

# Series 9 and 99 Pulse Valves

## High-performance media resistant solenoid valves

### FEATURES

- Flange mount, axial flow, 2-way normally closed valves
- Operates as fast as 2 ms (with IOTA ONE valve controller as fast as 160  $\mu$ s)
- Delivers repeatable pulses and high repetition rates
- Leak-tight to  $1 \times 10^{-8}$  or  $1 \times 10^{-7}$   $\text{cm}^3/\text{s}/\text{atm}$  Helium
- Constructed of non-corrosive stainless steel



### MEDIA COMPATIBILITY

Liquids and gases

### WETTED MATERIALS

**Body:**  
316L stainless steel

**Poppet:**  
PTFE, PEEK, PCTFE or Vespel

**O-ring (Series 9 only):**  
FFKM

**Gasket (Series 99 only):**  
Silver-plated nickel

### ELECTRICAL

Power	11.2, 12 W
Voltage	12, 20, 28 $V_{DC}$
Current/Resistance ( $\Omega \pm 5\%$ @ 21 $^{\circ}$ C)	
12 $V_{DC}$	1000 mA/12 $\Omega$
20 $V_{DC}$	594 mA/33 $\Omega$
28 $V_{DC}$	400 mA/70 $\Omega$

### PHYSICAL PROPERTIES

Operating environment	4 to 105 $^{\circ}$ C
Weight	approx. 80 g
Porting	1.3" standard or Conflat compatible flange, 1/4" A-Lok or VacuSeal fittings
Internal volume	various

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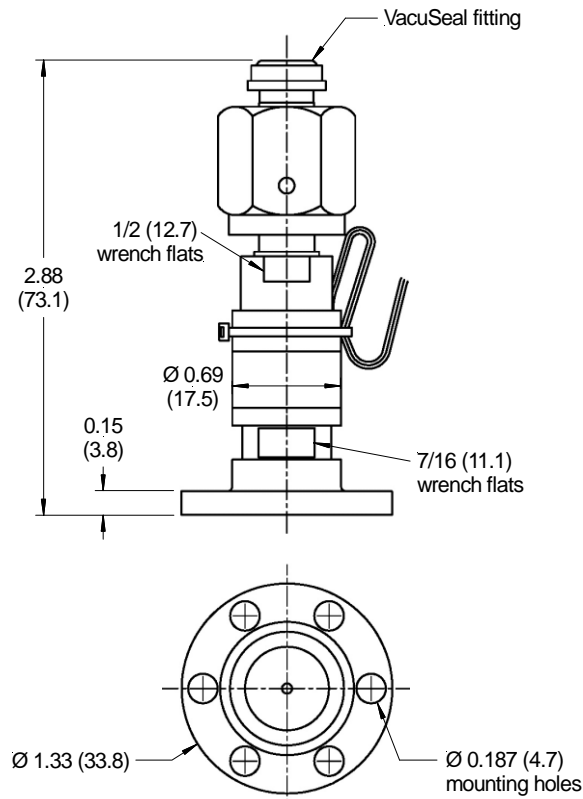
### PERFORMANCE CHARACTERISTICS

Part no.	Pressure	Orifice sizes <sup>1</sup>	Leak rate <sup>2</sup>
Contact Sensortechinics	Vacuum...86 bar (1250 psi)	0.002" (0.05 mm)	Series 9: 1 x 10 <sup>-7</sup> cm <sup>3</sup> /s/atm Helium
		0.004" (0.10 mm)	
		0.010" (0.25 mm)	
		0.020" (0.51 mm)	
		0.031" (0.79 mm)	
	Vacuum...50 bar (750 psi)	0.039" (0.99 mm)	Series 99: 1 x 10 <sup>-8</sup> cm <sup>3</sup> /s/atm Helium

1. Straight orifices (no cone) available in all diameters for flange and Mini-Conflat bodies.  
Cone shaped orifices only available in 0.020" and 0.031" diameters for flange bodies.
2. Not rated for continuous duty at maximum temperature.

### OUTLINE DRAWING

#### Series 99, Vacuseal, Mini-Conflat, no cone



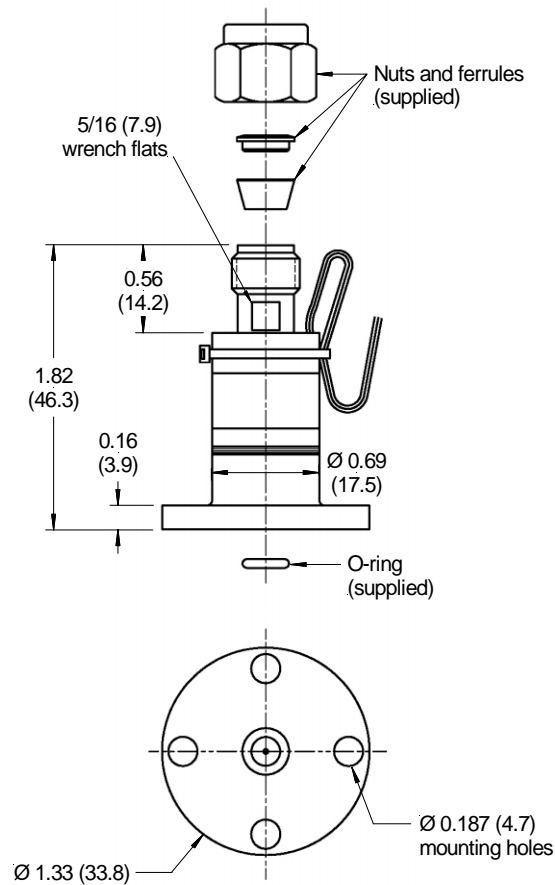
dimensions in inches (mm)

# Series 9 and 99 Pulse Valves

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### OUTLINE DRAWING (cont.)

Series 9, 1/4" A-Lok, standard flange, no cone



dimensions in inches (mm)

### ORDERING INFORMATION

Please contact your nearest Sensortechincs sales office for further information.

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