

# MINIATURE INERT ISOLATION VALVE

## 300 SERIES – 2 WAY & 3 WAY SOLENOID VALVES

### COMPONENT FEATURES

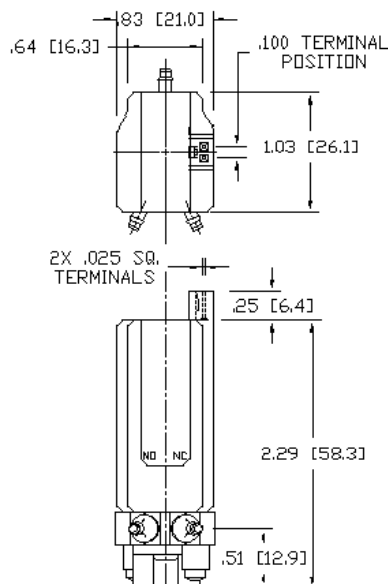
- Inert wetted materials provide broad chemical compatibility  
Valve Elements — PEEK (Polyetheretherketone)  
Diaphragms/Seals — Viton®-GF or EPDM
- Max pressure: 35 psig [2.4 bar] standard
- Flow rates: up to 1150 ml/min. of water or similar fluid  
up to 34 slpm of air or similar gas
- Integral diaphragm/poppet isolates flow path from solenoid
- Coil Encapsulation protects from corrosive external fluid exposure
- Suitable for high fluid temperatures — up to 230°F (110°C)
- Various port & manifold mounting options provide design flexibility
- Robust design, qualification tested to beyond 20 million cycles



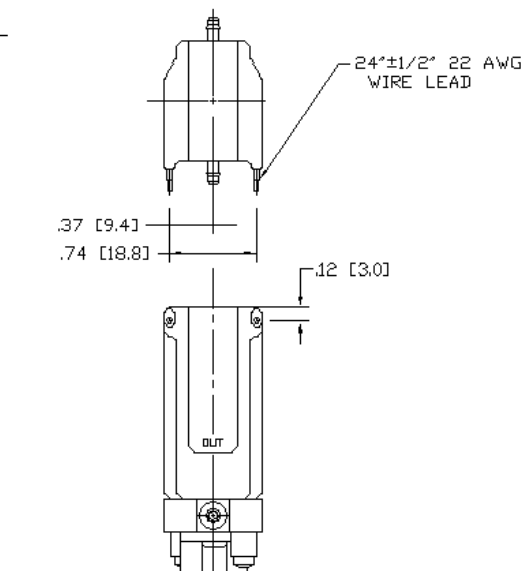
### TYPICAL FLUIDS:

- Blood & Bio-fluids
- Reagents & Solvents
- Ultra Pure Water
- Ethyl, Methyl Alcohols
- Sodium Hypochlorite
- Lye (Sodium Hydroxide)
- Ethylene Glycol
- Formaldehyde

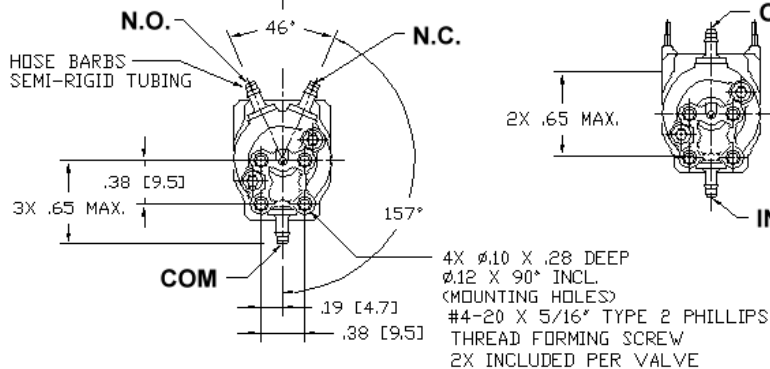
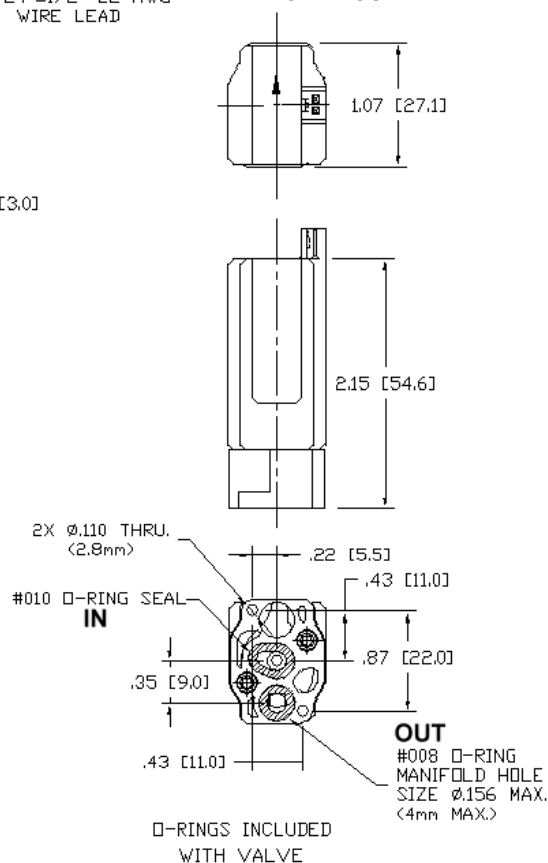
3-WAY VALVE WITH  
TERMINAL COIL OPTION



