

## SUBMERSIBLE(4-20mA, Hart® protocol) \_

## **VERSALINE DEPTH & LEVEL**







**PMC-STS, Inc. Smart Submersible Level Transmitters** are designed for challenging industrial applications where the electronics are separated from the transducer to protect against high vibration, very wet/moist conditions, and elevated temperatures. Rugged design allows for total submersion in harsh (corrosive) environments with standard polyurethane jacketed cable or optional FEP Cable for use in aggressive liquids such as wastewater, seawater, alkaline or acidic chemicals, fuel, and lube oils.

The remote electronics configuration and field accessible terminal head offers practical ease-of-use advantages. It allows for range adjustments without requiring personnel to access hazardous or hard-to-reach locations. This feature enhances both the safety and efficiency of maintenance procedures, saving time and reducing risks associated with working in challenging environments. Users can easily fine-tune the transmitter's settings to suit varying environmental conditions, ensuring optimal performance throughout different operational scenarios.

- Extremely rugged, corrosion-resistant design
- Field programmable with Hart® communicator
- 4-20mA, 2 wire output
- Optional local display (LCD)
- Polyurethane or FEP Jacketed Cable

#### **SPECIFICATIONS**

Ranges	05" WC to 0300 PSIG,	
Output	4-20mA, Hart® digital signal	
Accuracy	±0.25%	
Mounting	None, Bracket with Remote option	
Diaphragm	Ceramic	
Temperature	-10° to 175° F	

The PMC-STS. Inc VersaLine Series Submersible Depth and Level Transmitters are specifically designed for use in groundwater, wastewater, seawater, and a variety of other liquids. Typical applications include sewage and pump/lift stations, deep wells, irrigation, rivers and oceanography, food and beverage, pulp and paper, and pharmaceutical. Options include a rugged ceramic diaphragm with flush face design or depth cone. Diameters of 3/8", 3/4", and 1" are available. Select Stainless Steel or Titanium versions to satisfy the most demanding applications. The standard polyurethane vented cable is molded to the transmitter providing the highest integrity waterproof assembly well-proven in thousands of installations worldwide. FEP Jacketed cable with a hermetically insulated Glass-to-Metal seal is available as an alternate for improved corrosion resistance and chemical compatibility in harsh environments.

- All Welded 316L SS or Titanium
  - 3/8", 3/4", or 1" Diameter
- Molded Polyurethane or FEP Cable
  - Gauge and Absolute Ranges
  - Cable lengths up to 5000 feet
- Outputs of 4-20mA, 0-5Vdc, 0-10Vdc, mv/V

### **SPECIFICATIONS**

Ranges	010"WC to 0300 PSI	
Output	4-20mA, 2-Wire standard (0-5Vdc, 0-10Vdc, mv/V available)	
Accuracy	±0.25% standard, ±0.1% FS optional	
Mounting	Polyurethane, FEP Cable, or 1/2" NPTM conduit backend	
Diaphragm	Ceramic	
Temperature	-10° to 175° F	

Flush Mounting • Fully Repairable • Corrosion Resistant

# ELECTRONIC(4-20mA)

## SMART (Hart® protocol)



PMC-STS, Smart Transmitters accurately Inc. measure heavy slurries, liquids, pressures of and vapors. The ceramic capacitance sensor handles overloads of 10 times below 100 PSIG and 4 times from 100 to 300 PSIG, with a 10:1 turndown. The Hart protocol allows easy access to the configuration, test, and detailed set-up of the transmitter. The remote electronics version offers a split unit where the transducer is separated from the Hart voltage-to-current converter a distance apart by a specified length of polyurethane cable. This PMC-STS product is well suited for industrial processes where high vibration environments and limited access is a concern.

- Sensing area is 1 to 1-1/2 " (retro-fits 1:1 nipple)
- Field programmable with Hart communicator
- Continually self tests for automatic output warnings
- Cable or Terminal Head option
- Optional local display (LCD)
- Submersible versions available

**PMC-STS, Inc. Electronic Transmitters** accurately measure pressures, levels, and vacuum ranges in processes where clogging of the diaphragm face is a problem. The small diameter of the transmitter permits installation flush with the inside wall of pipes 2" or larger. This feature avoids the usual pocketing problems encountered with conventional flange-mounted and recessed-diaphragm transmitters. The capacitance sensor handles overloads of up to 10 times nominal range. The remote electronics version separates the electronics from where the transducer is by a specified length of polyurethane cable. This PMC-STS product is well suited for industrial processes where high vibration environments and limited access is a concern.

