Diaphragm Valve





The AURA EXPVD Series diaphragm valve provides primary flow control in high-purity or corrosive gas systems. The packless, springless design enables compatibility in high-purity systems and extended lifecycle, while the Elgiloy diaphragm increases accuracy and repeatability even under harsh process conditions. The configurable inlet and outlets allow for easy installation and drop in replacement.

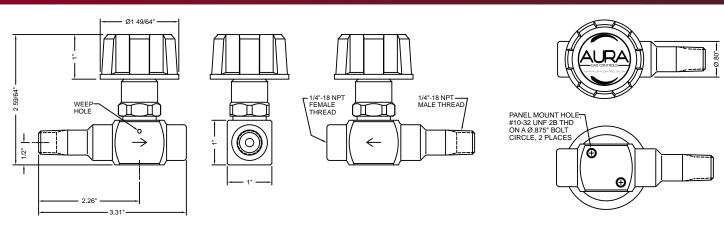
AURA's proprietary machining process enables the highest surface finish available in order to reduce corrosion. The EXPVD diaphragm valve is built as a complete assembly with all fittings and peripherals installed. The completed assembly is clean for oxygen service and is 100% helium leak checked. Additionally the diaphragm valve undergoes multiple flow and function tests. Available with Dursan® LS inert and anti-corrosive technology that provides superior corrosion resistance versus exotic metals in highly acidic and caustic applications, the AURA diaphragm valve ensures the highest level of purity and durability.

Diaphragm Valve Features

- 1. Elgiloy® diaphragm
 - · Improved accuracy and durability
- 2. Configurable inlets and outlets
 - Installation flexibility
- 3. Proprietary diaphragm configuration
 - · Compatibility in forward pressure and vacuum systems
- 4. Springless design
 - · Increased lifecycle
- 5. Machined vs forged body
- High surface Finish



Diaphragm Valve



Materials of Construction

	Brass	Stainless Steel	Fluorine Passivated	Dursan® LS	Chrome-plated Brass
Body	Brass	316L stainless steel	Fluorine passivated 316L stainless steel	Dursan LS	Chrome-plated brass
Valve Stem	304 stainless steel	304 stainless steel	304 stainless steel	304 stainless steel	304 stainless steel
Stem Nut	304 stainless steel	304 stainless steel	304 stainless steel	304 stainless steel	304 stainless steel
Seat	PCTFE	PCTFE	Fluorine passivated PCTFE	PCTFE	PCTFE
Diaphragm	Elgiloy®	Elgiloy	Fluorine passivated Elgiloy	Dursan LS	Elgiloy

Functional Specifications

Design Pressure	Working pressure: 3300 PSIG PCTFE Burst pressure: > 4x Working pressure	Cv	.17
Maximum Inlet Pressure (Valve only)	PCTFE (3300 PSIG)	Temperature	PCTFE: -40 to 140°F (-40 to 60°C)
Leak Rate	1x10 ⁻⁹ scc/sec	Weight (bare body)	.66 lbs (.3 kg)

Ordering Information



Digit 6- Material of Construction

2 = Brass

4 = Stainless steel

7 = Fluorine passivated

8 = Dursan LS

9 = Chrome-plated brass

Digit 10-11-Knob

01 = Chrome

BK = Black

BL = Blue

GN = Green

RD = Red

WT = White

Digit 14-15 Inlet Connection*

00 = None (1/4" female NPT)

01 = 1/4" Male NPT

02 = 1/4" Male NPT (extended leg)

03 = 1/8" Compression tube fitting

 $04 = \frac{1}{4}$ " Compression tube fitting

05 = 6mm compression tube fitting

Digit 18-19 Outlet Connection*

 $00 = \text{None} \left(\frac{1}{4}\right)$ female NPT)

01 = 1/4" Male NPT

02 = 1/4" Male NPT (extended leg)

03 = 1/8" Compression tube fitting

 $04 = \frac{1}{4}$ " Compression tube fitting

05 = 6mm compression tube fitting

*Compression tube fitting maximum pressure is limited by size and material.



