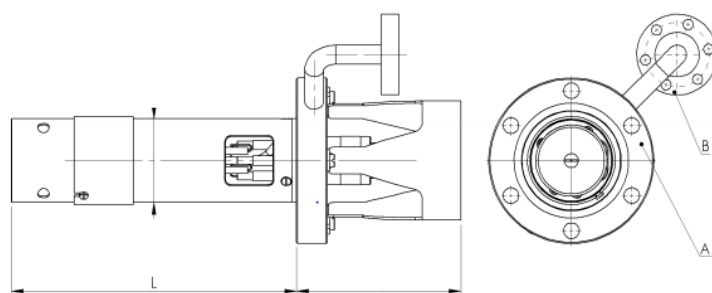


Ion Source

Compact, easy-to-handle extractor type ion source for sample cleaning

Features:

- **High Ion Beam Current** with Gaussian beam profile. Beam diameter and current density depend on the source to sample distance – accessible by customized insertion length L (between 62.5 – 384.5 mm).
- **Operation** with inert (Ar) and reactive gases (O₂, H₂, hydrocarbons with reduced lifetime). An easy-to-handle gas-inlet setup is included.
- **Long lifetime.**
- **High stability** due to special arrangement of anode and accelerating electrode.



A – DN 40CF mounting flange, B – DN 16CF gas inlet, L – custom length

Technical Data:

Mounting flange	DN40CF
Current maximum	20μA
Current density	>120μA/cm ² for working distance of 30mm
FWHM	Depends on ion energy and working distance (3mm at 30mm working distance)
Energy range	0.12 – 5.0 keV
Cathode	Yttrium oxide coated iridium filament
Insertion length L	62.5mm – 384.5mm
Typical working distance	30 – 250mm
Bakeout temperature	250°C
Working pressure	10 ⁻⁵ – 10 ⁻⁶ mbar

Summary

Part Number: PN06405

Parts needed:

- Ion Source IS40C1
- Power Supply IS40-PS incl. cable
- Gas inlet package
- Ar or N₂ (to be provided by customer)

Prerequisites:

- Insertion length has to be defined upon order according to customer's requirements

Limitations:

- Suitable for cleaning surfaces – not for applications like sputter etching, depth profiling or charge neutralization

Options:

- Linear shift