- Sensing area is 1 to 1-1/2" (retro-fits 1:1 nipple)
  - 4-20mA, 2 wire output, RFI protected
    - Cable or Terminal Head option
  - All stainless steel housing available
    - Optional local display (LCD)
    - Submersible version available

# **SPECIFICATIONS**

Ranges	05" WC to 0300 PSIG, 03"Hg to 030" Hg Vacuum	
Output	4-20mA, Hart® digital signal	
Accuracy	±0.25%	
Mounting	1" or 1-1/2" Weld-on Spuds, Triclover or Flange	
Diaphragm	Hastelloy C, Tantalum, Ceramic	
Temperature	-40° to 250° F	

# **SPECIFICATIONS**

Ranges	05" WC to 0300 PSIG, 03"Hg to 030" Hg Vacuum	
Output	4-20mA	
Accuracy	±0.25% standard, ±0.1% FS optional	
Mounting	1" or 1-1/2" Weld-on Spuds, Triclover or Flange	
Diaphragm	Hastelloy C, Tantalum, Ceramic	
Temperature	-40° to 250° F	

# PNEUMATIC ( 1:1) \_\_\_\_\_

# SEAL GAUGES AND SWITCHES





#### PMC-STS, Inc. Miniature Pressure and Level

**Transmitters** accurately measure pressure and levels in process industries where plugging of gauges and seals is a problem. The small diameter of the transmitter permits installation flush with the inside wall of pipes 2" and larger. This feature avoids the usual pocketing problems encountered with conventional flangemounted transmitters. This PMC product is well suited for high vibration environments and is ideal where limited access is a concern.

- Sensing area is 1 to 1-1/2" in diameter
- O-Ring seal
- Linear 1:1 output
- 316L stainless steel on all wetted parts
- Direct mounting with pressure or remote gauges
- Extremely reliable in very wet locations
- Corrosion resistant diaphragms
- Serviceable parts

#### **SPECIFICATIONS**

Ranges: Pressure Level	0-10, 15, 30, 60, 100 & 150 PSIG 0-10, 25, 50, 100, 300 & 500"WC	
Output	1:1	
Accuracy	±0.1 PSIG	
Mounting	1" or 1-1/2" Weld-on Spuds, Triclover or Flange	
Diaphragm	ragm Hastelloy C, Titanium, Tantalum	
Temperature	up to 400° F	

**PMC-STS**, **Inc Seal Gauges** accurately measure pressure in industries where viscous materials are processed. The PMC-STS design permits the diaphragm to be installed flush with the inside wall of pipes 3" or larger. This feature avoids the pocketing problems usually encountered with conventional seal gauge systems. The 4" diameter easy-to-read all-stainless steel gauge is equipped for external damping to promote longevity. Gauges can be removed and exchanged or reinstalled without loss of seal oil. The **Seal Switch** is Nema 4 with adjustable ranges. Each gauge and switch is equipped with a proven PMC-STS transmitter and can be bottom or back connected for ease of visibility.

- Sensing area is 1-1/2" (retro-fits LT-07 nipple)
- Anti-Clogging and Corrosion Resistant diaphragm
  - 316L stainless steel on all wetted parts
    - Built in gauge damper
    - Dual Engineering Units (kPa/psi)
      - NEMA 4 Rated Enclosure

#### **SPECIFICATIONS**

Ranges	0-15, 30 60, 100 & 200 PSIG	
Gauge Type	4" diameter oil filled	
Accuracy	±0.1 PSIG	
Mounting	Push & Bolt (LT-07), or SAN (LT-07-SAN) (Back or Bottom)	
Diaphragm	Hastelloy C	
Temperature	up to 400° F	

