

PSAG series motorized goniometers



Description:

PSAG series motorized goniometers are made of hard black anodic-oxidation aluminum alloy which presents excellent appearance. Fine precise worm gear/worm and arc V-shaped guides are key parts of guiding mechanism. This combination guarantees higher strength, higher load capability and better durability.

Main characteristics:

- Fine grinding worm gear/worm offers higher positioning accuracy
- Arc V-shaped guide offers higher loading capability
- Standard two-phase stepping motors are stable and reliable, with self-lock function

Naming rules:

PSAG 15-130

Series code:
PSAG: worm gears/worm, standard precision, arc V-shaped ball guides

Swing angle range:
15: +/-15°

Designed height at center:
130: 130mm
195: 195mm
250: 250mm
370: 370mm

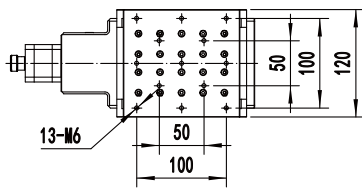
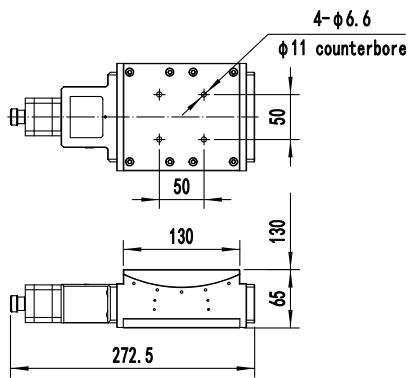
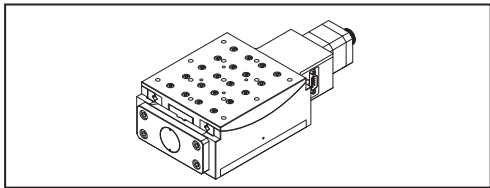
Selection chart:

	Model number	PSAG15-130	PSAG15-195	PSAG15-250	PSAG15-370
Mechanical specifications	Table dimensions(mm)	120×130	120×180	250×250	250×340
	Swing angle range (°)	±15			
	Overall height (mm)	65±0.1	65±0.1	110±0.1	155±0.1
	Worm gear/worm transmission ratio	320:1	450:1	610:1	870:1
	Guides (guiding mechanism)	Arc V-shaped ball guides			
	Worm gear materials	Brass			
	Worm materials and treatment techniques	Stainless steel, high-frequency quench			
	Main body materials and surface treatments	Black anodic-oxidation 2024 aluminum-alloy			
	Weight (Kg)	3.5	4.3	14.8	30
	Shaft coupling (external diameter-diameter of aperture 1-diameter of aperture 2) (mm)	20-5-8		30-6.35-10	
Accuracy specifications	Step resolution (")	20.25	14.4	10.62	7.45
	8-fine-subdivision resolution (")	≈2.5	≈1.8	≈1.32	≈0.93
	Highest speed (°/s) *	11.25	8	≈5.9	≈4.1
Electrical specifications	Motor and its stepping angle (°)	Two-phase 42 stepping, 1.8		Two-phase 57 stepping, 1.8	
	Model number of motor	42M-1.8D		57BYG250CII	
	Working current (A)	1.7		2.4	
	Torque of motor (N·m)	0.42		1.72	
	Brand and model number of stepping driver (optional)	Moons, SR2		Moons, SR4	
	Type of plugs for stages	1*DB9 (pin)			
	Position-limit sensors (built-in)	2*KX-EE-SX672		2↑KX-SS-5GL2	
	Origin-point sensors (built-in)	1*PI-ITR8104		/	
	Voltage of power supply for sensors (V)	DC5~24V ±10%			
	Consuming current (mA)	<60 (total)			
	Output for control	Position-limit sensor: dry-contact output; Origin-point sensor: collector of NPN open-circuit output		Position-limit sensor: drain-contact output	
	Status of output ports	Position-limit sensor: output ON when sensor is triggered; Origin-point sensor: output OFF when sensor is blocked		position-limit sensor: output ON when sensor is triggered	
	Operating load	Horizontal direction (Kg)	20		30

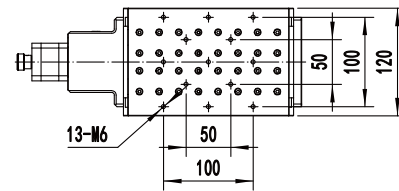
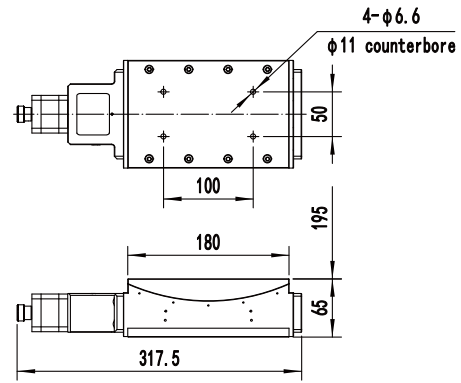
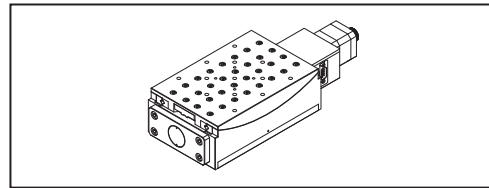
* Highest speed is measured with the conditions of zero-load and motors being worked at 600rpm

Dimensions:

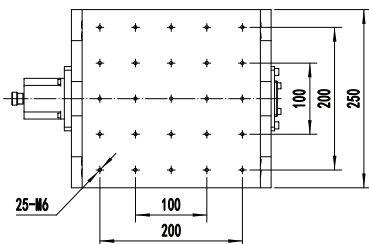
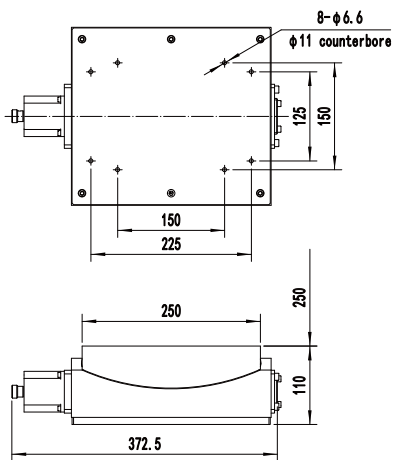
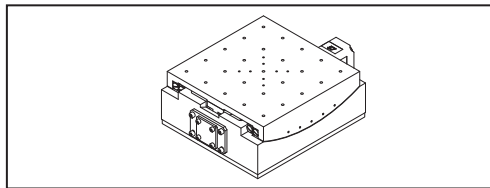
PSAG15-130



PSAG15-195



PSAG15-250



PSAG15-370

