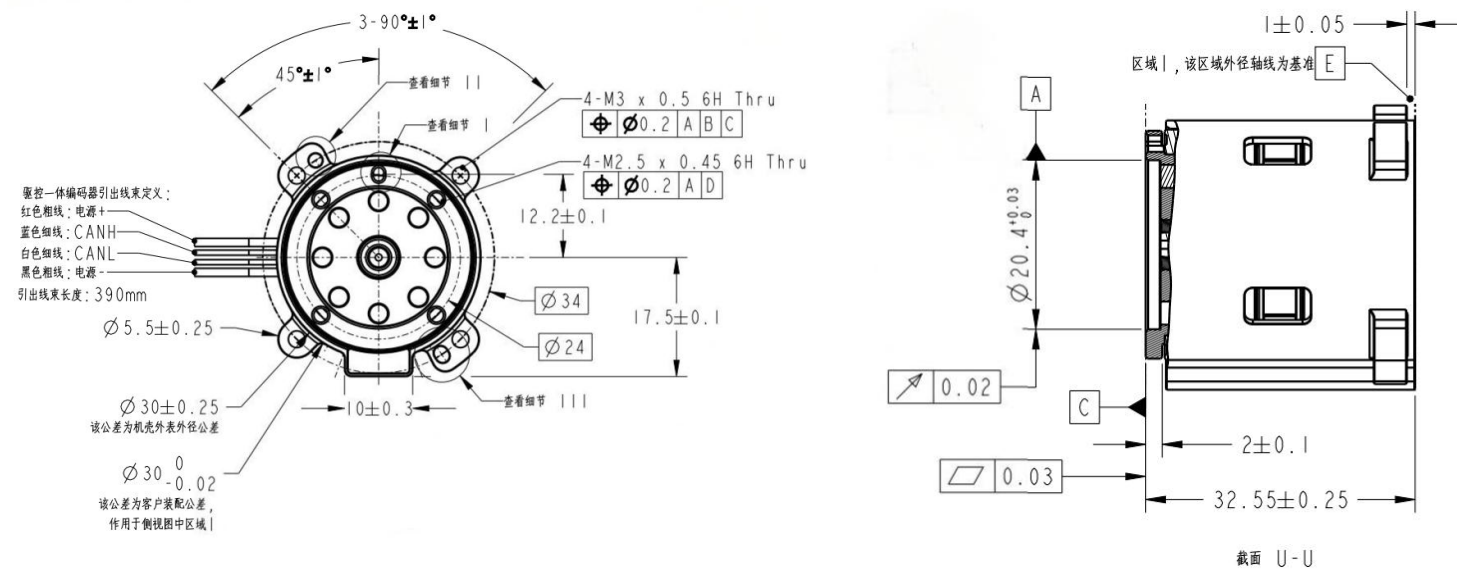
*This product is primarily used in dexterous hands, highly integrated robots, and other fields requiring mechanical motion control actuators.

*Caution: Please refer to the specifications during use and avoid exceeding the parameter range to prevent damage.

We welcome inquiries and discussions regarding product-related questions.

