PS-50 - PRECISION SLITS, 50W

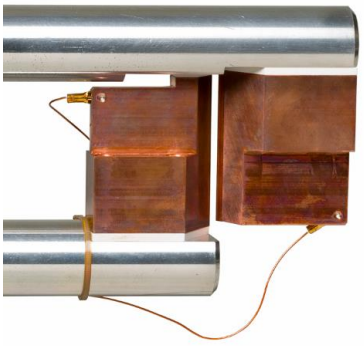
Manually-Actuated Slits for Ultra High Vacuum Where High Precision is Required

- High accuracy. Ideal for mass spectroscopy
- Measures low-energy charged-particle beam currents (< 1 MeV) up to 50W
- Ambient air cooled for simplicity
- Slit beam current read back[3]
- Designed for UHV vacuum

The **D-Pace 50W Precision Slits** were designed for mass spectroscopy. This device is manually actuated using a single knob, and has a convenient digital readout which indicates the slit separation distance. The slits are electrically isolated, allowing the current to be read from each slit independently through the BNC connectors on the flange. BNC shorting caps are provided if electrical isolation is not required.

The 50W Precision Slits are air-cooled, eliminating the need for water. This was accomplished with large cross section aluminum rods to conduct heat from the copper slits to heat sinks in ambient air within the device. Low-thermal-expansion Invar rods are used to compensate for high expansion rate materials used to conduct heat. The welded bellows design is UHV compatible and requires no O-rings.

D-Pace can also provide crosses, beamlines, spectrometer magnets, and control systems for a complete spectrometer system.



Electrically-Isolated Copper Slits

D-Pace, Inc. +1.250.352.5162 info@d-pace.com www.d-pace.com

Manual adjustment with single knob

Digital readout of slit gap

SPECIFICATIONS: PS-50	
Maximum Beam Power	50W
Slit Adjustment	0.00 – 20.00mm
Slit Width	50 mm [1]
Flange	DN 150CF [2] (O.D. 203mm)
Cooling	Ambient Air
Current Read back	2 BNC Connectors [3]
Particle Kinetic Energy Range	< 1 MeV
Vacuum	UHV
Absolute Slit Position Relative to Flange	± 0.1mm
Position Resolution	0.05mm

Notes:

1. Plane transverse to slit motion.
2. Designed for use with standard cross with rotatable flange. Bolted from below.
3. Optional. BNC shorting caps are provided.
4. D-Pace reserves the right to update specifications as part of its ongoing product improvement program.