

UC9 ULTRA HIGH PURITY PRESSURE & VACUUM SWITCH SERIES

The UC9 Series incorporates Wasco's proprietary manufacturing method along with an Elgiloy® diaphragm. It provides ultra high purity and unmatched corrosion resistance. Its all-welded construction eliminates all leak paths.

This series is a perfect switch to handle corrosive media with high accuracy and tight tolerance.



UC9 HIGHLIGHTS

We've designed these switches for highly corrosive environments found in next generation semiconductor processing equipment. The UC9 series is rated for more than 2,000,000 95B2 application cycles. The UC9 series has materials options available that meet or exceed SEMI F20 UHP requirements. All switches are helium leak tested to $\leq 1 \times 10^{-9}$ std cc/sec per SEMI F1.

TYPICAL APPLICATIONS

- Gas Boxes
- IGS Gas Panels
- Gas Distribution Systems
- Valve Manifold Boxes
- Etch & Deposition Systems

UC9 PERFORMANCE CHART

Model	Range of Activation Points*	Reset Band*	Activation Point Tolerance	Proof Pressure**	Burst Pressure**
UC9-A	20 to 200 Torr Absolute Pressure	10 Torr +6% of Activation Point (typical)	+/- 5 Torr +2% of Activation Point (typical)	100 PSIG	1000 PSIG Minimum
UC9-G	0.5 to 3.5 PSIG Gauge Pressure	0.2 PSI +6% of Activation Point (typical)	+/- 0.1 PSI +2% of Activation Point (typical)	100 PSIG	1000 PSIG Minimum

* Other ranges available

**Higher pressures available

MATERIAL SPECIFICATIONS

	Wetted Components
Process Port	316L SS* SEMI F20 UHP compliant
Diaphragm	Elgiloy®*
Interior Surface Finish	5 Ra

* Other Materials Available

TECHNICAL SPECIFICATIONS

Expected Lifetime	≥1,000,000 cycles 95B2 (depending on application)
Ingress Protection	IP67 (absolute configuration only)
Leak Rate	100% Helium Leak Tested to ≤ 1 x 10 ⁻⁹ std cc/sec

ELECTRICAL SPECIFICATIONS

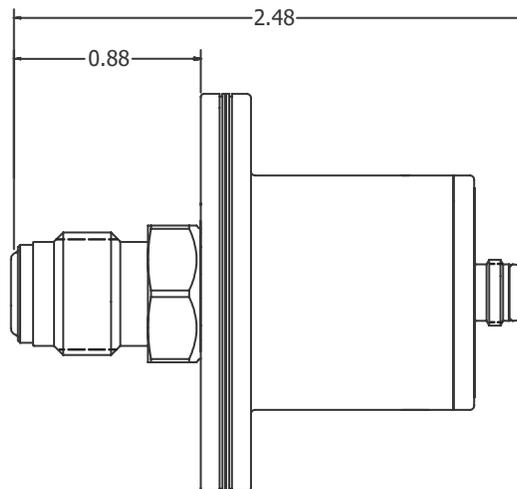
UL 508	E489633		
	Max Amp Rating	Volts AC/DC	Contact Material
Electrical Rating	1	115/28	Gold
	3	250/28	Silver

TEMPERATURE SPECIFICATIONS

Operating Temperature	-20° to 60°C* (-4° to 140°F)
Non-Operating Temperature	-40° to 100°C (-40° to 212°F)

*Higher temperature ratings available

UC9 DIMENSIONS



Typical UC9 with 1/4" male face seal and M8 3-pin (other configurations available)