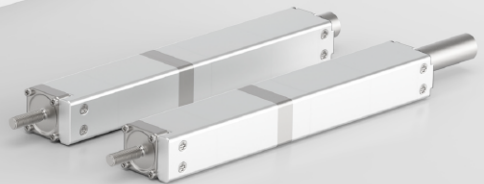




Micro Linear Actuators Product Manual



Harmony in motion, evolving with every move.

ABOUT US

About Xynova

Hangzhou Xynova Technology Co., Ltd. is a world-leading full-stack provider of general dexterous manipulation solutions. We focus on high-sensitivity perception, intelligent control, and high-precision execution, delivering the master key that unlocks dexterous manipulation for embodied AI.

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Performance Breakthroughs

360 N

Max. Thrust

10 mm

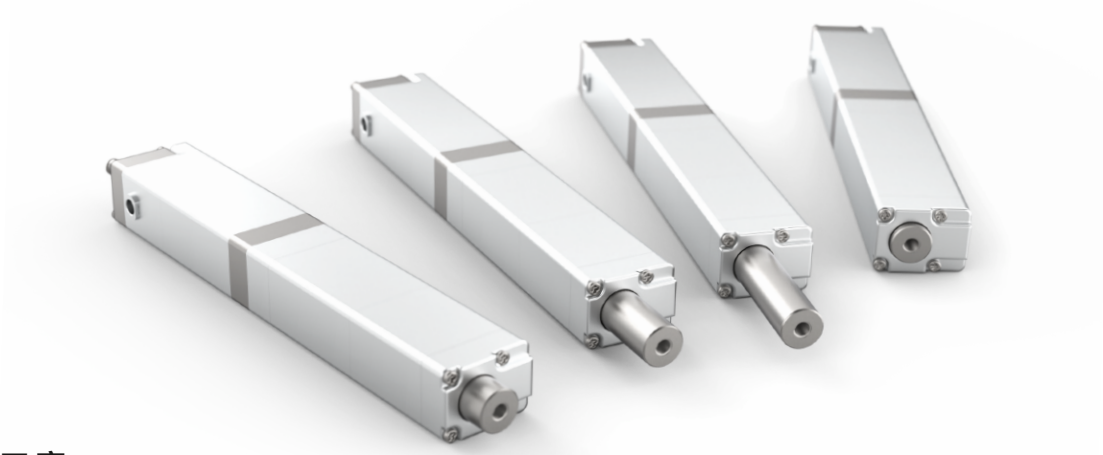
Min. Diameter

34 g

Ultra-lightweight



Model Selection Guide



示意：

PRM 10 - 20 - 64 - 75 - F 2 P

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

①	Series Name	PRM: Planetary Roller Screw Mechanism			
②	Profile Width	10 Series	12 Series	18 Series	
③	Stroke Length	10: 10mm	20: 20mm	25: 25mm	30: 30mm
④	No-Load Speed	mm/s			
⑤	Maximum output	N			
⑥	Force Sensor Options	Default: No force sensor		F: With force sensor	
⑦	Mounting & Interface Options	Default: Standard interface		1. Clevis Mount Interface	
		2. Octagonal interface		3. Rod End Bearing	
⑧	Electrical Interface Options	Default: LVTTL Serial		P: PWM Interface	

Micro Planetary Roller Screw Linear Actuator

PRM10-20 Series

Standard Parameters

Stroke	≥19mm	Operating Voltage	DC12V±10%
Dimensions	10 × 13.5 × 81mm	Communication Interface	LVTTL Serial Port
Repeatability	±0.04mm	Motor Type	Coreless Brushless DC Motor
Operating Temperature	-15~60°C	Mechanical Interface	Standard Interface
Quiescent Current	0.05A	Noise Level	<55dB
Weight	≤34g	IP Rating	IP54
Peak Current	1.2A		

Parameters at Different Speed Grades

Model	PRM10-20-34-150-F	PRM10-20-47-100-F	PRM10-20-64-75-F
No-load Current	0.4A	0.4A	0.5A
Max.No-Load Speed	≥34mm/s	≥47mm/s	≥64mm/s
Maximum Thrust	≥150N	≥100N	≥75N
Full-Load Speed	≥9mm/s	≥20mm/s	≥25mm/s
Force Sensor Range	-200~200N	-150~150N	-100~100N
Force Sensor Resolution	2N	1.5N	1N

*All models support customization without force sensors.

