

# SUBMERSIBLE VEHICLE DEPTH TRANSDUCER

Underwater vehicles require unique configurations for instrumentation and pressure sensing. When our customers asked, we delivered. The **SST 74X-UV Series** transducers are compact, shallow diaphragm sensors with a configurable flange design that allows outboard or inboard bulkhead installation. Designed to provide highly accurate depth measurement of submersible vehicles, our unique design provides superior sensing element constraint and an easily cleanable wetted area.

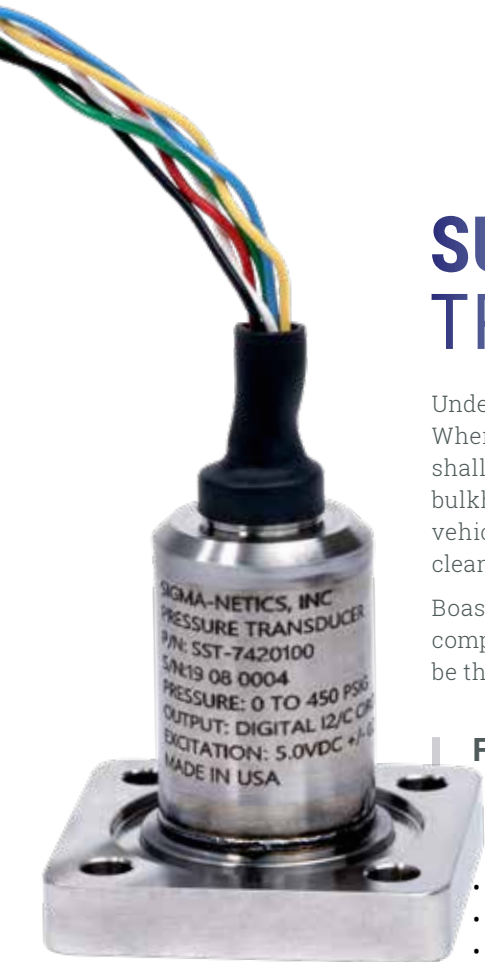
Boasting  $\pm 0.15\%$  FSO TEB accuracy, digital and analog outputs, saltwater and freshwater compatible designs, low mass, and high shock and vibrate resistance, the **SST 74X-UV Series** may be the best pressure sensor ever built.

## FEATURES

- 0.75" Max OD
- 15-5 PH SS or Inconel wetted parts
- All welded Hermetic construction
- High vibration and shock resistant
- Low Mass <90 grams
- ASIC-based output

## APPLICATIONS

- Unmanned Underwater Vehicles (UUVs)
- Saltwater and freshwater depth measurement



## MECHANICAL CHARACTERISTICS

Standard Ranges	0-100, -250, -500, -750, -1000, -1500, -2000, -3000, -5000, -7000, -10000 PSIA / PSIG / PSIS
Proof Pressure	1.5x range
Burst Pressure	2.5x range
Operating Media	Fluids and gases compatible with 15-5 PH or Inconel
Enclosure	Body of stainless steel
Pressure Fitting	Flange mount
Natural Frequency of Sensing Diaphragm	2 kHz at 50 psi to 347 kHz at 40,000 psi
Acceleration Response	Less than $\pm 0.15\%$ FS/G at 50 psi to $\pm 0.0015\%$ FS/G at 10,000 psi
Mass	Less than 90 grams

## ELECTRICAL CHARACTERISTICS

### OUTPUTS

Analog/Excitation	4-20mA Current Loop:	9-36 Vdc for 2-wire
	Non-Isolated Voltage Output:	8-40 Vdc, 3- or 4-wire (standard)
Digital/Excitation	RS-232:	15-40 Vdc
	I <sup>2</sup> C:	5 Vdc

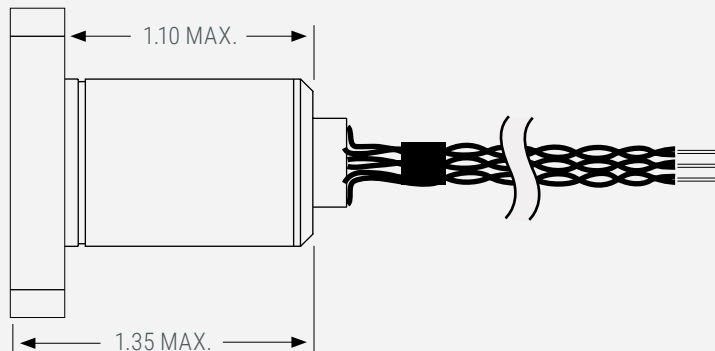
### COMMON

Insulation Resistance	> 100 megohms at 50 Vdc at 70°F	
Electrical Termination	Integral 6" Twisted Leads, 3113H-10-6P or M12 connector	
	Optional electrical terminations available	

## ENVIRONMENTAL CHARACTERISTICS

Compensated Temperature Range	-65°F to +250°F (Process Temperature)	
	Options available, consult factory	
Operating Temperature Range	-65°F to +250°F (Ambient and Process Temperature)	
	Note: Maximum Operating Temperature for digital output is +185°F	

## DIMENSIONS (INCHES)



## PERFORMANCE

### STATIC ACCURACY

±0.15% FSO TEB  
±0.1% FSO TEB (option available)

### RESOLUTION

Analog: Infinite  
Digital: Options available

### ZERO BALANCE

±0.15% FSO

### SPAN

±0.3% FSO at 70°F < ±0.25% FSO

### AVAILABLE OPTIONS

- Optional Alarm Setting (digital only)
- Multi-Temperature Thermal Characterization
- Alternate Flange Configurations (consult factory)

## DIMENSIONS (INCHES)

