

E41523

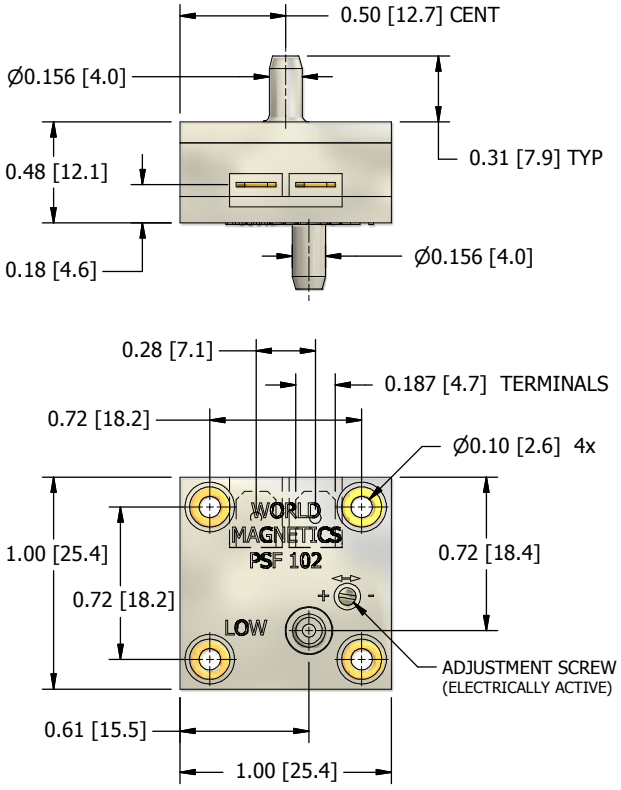
Made in USA

RoHS

FEATURES / BENEFITS

- Field adjustable set point ranges — from 0.03" H_2O 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

MODEL 721X-XXX SHOWN





SPECIFICATIONS

MECHANICAL	
Standard Tolerance	Varies by option – see Set Point Options overleaf
Switch Type	SPST (single pole / single throw) normally open normally closed option — contact us
Switching Medium	Air; compatible fluids on "High" port side
Mechanical Life	More than 20 million cycles
Maximum Operating Pressure	Varies by option — see Set Point Options overleaf
Operating Temp.	+40°F to +150°F (standard) | -46°F to +205°F (contact us) +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 overleaf
Diaphragm Material	Polyurethane / Teflon® (other material options available)
Contact Points	Gold
Electrical Connections	Terminals – .187"x.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; 120 VAC neon lamp load

Note: For higher load capabilities see our PSF103, PSF109 and Goldtech series switches.

DESIGNFLEX STANDARD OPTIONS

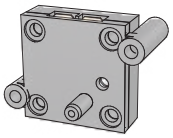
World Magnetics' exclusive DesignFlex™ feature allows you to quickly custom design a proven pressure, vacuum or differential switch for your application. Choose from our standard PSF102 options as shown or contact our vertically integrated in-house design and engineering team for special features.

SET POINT OPTIONS

	700	710	711	712	713	723	714
In. H_2O	0.03 to 0.1	0.1 to 0.5	0.5 to 2.0	2.0 to 15.0	15.0 to 60.0	60.0 to 100.0	100.0 to 692.0
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 249.0	249.0 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 25.0
Maximum Operating Pressure	2psi	4psi	8psi	8psi	15psi	30psi	30psi
Tolerance	+/- 0.03" H20	+/- 0.1" H_2O	+/- 0.2" H_2O	+/- 0.5" H_2O	+/- 10%	+/- 10%	+/- 10%
Diaphragm Material	PUR only	Teflon only	PUR or Teflon	PUR or Teflon	PUR or Teflon	PUR or Teflon	PUR or Teflon

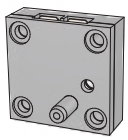
LOW PORT OPTIONS

1



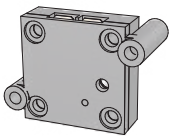
Smooth Port .156" diameter for 1/8" ID tubing w/mtg. lugs

2



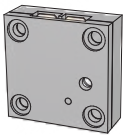
Smooth Port .156" diameter for 1/8" ID tubing w/o mtg. lugs

3



No Port (.060" vent hole) w/mtg. lugs

4



No Port (.060" vent hole) w/o mtg. lugs

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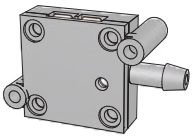
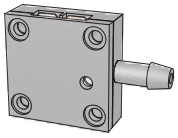


Barbed Port for 3/16" ID tubing w/mtg. lugs

6



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

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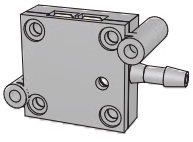

Barbed Port for 1/8" ID tubing w/mtg. lugs

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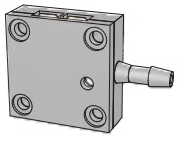
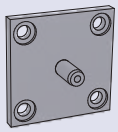


Barbed Port for 1/8" ID tubing w/o mtg. lugs

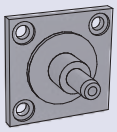
HIGH PORT OPTIONS

1



Smooth Port .156" diameter for 1/8" ID tubing

2



Smooth Port .187" diameter for 5/32" ID tubing

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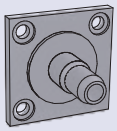
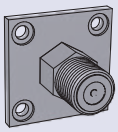


Smooth Port .250" diameter for 7/32" ID tubing

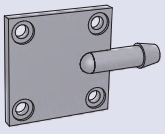


4



1/8" NPT Port

5



Barbed Port for 3/16" ID tubing

Diaphragm Options

1 Polyurethane (standard)

2 Teflon (optional)

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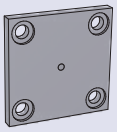
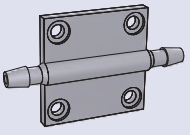


No Port (.060" vent hole)

7



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

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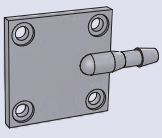
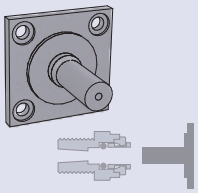


Barbed Port for 1/8" ID tubing

9



1/4" Port for Quick Connect Fitting

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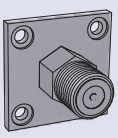

M8 x 1.25 Port

Model Design Guide

For building standard model order number

PSF102 Series Number	Low Port Option Number	High Port Option Number	Diaphragm Option Number	Three Digit Set Point Option Number		
7			—			

www.designflexswitches.com

PSF102 SERIES