Micro Planetary Roller Screw Linear Actuator

PRM10-25 Series

Standard Parameters

Stroke	≥24mm	IP Rating	IP54
Dimensions	10*13.5*86mm	Operating Voltage	DC12V±10%
Repeatability	±0.05mm	Communication Interface	LVTTTL Serial Port
Operating Temperature	-15~60°C	Motor Type	Coreless Brushless DC Motor
Quiescent Current	0.05A	Mechanical Interface	Standard Interface
Weight	≤38g	Noise Level	<55dB
Peak Current	1.2A		

Parameters at Different Speed Grades

Model	PRM10-25-64-75-F	PRM10-25-47-100-F
Max. No-Load Speed	≥64mm/s	≥47mm/s
Maximum Thrust	≥75N	≥100N
Full-Load Speed	≥25mm/s	≥20mm/s
No-load Current	0.5A	0.4A
Force Sensor Range	-100~100N	-150~150N
Force Sensor Resolution	1N	1.5N

*All models support customization without force sensors.

Micro Planetary Roller Screw Linear Actuator

PRM12-25 Series

Standard Parameters

Stroke	≥24mm	IP Rating	IP40
Dimensions	12.5*15.5*90mm	Operating Voltage	DC12V±10%
Repeatability	±0.05mm	Communication Interface	LVTTTL Serial Port
Operating Temperature	-15~60°C	Motor Type	Coreless Brushless DC Motor
Quiescent Current	0.04A	Mechanical Interface	Standard Interface
Weight	≤55g	Noise Level	<55dB
No-load Current	0.3A		
Peak Current	1.2A		

Parameters at Different Speed Grades

Model	PRM12-25-11-300-F
Max. No-Load Speed	≥11mm/s
Maximum Thrust	≥300N
Full-Load Speed	≥5mm/s
Force Sensor Range	-400~400N
Force Sensor Resolution	4N

*All models support customization without force sensors.

Micro Planetary Roller Screw Linear Actuator

PRM18-36 Series

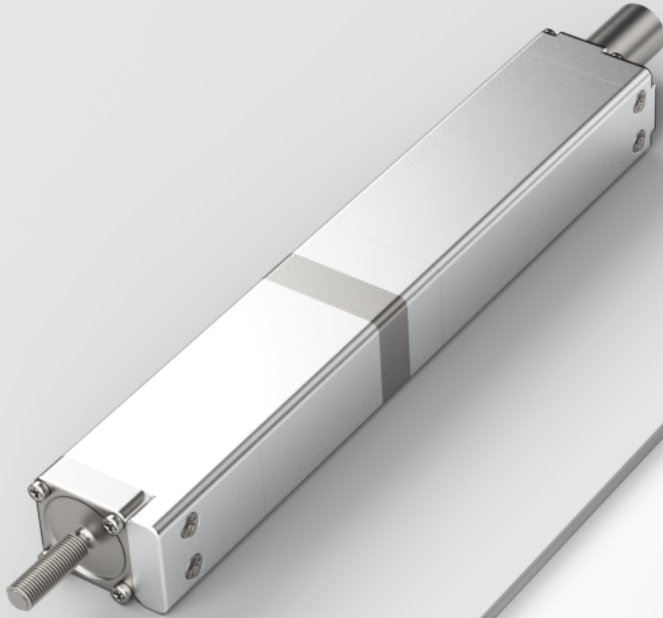
Standard Parameters

Stroke	35+1%mm	Operating Voltage	DC24V±10%
Dimensions	φ18*85 (w/ Pressure Sensor)	Communication Interface	LVTTTL Serial Port
Repeatability	±0.05mm	Motor Type	Coreless Brushless DC Motor
Operating Temperature	-15~60°C	Mechanical Interface	Standard Interface
Quiescent Current	0.06A	Noise Level	<60dB
Weight	≤90g		
Peak Current	3A		

