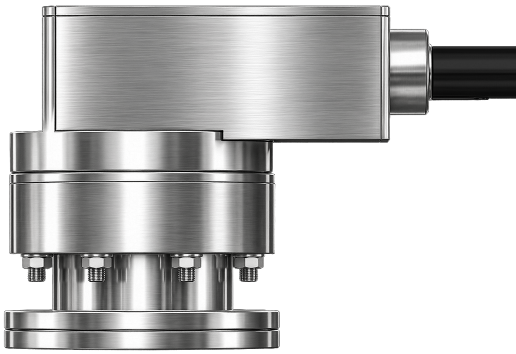
AVALANCHE

MAKO

200 KV HIGH-VOLTAGE VACUUM FEEDTHROUGH

Compact, fully shielded, single-conductor feedthrough for UHV systems



Product class: High-voltage vacuum power feedthrough
Mount: 6" ConFlat (DN100CF)
Configuration: Fully shielded single conductor

Rated voltage: 200 kV DC
Part number: 000-4440-001

Voltage rating	Vacuum interface	Architecture
200 KV DC	**6" CONFLAT (DN100CF)**	**FULLY SHIELDED, SINGLE CONDUCTOR**

01. PRODUCT OVERVIEW

Mako is a compact 200 kV high-voltage vacuum feedthrough designed for UHV-compatible systems requiring a shielded single-conductor interface across an 6 in CF flange.

KEY FEATURES

- 200 kV DC product class (unique on the market)
- Fully shielded high-voltage geometry
- Single-conductor design (can be customized to 3 conductors)
- Ultra-high-vacuum (UHV)-compatible ceramic-to-metal sealed assembly
- Application guide (Conditioning and baking instructions)
- Standard Detachable Flat Connector Included

APPLICATIONS

- Particle accelerators and beamlines
- High-energy ion source and extraction assemblies
- Electron microscopy and diffraction systems
- High-voltage electron guns
- Fusion and neutron generation systems
- Industrial electron-beam processing
- Pulsed-power and high-power microwave (HPM) systems
- High-voltage vacuum test chambers

02. TECHNICAL PERFORMANCE SPECIFICATION

PARAMETER	SPECIFICATION
Voltage rating	200 kV DC rated maximum voltage. Polarity: can be negative or positive
Current rating	5 A continuous
Mount style and size	6" ConFlat (DN100CF), 304 stainless steel
Cable connection style	A fully shielded, detachable flat connector
Center conductor	Molybdenum, diameter: 0.95 in / 2.4 cm
Conductor, housing, and dielectric materials	Housing / flange: stainless steel 304 Insulator: MACOR
Operating temperature range	−50 °C to 120 °C
Leak rate	Helium leak rate: less than 1×10^{-9} atm·cc/s
Ultimate pressure	10^{-9} Torr (10^{-7} Pa)
Dimensions	Diameter: 15 cm / 6 in Length (excluding cable): 30 cm / 12 in Cable length: 6 m / 20 ft (custom length available on request)