



ULTRA HIGH PURITY PRESSURE & VACUUM SWITCHES

The UC9 Series incorporates an elgiloy diaphragm. This provides the series with superior corrosion resistance performance that is unmatched by other offerings in the market. The UC9 series incorporates Wasco's proprietary manufacturing method and an all-welded construction which eliminates all leak paths.

This series is a perfect switch for systems that require sensing of corrosive media in a high accuracy, tight tolerance application.



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 1,000,000 95B2 application cycles. The UC9 series has materials available that meet or exceed SEMI F20 (UHP) with a critical pitting temperature performance of $> 35^{\circ}\text{C}$. All switches are helium leak tested to $\leq 1 \times 10^{-9}$ std cc/sec Helium 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 PSIG +6% of Activation Point (typical)	+/- 0.1PSIG +2% of Activation Point (typical)	100 PSIG	1000 PSIG Minimum

* Other Ranges Available

**Higher Pressures Available



MATERIAL SPECIFICATIONS

	Wetted Components
Process Port	SEMI F20 UHP Compliant (316LSS)*
Diaphragm	Elgiloy*
Interior Surface Finish	5 Ra * Other Materials Available

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

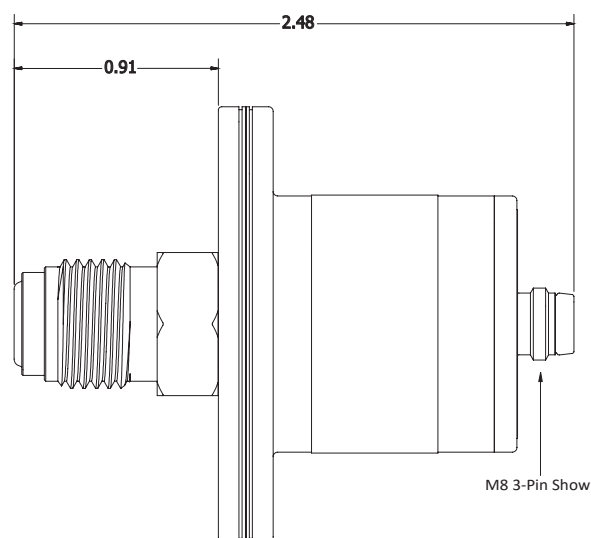
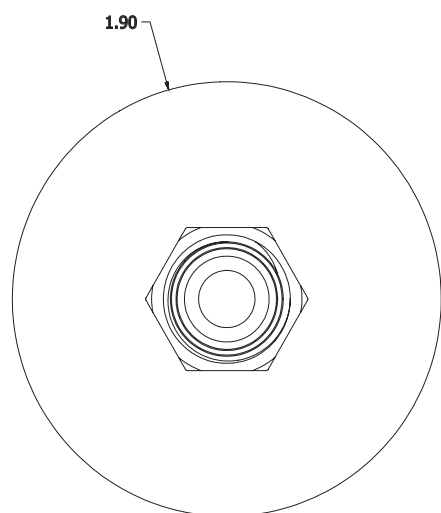
Operating Temperature	-20° to 60°C (-4° to 140°F)
Non-Operating Temperature	-40° to 100°C (-40° to 212°F)

Higher temperature constructions are available

TECHNICAL SPECIFICATIONS

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

UC9 DIMENSIONS



UC9 - 1/4" Male Face Seal (typical)