

CLARK SOLUTIONS

SM Pressure Switch

Set Point Range, 2-120 PSI, Factory Preset

DESCRIPTION

Model SM is a simple, reliable low cost pressure switch that uses a spring loaded diaphragm as the sensing element. A Buna-N diaphragm is standard, however, a selection of other diaphragm materials are optionally available.

In operation, the diaphragm actuates a snap action electrical switch that insures a positive, instantaneous electrical contact under all operating conditions.

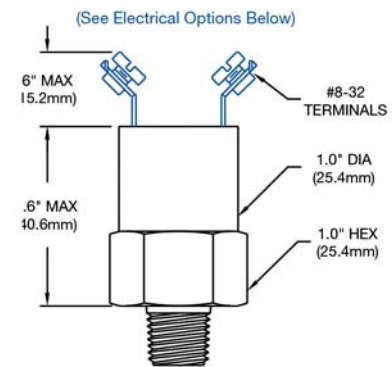
SPECIFICATIONS



Set Point Range- 2-120 PSI (0.14-8.3 bar)
 Set Point Tolerance- ± 1 PSI or 5% (0.07 bar)
 Max Operating pressure- 250 PSI (17 bar)
 Proof Pressure- 750 PSI (51 bar)
 Switch Deadband (differential)- 8-16%
 Current Rating- 5 A @ 250 VAC, 5A @30 VDC Resistive
 Media Connection- Brass (Standard); Optional: Aluminum, Nickel Plating, Delrin, Zinc Plated Steel, 303 SS, 316 SS
 Circuit Form- SPST-NO, SPST-NC, SPDT
 Electrical Connections- See order table
 Diaphragm- Buna-N (other materials available, consult us)
 Cycle Life- 1 Million Cycles
 Housing: NEMA 4, 13



DIMENSIONS



ORDERING INFORMATION

ORDER NUMBER (SEE TABLE)
A-BCD-EF-GH

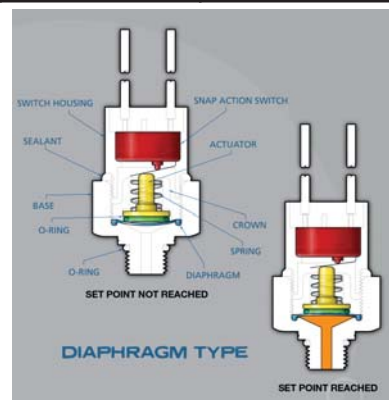
EXAMPLE- SM-B1C-50R-4WL

A Model	B Connection Material	C Media Connection	D Circuit Form	E Fixed Set Point	F Set Point Direction	G Wire Length (Where Applicable)	H *Electrical Options
SM	A= Aluminum B= Brass (Standard) N= Nickel Plating P= Delrin S= Zinc Plated Steel T= 303 Stainless Steel U= 316 Stainless Steel	1= 1/4" NPT Male 2= 1/8" NPT Male 6= 7/16" SAE O-Ring (-4) 14= 1/2" NPT Male 1/8" NPT Female 17 1/4" BSPP Male (G1/4) 28 1/8" BSPP Male (G1/8) 41 7/16" - 20 Internal 45° Flare - SAE J 513 77 M16 x 1.5 SAE J2244-3	A SPST-NO B SPST-NC C SPDT	Specify 2-120 PSI	R= Rising F= Falling	-= No Wire 1= 3" Wire Length 2= 6" Wire Length 3= 12" Wire Length 4= 18" Wire Length 5= 24" Wire Length 6= 36" Wire Length 7= 48" Wire Length 8= 60" Wire Length 9= Special Wire Length	- = Screw Terminals (Standard) WL= Wire Leads QC= 1/4" Spade Connection WP= Weather Pack HR= DIN43650A Connector MP= Metri-Pack AT= 10 A @ 125/250 VAC 5 A @ 30 VDC GG= Internal Ground AU= Gold Plate/Alloy for low currents *See next page for more choices

The snap-action design will maintain its state with contacts either open or closed, until a precise set point is reached when it will snap over center to a new state. It will remain in that state until a distinct change towards its original setting is sensed, at which time it will snap back to its original state.

