



WAYINMOTION

WayinMotion is the motion control product line of Hangzhou Wayin Technology Co., Ltd. We specialize in integrated servo joint modules for robotics and motion control, delivering compact, high-torque-density actuators with industrial-grade precision manufacturing and advanced motor drive technology. Our products power humanoid robots, quadruped robots, collaborative robots, semiconductor equipment and industrial automation systems.



Industrial



Medical



Agriculture



Semiconductor



Cobot



Humanoid

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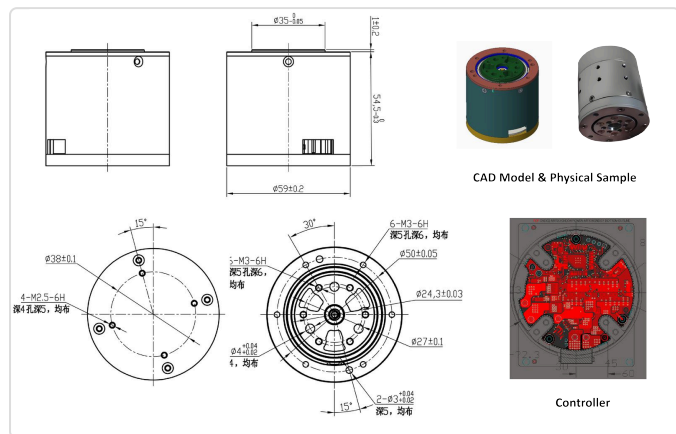


WhatsApp

Send us your drawings or requirements for a quote.

Product Line Overview

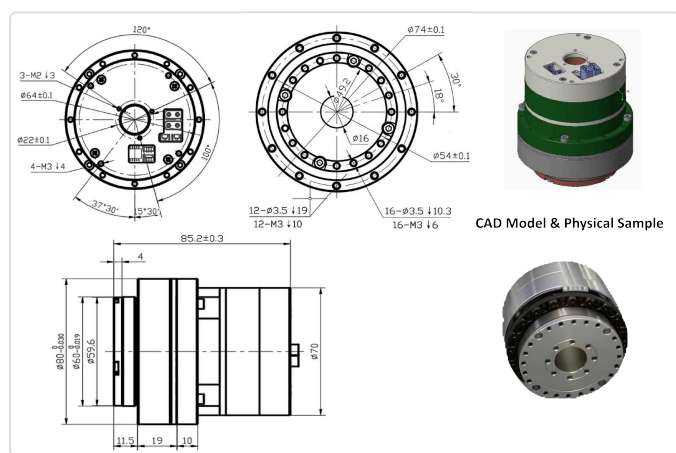
WD-59 Series · Robot Dog Joint Actuator



WD-59 · Drawings, CAD Model & Sample

Weight	≤ 220 g
Gear Ratio	10:1 (Planetary)
Rated Voltage	24 VDC
Rated Torque	3.0 N·m
Peak Torque	6.0 N·m
Rated Speed	≥ 120 rpm
Encoder	Dual Magnetic

WD-80 Series · High-Precision Harmonic Joint



WD-80 · Drawings, CAD Model & Sample

Weight	≤ 1500 g
Gear Ratio	≥ 100:1 (Harmonic)
Rated Voltage	48 VDC
Rated Torque	45 N·m
Peak Torque	145 N·m
Rated Speed	≥ 30 rpm
Encoder	Dual 24-bit Magnetic

Integrated Joint Structure



Integrated Joint Module · Exploded View & Controller PCB

Technical Specifications

Parameter	WD-59 Series (Robot Dog)	WD-80 Series (Harmonic)
Mechanical		
Weight	≤ 220 g	≤ 1500 g
Pole Pairs	14	14
Phases	3	3
Drive Method	FOC	FOC
Gear Type	Planetary (Powder Metallurgy)	Harmonic
Gear Ratio	10:1	≥ 100:1
Electrical		
Magnetic Encoders	2	2 (24-bit)
Rated Voltage	24 V	48 V
Voltage Range	20 to 28 V	24 to 56 V
Rated Current	3.0 A	4.0 A
Peak Current	7.0 A	15.0 A
Rated Output Power	≥ 70 W	≥ 141.5 W
Performance		
Rated Torque	3.0 N·m	45 N·m
Peak Torque	6.0 N·m	145 N·m
Rated Speed	≥ 120 rpm	≥ 30 rpm
No-Load Speed	≥ 300 rpm	≥ 45 rpm
Operating Temp.	-20 to 80°C	-20 to 80°C

Special sizes and custom configurations available upon request. Send us your drawings for custom solutions.

Ready to Discuss Your Project?

Contact us today for technical support, sample evaluation or OEM customization.