



### DESCRIPTION

A simple and common pressure switch utilizing a polyimide diaphragm for extended duty applications. It is used in many automotive applications for monitoring of engine functions and auxiliary devices.

### FEATURES

- Gold plated silver alloy contacts
- High current ratings
- Works well in extreme temperatures
- Very economical

### APPLICATIONS

- Oil pressure switch
- Fuel pressure switch
- Exhaust pressure switch
- Air brake switch

### Specifications

Electrical	Resistive	Inductive
	15 AMP - 6 VDC	1 AMP - 120 VAC
	8 AMP - 12 VDC	0.5 AMP - 240 VAC
	4 AMP - 24 VDC	
Switch Type	Blade Contact	
Protection	Terminals - IP00	
Temperature Range	-40°F to 248°F (-40°C to 120°C) Polyimide Film	
Mechanical Range	1,000,000 Cycles @ 75 PSI (5.2 BAR)	
Diaphragm Material	Standard: Polyimide Film Optional: EPDM (must be selected when in contact with water)	
Housing Material	Brass, Glass Reinforced Polyester (Optional Stainless Steel)	
Maximum Overpressure	Model 1A to 5A - 150 PSI (3.5 BAR) Model 6A to 8A - 250 PSI (17 BAR) Model 1H to 5H - 500 PSI (34 BAR)	
Weight	0.14 lbs (0.06 kg)	

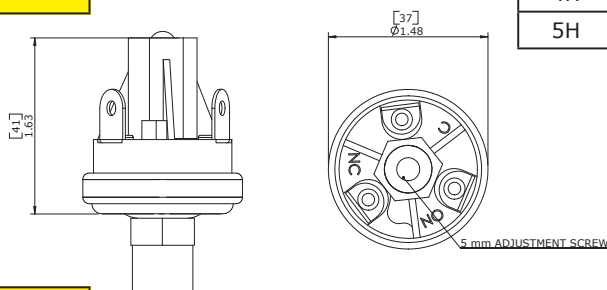
### Pressure Range

Model	Adjustment Range	
	PSI	BAR
1A	0.5 - 1.0	0.03 - 0.07
2A	1.1 - 3.0	0.08 - 0.21
3A	3.1 - 7.0	0.21 - 0.49
4A	8.0 - 13	0.55 - 0.90
5A	14 - 24	0.97 - 1.65
6A	25 - 50	1.72 - 3.45
7A	51 - 90	3.52 - 6.20
8A	91 - 150	6.27 - 10.34

\* Model 1H to 5H has an overpressure of 500 PSI

Model	Adjustment Range	
	PSI	BAR
1H	10 - 35	0.69 - 2.41
2H	35 - 75	2.41 - 5.17
3H	75 - 150	5.17 - 10.34
4H	150 - 250	10.34 - 17.24
5H	250 - 400	17.24 - 27.58

### Dimensions



### Wiring Code

CONTACT	FLYING LEADS	DIN 43650 TYPE	FLWF / FLWM FLCM / FLCF / FLPM / FLPF		FLDR / FLDP	
			SPDT MODEL	SPST MODEL	SPDT MODEL	SPST MODEL
COMMON	BLACK	PIN 1	PIN A	PIN A	PIN A	PIN 1
NORMALLY CLOSED	BLUE	PIN 2	PIN C	PIN B	PIN C	PIN 2
NORMALLY OPEN	RED	PIN 3	PIN B	PIN B	PIN B	PIN 2

# SPAL / SPFL / SPFLH



## Ordering Information

Field Adjustable

1 2 3 4 5 (Optional)  
**SPAL** - **2A** - **2M** - **B** - **FL** - **3**

Factory Preset

1 2 3 4 5 (Optional)  
**SPFL** - **30F** - **2M** - **B** - **FL** - **3**

Factory Preset

1 2 3 4 5 (Select this ordering code if you require a factory set switch with the high overpressure option.)  
**SPFLH** - **30F** - **2M** - **B** - **FL** - **3**

### 1 - Pressure Selection:

Field Adjustable - Select Model Code

Model	Adjustment Range	
	PSI	BAR
<b>1A</b>	0.5 - 1.0	0.03 - 0.07
<b>2A</b>	1.1 - 3.0	0.08 - 0.21
<b>3A</b>	3.1 - 7.0	0.21 - 0.49
<b>4A</b>	8.0 - 13	0.55 - 0.90
<b>5A</b>	14 - 24	0.97 - 1.65
<b>6A</b>	25 - 50	1.72 - 3.45
<b>7A</b>	51 - 90	3.52 - 6.20
<b>8A</b>	91 - 150	6.27 - 10.34
<b>1H</b>	10 - 35	0.69 - 2.41
<b>2H</b>	35 - 75	2.41 - 5.17
<b>3H</b>	75 - 150	5.17 - 10.34
<b>4H</b>	150 - 250	10.34 - 17.24
<b>5H</b>	250 - 400	17.24 - 27.58

Insert set point value XXXX followed by: R, F, BR, or BF

OR

Set Point	Direction	Description
XXXX	<b>R</b>	PSI Rising Pressure
	<b>F</b>	PSI Falling Pressure
	<b>BR</b>	BAR Rising Pressure
	<b>BF</b>	BAR Falling Pressure

\*If you require a factory preset switch with an overpressure higher than 250 PSI, please select the model code SPFLH.

### 2 - Thread Options:

- 2M** - 1/8 NPT male
- 4M** - 1/4 NPT male
- 2G** - 1/8 BSPP male, G1/8
- 4G** - 1/4 BSPP male, G1/4

### 3 - Circuit:

- A** - SPST (Normally Open)
- B** - SPST (Normally Closed)
- D** - SPDT (Single Pole Double Throw : Normally Open and Normally Closed)
- E** - SPDT (Single Pole Double Throw, Adjustable Differential)

### 4 - Electrical Termination:

- FL** - Flying Lead 18" long, 18 AWG
- FLWF** - Flying Lead Weatherpack connector, female, Tower, 10" long leads
- FLWM** - Flying Lead Weatherpack connector, male, Shroud, 10" long leads
- FLDP** - Flying Lead Deutsch connector, plug, 10" long leads
- FLDR** - Flying Lead Deutsch connector, receptacle, 10" long leads
- FLCM** - Flying Lead Metripack, male, 150 series, 10" long leads
- FLCF** - Flying Lead Metripack, female, 150 series, 10" long leads
- FLPM** - Flying Lead Metripack, male, 280 series, 10" long leads
- FLPF** - Flying Lead Metripack, female, 280 series, 10" long leads
- SP** - 1/4" Spade
- TS** - Terminal Screws, #8-32



### 5 - Options (Omit if not required):

- 2** - EPDM Diaphragm
- 3** - Stainless Steel Housing
- 20** - Seal Adjustment Screw
- 30** - Rubber Boot - Removable

Note: Please see page 51 for other available options