

## Series 9 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 µs)
- Delivers repeatable pulses and high repetition rates
- Leak-tight to  $1 \times 10^{-7} \text{ cm}^3/\text{s}/\text{atm}$  Helium
- Constructed of non-corrosive stainless steel



#### MEDIA COMPATIBILITY

Liquids and gases

#### WETTED MATERIALS

**Body:**  
316L stainless steel, PTFE

**Poppet:**  
PTFE or Vespel

**O-ring:**  
FFKM

#### ELECTRICAL

Power	11.2, 12 W
Voltage	20, 28 V <sub>DC</sub>
Current/Resistance ( $\Omega \pm 5\%$ @ 21 °C)	
20 V <sub>DC</sub>	594 mA/33 $\Omega$
28 V <sub>DC</sub>	400 mA/70 $\Omega$

#### PHYSICAL PROPERTIES

Operating environment	4 to 105 °C
Weight	approx. 80 g
Porting	1.3" standard flange, 1/4" A-Lok fittings
Internal volume	various

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### PERFORMANCE CHARACTERISTICS

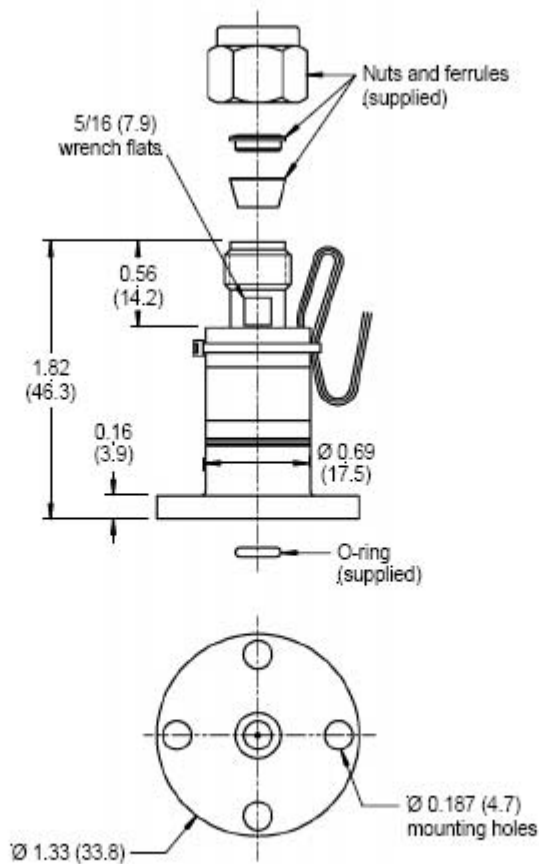
Part no.	Pressure	Orifice sizes <sup>1</sup>	Leak rate <sup>2</sup>
Refer to ORDERING INFORMATION	Vacuum...86 bar (1250 psi)	0.004" (0.10 mm)	$1 \times 10^{-7}$ cm <sup>3</sup> /s/atm Helium
		0.020" (0.51 mm)	
		0.031" (0.79 mm)	
	Vacuum...50 bar (750 psi)	0.039" (0.99 mm)	

**Notes:**

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

### OUTLINE DRAWING

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

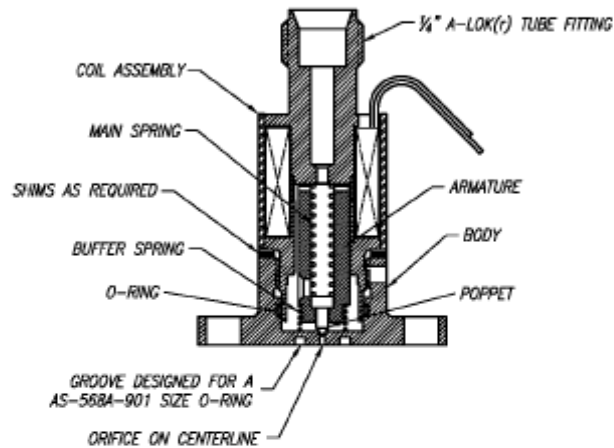


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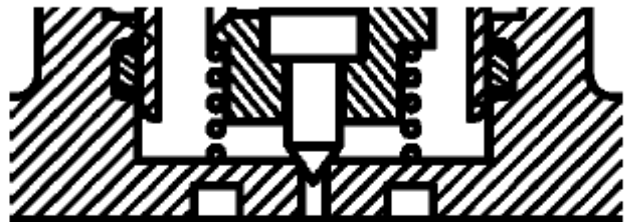
### CROSS SECTION

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

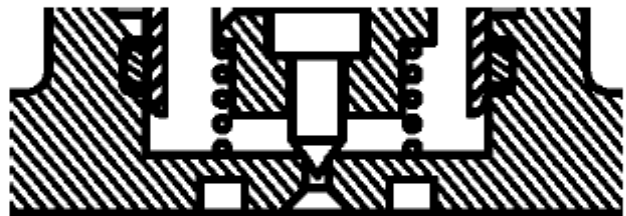


### OUTLET PORT DETAIL

No cone



With cone



### ORDERING INFORMATION

Part No.	Type	Operating Pressure	Orifice	Voltage	Porting (inlet/outlet)	Seals (poppet/O-ring)		
9S1-A1-P1-9B02	2-way NC	Vac...86 bar (1250 psi)	0.10 mm (0.004")	28 V <sub>DC</sub>	1/4" A-Lok, flange, no cone	PTFE & FFKM		
9S2-A1-P3-9B02				20 V <sub>DC</sub>		Vespel & FFKM		
9S2-A1-P3-9B04			28 V <sub>DC</sub>	PTFE & FFKM				
9S1-A1-P1-9B04			0.51 mm (0.020")	20 V <sub>DC</sub>	1/4" A-Lok, flange, with cone	Vespel & FFKM		
9S2-A1-P3-9B07				28 V <sub>DC</sub>		PTFE & FFKM		
9S1-A1-P1-9B07			0.79 mm (0.031")	20 V <sub>DC</sub>		Vespel & FFKM		
9S2-A1-P3-9B08		28 V <sub>DC</sub>		PTFE & FFKM				
9S1-A1-P1-9B08		Vac...50 bar (750 psi)	0.99 mm (0.039")	20 V <sub>DC</sub>	1/4" A-Lok, flange, no cone	Vespel & FFKM		
9S2-A1-P3-9B05						28 V <sub>DC</sub>	PTFE & FFKM	
9S1-A1-P1-9B05			28 V <sub>DC</sub>	0.99 mm (0.039")		20 V <sub>DC</sub>	1/4" A-Lok, flange, no cone	Vespel & FFKM
9S2-A1-P3-9B06					28 V <sub>DC</sub>			PTFE & FFKM
9S1-A1-P1-9B06					20 V <sub>DC</sub>			Vespel & FFKM
9S2-A1-P3-9B06	28 V <sub>DC</sub>		PTFE & FFKM					

**PARKER INFORMATION:**

Verfügbare Armaturen Stand 11/2010. Andere Kombinationen ab 50 Stk. erhältlich