The design's snap-action feature prevents contact intermittency near its switch point, which is common in creeper designs. As system pressures fluctuate, our switches inherent differential prevents searching. Only the highest quality snap-action switches are used. The switches are UL, CSA, and military approved.

The elastomer diaphragm, which moves a precise .040 of an inch, ensures accurate, instantaneous contact under all operating conditions. While nitrile is preferred for general use, other materials are available.



A COMPREHENSIVE SELECTION OF ELECTRICAL CONNECTIONS

We see designs used in all types of applications imaginable, so we want to make sure you have a wide choice of electrical connections.

We offer a growing selection of connections, and if you want something else, just ask us for it.



HF
DIN43650A
1/2" Conduit
(Plug & Receptacle)

HH
DIN43650A
(Plug Only)

HR
DIN43650A
Strain Relief
(Plug & Receptacle)

HP
9.4mm DIN
(Plug Only)

HM
9.4mm DIN
(Plug & Receptacle)

MP
Metri-Pack
Female 280
Series Sealed

NP
Metri-Pack
Male 280
Series Sealed



CP
Metri-Pack
Female 150
Series Sealed

DP
Metri-Pack
Male 150
Series Sealed

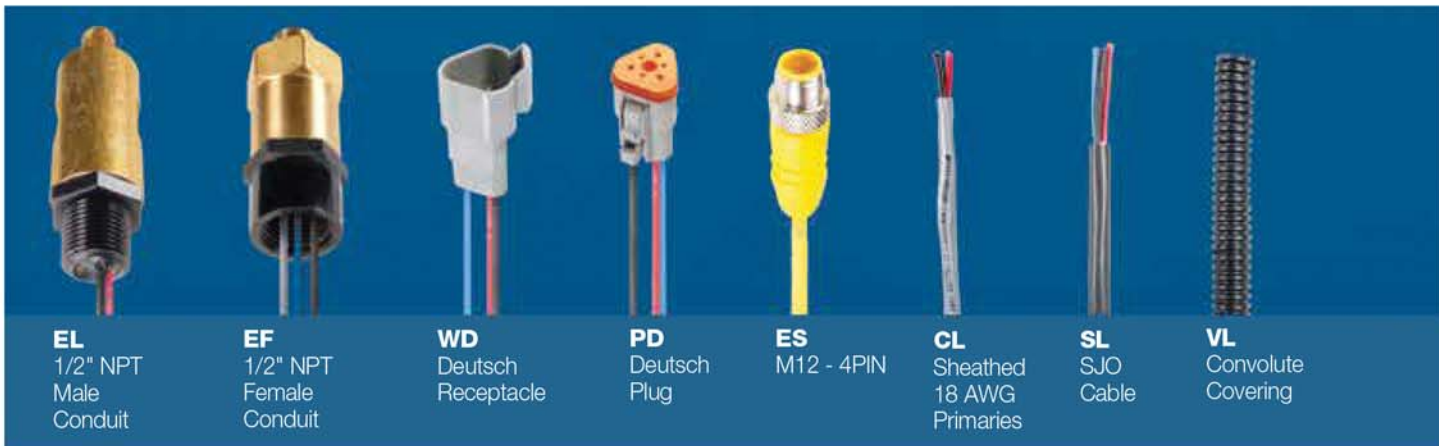
PP
Boot
(Military
Connector)

QC
1/4" Male
Spade Quick
Connect

WL
Wire Leads

WP
Weather Pack
(Female)

TP
Weather Pack
(Male)



EL
1/2" NPT
Male
Conduit

EF
1/2" NPT
Female
Conduit

WD
Deutsch
Receptacle

PD
Deutsch
Plug

ES
M12 - 4PIN

CL
Sheathed
18 AWG
Primaries

SL
SJO
Cable

VL
Convolute
Covering

Color Code: Black – Common Red – Normally Open Blue – Normally Closed
Pin Assignments: A – Normally Open B – Common C – Normally Closed
DIN Connector Pin Assignments: #1 – Common #2 – Normally Closed #3 – Normally Open #4 – Not Used
M12 Connector Pin Assignments: #1 – Common #2 – Not Used #3 – Normally Open #4 – Normally Closed