



FEATURES / BENEFITS

- Many standard port and mounting options
- Custom design and engineering available
- Miniature size, lightweight, low cost
- Quick response time
- Dependable long life (20+ million cycles)
- Gold contact points
- PCB terminals available
- Factory set, tamper proof



SPECIFICATIONS

MECHANICAL

Standard Tolerance	±20% (Tighter tolerances available)
Switch Type	SPST normally open
Switching Medium	Air; compatible fluids on “High” port side
Mechanical Life	More than 20 million cycles
Maximum Operating Pressure	8psi: for units where set point is 3.0” H ₂ O or less 15psi: for units where set point is greater than 3.0” H ₂ O 8psi: for units with Teflon® diaphragm
Operating Temp.	+40°F to +150°F (standard) -46°F to +205°F (contact us)

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"×.020" tab-type (bifurcated), for use with quick disconnects (ref. AMP 2-520182-2 or equivalent) .020"×.060" (PCB terminals available)
Mounting	#4 Screws through mounting lugs; #2 Screws through eyelets; mounting clip available for specific port arrangement only
Weight	Less than 10 grams

ELECTRICAL

Current Rating	40mA resistive for life in excess of 20 million cycles
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.



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 PSF101 options as shown below or contact our vertically integrated in-house design and engineering team for special features and unique application needs. Sample switch available by request.

SET POINT OPTIONS

	005	010	015	020	030	040	060	080	100	120	150	200	300	400	500
In. H ₂ O	0.1 - 0.5	1.0	1.5	2.0	3.0	4.0	6.0	8.0	10.0	12.0	15.0	20.0	30.0	40.0	50.0
mbar	0.25 - 1.25	2.49	3.73	4.98	7.47	9.96	14.95	19.92	24.91	29.91	37.36	49.76	74.73	99.63	124.59
psi	0.004 - 0.018	0.036	0.054	0.072	0.108	0.144	0.217	0.289	0.361	0.433	0.541	0.722	1.083	1.444	1.804

LOW PORT OPTIONS

HIGH PORT OPTIONS

1		2		1		2		3	
	Smooth Port .156" diameter for 1/8" ID tubing w/mtg. lugs		Smooth Port .156" diameter for 1/8" ID tubing w/o mtg. lugs		Smooth Port .156" diameter for 1/8" ID tubing		Smooth Port .187" diameter for 5/32" ID tubing		Smooth Port .250" diameter for 7/32" ID tubing
3		4		5		4		5	
	Smooth Port .250" diameter for 7/32" ID tubing w/mtg. lugs		Smooth Port .250" diameter for 7/32" ID tubing w/o mtg. lugs		Barbed Port for 3/16" ID tubing w/mtg. lugs		1/8" NPT Port		Barbed Port for 3/16" ID tubing
6		7		8		6		7	
	Barbed Port for 3/16" ID tubing w/o mtg. lugs		No Port (.060" vent hole) w/mtg. lugs		No Port (.060" vent hole) w/o mtg. lugs		No Port (.060" vent hole)		Flow-Thru Barbed Port for 3/16" ID tubing
9		0		Diaphragm Options 1 Polyurethane (standard) 2 Teflon (optional)		8		9	
	Barbed Port for 1/8" ID tubing w/mtg. lugs		Barbed Port for 1/8" ID tubing w/o mtg. lugs				Barbed Port for 1/8" ID tubing		1/4" Port for Quick Connect Fitting

Model Design Guide

For building standard model order number

PSF101 Series Number

Low Port Option Number

High Port Option Number

Diaphragm Option Number

Three Digit Set Point Option Number

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