Model 1000

Solid State Pressure Switch

Overview

The Model 1000 is a high quality, stainless steel media isolated Solid State Pressure Switch. This highly repeatable switch is designed for use when measuring gases and liquids that are compatible with stainless steel. The Model1000 is offered with factory set switch points. Packaged with heavy duty relay contacts, as well as high electrical isolation, this pressure switch is built to handle a wide variety of applications. The Model 1000 is ideal for applications that require consistent repeatability, excellent long-term stability, trouble free operation, long life and high performance with a competitive price.

Benefits

- High Strength Stainless Steel Construction
- No Silicone Oil, No Internal O-rings, No Welds
- Wide Operating Temperature Range
- Switch Points up to 10,000 PSI
- Switching Capability of 1 Amp @ 24VDC or 0.5 Amps @ 125VAC, max
- Low Static and Thermal Errors
- Unparalleled Price to Performance Ratio
- Rugged Design Survives Harsh Environments
- Compatible with a Wide Range of Liquids
- Suitable for High Shock and Vibration Applications

Applications

- OEM Equipment
- Test Stands
- Off Road
- Process Control
- Compressors
- Refrigeration
- Pneumatics
- Semiconductor Processing

Performance @ 25°C (77°F)

Stability (1 year)	±0.25% FS, typical
Repeatability	< ±0.5% FS, typical
Proof Pressure*	2X System Pressure Max
Burst Pressure	5X System Pressure Max or 20,000 PSI whichever is less.
Pressure Cycles	> 1 Million
Reaction Time	< 100 msec, typical

*System Pressure Max must not exceed Proof Pressure. Please consult factory for custom Proof Pressure.

Environmental Data

Temperature	
Media	-55 to 125°C (-65 to 250°F)
Operating	-40 to 85°C (-40 to 185°F)
Storage	-55 to 125°C (-65 to 250°F)
Thermal Limits	
Compensated Range	0 to 55°C (30 to 130°F)
Thermal Error	<±2% of FS
Other	
Shock	100G, 11 msec, 1/2 sine
Vibration	10G peak, 20 to 2000 Hz.
EMI/RFI Protection:	Yes
Rating:	IP-66

Electrical Data

Voltage Supply	10-32VDC, typical
Switching Current	1 Amp @ 24VDC or 0.5 Amps @ 125VAC
Output Type	Open or Closed, Customer to Define Switching Point
Reverse Polarity	Yes

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Ordering Information

1000	A	00100	P	C	01	E	1	000

Series Type

Process Connection
A= 1/4"-18 Male NPT
B= 1/8"-27 Male NPT
C= 1/4"BSPP
N= 1/4" VCR Male

Switch Point
Insert Switch Point code: **Chart 1**

Pressure Unit
B= BAR | K= kg/cm2 | P= PSI

Switch Configurations
C= Normally Open
D= Normally Closed
E= Normally Open (1 pair) & Normally Closed (1 pair)*

System/Line Pressure, Max.
Insert Max PSI code from **Chart 2**

Electrical Interface+
A= 2 ft.
B= 4 ft.
C= 6 ft.
D= 10 ft.
E= Mini DIN 43650 Connector
I= DIN 43651 Connector
R= 6 Pin Bendix Connector*

Wetted Material
0= 17-4PH Stainless Steel
1= 316L Stainless Steel

Options
00= No special potions

Chart 1

Switch Point** PSIG	Code
25	00025
50	00050
100	00100
250	00250
500	00500
1000	01000
2500	02500
5000	05000
10,000	10000

**Typical Switch Points. All SwitchPoints between 25PSI and 10,000 PSI are available. Please consult factory.

Chart 2

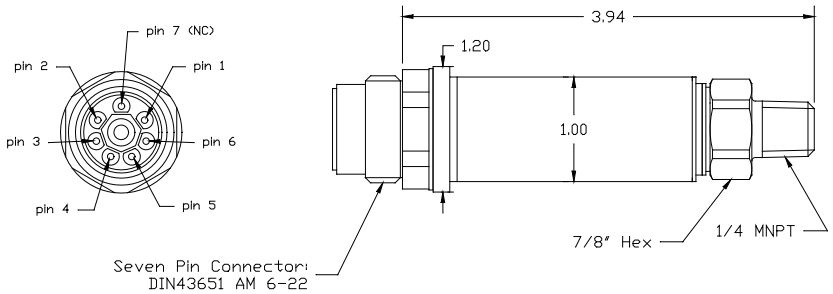
Max PSI+	Code
50	01
100	02
250	03
500	04
1000	05
2500	06
5000	07
7500	08
10,000	09

+Note: Switch Point, Min. must be at least 10% of System/Line Pressure, Max.

*Note: Switch Configuration "E" only, available with DIN43651 and 6 Pin Bendix Electrical Interfaces.

+Wiring information available at: *http://www.astsensors.com/mediacenter.php*

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.