



20181008 Meeting

**Korea University
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Electron gun



FC50 50W 1.0"
(2.54cm)

- > For applications requiring maximum beam clearance when the cup is retracted
- > Mounted on a single flange with feedthroughs to allow it to be mounted in an existing vacuum chamber
- > Cooling by radiation only, no water cooling needed
- > 2 "(50mm) stroke
- > custom insertion lengths available as well as custom housings

COMMODITY / SPECIFICATION	
2EA052316 Faraday cup, FC50, with 8.0" OD CF housing flanges, 12-1/2" LG	

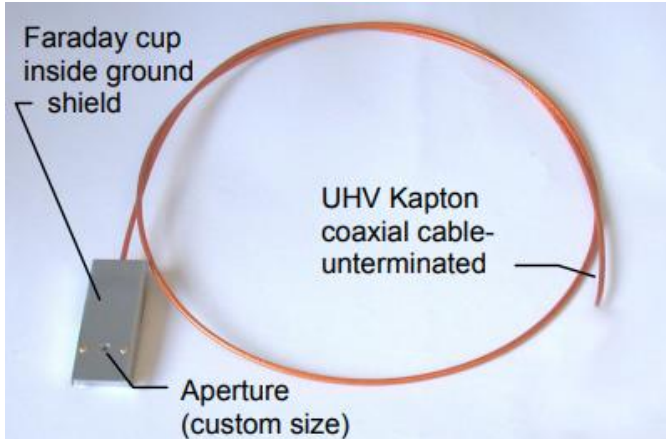
UNIT PRICE	AMOUNT
\$ 12,766.60	\$ 12,766.60



Faraday Cup
Faraday Cup for Low Current Measurements

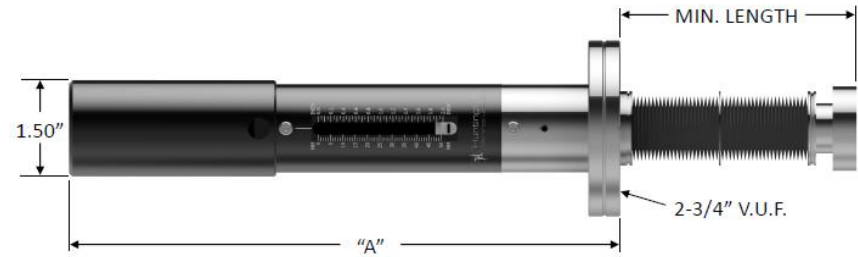
Faraday Cup Parameters	
aperture diameter	1 mm, 2 mm, 5 mm, or customer-specific
recommended supressor voltage	50 V
max. beam power without additional cooling	20 mW
General Parameters	
dimensions (length x width x height)	34 mm x 34 mm x 55 mm
max. bakeout temperatrue	150°C

Electron gun



SPECIFICATIONS

FC-70C	
Aperture size (Custom available)	1.596 mm dia. = 2mm ² area
Input power continuous	100 mW max.
Shield size	53 mm x 22 mm x 10 mm (2.1" x 0.9" x 0.4")
Cable length	19", Optional: 16"
Operating temperature	150°C max.
Bakeout temperature	250°C max.
Vacuum level	10 ⁻¹⁰ torr min.



Specifications

Sealing Mechanism: Welded Bellows
 Material Exposed to Vacuum: Stainless Steel
 Bakeout Temperature: 200°C (Maximum)
 Operating Temperature: -20° to 150°C
 Pressure Range: Atmosphere to 1×10^{-11} Torr

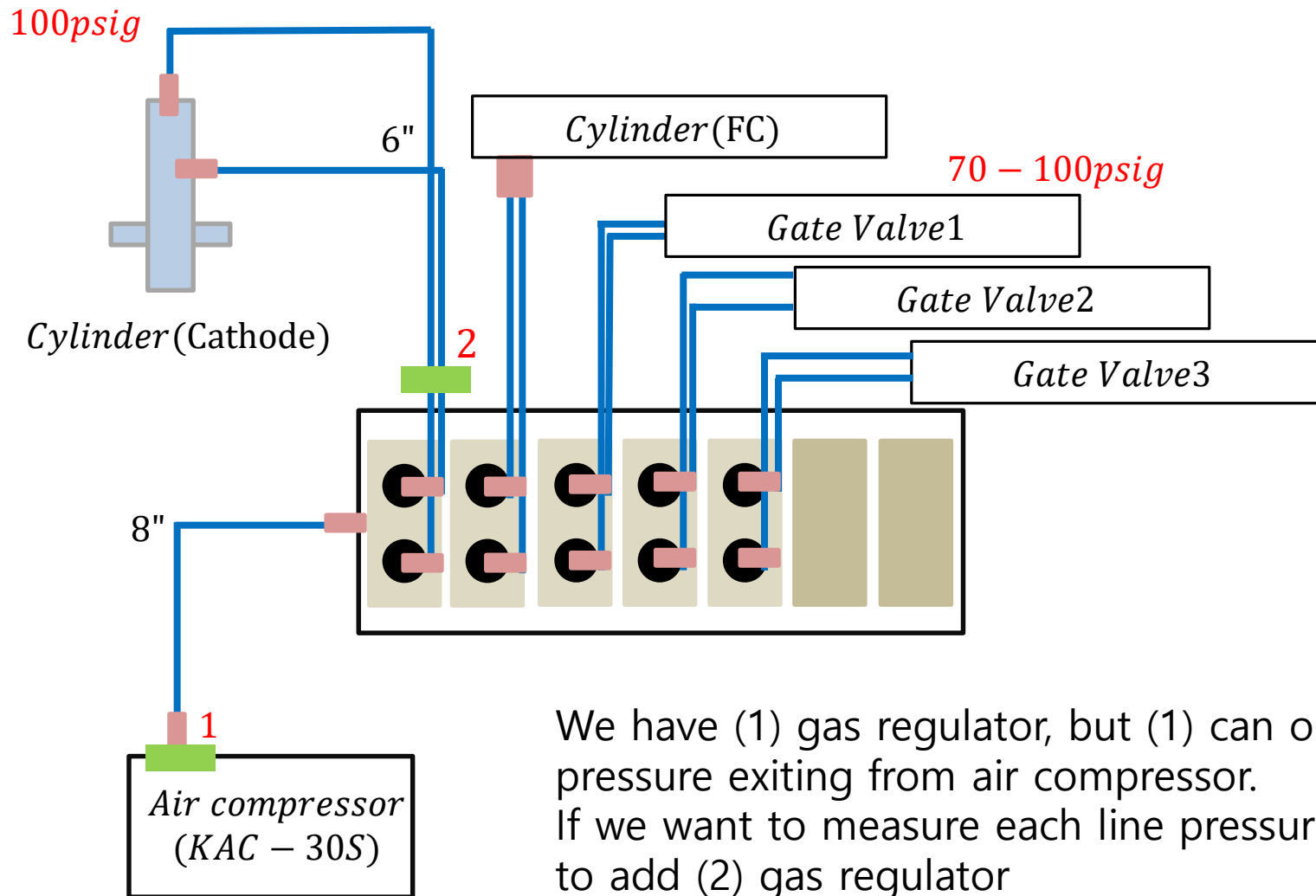
Maximum Axial Load: 25 lbs. (11.3 kg) concentric load
 Maximum Lateral Load: 20 lbs. (9.1 kg) @ tip in retracted (minimum) position
 Scale Resolution: 0.05" (1 mm)
 Pneumatic Actuator: 1/8" NPT (Solenoid not included), Double-acting cylinder, 100 psi (6.9 bar) Maximum