Parameters at Different Speed Grades

Model	PRM18-36-80-360-F
Max. No-Load Speed	≥80mm/s
Maximum Thrust	≥360N
Full-Load Speed	≥15mm/s
No-load Current	0.5A
Force Sensor Range	-500~500N
Force Sensor Resolution	5N

**Fast, Precise,
Ultra-Powerful.**



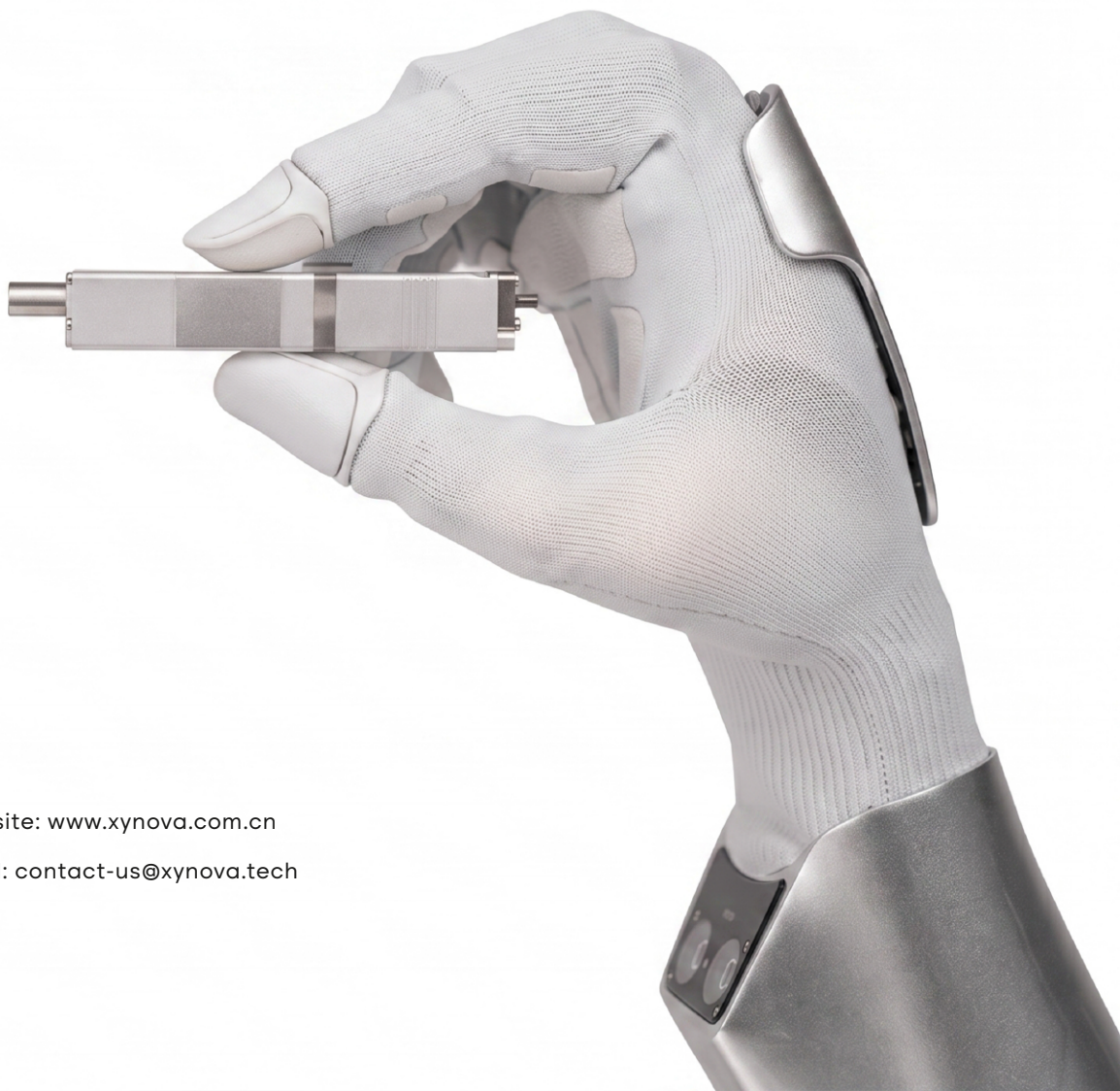
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