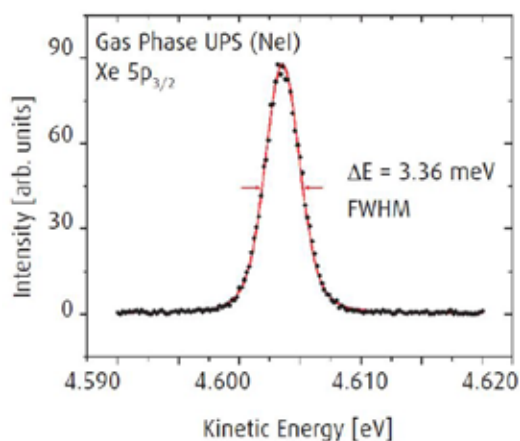


HIS 13

HIGH INTENSITY VUV SOURCE

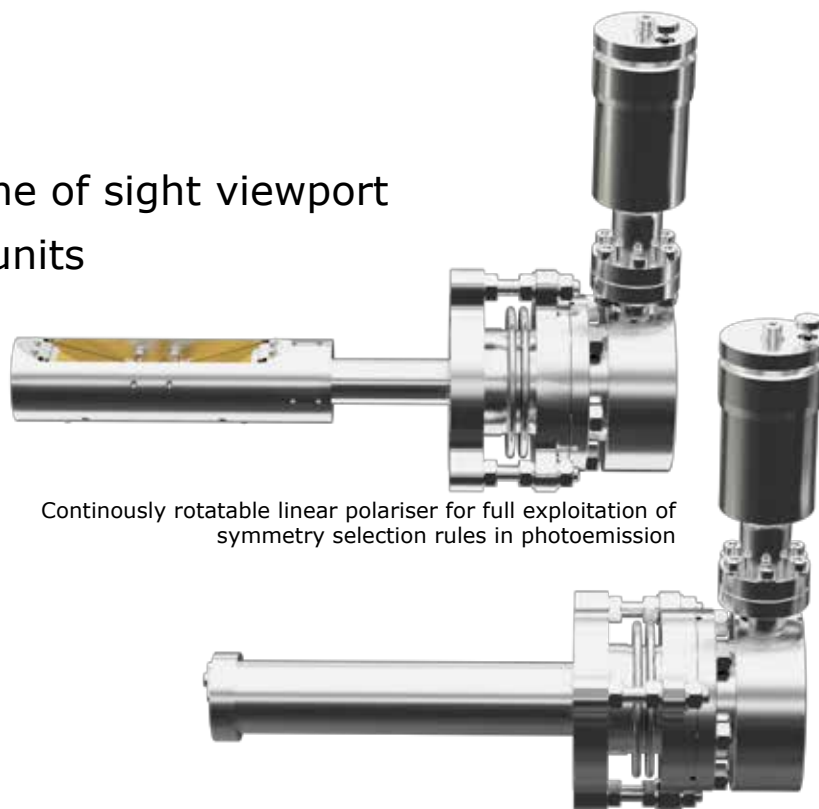


- Ease of operation
- Robust design
- Discharge regulation
- Precise alignment with line of sight viewport
- More than 300 installed units
- Large range of options



The line width of the gas phase spectrum is dominated by the Xe Doppler broadening and the analyser resolution. It proves a line width less than 2meV of the HIS 13 operated with Ne.

Measured with
OMICRON EA 125



Continuously rotatable linear polariser for full exploitation of symmetry selection rules in photoemission

Attenuator for HIS 13/14 for VUV-sensitive samples. Variable reduction of photon flux by a factor 10 or 100.



Photo current	>80 nA (biased Al foil)
Useful gas discharge lines	HeI, HeII, NeI, NeII, ArI, ArII, KrI, KrII, XeI, XeII, H (Ly _α , Ly _β)
Capillary	Selectable length & diameter
Cooling	Water cooling
Discharge power	Up to 300 W
Operating pressure	Down to 10 ⁻¹⁰ mbar (HeI)
Differential pumping	Two or three (optional) stage
Mounting flange	DN 40 CF 2¾" OD
Alignment & discharge control	Via backside viewport
Adjustment	± 3° port aligner
Bake out temperature	Up to 250° C
Plasma Ignition	Automatic

