Pressure Sensors PSF102 Series



RoHS Compliant



Features:

- Field adjustable set point ranges from 0.03" H₂O to 25 psi
- · High resolution / high accuracy field adjustment mechanism
- · Many standard ports and mounting options
- · Custom design and engineering available
- Miniature size, lightweight, low cost
- Dependable long life (20+ million cycles)
- · Gold contact points
- · PCB terminals available

Specifications:

Mechanical

Standard Tolerance	Varies by option – see Set Point Options			
Switch Type	SPST (single pole / single throw) normally open normally closed option			
Switching Medium	Air; compatible fluids on "High" port side			
Mechanical Life	More than 20 million cycles			
Max. Operating Pressure	Varies by option — see Set Point Options			
Operating Temperature	+40°F to +150°F (standard) -46°F to +205°F +50° - 86°F (700 range)			

Physical

Case Material	Polycarbonate (optional: Lexan 141, Ryton, Ultem®, Noryl®)				
Porting Options	Many standard ports — see Low Port / High Port Options				
Diaphragm Material	Polyurethane / Teflon® (other material options available)				
Contact Points	Gold				
Electrical Connections	Terminals – 0.187" × 0.020" spade (recessed) for use with quick disconnects uninsulated (ref. AMP Faston, #8-640917-1, 187 Series) (PCB terminals available)				
Mounting	#4 Screws through mounting lugs; #2 Screws through eyelets; mounting clip available				
Weight	Less than 10 grams				

Electrical

Current Rating	Up to 40mA resistive
Operating Voltage	AC/DC – 30V or less with resistive load; 120V AC neon lamp load

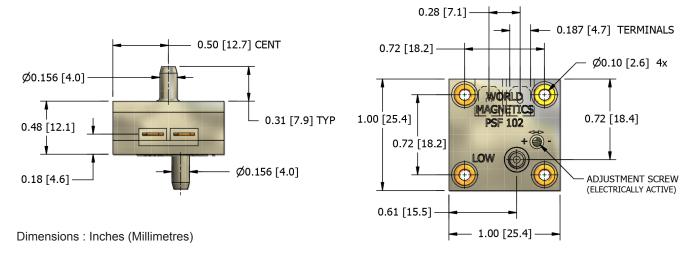
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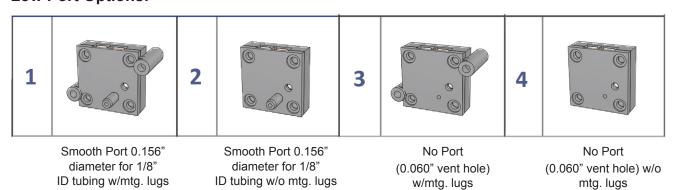
Diagram:



Set Point Options:

Characteristics	700	710	711	712	713	723	714
In. H ₂ O	0.03 to 0.1	0.1 to 0.5	0.5 to 2	2 to 15	15 to 60	60 to 100	100 to 692
mbar	0.07 to 0.25	0.25 to 1.25	1.25 to 4.98	4.98 to 37.36	37.36 to 149.5	149.5 to 249	249 to 1723.5
psi	0.001 to 0.004	0.004 to 0.018	0.018 to 0.072	0.072 to 0.542	0.542 to 2.17	2.17 to 3.61	3.61 to 25
Max. Operating Pressure	2psi	4psi	8psi	8psi	15psi	30psi	30psi
Tolerance	±0.03" H ₂ O	±0.1" H ₂ O	±0.2" H ₂ O	±0.5" H ₂ O	±10%	±10%	±10%
Diaphragm Material	PUR only	Teflon only	PUR or Teflon	PUR or Teflon	PUR or Teflon	PUR or Teflon	PUR or Teflon

Low Port Options:

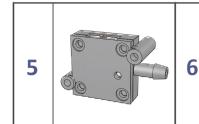


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Barbed Port for 3/16" ID tubing w/mtg. lugs



Barbed Port for 3/16" ID tubing w/o mtg. lugs

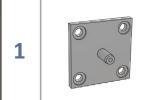


Barbed Port for 1/8" ID tubing w/mtg. lugs



Barbed Port for 1/8" ID tubing w/o mtg. lugs

High Port Options:



Smooth Port 0.156" diameter for 1/8" ID tubing



2

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Smooth Port 0.187" diameter for 5/32" ID tubing



4

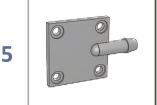
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Smooth Port 0.25" diameter for 7/32" ID tubing



1/8" NPT Port



Barbed Port for 3/16" ID tubing



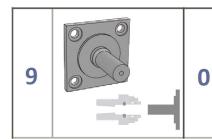
No Port (0.060" vent hole)



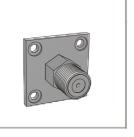
Flow-Thru Barbed Port for 1/8" ID tubing



Barbed Port for 1/8" ID tubing



1/4" Port for Quick Connect Fitting



M8 x 1.25 Port

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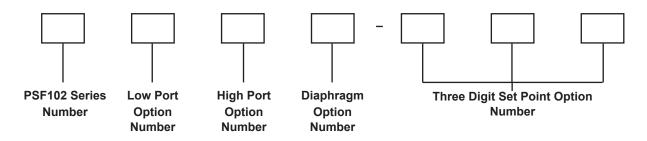
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Diaphragm Options:

- 1 Polyurethane (standard)
- 2 Teflon (optional)

Part Number Explanation:



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