

Series 99

Ultra-high leak integrity media resistant solenoid valves

FEATURES

- 2-way and 3-way configurations
- Performs at high speed
(opening response time ≤ 5 ms)
- Leak-tight to 1×10^{-8} cm³/s/atm Helium
- Provides ultra-high vacuum and high pressure
- Constructed of non-corrosive stainless steel
- Offers a variety of porting options
- Offers a high cycle life



MEDIA COMPATIBILITY

Liquids and gases

WETTED MATERIALS

Materials contacting media:
 PTFE, stainless steel, body, seals

Body:
 316L stainless steel

Seals:
 Vespel & silver-plated nickel gasket,
 FKM & silver-plated nickel gasket

ELECTRICAL

Power 12 W

Voltage 12, 24 V_{DC}

Current/Resistance ($\Omega \pm 5\%$ @ 21 °C)

12 V _{DC}	1000 mA/12 Ω
24 V _{DC}	500 mA/48 Ω

PHYSICAL PROPERTIES

Operating environment 4 to 105 °C

Weight (e.g. 3-way, 1/8" body) 88 g

Porting Vacuum fittings;
 A-Lok compression fittings

Internal volume various

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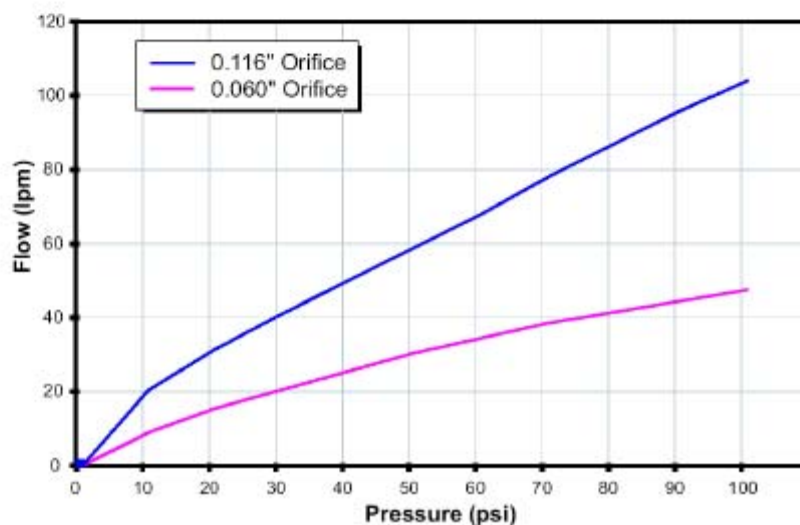
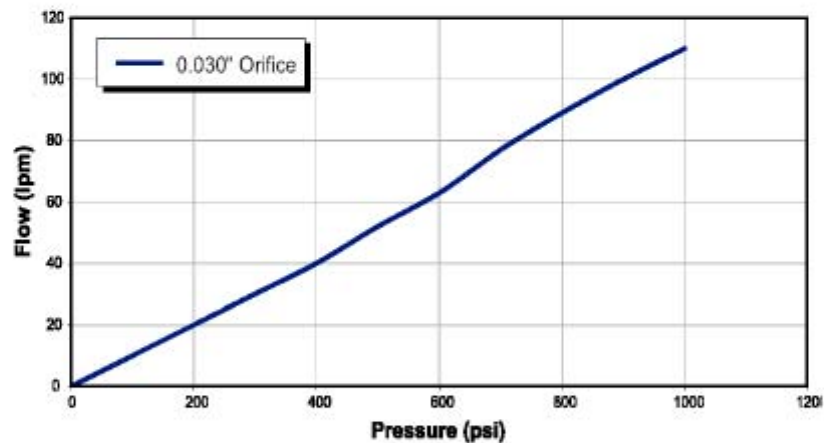
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PERFORMANCE CHARACTERISTICS

Part no.	Pressure	Orifice sizes	Leak rate*
See Ordering Information	Vacuum...86 bar (1250 psi)	0.030" (0.76 mm)	1 x 10 ⁻⁶ cm ³ /s/atm Helium
	Vacuum...17 bar (250 psi)	0.060" (1.52 mm)	
	Vacuum...7 bar (100 psi)	0.116" (2.99 mm)	

* Not rated for continuous duty at maximum temperature.

