

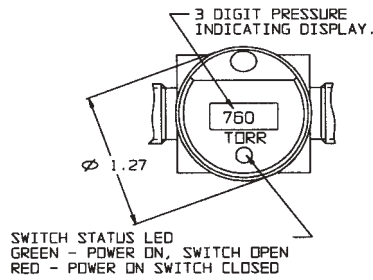
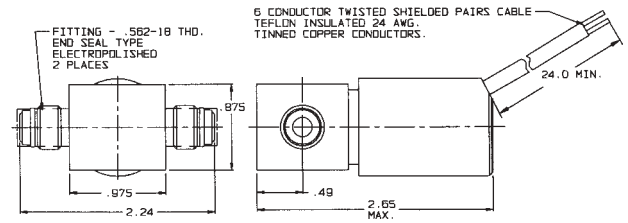
# Multi-Function Products

**Switch,  
Transducer  
& Display in  
Absolute Gauge  
Sealed Gauge  
Low Differential**

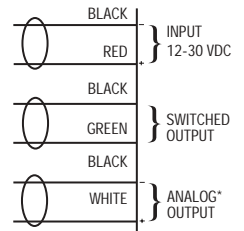


Model Number	Staset	ECHOLINE
Medium	Gas or Liquid	Clean Dry Air
Type	Factory set	Adjustable
Range	4 to 770 Torr 1 to 99 psia/psig	Full scale from 0.2 to 20" WC from 50 to 2000 Pa
Proof Pressure	2x range	±14.5 psig/80" WC
Burst Pressure	psig - 5x range or 10,000 psia	20 psig
Deadband	1% to 98% F.S.	Adjustable
Switching Response	30 ms max.	1 Sec. to 30 Sec.
Switching Output	0.25A AC/DC 0.4A peak, 50V	1A @ 30 VDC
Switch Point Accuracy	± 0.4% F.S. rms @ 22 +/- 5°C	± 1% F.S.
Switch Repeatability	± 0.25% F.S.	± 0.5% F.S.
Input Power	9 to 30 VDC	12 to 24 VDC
Analog Outputs	0 - 5 VDC, 4 - 20 mA	4 - 20 mA or 0-10 VDC
Status LED	Open/Closed	In/Out of Range
Internal Volume	0.5cc for 1/4" VCR	—
Operating Temp. Range	0° to 50°C	0° to 40°C
Display Accuracy	1% F.S., 0° to 50°C	1% F.S., 0° to 40°C
Wetted Materials	316L VIM/VAR	—
Min. Operating Life	5 million cycles	5 million cycles
Approvals	UL, CE	UL 991, CE
Warranty	3 Years	3 Years
Media Connections	1/4" male VCR 1/4" female VCR 1/4" flow thru male & female 1.125"/1.5 "C" seal 1.125"/1.5 "W" seal	1/4" tubing (push to seal)  Barbed hose fitting for .170 ID tubing

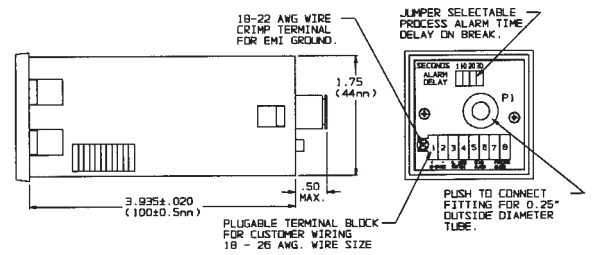
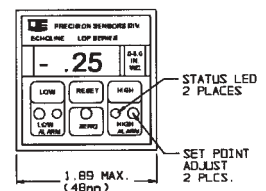
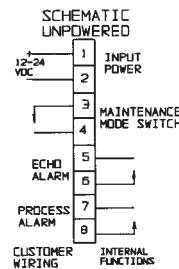
## Staset® (3 in 1 Pressure Switch)



### Schematic



## ECHOLINE (Low Differential Pressure Sensor)





**UNITED ELECTRIC  
CONTROLS**

Precision Sensors Division

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BHA3.5K0104

PSG-S02



### Pressure, Flow, Level & Temperature Products for Ultra-Clean Processing



P R E C I S I O N  
S E N S O R S

# Stainless Steel Pressure Switches for High Pur

## PRECISION SENSORS

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Milford, CT 06460 USA  
Telephone: 203 877 2795  
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www.precisionensors.com



