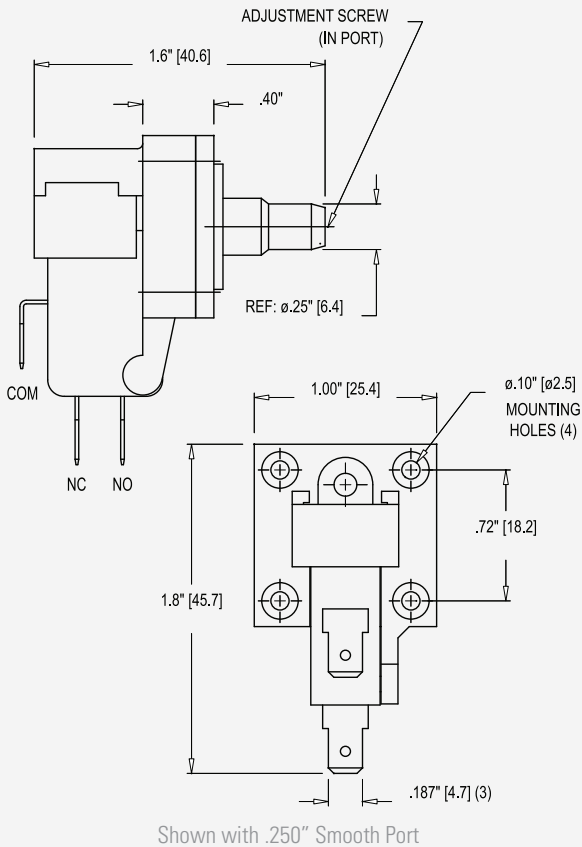




Made in USA

RoHS



FEATURES / BENEFITS

- **Controllable hysteresis (deadband)** (see diagram on page 19)
- **Field adjustable vacuum set point, from -3" H₂O to -12 psi** (-2" H₂O available as fixed set point)
- **Snap action basic switch, up to 25A*, 125/250 VAC**
*Not available on all ranges
- **.250" diameter; 1/8" NPT; or 1/4" Quick Connect Fitting port**
- **Custom design and engineering available**
- **Small size, lightweight, low relative cost**
- **Dependable long life (10+ million cycles)**



SPECIFICATIONS

MECHANICAL

Standard Tolerance	±20% (Tighter tolerances available)
Switch Type	SPDT normally open or normally closed
Switching Medium	Air; compatible fluids
Mechanical Life	More than 10 million cycles
Operating Temp.	+40°F to +150°F (standard) -46°F to +205°F (contact us)

PHYSICAL

Case Material	Polycarbonate (optional: Lexan 141, Supec®, Ultem®, Noryl®)
Vacuum Port Options	.250" diameter, 1/8" NPT, Quick Connect Fitting Port
Diaphragm Material	Polyurethane (Teflon® optional)
Contact Points	Silver (Gold available on special order)

Electrical Connections	Terminals – .187"x.020" tab-type for use with quick disconnects (ref. AMP #2-520182-2 or equivalent) .250" available - contact us
Mounting	#2 Screws through eyelets; mounting bracket available (see page 15)
Weight	Less than 20 grams

ELECTRICAL

Current Rating	Varies by option – see Adjustable Vacuum Set Point Options next page
Operating Voltage	125/250 VAC– see Adjustable Vacuum Set Point Options (next page)

The versatile high-current PSF109S vacuum switch offers a controllable hysteresis (deadband); a wide-range field adjustable set point; snap action; and choice of standard vacuum port design options. For custom applications, our in-house design and engineering team provide rapid prototyping and manufacturing turnaround.

PSF109S SERIES

ADJUSTABLE VACUUM SET POINT / PORT / ELECTRIC RATING OPTIONS

	20161	20901	21472	20112	20890	21473	20623	20897	21474
Description	109S-3-8	109S-NPT-3-8	109S-QC-3-8	109S-9-80	109S-NPT-9-80	109S-QC-9-80	109S-81-330	109S-NPT-81-330	109S-QC-81-330
- In. Hg	.2205 to .5878	.2205 to .5878	.2205 to .5878	.6613 to 5.878	.6613 to 5.878	.6613 to 5.878	5.951 to 24.25	5.951 to 24.25	5.951 to 24.25
- In. H ₂ O	3 to 8	3 to 8	3 to 8	9 to 80	9 to 80	9 to 80	81 to 330	81 to 330	81 to 330
- mbar	8 to 20	8 to 20	8 to 20	21 to 199	21 to 199	21 to 199	200 to 822	200 to 822	200 to 822
- psi	0.1 to 0.3	0.1 to 0.3	0.1 to 0.3	0.3 to 2.9	0.3 to 2.9	0.3 to 2.9	2.9 to 11.9	2.9 to 11.9	2.9 to 11.9
Port Style	.250" dia.	1/8" NPT	1/4" QC	.250" dia.	1/8" NPT	1/4" QC	.250" dia.	1/8" NPT	1/4" QC
Electrical 125/250 VAC	3A	3A	3A	10A	10A	10A	15A	15A	15A

FREE SAMPLE SWITCH available by request – Call 1-800-643-3884

SWITCH ACCESSORIES

We carry a variety of pressure switch product accessories. Our most popular are listed below. For more information about our full line of accessories, please contact us or visit our web site.

MOUNTING CLIP Part# 70012

The Mounting Clip can be used with models PSF100A, PSF101 or PSF102 Series switches. The universal clip also allows interchangeability with other products. Double-sided tape included.



MOUNTING BRACKET Part# 70018

The Mounting Bracket can be used with our PSF100A, PSF101, PSF102, PSF103, PSF109 or PS160 Series switches. The bracket also allows interchangeability with other products.



RIGHT-ANGLE MOUNTING BRACKET Part# 70019

The Right-Angle Mounting Bracket can be used with our PSF100A, PSF101, PSF102, PSF103, PSF109 or PS160 Series switches. The bracket also allows interchangeability with other products.



TERMINAL CONNECTORS

Part# 70000 Compatible with PSF100A, PSF101, PSF103, & PSF109 Series.

Amp part #2-520182-2 or equivalent.

Part# 70005 Compatible with PSF102 Series. Amp part #8-640917-1 or equivalent.



PRECISION ADJUSTMENT TOOLS

Part# 70015 Precision adjustment screwdriver for field adjustable DesignFlex™ switches.

1/32 inch, Slotted blade, Instrument quality.

Part# 70013 Precision Allen wrench for field adjustable DesignFlex™ and Goldtech™ switches.



www.designflexswitches.com

PSF109S SERIES

ALSO AVAILABLE: Port Couplings | Port Fittings | Polyurethane Tubing | Tools