

SMA / SMF



DESCRIPTION

The SMA pressure switch is ideal for many hydraulic and pneumatic applications. It utilizes a proven piston/ diaphragm design to provide excellent accuracy and high proof pressures with zero leakage. Any flying leads are available with IP67 rating "CA" & "CS" option, making it an exceptional product for outdoor environments.

FEATURES

- Snap action micro switch ٠
- Factory set or field adjustable •
 - Diaphragm/piston design for
 - longevity
 - Wide adjustment range

3A [250 VAC]

High proof pressures

APPLICATIONS

- Hydraulic system control
- Material handling equipment
- Lubrication systems ٠
- Garbage compactors

* UL	available	for	certain	models	

		са		

Electrical

Switch Type

Protection

Media Temperature Range

Ambient Temperature Range

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9	DE		Ca	115

S							
	0		 -	-	0	-	
					U	5	
_	-	~	 -	 	~	 -	

Pressure Range						
Model	Adjustmen	t Range				
Model	PSI	BAR				
3	10 - 35	0.7 - 2.4				
4	30 - 120	2.0 - 8.0				
5	75 - 300	5.2 - 21				
6	300 - 1200	21 - 83				
7	1000 - 3000	69 - 207				
8	2000 - 5000	138 - 345				

Dimension						
Dimension						
	[50]					
Weight	0.37 lbs (0.17 kg)	ADJUSTMEN				
Differential	7 - 30% of setting	5/64" ALLEI				
Repeatability	+/- 2% of full set point range at 20°C (68°F)					
Maximum Overpressure	9000 PSI (620 BAR) 4700 PSI (324 BAR) for SMA-3 model					
Housing Material	Zinc Plated Steel (Optional Stainless Steel)					
Diaphragm Material	Standard: Nitrile Optional: Viton, EPDM, HNBR					
Mechanical Life Expectancy	1,000,000 Cycles @ 1000 PSI (69 BAR)					

95

5A [12/24 VDC, 125 VAC] or

Optional: 10A or Gold Contact

DIN 43650A (18 mm): IP65

Flying Lead with CA/CS: IP67

Nitrile: -20°F to 180°F (-29°C to 82°C)

HNBR: -20°F to 248°F (-29°C to 120°C) EPDM:-20°F to 248°F (-29°C to 120°C)

-40°F to 180°F (-40°C to 82°C)

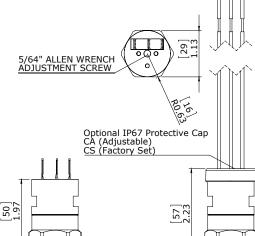
(-5°C to 120°C)

Snap Action

Spades: IP00

Flying Lead: IP64

Viton: 23°F to 248°F



Wiring	g Code		HC DIN 43650/	4	SP 1/4" Spades	FL Flying Leads	
CONTACT	FLYING LEADS	DIN 43650 TYPE	FLWF / FLCM / FLCF /		FLDR	/ FLDP	
	LEADO		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	



SMA / SMF

Adjustment Range

BAR

0.7 - 2.4

2.0 - 8.0

5.2 - 21

21 - 83

69 - 207

138 - 345

PSI

10 - 35

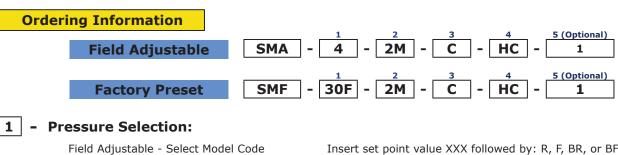
30 - 120

75 - 300

300 - 1200

1000 - 3000

2000 - 5000



	Set Point	Direction	Description
OR	xxxx	R	PSI Rising Pressure
		F	PSI Falling Pressure
		BR	BAR Rising Pressure
		BF	BAR Falling Pressure

2 **Thread Options:**

2M - 1/8 NPT male

Model

3

4

5

6

7

8

- **4M** 1/4 NPT male
- 1/8 BSPP male, G1/8 2G
- **4G** - 1/4 BSPP male, G1/4
- **4S** - 7/16-20 SAE male, with O-ring seal
- **4SLN** 7/16-20 SAE male, with O-ring seal, adjustable
- **6S** 9/16-18 SAE male, with O-ring seal
- M10 M10 X 1.0 male, with O-ring seal (ISO 6149-2)
- M12 M12 X 1.5 male, with O-ring seal (ISO 6149-2)

3 - Circuit:

- Δ - SPST (Normally Open)
- В - SPST (Normally Closed)
- С - SPDT (Single Pole Double Throw : Normally Open and Normally Closed)

4 **Electrical Termination:** -

- HC - DIN 43650A - connector type (only available in SPDT option)
- HN DIN 43650A 1/2" NPT Conduit (only available in SPDT option)
- 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
- $\ensuremath{\textbf{FLDR}}$ 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

5 - Options (Omit if not required):

- 1 - Viton® Diaphragm
- 2 - EPDM Diaphragm
- 3 - 316 Stainless Steel Housing
- 4 - HNBR Diaphragm
- 7 - Gold Contact, Snap Action Microswitch @ 20 mA/12 VDC 8
 - 10 amp, Snap Action Microswitch @ 10(2) 125 VAC (inductive), 6(2) 250 VAC (inductive)
- 20 Seal Adjustment Screw
- **OC** Oxygen Cleaned
- SR Snubber
- IP67 rated protective cover with a removable plug (For adjustable switches SMA flying lead model) CA
- IP67 rated protective cover (For factory set switches, SMF flying lead model) CS

Note: Please see page 63 for other available options