



## P6X SERIES SOLID-STATE PRESSURE SWITCH

Flight Control | Braking | Thrust Reverse | Landing Gear

The P6X Series solid-state switch provides superior accuracy, performance over temperature and high cyclic life. This series offers high dielectric withstanding capability, flameproof stainless steel welded construction and customer specified factory set switch points. The P6X solid-state switch has no moving parts or internal seals to degrade or cause leakage. Designed to be used in aerospace systems that monitor or control flight surfaces, braking, thrust reversers and landing gear actuators.



SET POINT (PSIG)	TOLERANCE (PSIG)	PROOF PRESSURE (PSIG)	BURST PRESSURE (PSIG)
1000 to 5000	± 50	7500	10,000

### P6X FEATURES

- RTCA DO -160 Qualified
- 5 Million Cycle Life
- Customer Specified/Factory Set Switch Points
- Form C (SPDT) Solid State Contacts, Rated 400mA, 40 VDC
- Stainless Steel Construction Compatible with all Hydraulic Fluids
- No Internal Seals to Cause Leaks
- Polysilicon Sensor Technology
- Hermetically Sealed/Secondary Containment
- EMI Protected
- 3 Year Warranty

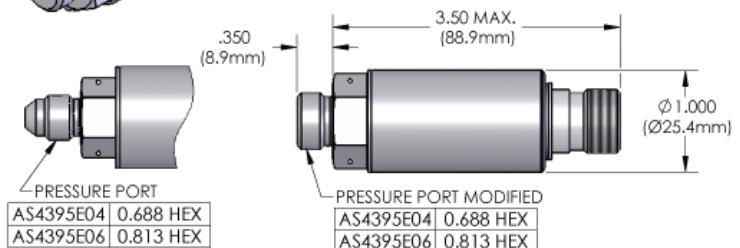
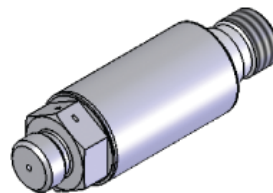
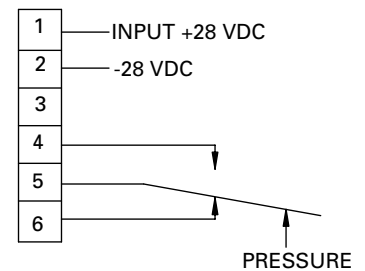


### MECHANICAL SPECIFICATIONS

- Sensor Material:** 17-4 PH SS
- Housing Material:** 300 Series SS
- Weight:** 0.35 LBS. Max.
- Pressure Connections:** AS4395 Types\*
- Electrical Connection:** D38999 Types\*

\* May be customized to individual application

#### SCHEMATIC SPDT SWITCH



# HOW TO SPECIFY

# OR... E-MAIL US AT

Call us at 203.877.2795 and ask for an engineer.

Sales Department: sales@precisionsensors.com

Locate our representative in your area via our website.

Technical Department: askanengineer@precisionsensors.com

Visit [www.precisionsensors.com](http://www.precisionsensors.com) and utilize our "Ask An Engineer" form.

TECHNICAL SPECIFICATIONS		INSTALLATION INFORMATION	
Pressure Range	1000 Through 5000 PSIG	Input Voltage	15 to 45 VDC Reverse Polarity Protected
Accuracy	± 50 PSIG, -20 to 85°C, ± 75 PSIG, -40 to 120°C	Supply Current	Less than 15 mA
		Dielectric Resistance	1250 VDC, < 1mA Leakage
Proof Pressure	7,500 PSIG	Insulation Resistance	> 100 MΩ at 500 VDC
Burst Pressure	10,000 PSIG	Form C Switch (SPDT)	Rated 400mA, 40 VDC
ENVIRONMENTAL SPECIFICATIONS			
Operating Temperature Range	-55 to 85°C (-67 to 185°F)	Operating Altitude Range	-2,000 FT to +70,000 FT
Storage Temperature Range	-55 to 125°C (-67 to 257°F)		
RTCA DO-160 COMPLIANCE			
Section 4: Temp and Altitude	D2	Section 18: Audio Frequency Conducted Susceptibility – Power Inputs	Z
Section 5: Temp Variation	A		
Section 6: Humidity	C		
Section 7: Operational Shocks and Crash Safety	B	Section 19: Induced Signal Susceptibility	ZC
Section 8: Vibration	CAT R, Curves E, E1	Section 20: Radio Frequency Susceptibility	T
Section 9: Explosion Proof	ENV II		
Section 10: Waterproofness	S	Section 21: Emission of Radio Frequency Energy	M
Section 11: Fluids Susceptibility	F		
Section 12: Sand and Dust	D	Section 22: Lightning Induced Transient Susceptibility	B4K44
Section 13: Fungus Resistance	F		
Section 14: Salt Spray	S	Section 24: Icing	A
Section 15: Magnetic Effect	Z	Section 25: ESD	A
Section 16: Power Input	Z	Section 26: Fire, Flammability	A
Section 17: Voltage Spike	A		
RELIABILITY		MISCELLANEOUS	
Cycle Life	5 Million Pressure Cycles	Response Time	Less than 1 msec
MTBF	200,000 hrs		



**Precision Sensors Division**

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Certification of Approval to  
 ISO 9001:2000 and AS9100  
 Revision B/Section 1

