

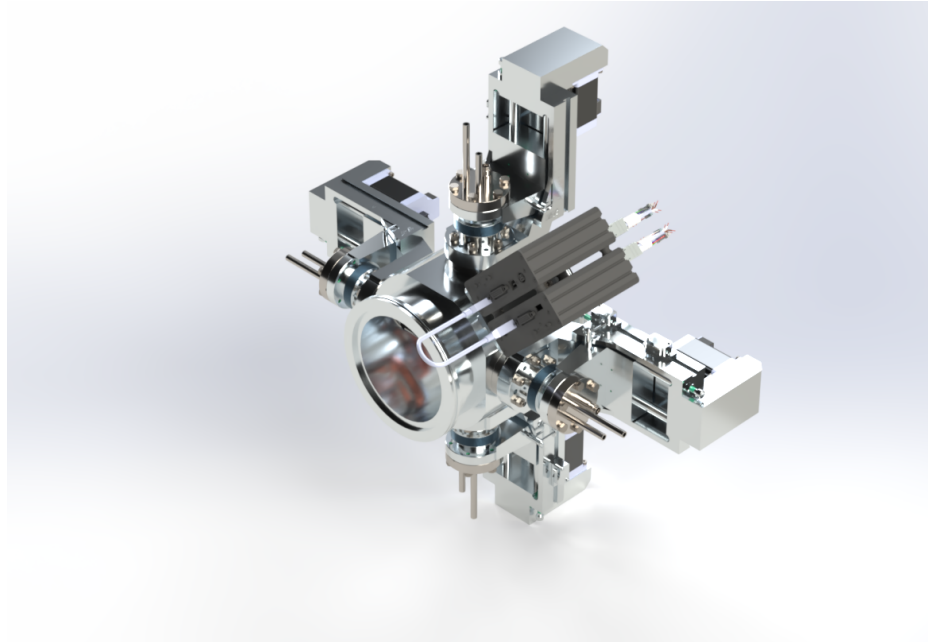
high power 4-jaw-slit-system DN160

932-S7-09-00002-B-01

The 4-Jaw slit system can be used for ion beam diagnostics for the purpose of collimating or blanking the charged particle beam.

Each slit is mounted on a linear feedthrough in order to be individually moved into and out of the beam.

The system is designed for collimating beams of charged particles with an energy of 18 MeV and a beam power up to 270 W beam power in broad pressure ranges, down to ultra-high vacuum conditions.



4-Jaw slit system, each slit is equipped with a stepper motor and can be moved individually.

further reading:

- https://www.dis-eng.de/products/charged-particle-beam-diagnostics/_4-jaw-slit-system/

Special Features:

- water cooled 6 mm thick slit aperture made of aluminum (3.0385. EN AW-1098)
- each slit is mounted to a motorized linear feedthrough thus being individually adjustable
- travel length 30 mm in steps of 1 μ m
- overlap of opposite apertures in insert position
- BNC feedthrough for charged particle current readout on the individual aperture
- vacuum chamber with DN160 ISO-K beamline connection flanges

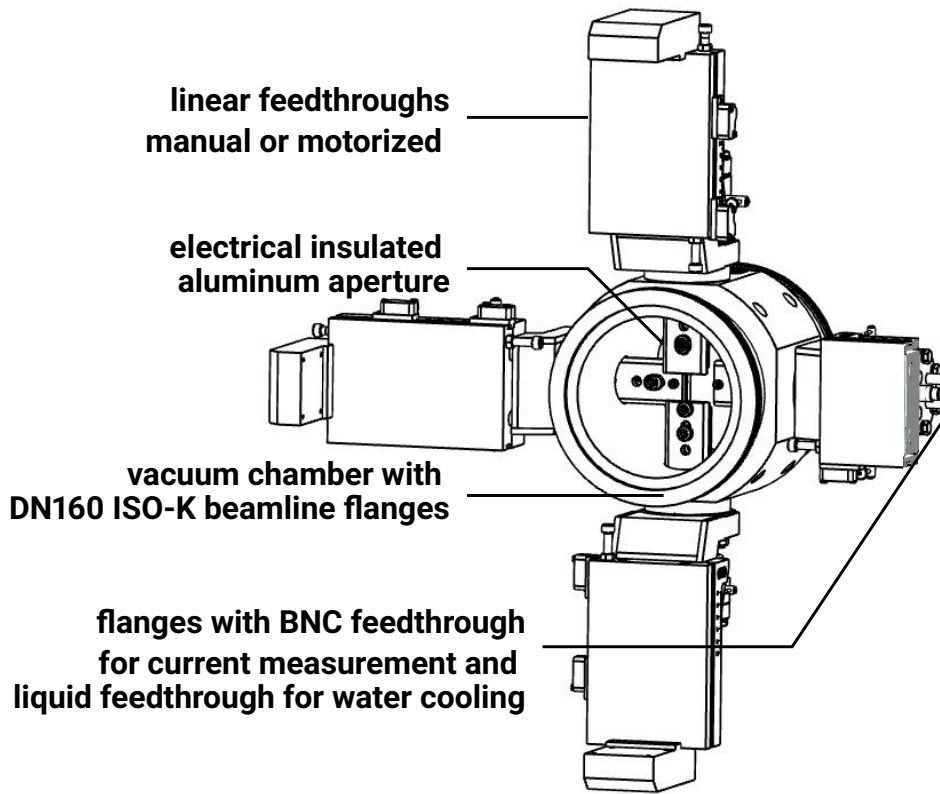
Optional Supplementing Devices:

- different geometries and materials for slit aperture
- current measurement device for all dimensions of electric current, starting at pA
- stepper motor control device (991-S7-10-00004 - Motor control device, 4 axes)

Please do not hesitate to contact us to find a solution suitable for your special application.

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Sketch of the 4-jaw-slit system with labeled components

TECHNICAL DATA

category	charged particle beam diagnostics
maximum beam power	up to 270 W with water cooling, inlet pressure: 6 bar, outlet pressure: <1 bar
connection cooling water	8 mm stainless steel tube
pressure operating range	down to $1 \cdot 10^{-10}$ mbar
travel length	30 mm
resolution	1 μ m
beamline mounting flange	DN160 ISO-K
maximum bakeout temperature	<120 °C
approx. box size (length x width x height)	309 mm x 636 mm x 636 mm