

Data Sheet

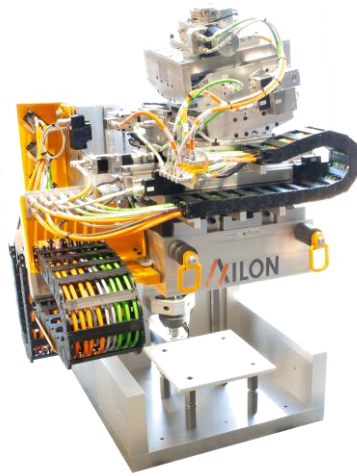
Neutron Sample Stages

Versatile and extremely precise positioning stages for your neutron experimental stations

The AILON logo, consisting of a stylized orange and blue 'A' followed by the word 'ILON' in a bold, grey, sans-serif font.

Introducing...

AXILON manufactures standard solutions with state-of-the-art performance as well as highly customized and positioning assemblies designed and built to your particular needs. AXILON's in-house testing capabilities enables the verification of mechanical and operational specifications and performance of each component in the factory, prior to shipment. The team at AXILON has an intensive experience in designing and building research equipment for high demanding scientific communities and knows well to cope with the special requirements in the field of neutron research.



Specifications

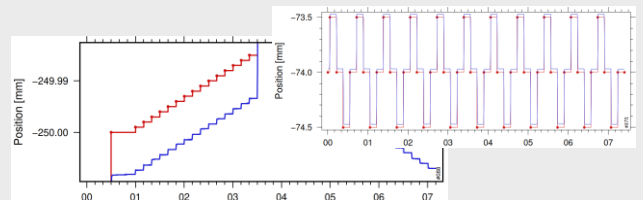
- Linear stages, rotational stages (goniometers) or cradles (tilt stages), freely stackable, flexible combinations
- Heavy load capacities up to 1.000 kg sample weight
- High resolution, minimal backlash, high accuracy
- Stepper or servo driven, encoded, limit switches and hard stops
- Standard motion control system or customer's preferred controls
- Self-locking and safe operation

Key features

- Flexible and versatile to suite varying experimental setups
- Extreme performance even under heavy loads and duty cycles
- Extremely precise, high reliability
- Fully tailored and customizable fitting your specific requirements and preferences
- Suited for neutron environment

Services

- Engineering support for specific applications and adaptations
- Neutron Guides, vacuum housings and support structures
- Experimental Cave equipment and configuration
- Optical benches and accessories
- Design, engineering, manufacturing and installation



Name	spec	measured	result
Target center value		-74 mm	
Mean, both directions		-73.97 mm	
Mean, moving in - dir. (\bar{x}_-)		-73.9682 mm	
Mean, moving in + dir. (\bar{x}_+)		-73.9718 mm	
Backlash ($\bar{x}_- - \bar{x}_+$)		0.0036 mm	
Standard deviation, - dir. (σ_-)		5.23e-05 mm	
Standard deviation, + dir. (σ_+)		3.82e-05 mm	
Unidir. repeatability, - dir. ($4\sigma_-$)	0.001	0.000209 mm	passed
Unidir. repeatability, + dir. ($4\sigma_+$)	0.001	0.000153 mm	passed
Bidir. repeatability ($2\sigma_- + \bar{x}_- - \bar{x}_+ + 2\sigma_+$)		0.00378 mm	

Axilon AG

Robert-Bosch-Str. 1b
50354 Hürth • Germany

T +49 (221) 165 324 00
F +49 (221) 165 324 99

beamlines@axilon.de
www.axilon.de