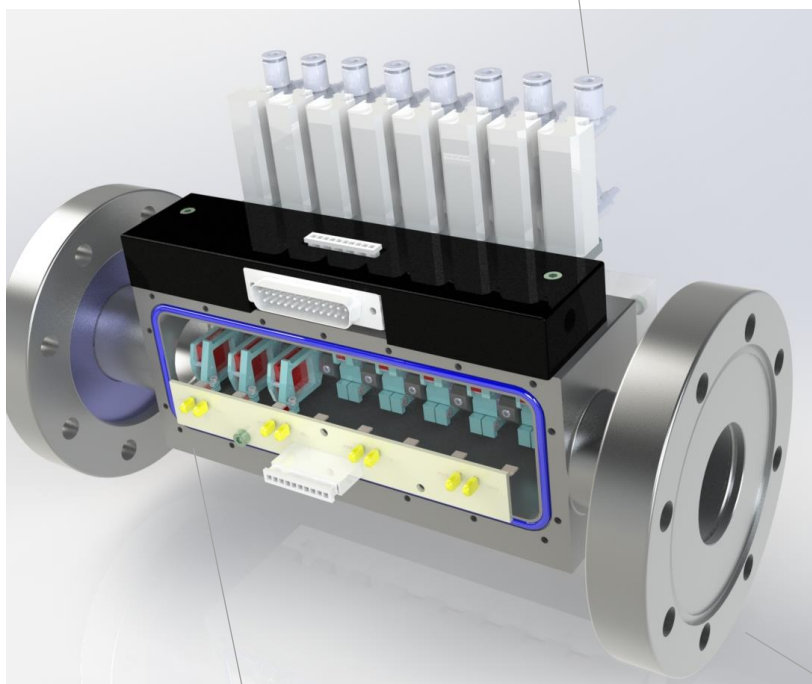


X-ray Attenuator System | ATS-8

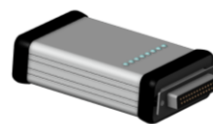
A compact 8-axis filter-holder fully compliant with UHV requirements

Equipment upon license agreement with the ESRF

Pneumatic actuators moving magnets located outside the vacuum chamber.
Filters are inserted into the beam path through magnetic couplings.
No mechanical feedthrough



8 filter-holders
Two sensors per filter for status indication (filter in/out)



Diagnostic tool for a fast check of each filter proper location without breaking the vacuum and without using the control electronics

Compact assembly
Simple interfaces with the beamline

UHV version: stainless steel chamber and CF flanges

HV version: aluminum chamber and KF flanges

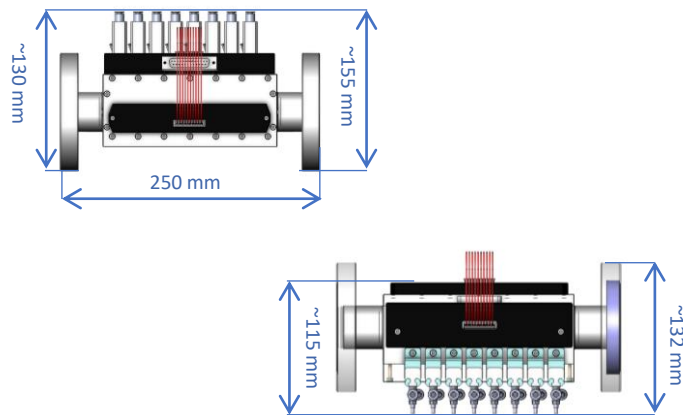
X-ray Attenuator System | ATS-8

Technical specifications

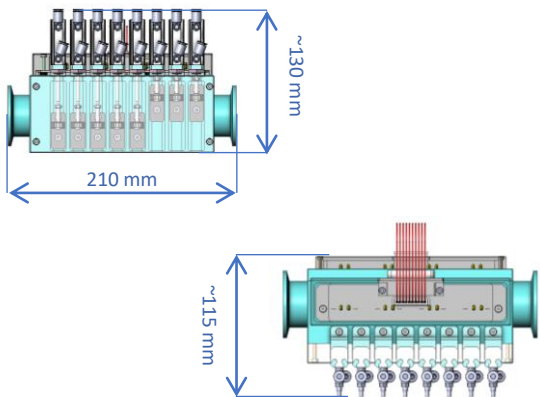
	All versions
Through aperture (H x W)	10 x 10 mm
Foil ⁽¹⁾ size	14 (H) x 15 (W) mm Max. thickness = 4 mm
Number of holders	8
Drive mode	Pneumatic actuator moving magnets outside the chamber and magnetic coupling for inserting the filters (90° rotation)
Air pressure	Min. = 1.2 bar Max. = 7 bars
Switching time	Adjustable – Max. 2 s
Position Accuracy	~ 0.1 mm by hard stop
Flange interface	UHV version: CF63 or CF40 HV version: KF40 (one rotatable flange)
Position sensors	Magnetic Hall sensors 2 per holder
Power supply	24V DC (supply for position sensors)
Electrical interface	Connector DB25F

⁽¹⁾ Foils are not included in our base supply

UHV version (CF63 or CF40)



HV version (KF40)



Control electronics (option)

19" drawer including:

- 24 VDC power supply
- Programmable Logic Controller
- Electro-pneumatic station

Ethernet connection and communication via TCP/IP socket commands