FLOW CURVES (typical air flow)

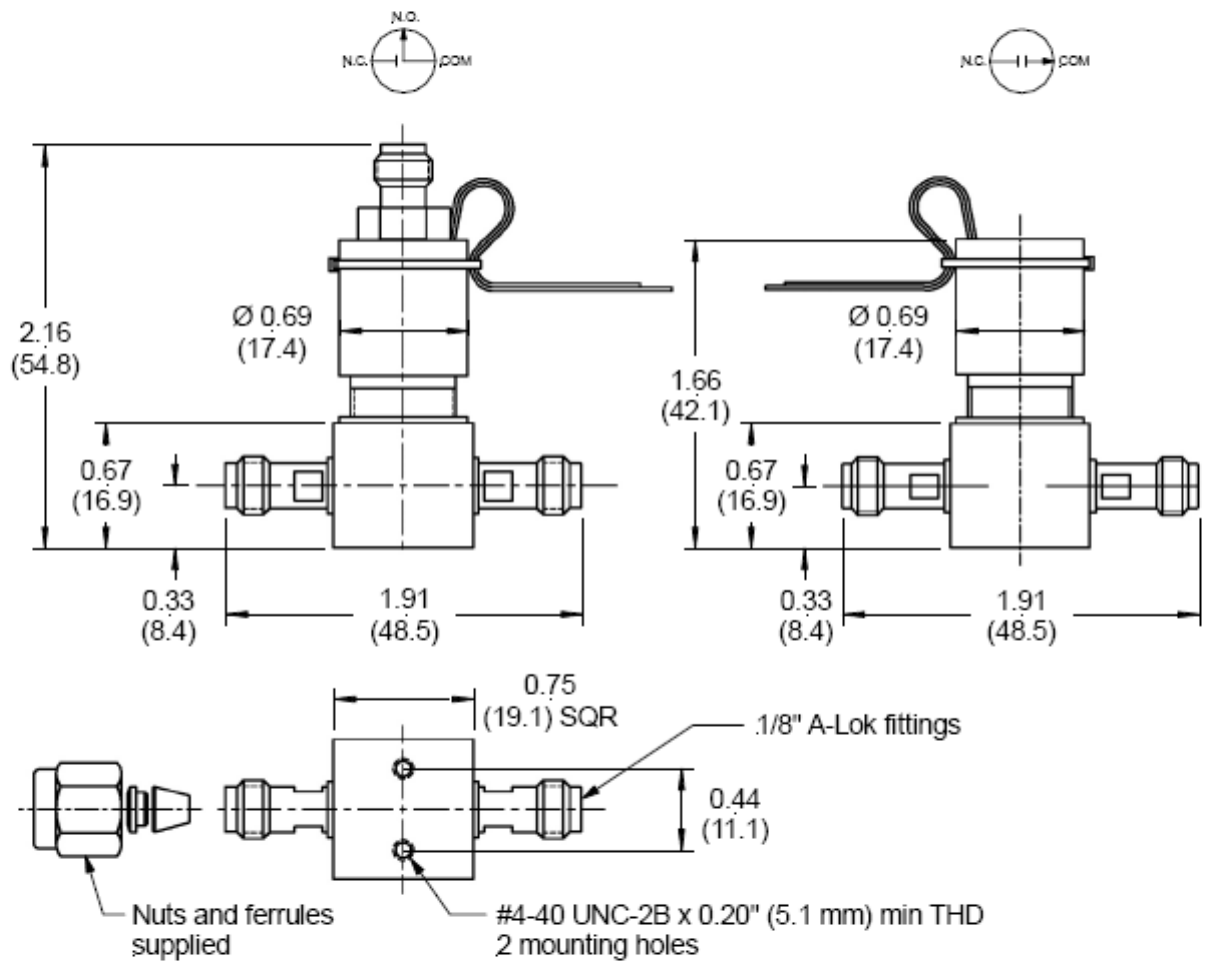


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OUTLINE DRAWING

Part No. 099-0135-900 and 099-0075-900 (3-way),
099-0080-900 (2-way NC)