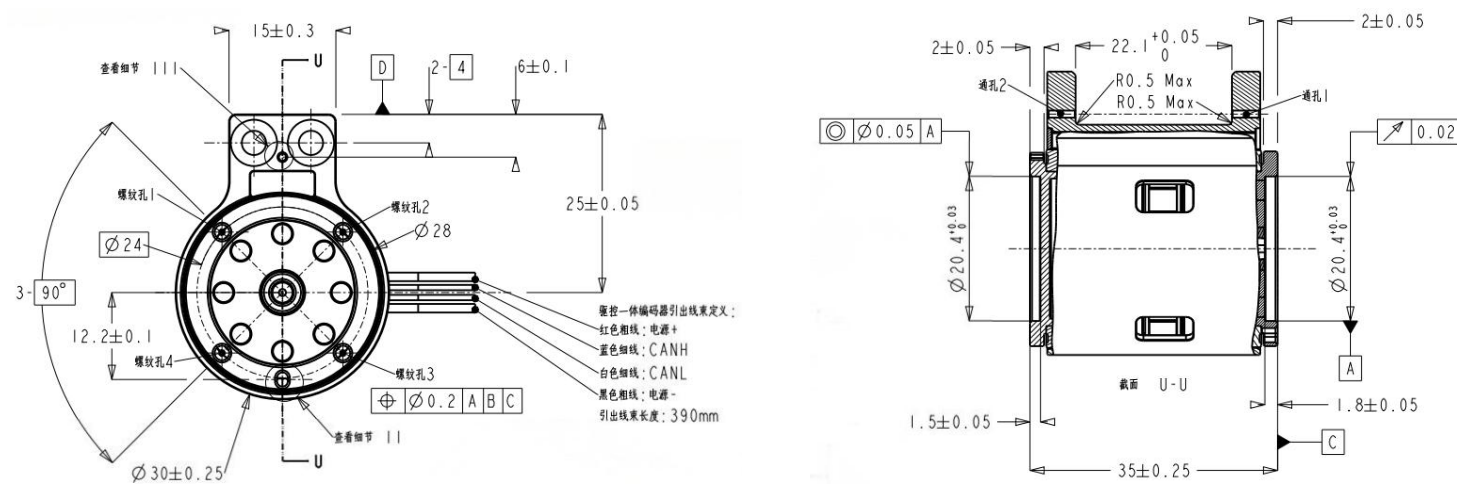
01. Appearance Reference

X30S-UZ30/50-MH-1



Housing Mounting Holes Detail

X30S-BZ30/50-MH-1



Housing Mounting Holes Detail

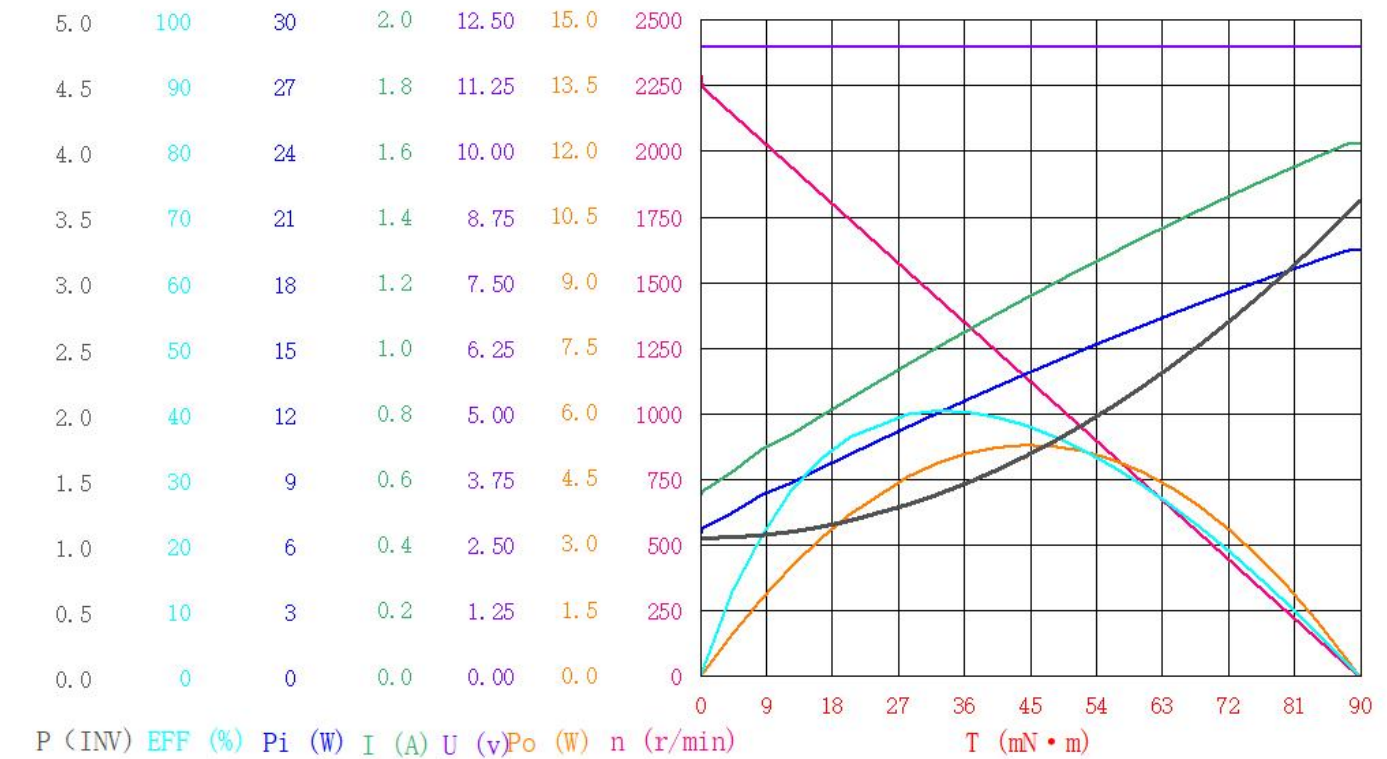
03. Technical Specifications

Motor Data		Unit	X25S-UZ30/50/80-MH-1	X25S-BZ30/50/80-MH-1
1	Nominal Voltage	V	12~18	
2	No Load Speed	Rpm	≤3000	
3	Nominal Speed	Rpm	≤2000	
4	*Continuous Stalling Torque	mNm	59	
5	*Continuous Stalling Current	A	2.4	
6	*Stalling Torque (Max)	mNm	85	
7	*Stalling Current(Max)	A	3.2	
8	*Terminal Resistance	Ω	1.2	
9	Unbalanced Three-Phase Resistance	%	≤2	
10	*Terminal Inductance	mH	0.6	
11	Unbalanced Three-phase Inductance	%	≤2	
12	Torque Constant	mNm/A	27.5	
13	Speed Constant	rpm/V	347	
14	Rotor Inertia	gcm ²	15.8	
Electric Drive Assembly				
15	Gear Ratio	/	30	50
16	Gear Efficiency (maximum)	%	75	60
17	Gear Efficiency (Stalling Point)	%	65	55
18	Continuous Stalling Torque	mNm	1100	1500
19	Initial Torque (cold state)	mNm	1450	2200△
20	Backlash of Gears	Arcmin	15	
21	Encoder	Absolute Magnetic Encoder		
22	Communication Protocol	CAN FD		
23	Total Weight	g	123(UZ)/133(BZ)	
24	Total Inertia	gcm ²	30.4	
Thermal Data				
25	Loss Power	w	6.2	10.3
26	Chassis Temperature	°C	80	115

*Indicates a deviation of ±10% between actual and theoretical values

△Indicates that the output torque is limited by mechanical strength

Single Motor Test Data (DC Bus Voltage: 12 V, Duty Cycle: 0.4)



Electric Drive Assembly Test Data (Gear Ratio: 50, DC Bus Voltage: 12 V, Duty Cycle: 0.4)

