



EXPLOSION-PROOF SPDT Solid State Pressure Switch AST46SW

Overview

The Model 46SW is a high accuracy Explosion-proof 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

- ATEX / IECEx: Class I, Zone 1, Ex d IIC T5 Gb (Ta = -40°C to 85°C)
- 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
- Excellent Accuracy
- High Proof and Burst Pressure
- Factory Sealed

EXPLOSION-PROOF

AST46SW SPDT Solid State Pressure Switch

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% BFSL of line pressure
Over range Protection	2X rated line pressure, standard (for higher proof pressures, contact factory)
Burst Pressure	5X or 60,000PSI of line pressure, whichever is less
Pressure Cycles	> 100 million full pressure cycle

Environmental Data

Temperature

Operating	-40 to 85°C (-40 to 185°F)
Storage	-55 to 105°C (-67 to 221°F)

0-100% relative humidity, non-condensing

Thermal Limits

Compensated Range	-20 to 70°C (-4 to 158°F)
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Other

Shock	100G, 11 msec, 1/2 sine
Vibration	10G peak, 20 to 2000 Hz.
EMI/RFI Protection:	Yes
Rating:	IP-66

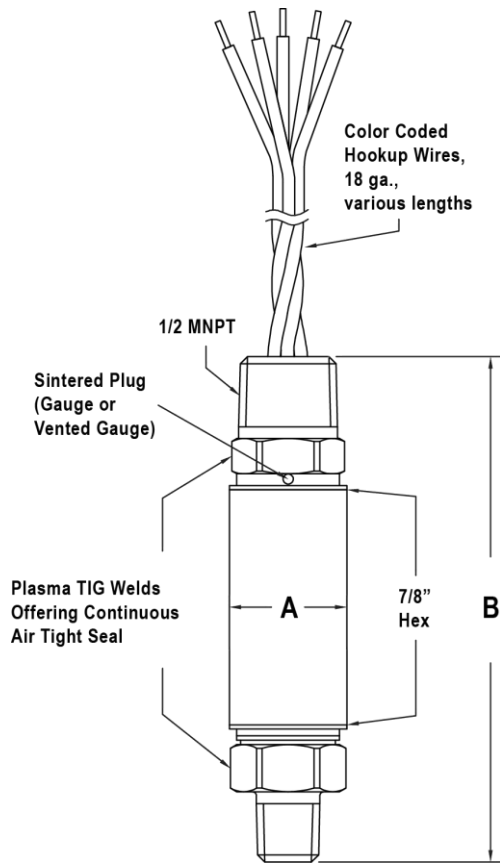
Electrical Data

Excitation	10-28VDC
Current Consumption:	400Hz
Set Point	See Chart on Page 2
Output Load:	Yes
Reverse Polarity Protection	Yes

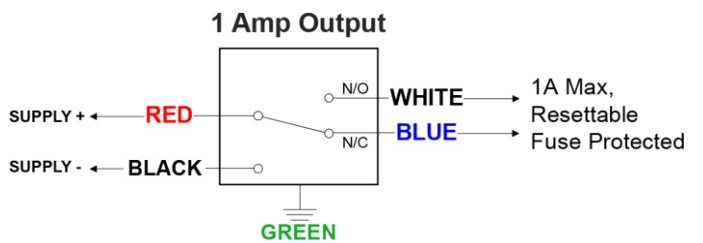
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Dimensions



Model Series	Body Diameter "A"	Overall Length "B"
AST4600	0.875"	3.64"
AST46HA	1"	4.3"
AST46PT (4-20mA)	1"	4.8"
AST46PT (Voltage)	1"	4.3"
AST46SW	1"	4.8"



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AST46SW SPDT Solid State Pressure Switch

Ordering Information

AST46SW	A	05	P	E	T	1	G	00025	R	05	000	-Z
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Series Type

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

System Pressure
Insert 2 digit code

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

consult factory for pressures not shown

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= 316L 2= Inconel 718

Pressure Reference
0= Sealed Gauge G= Vented Gauge Pressure

Switching Point Pressure
Insert 5 digit code [5-95% of system line pressure]

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

consult factory for pressures not shown

Switching Direction
F= Falling R= Rising

Hysteresis: Insert 2 digit code (example: 1% is 01) [1% of line pressure minimum]

Options= 000

Approval
Z= Add "-Z" for CRN Registered to ANSI/ASME B31.3. Contact factory for material, pressure, and process connection options.

NORTH AMERICA

American Sensor Technologies, Inc. (AST),
a TE Connectivity company
450 Clark Drive
Mount Olive, NJ 07828 USA
Tel +1 973 448 1901
Fax +1 973 448 1905
info@astsensors.com

ASIA

Hong Kong Sensor Technologies (HKST),
a TE Connectivity company
Unit No. 2 on 24/F., Perfect Industrial
Building, No. 31 Tai Yau Street,
San Po Kong, Kln., Hong Kong
Tel 852 2242 5048
info@hkstsensors.com

TE.com/sensorsolutions

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