D.I.S

D.I.S Germany GmbH

FARADAY CUP 931-S7-09-00006-A-01

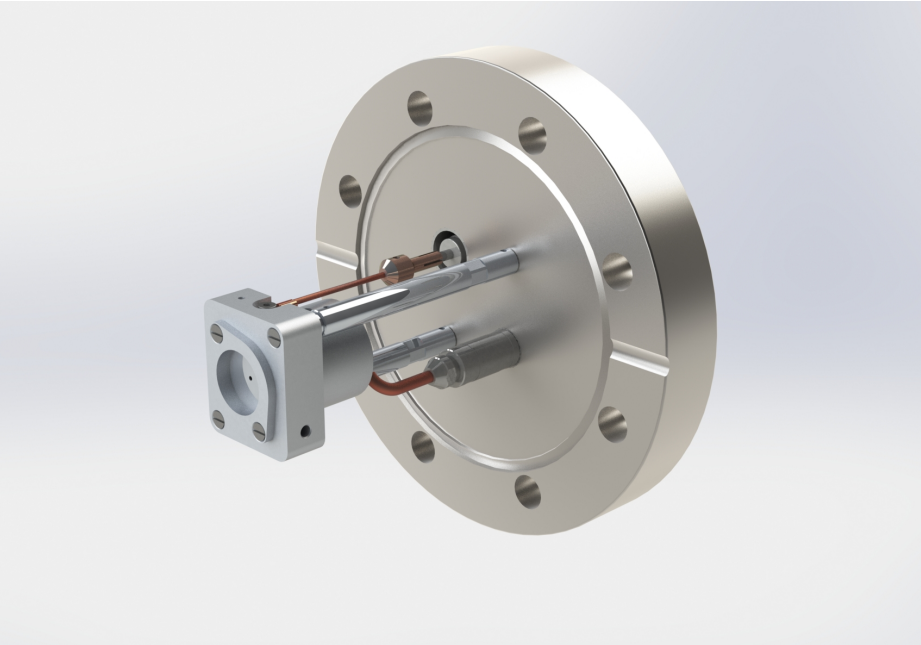
Faraday cups are used for measuring electrical currents of charged particle beams in real time in broad pressure ranges, down to ultra-high vacuum conditions.

The Faraday cup is equipped with an exchangeable aperture, a suppressor electrode for compensation of secondary electron emission, and a measurement electrode.

It can be used for currents of fA up to mA at beam power loads of several watt depending on the cooling solution.

further reading:

- *https://www.dis-eng.de/products/charged-particle-beam-diagnostics/faraday-cup/*



Faraday cup with fixed inline mounting.

Special Features:

- fixed inline installation
- CF63 base flange
- exchangeable apertures with diameters ranging from 0.5 mm up to 5 mm
- triaxial wiring and feedthrough for the Faraday cup detector for low noise measurements
- passive cooling for power loads up to 3 W

Optional Supplementing Devices:

- power supply for the suppressor voltage
- current measurement device for beam currents of fA up to mA
- additional apertures

Please do not hesitate to contact us for additional support.

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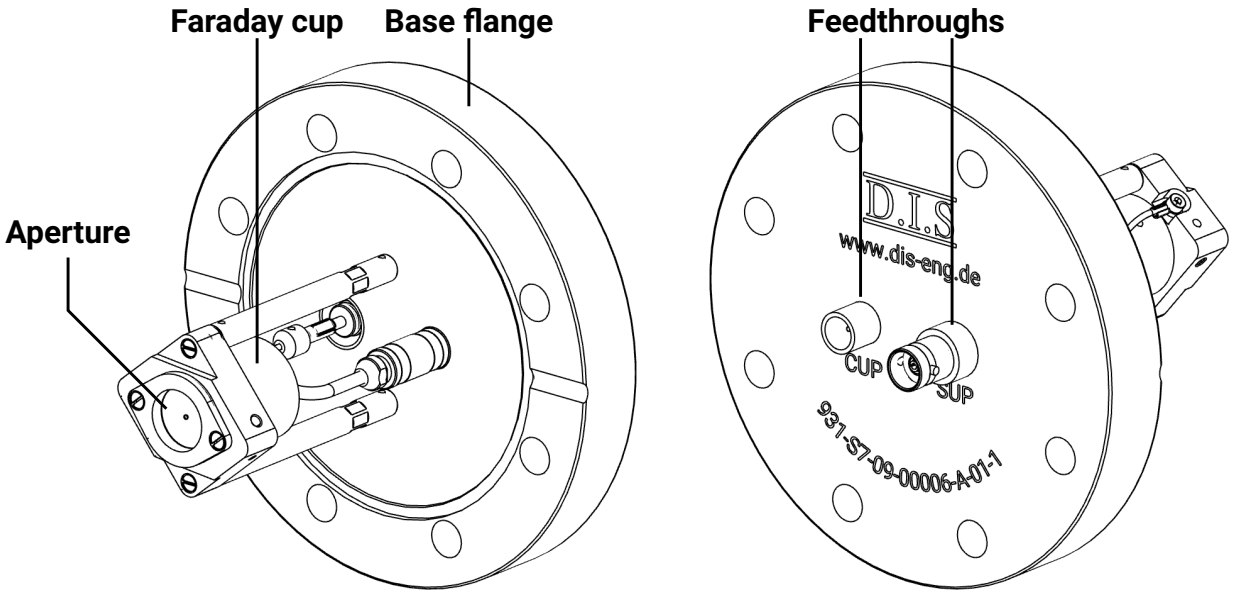

Sketch of the Faraday cup with labeled components.

TECHNICAL DATA	
maximum beam power	3 W
current measurement range	nA up to 10 µA @ 200 keV
pressure operating range	down to 1×10^{-10} mbar
mounting flange	DN63CF
mounting style	inline
connectors	Suppressor (SUP): BNC connector Detector (CUP): triaxial connector
aperture dimensions	0.5 mm, 1 mm, 2 mm, 3 mm, 4 mm, and 5 mm
maximum bakeout temperature	150 °C
approx. box size (length x width x height)	113.5 mm x 113.5 mm x 105 mm

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