

Model 46SW *Explosionproof* / ASIC



Stainless Steel Media Isolated Pressure Switch

Overview

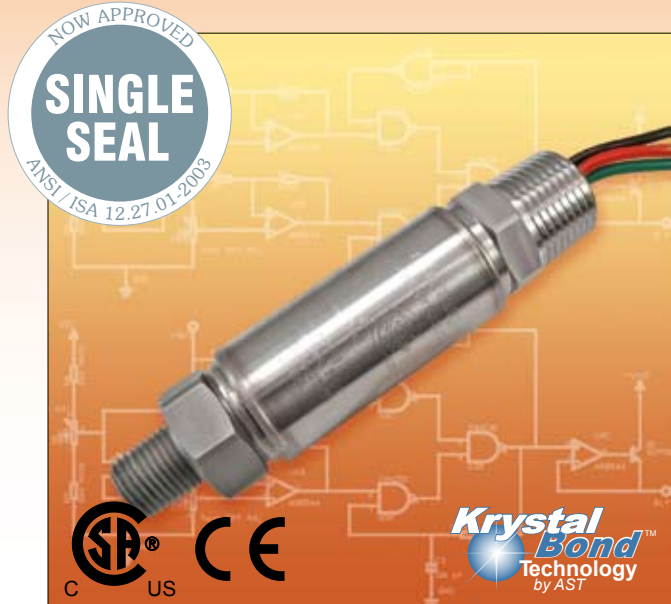
The Model 46SW is a high accuracy Explosionproof Pressure Switch, designed for use in a variety of applications. Applying digital compensation, this product offers top performance over a wide temperature range. Utilizing Krystal Bond Technology™, the sensing element will measure pressure in the most extreme temperature conditions. Where other sensor technologies will freeze or boil, the AST46SW uses a one piece stainless steel sensor to offer continuous operation. If linearity and repeatability are critical for your application, this product will exceed your expectations at an affordable price.

Benefits

- CSA30 (UL1203 / FM3615) Class I Div 1 and Zone 1 Group IIC Explosionproof - Groups A, B, C, D
- ANSI 12.27.08-1 Single Seal Approved
- ASIC Compensation
- Superb Temperature Performance
- Wide Operating Temperature Range
- Excellent Accuracy
- High Proof and Burst Pressure
- Factory Sealed

Applications

- Well Optimization
- Oil and Gas Pipelines
- Drilling Platforms
- CNG / Hydrogen Fill Stations
- Paint Booths
- RTU
- Combustion Controls



Performance @ 25°C (77°F)	
Error Tolerance	<±1.0% BFS of line pressure
Over range Protection	2X rated line pressure, standard*
Burst Pressure	5X or 60,000PSI of line pressure, whichever is less
Pressure Cycles	> 100 million full pressure cycle
*For higher proof pressures, contact factory	

Environmental Data

Temperature	
Operating	-40 to 85°C (-40 to 185°F)
Storage	-50 to 105°C (-58 to 221°F)
Thermal Limits	
Compensated Range	-20 to 70°C (-4 to 158°F)
Other	
Shock	100G, 11 msec, 1/2 sine
Vibration	10G peak, 20 to 2000 Hz.
EMI/RFI Protection:	Yes
Rating:	IP-66

Electrical Data

Excitation	10-28VDC
Current Consumption	<10mA
Set Point	See Chart on page 2
Output Load	1 Amp., Resistive
Reverse Polarity Protection	Yes



Ordering Information

46SW A 05 P E T 1 G 00025 F 05 000

Series Type

Process Connection*
 A= 1/4"-18 Male NPT
 B= 1/8"-27 Male NPT
 C= 1/4"BSPP
 W= F250C Female Autoclave

System Pressure
 Insert 2 digit code (chart 1)

Pressure Unit
 P= PSI

Switch Configurations
 E= SPDT [Form C]

Electrical Connection
 T= 2ft. 18 AWG wires
 U= 4ft. 18 AWG wires
 W= 2 Meter 18 AWG wires

Wetted Material**
 0=17-4PH 1=316 L 2= Inconel 718

Pressure Reference
 0= Sealed Gauge
 G= Vented Gauge Pressure

Switching Point Pressure: Insert 5 digit code (chart 2)

Switching Direction
 F= Falling R= Rising

Hysteresis (5-95% of system line pressure): Insert 2 digit code (multiples of 5%, ex. 5% is 05)

Chart 1

System Pressure*	Code
50	01
100	02
250	03
500	04
1000	05
3000	06
5000	07
7500	08
10,000	09
15,000	10
20,000	11

Chart 2

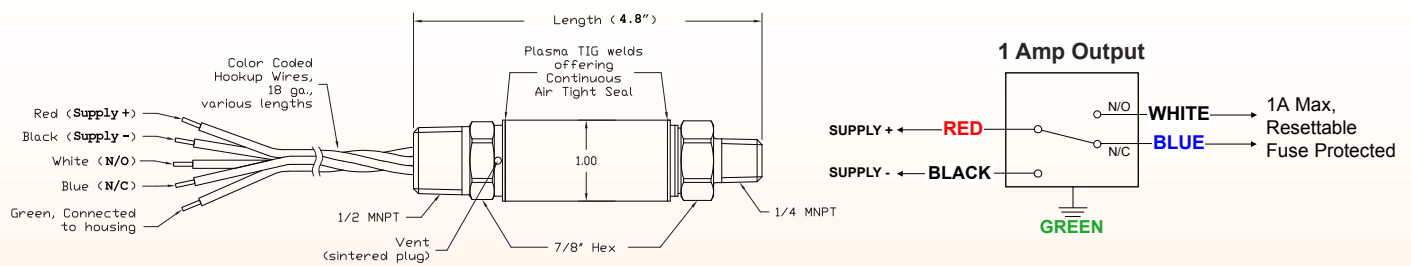
Switching Pressure*	Code
25	00025
50	00050
100	00100
250	00250
500	00500
1,000	01000
2,500	02500
5,000	05000
10,000	10000

Options
 No Options= 000

*For optional pressure ports and electrical interfaces please consult factory.
 1/8" NPT Male not available under 50PSI or with 316L.
 F250C Female Autoclave is the only option for pressure ranges greater than 10,000.
 **316L available up to 10,000 PSI. For Inconel 718 consult factory on availability.

*For ranges not shown, please consult factory.

Dimensional Data



Warranty

Workmanship - AST, Inc. pressure transmitters have a limited one-year warranty to the original purchaser. AST, Inc. will replace or repair, free of charge, any defective transmitter. This warranty does not apply to any units that have been modified; misused, neglected or installed where the application exceeds published ratings. AST's sensors are made with pride in New Jersey, USA. If in the area please feel free to stop by for a visit!

Installation/Applications - The purchaser is responsible for media compatibility, functional adequacy, and correct installation of the transmitter.