FC70 / Cylinder will be purchased.

660\$(FC) + 1,900,000W(Cylinder)
 + @(Clamp/wire..)

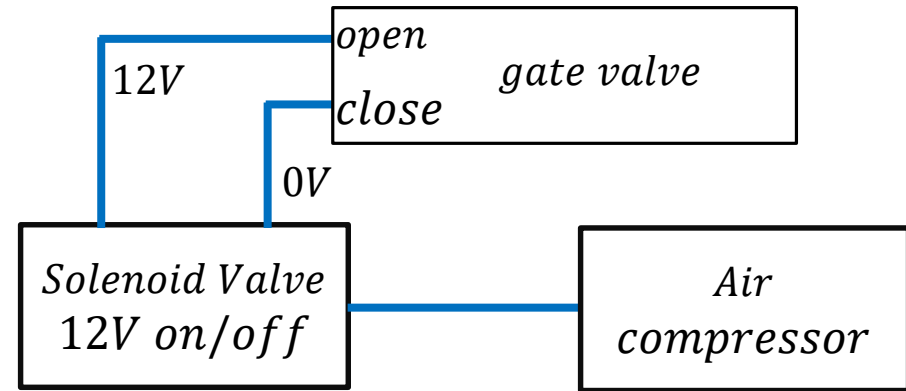
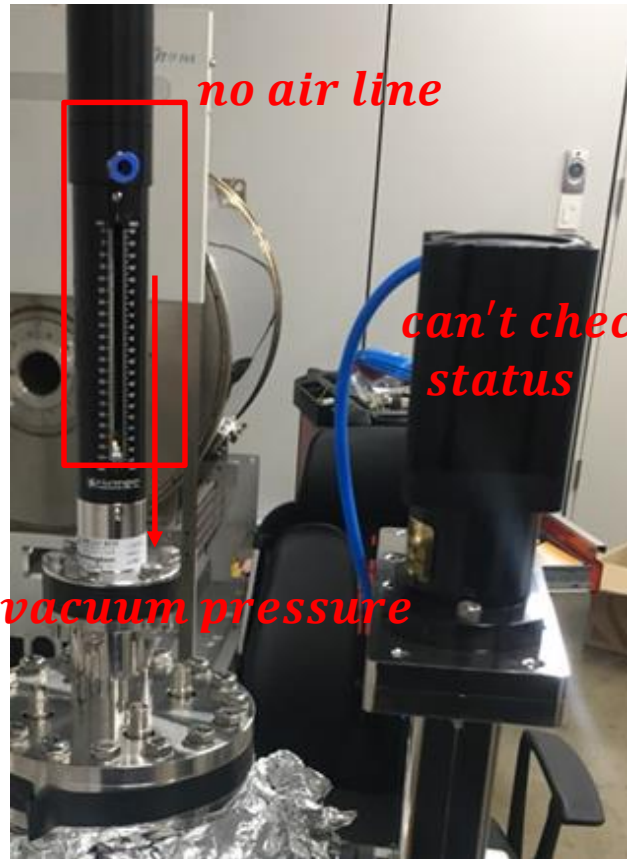
Clamp will be made(Booil)

Gate Valve



We have (1) gas regulator, but (1) can only see the pressure exiting from air compressor. If we want to measure each line pressure, we need to add (2) gas regulator

Gate Valve



When set to this direction, vacuum can be maintained because gate valve is closed even if there is a power failure.

Air compressor is kept for a while. But you have to take action within that timeframe. (If there is no pressure on air compressor, gate opens.)

$$P_{cylinder-upside} \geq P_{gate}$$

If cylinder bar goes up, gate valve pressure has enough value.