Flush Mounting • Fully Repairable • Corrosion Resistant

## DIFFERENTIAL (4-20mA)





PMC-STS. Inc.'s DP2000 Series Hi-Line Differential Pressure а high-performance, rugged general transmitter is purpose transmitter designed for hi-line pressure capable of proof pressures up to 1000 psi, avoiding damage where pressure spikes and unknown pressure surges can occur. The DP2000 series can handle dry/wet gases or fluids on either side (high/low) of the differential. The PMC-STS, Inc. DP/EL Low Pressure Differential Transmitter is used in applications where flow across a line of filter elements causes a pressure drop when the filters require maintenance/ cleaning. In a vacuum application, the diaphragm is connected to the vacuum (dusty side), while the 1/8" NPT port is connected to the blower intake (high vacuum side) of the system. The DP/EL is well suited for low pressure and is strictly used in dry applications.

- Process Connections available for DP2000
- 1-1/2" Sensing area for DP/EL
- 4-20mA, 2 wire output

MODEL

Range

Output

Accuracy

Diaphragm

Temperature

Polyurethane or FEP Cable, connector options

Stainless Steel

-40° to 250° F

- DP2000 f
- DP/EL for

for WET or DRY applications or DRY applications only SPECIFICATIONS			solutions
	DP2000	DP/EL	
	0-1 psid to 0-600 psid	020" WC to 0400"WC	
	0.5 - 4.5 VDC, 4-20mA	4-20mA	
	±0.10% FS	±0.5% FS	

Ceramic -40° to 250° F PMC-STS, Inc. in Danbury, CT is a Subsidiary of STS Sensors providing an extremely broad range of pressure transmitters and transducers for the North American market. STS Sensors is an internationally recognized company specializing in the design and manufacture of high performance sensors specifically for the measurement of pressure, temperature, and level. It's headquarters and main manufacturing facilities are based in Sirnach, Switzerland with global subsidiaries in Germany, France, United Kingdom, the United States of Italy, America and China.

PMC-STS, Inc. offers a diverse range of high-performance pressure transducers and transmitters for various applications, including process industry, test and measurement, oil and gas, transportation, mining, offshore, shipbuilding, and hazardous environments. With pressure ranges from 0-1 psi to 0-15,000 psi, accuracies of 0.05%, and operating temperature ranges up to 300°F, these devices provide exceptional repeatability and total accuracy of better than 0.1%. They offer open face designs for clog prevention, 4-20mA and DC millivolt voltage outputs. output options. and certifications such as FM, FMC, and ATEX for hazardous locations. catering to various industry needs. Custom are available upon contact.

- Output Options: 4-20mA, DC Voltage, Millivolt, RS485
  - Pressure Ranges: 0-1 psi to 0-15,000 psi
  - Operating Temperatures: -40 to 300°F
  - Industry Certifications: FM, FMc, ATEX
    - High Accuracy: up to ±0.05% FS
- Modularity: Configurable Process/Electrical Connections

# PROCESS CONNECTIONS & ACCESSORIES \_





Flush Mount Nipple Tapping Kits Welding Mandrel - Dummy Plugs - Nipples

**PMC-STS**, Inc. provides industry solutions for the precise and reliable measurement of pressure, level, and vacuum in processes. In 1963, the original flush-mounted transmitter was designed for processes specific to the Pulp and Paper industry. Since then, PMC-STS's flush-mounted transmitters have become the standard for **accuracy** and **dependability** in industries such as pulp and paper, food and beverage, petrochemical, pharmaceutical, and wastewater management. PMC-STS offers a full line of pneumatic, 4-20mA, Hart® protocol, and submersible instrumentation with accessories that are built to last. **Rugged** and **reliable**, PMC-STS products accurately measure corrosive, viscous, and clogging fluids in industrial applications around the world.

Our corporate commitment to customer satisfaction is reflected in every aspect of product development, manufacturing, and customer service. Transmitters are produced in a modern facility that uses high-tech equipment designed and built in-house. **Quality** is assured by exhaustive, uncompromising attention to manufacturing details, with calibration procedures performed by skilled technicians.



Precision pressure transmitters and transducers, Voltage, current loop and digital interface Ranges to 15,000 psi, 0.1% total accuracy www.sts-sensors.com



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For more detailed information, contact your local PMC-STS representative or PMC direct.