2-WAY VALVE WITH  
LEADWIRE COIL OPTION



2-WAY VALVE  
MANIFOLD MOUNT



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BULLETIN IV-406

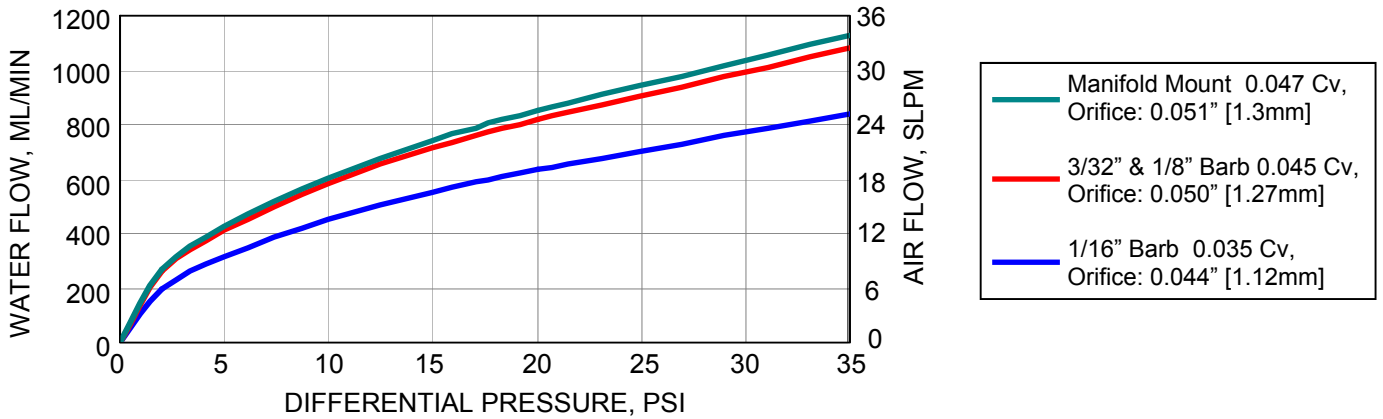
## 300 SERIES INERT ISOLATION VALVE SPECIFICATIONS

VALVE TYPE	OPERATING VOLTAGE	HOLDING VOLTAGE	DROPOUT VOLTAGE	MAX POWER	RESISTANCE	RESPONSE TIME	SEALING	INLET PRESSURE	MAX VACUUM
2-WAY N.C.	12 VDC	5.0 VDC	1.0 VDC	2.0 WATTS	72 OHMS	25 MSEC TYPICAL	BUBBLE TIGHT	35 PSIG [2.4 BAR]	24" HG [9.5 CM HG]
	24 VDC	9.0 VDC			288 OHMS				
2-WAY N.O.	12 VDC	5.0 VDC		3.5 WATTS	40 OHMS				
	24 VDC	9.0 VDC			165 OHMS				
3-WAY UNIVERSAL	12 VDC	5.0 VDC		40 OHMS					
	24 VDC	9.0 VDC		165 OHMS					
2-WAY MANIFOLD	12 VDC	5.0 VDC		40 OHMS					
	24 VDC	9.0 VDC		165 OHMS					

**Operating Temperature Range (Ambient):**  
-5°F to 150°F (-20°C to 65°C)

**Fluid Temperature Range:**  
-5°F to 230°F (-20°C to 110°C)

### FLOW VS PRESSURE DROP



### VALVE PART NUMBER SYSTEM

# 300

# 0

**Diaphragm Material:**

- 7. Viton® GF\*\*\*
- 8. EPDM

**Valve Type:**

- 1. 2-Way Normally Closed
- 2. 2-Way Normally Open
- 3. 3-Way Universal - Ported
- 4. 2-Way Manifold Mount

**Port Type:**

- 0. Manifold (No Barbs)
- 1. 1/16" Tube Barbs
- 2. 3/32" Tube Barbs
- 3. 1/8" Tube Barbs

**Solenoid:**

- 1. 12 VDC - Pin Connector<sup>1</sup>
- 3. 24 VDC - Pin Connector<sup>1</sup>
- 5. 12 VDC - Wire Leads<sup>2</sup>
- 7. 24 VDC - Wire Leads<sup>2</sup>



\*\*\*FKM-GF (Highly Fluorinated Viton®)  
Viton® is a registered trademark of Dupont, Inc.

<sup>1</sup>Mates with Tyco 640442-2 or Molex 22-01-2027  
<sup>2</sup>Standard wire leads - 22 AWG x 24" [610 mm]

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