MODEL NUMBER	PV48W	PV36W	P48W	P36W	P17W
Medium	Gas or Liquid	Gas or Liquid	Gas or Liquid	Gas or Liquid	Gas or Liquid
Type	Factory set	Factory set	Factory set	Factory set	Factory set
Available Settings	10 to 150 mm Hg VAC	125 to 750 mm Hg VAC	0.5 to 5 psig	2.5 to 30 psig	20 to 100 psig
Actuation Value	20 mm Hg +5% of setting	40 mm Hg +6% of setting	0.5 psi +5% of setting	1.0 psi +6% of setting	4.0 psi +7% of setting
Repeatability	± 5 mm Hg +2% of setting	± 15 mm Hg +2% of setting	± 0.1 psi +2% of setting	± 0.3 psi +2% of setting	± 1.5 psi +4% of setting
Proof Pressure	0 psia - 15 psig	0 psia - 25 psig	0 psia - 15 psig	0 psia - 25 psig	0 psia - 300 psig
Internal Volume*	2.22 CC	1.06 CC	2.22 CC	1.06 CC	0.46 CC
Operating Temp. Range	0° to 130°F	0° to 130°F	0° to 130°F	0° to 130°F	0° to 130°F
Finish	10 or 5 Ra	10 or 5 Ra	10 or 5 Ra	10 or 5 Ra	10 or 5 Ra
Wetted Materials	316L VIM/VAR or Hastelloy	316L VIM/VAR or Hastelloy	316L VIM/VAR or Hastelloy	316L VIM/VAR or Hastelloy	316L VIM/VAR or Hastelloy
Media Connections	1/4" end seal type 1/4" flow thru - end seal type	1/4" end seal type 1/4" flow thru - end seal type  1.125"/1.5 "C" seal 1.125"/1.5 "W" seal	1/4" end seal type 1/4" flow thru - end seal type NW16, NW25	1/4" end seal type 1/4" flow thru - end seal type NW16, NW25 1.125"/1.5 "C" seal 1.125"/1.5 "W" seal	1/4" end seal type 1/4" flow thru - end seal type 1.125"/1.5 "C" seal 1.125"/1.5 "W" seal
Electrical Connections	Free leads Crimp type	Free leads Crimp type	Free leads Crimp type	Free leads Crimp type	Free leads Crimp type
Min. Operating Life	1 million cycles	1 million cycles	1 million cycles	1 million cycles	50,000 cycles
Approvals	UL, CE	UL, CE	UL, CE	UL, CE	UL, CE
Warranty	3 Years	3 Years	3 Years	3 Years	3 Years
Dimensions	<p>1/4" end seal</p>	<p>1/4" end seal</p>	<p>1/4" end seal</p>	<p>1/4" end seal &amp; 9 pin DSub connector</p>	<p>1/4" end seal (F)</p>

\*with 1/4 male end seal type

					
E48W	E36W	E17W	P15M	P15M-A	TS12T
Gas or Liquid	Gas or Liquid	Gas or Liquid	Liquid	Liquid	Gas or Liquid
Factory set	Factory set	Factory set	Factory set	Adjustable	—
10 to 150 Torr	100 to 1500 Torr	1000 to 5000 Torr	5 to 75 psig	5-40 psig, 20-55 psig, 35-75 psig	—
20 Torr +5% of setting	40 Torr +6% of setting	200 Torr +7% of setting	2 psi +7% of setting	3 psig + 9% of set pt. 3 psig + 10% of set pt. 3 psig + 12% of set pt.	—
± 5 Torr +2% of setting	± 15 Torr +2% of setting	± 75 Torr +4% of setting	± 0.5 psi +2% of setting	± 0.5 psig + 2% of set pt. ± 0.75 psig + 2% of set pt. ± 1.0 psig + 2% of set pt.	± 2°C
0 psia - 15 psig	0 psia - 25 psig	0 psia - 300 psig	100 psig	100 psig	300 psig
2.22 CC	1.06 CC	0.46 CC	—	—	—
0° to 130°F	0° to 130°F	0° to 130°F	40° to 120°F	40° to 120°F	-65° to 250°F
10 or 5 Ra	10 or 5 Ra	10 or 5 Ra	—	—	10 or 5 Ra
316L VIM/VAR or Hastelloy	316L VIM/VAR or Hastelloy	316L VIM/VAR or Hastelloy	PFA or PTFE and PFA	PFA or PTFE and PFA	300 Series SS
1/4" end seal type 1/4" flow thru - end seal type NW16, NW25	1/4" end seal type 1/4" flow thru - end seal type NW16, NW25 1.125"/1.5 "C" seal 1.125"/1.5 "W" seal	1/4" end seal type 1/4" flow thru - end seal type 1.125"/1.5 "C" seal 1.125"/1.5 "W" seal	1/4" Flaretek® type 1/4" Flaretek® type flow thru 1/4" MNPT 1/8" MNPT	1/4" Flaretek® type 1/4" Flaretek® type flow thru 1/4" MNPT 1/8" MNPT	—
Free leads Crimp type	Free leads Crimp type	Free leads Crimp type	Free leads Crimp type	Free leads Crimp type	Free leads Crimp type
1 million cycles	1 million cycles	1 million cycles	1 million cycles	1 million cycles	—
UL, CE	UL, CE	UL, CE	—	—	—
3 Years	3 Years	3 Years	1.5 Years	1.5 Years	1.5 Years
 <p>NW Type</p>	 <p>1.125" surface mount</p>	 <p>1/4" end seal</p>	 <p>1/4" Flaretek®</p>	 <p>1/4" MNPT</p>	 <p>1/2" NPT Threaded</p>

