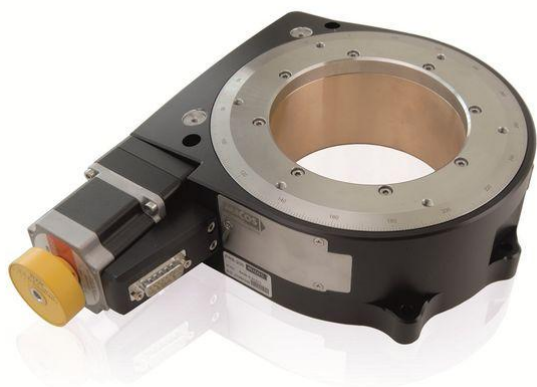


## Precision Rotation Stage



### PRS-200

- + Uni- directional repeatability down to 0.0003 °
- + Maximum speed 150 °/ sec
- + Load capacity up to 50 kg
- + Integrated reference switches
- + Optionally: angular scale
- + Clear aperture 120 mm
- + Preloaded worm drive for zero backlash
- + Vacuum Datasheet

The large clear aperture with a diameter of 120 mm is particularly significant for the rotation stages PRS-200. The body is fabricated from a special, high- rigidity, tempered aluminum alloy. Two calibrated preloaded zero backlash precision roller bearings guarantee an excellent flatness and smooth motion. A hardened and ground screw worm combined with a calibrated worm gear guarantee a quiet and smooth motion. As an option, the PRS-200 stages can be delivered with an integrated optical angular scale. The rotation stages PRS-200 are equipped with two reference switches which can be easily adjusted by the customer. Drive variations including DC or 2- phase stepper motors are available.

### Specifications

PRS-200					
Load Characteristics	F <sub>x</sub> (N)	F <sub>z</sub> (N)	M <sub>x</sub> (Nm)	M <sub>z</sub> (Nm)	k <sub>ax</sub> (μrad/ Nm)
DC- B-088	200	500	60	4	10
2Phase-070	200	500	60	4	10

## Specifications

<b>Travel range (°)</b>		<b>360, endless</b>	
Flatness (Bearings) (µm)		± 1	
Eccentricity (Bearings) (µm)		± 2.5	
Wobble (Bearings) (µrad)		± 17.5	
Weight (kg)		8	
<b>Motor</b>	<b>DC- B-088</b>	<b>2Phase-070</b>	
<b>Angular Measurement System</b>			<b>AE-068</b>
Speed max. (°/ sec.)	75	35	
Resolution calculated (°)	0.0001 (RE)	0.01 (FS)	0.000076271
Resolution typical (°)	0.001	0.001	0.0003
Bi- directional Repeatability (°)	± 0.02	± 0.02	± 0.0005
Uni- directional Repeatability (°)	0.002	0.002	0.0003
Nominal Current (A)	12875	2	
Voltage Range (V)	48.6		
Worm gear reduction	180:1	180:1	180:1
Accuracy	on request	on request	on request
Velocity Range (°/ sec.)	0.001 ... 75	0.001 ... 35	0.001 ... 75
Material	Aluminum, black anodized, stainless steel, red brass	Aluminum, black anodized, stainless steel, red brass	Aluminum, black anodized, stainless steel, red brass

## Order Information

### 6449911011

PRS-200 Precision Rotation Stage, DC Motor, Hall- Effect Reference Switches, Worm Gear Reduction 180:1

### 6449911111

PRS-200 Precision Rotation Stage, DC Motor, Optical Angular Scale-068, Hall- Effect Reference Switches-010, Worm Gear Reduction 180:1

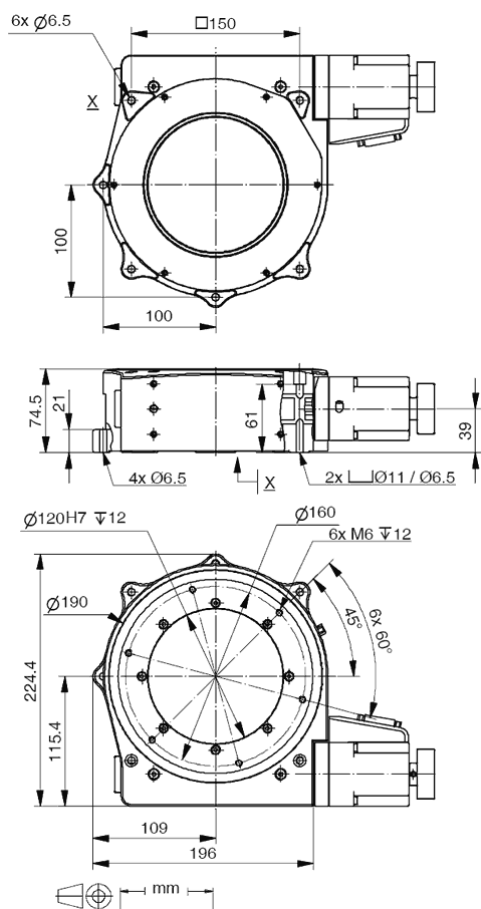
### 6449921011

PRS-200 Precision Rotation Stage, 2- Phase Stepper Motor, Hall- Effect Reference Switches, Worm Gear Reduction 180:1

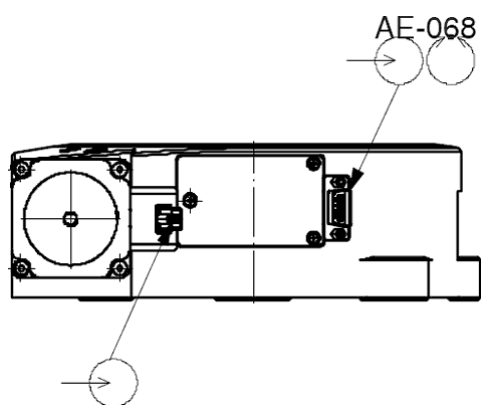
### 6449921111

PRS-200 Precision Rotation Stage, 2- Phase Stepper Motor, Optical Angular Scale-068, Hall- Effect Reference Switches, Worm Gear Reduction 180:1

## Drawings / Images



Travel range: 360°,  
endless



DC-B-088,  
2Phase-070

