



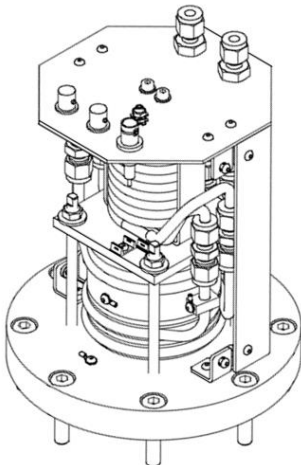
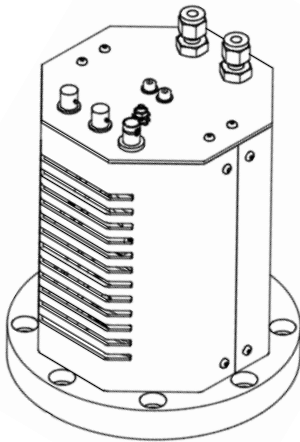
FARADAY CUP

FC-600-F

Stationary, water-cooled, Faraday Cup for
 Ø32 mm beams capable of 600 W beam power



- Measures low-energy charged-particle beam currents up to 600W
- Secondary-electron suppression electrode
- Water-cooled
- Beam current read back from both collimator and Faraday cup
- Polymer water tubing for electrical isolation within chassis for safety



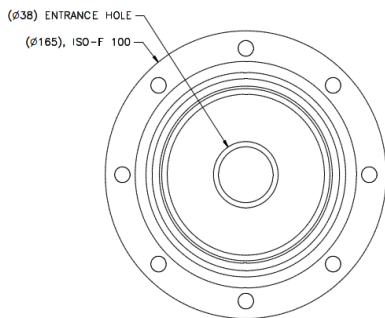
SPECIFICATIONS: FC-600-F

Beam Power, Max	600W
Collimator Diameter	32 mm
Bias Ring Diameter	32 mm
Faraday Cup Diameter	32 mm
Standard Flange	ISO 100F (O.D. 165mm)
Optional Flange	8" CF (O.D. 202mm)
Cooling	Water
Vacuum	HV (10^{-8} Torr) ¹

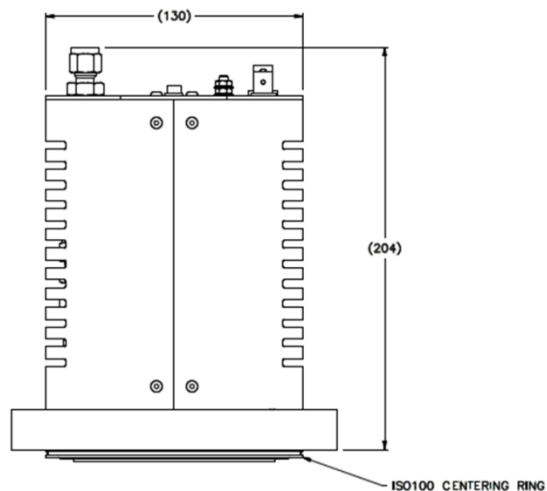
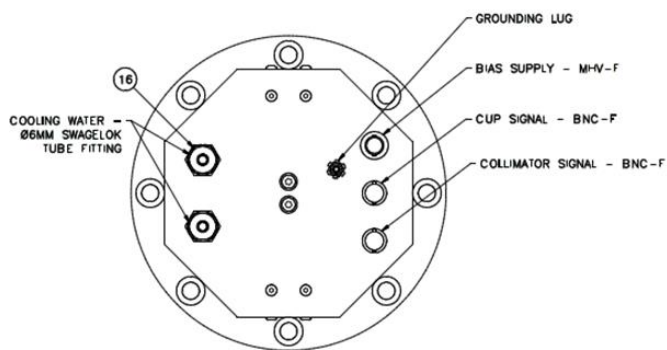
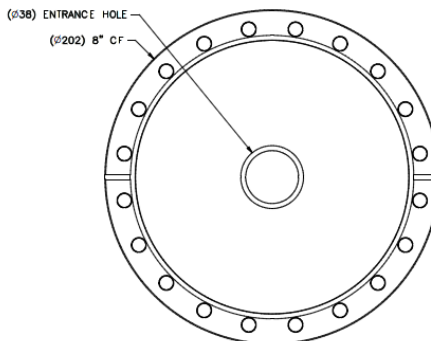
Notes:

1. FC-600-F design utilizes internal O-rings
2. Signal connector shells isolated from chassis, but grounded internally with a jumper wire to the ground post.
3. D-Pace reserves the right to update specifications as part of its ongoing product improvement program.

ISO 100 FLANGE (STANDARD)



8" CF FLANGE OPTION



CONNECTORS AND COOLING	
Connector, Faraday Cup Signal	Isolated BNC ³
Connector, Collimator Signal	Isolated BNC ³
Connector, Electron Suppression Bias	MHV, 500V Maximum
Cooling Water Connections	6mm Swagelok Tube Fitting
Minimum flow	1 liter/min
Pressure, minimum	200 kPa (30psi)
Pressure, maximum	620 kPa (90psi)
Water Tubing, Internal	Cup, bias ring and collimator cooling tubes connected in series with >100 cm of 4 mm I.D. polymer tubing between collimator and bias, and between signal and bias. This eliminates the need for external isolation water tubing.
Current Leakage, DI Water, 1MΩ/cm	Bias to Cup, Bias to Collimator
Water, 1kΩ/cm	< 200 nA
	< 200 μA
Grounding Lug	M4 Stud