

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
- Factory set or field adjustable
- Diaphragm/piston design for longevity
- Wide adjustment range
- High proof pressures

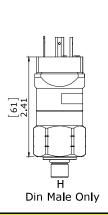
APPLICATIONS

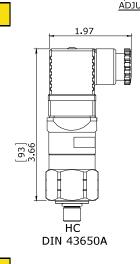
- Hydraulic system control
- Material handling equipment
- Lubrication systems
- Garbage compactors

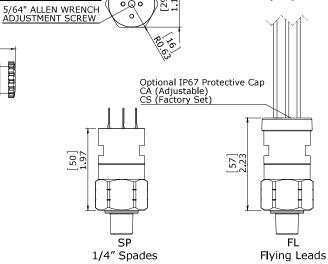
Specificatio	ns		
Electrical	5A [12/24 VDC, 125 VAC] or 3A [250 VAC] Optional: 10A or Gold Contact		
Switch Type	Snap Action		
Protection	DIN 43650A - IP65, Terrminals - IP00 CA/CS - IP67		
Temperature Range	-20°F to 180°F (-29°C to 82°C) Nitrile		
Mechanical Range	1,000,000 Cycles @ 1000 PSI (69 BAR)		
Diaphragm Material	Standard: Nitrile Optional: Viton, EPDM, HNBR		
Housing Material	Zinc Plated Steel (Optional Stainless Steel)		
Maximum Overpressure	9000 PSI (620 BAR) 4700 PSI (324 BAR) for SMA-3 model		
Repeatability	+/- 2% of full set point range at 20°C (68°F)		
Differential	7 - 30% of setting		
Weight	0.37 lbs (0.17 kg)		

Pressure Range			
Model	Adjustment Range		
	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	

Dimensions







Wiring Code

CONTACT	FLYING LEADS	DIN 43650 TYPE	FLWF / FLWM FLCM / FLCF / FLPM / FLPF		FLDR / FLDP	
	LLADS		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

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Ordering Information

Field Adjustable

Factory Preset

1 **Pressure Selection:**

Field Adjustable - Select Model Code

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

BF

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

BAR Falling Pressure

	Adjustment 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	
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2 - Thread Options:

- 1/8 NPT male

4M - 1/4 NPT male

- 1/8 BSPP male, G1/8 2G

- 1/4 BSPP male, G1/4

= 7/16-20 SAE male, with O-ring seal

4SLN - 7/16-20 SAE male, with O-ring seal, adjustable

= 9/16-18 SAE male, with O-ring seal

M10 - M10 X 1.0 male (ISO 9974)

M12 - M12 X 1.5 male (ISO 9974)

3 - Circuit:

- SPST (Normally Open)

- SPST (Normally Closed)

- SPDT (Single Pole Double Throw: Normally Open and Normally Closed)

4 - Electrical Termination:

DIN 43650A - connector type (only available in SPDT option)

HN - DIN 43650A 1/2" NPT Conduit (only available in SPDT option)

- 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

5 - Options (Omit if not required):

- Viton® Diaphragm 1 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

0C- Oxygen Cleaned Switches

SR - Snubber

СΔ - IP67 rated protective cover with a removable plug (For adjustable switches, SMA flying lead model)

- IP67 rated protective cover (For factory set switches, SMF flying lead model)

Note: Please see page 52 for other available options