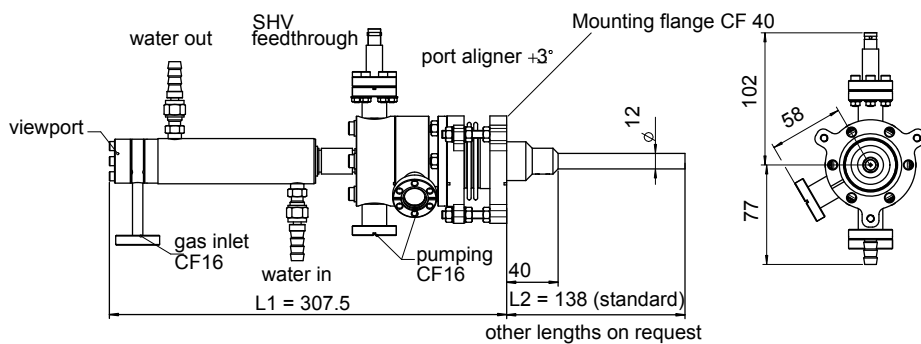
VUV Source Power Supply



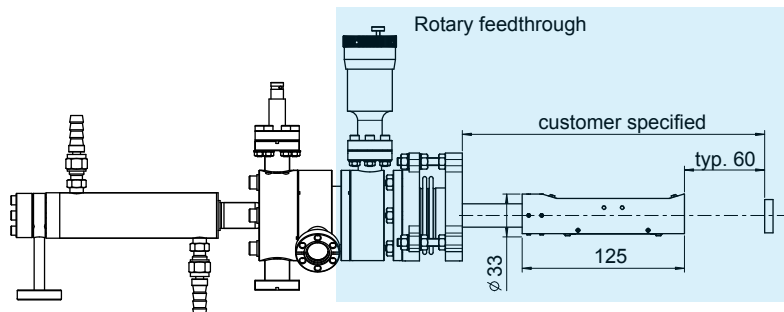
The VUV source power supply is a fully digital unit with integrated pressure measurement and automated plasma ignition. It delivers up to 1 kV anode voltage, up to 300 mA discharge current and a very stable discharge regulation.

Upgrade Options:

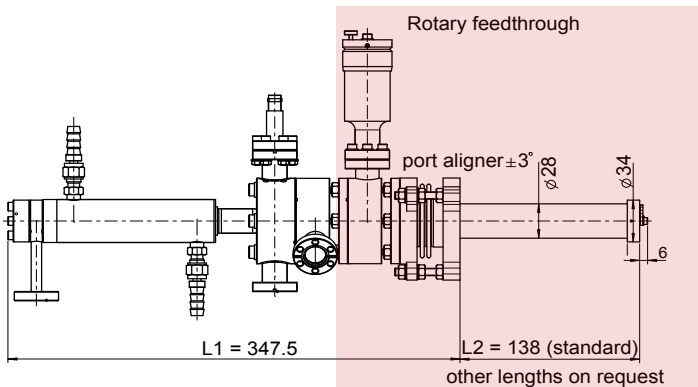
- linear polarizer
- VUV light attenuator
- upgrade to HIS 14 HD for ultimate focussing and high photon density
- 3rd differential pumping stage



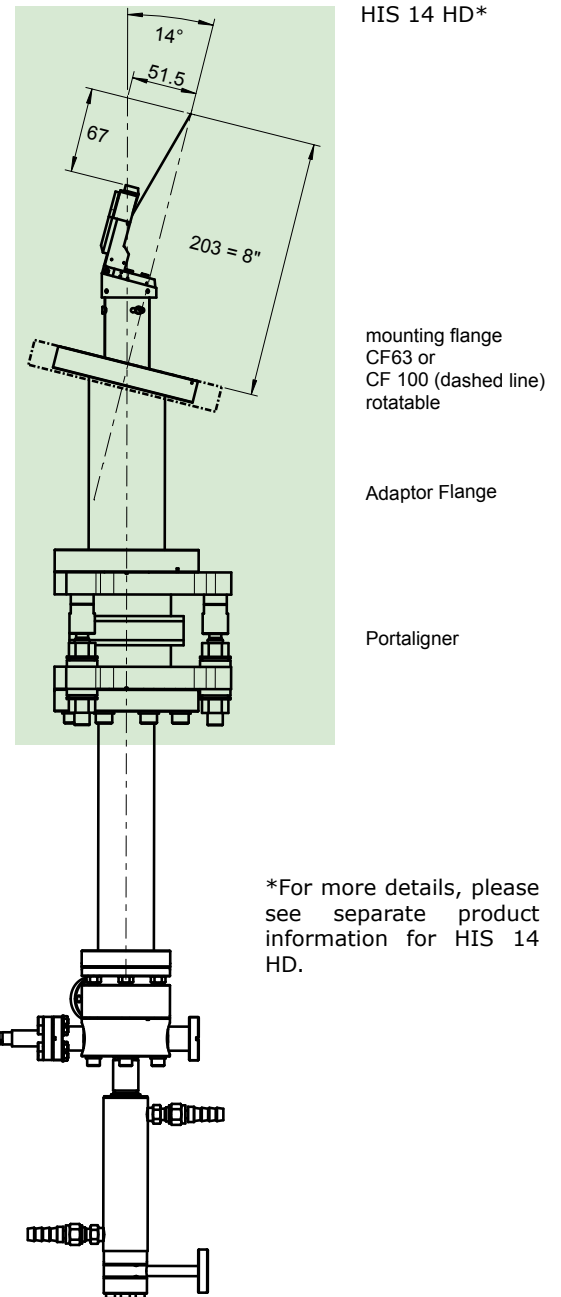
HIS 13 standard VUV source



HIS 13 with rotatable linear polarizer



HIS 13 with in-situ VUV light attenuator



Note: All dimensions in [mm].