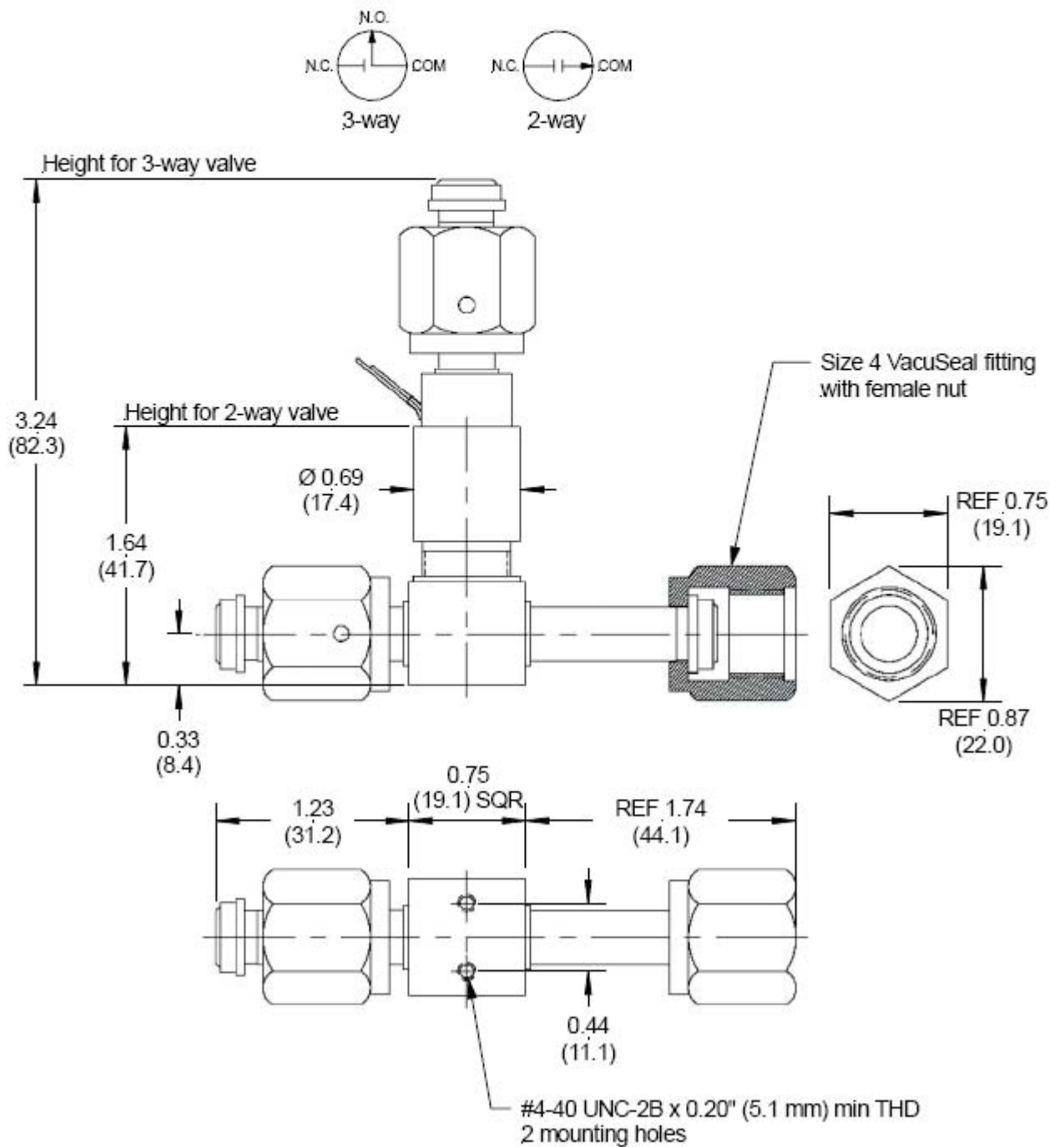
dimensions in inches (mm)

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OUTLINE DRAWING (cont.)

Part No. 099-0107-900 (3-way),
099-0167-900 (2-way NC)



dimensions in inches (mm)

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ORDERING INFORMATION

Part No.	Type	Operating Pressure	Orifice	Voltage	Porting	Seals
099-0051-900	2-way NC	Vac...86 bar (1250 psi)	0.76 mm (0.030")	12 V _{DC}	1/16" A-Lok	Vespel & gasket
099-0340-900				24 V _{DC}		
099-0080-900	3-way	Vac...17 bar (250 psi)	1.52 mm (0.060")	12 V _{DC}	1/8" A-Lok	FKM & gasket
099-0135-900		Vac...7 bar (100 psi)				
099-0075-900						
099-0107-900						
099-0167-900	2-way NC		2.99 mm (0.116")	24 V _{DC}	1/4" female VacuSeal	