# Flow Switches

# Level



V8F	V12F	L14F
Gas or Liquid	Liquid	Liquid
Factory set	Factory set	Factory set
.035 to 2 SCFM .03 to 1.25 GPM	.15 to 10 GPM	Consult Factory
10% of setting	.15 to .5 GPM	± 0.15"
5% of setting	.05 to .15 GPM	0.25" Max.
Material Dependent	Material Dependent	Material Dependent
—	—	—
40° to 125°F	40° to 125°F	40° to 125°F
Material Dependent	Material Dependent	—
SS, PVDF PTFE, PFA	SS, PVC, PVDF PTFE, PFA	PTFE, PFA SS
1/4, 3/8, 1/2, 3/4 and 1" flow thru Flaretek® type End seal types 3/8" type Compression	3/8" & 1/2" NPT Butt weld Compression	Customer Specified
Free leads Crimp type	Free leads Crimp type	Free leads Crimp type
—	—	—
UL, CE	UL, CE	—
1.5 Years	1.5 Years	1.5 Years
<p>1/2" Flaretek®</p>	<p>1/4" Compression</p>	<p>1/4" NPT Threaded</p>



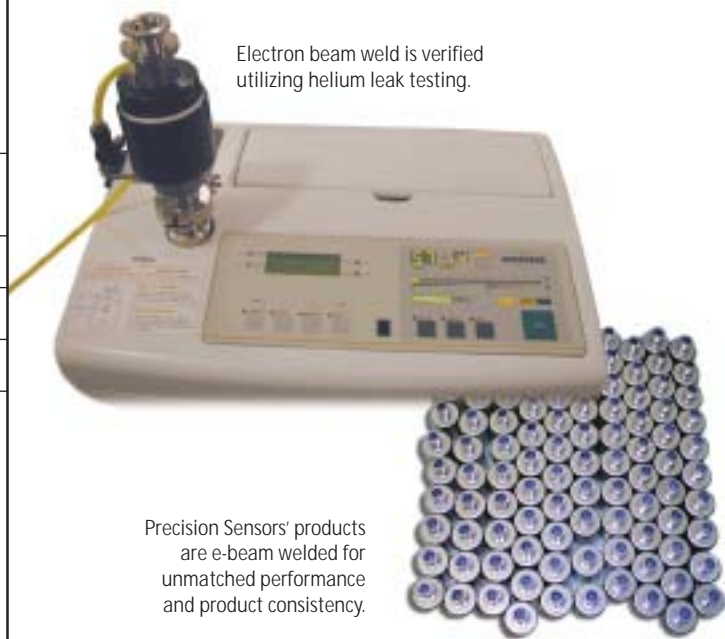
## Manufacturing Technologies:

### Stainless Steel Pressure Switches

- High set point repeatability
- Unaffected by exposure to high vacuum
- Electron beam weld for "Leak-tight" integrity
- Insensitive to mounting attitude
- Higher proof pressures option
- Higher temperature constructions are available
- Gold and silver switch contacts
- "Snap Action" Belleville spring design for superior accuracy, repeatability and switch life

### Flow Switches

- Rugged sealed switch construction
- By-pass chamber to minimize pressure drop



Electron beam weld is verified utilizing helium leak testing.

Precision Sensors' products are e-beam welded for unmatched performance and product consistency.

Proof of performance materials available upon request.