



# SST2015 DP Differential Pressure Transmitter For High Pressure, Deepwater Applications

**Solartron ISA - High performance  
instruments for the life of your reservoir**

## Engineering Excellence for Long-term Performance

Operating subsea to depths of 6666 ft (2000 m) and process pressures up to 15,000 psi (1034 Bar), the SST2015 utilises the unique micro capacitance silicon sensor, with state of the art microprocessor technology provides exceptional performance and functionality at extreme high pressures.

Solartron ISA's SST family sets the global performance standard for subsea measurement instrumentation in the oil and gas industry. Used by leading exploration companies, SST products have an unsurpassed service history in the field, even in the most demanding and hostile installation environments.

## Highly Stable, Accuracy Measurement

Solartron's 40 years of flow measurement experience has made us experts in pressure measurement technology. For subsea applications, only the best pressure measurement technologies should be employed. This is especially critical if the pressure measurement will be used for flow calculations as long-term inaccuracy can lead to significant fiscal errors.

The SST2015 DP is equipped with the Fuji FKC Pressure Transmitter Series with its unique micro capacitance silicon sensor, the advanced "floating cell design protects the sensor against changes in temperature, static pressure and overpressure, substantially the total measurement error in actual field applications.

## Robust Construction

Small and Light, yet built for long-term use in the hostile deep subsea environment, the SST2015 integrates a fully machined sensor body and pressure flanges with high strength bolts and nuts. The electronics enclosure can be fitted with a variety of subsea electrical connectors or penetrators to suit client/project requirements. Every unit is hyperbarically tested to 2000 m water depth prior to dispatch, proving the integrity of the twin O-Ring sealing arrangements.

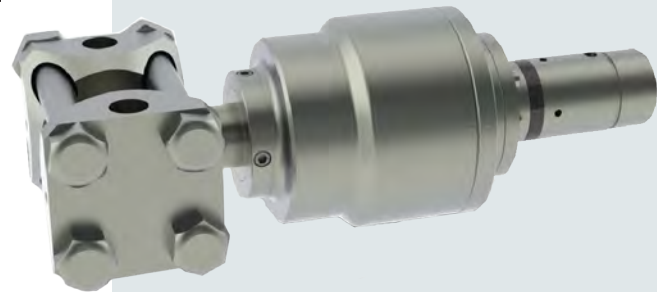
## Comprehensive Qualification Testing

Every one of Solartron ISA's Seastreams are fully tested to rigorous standards appropriate to the harsh subsea environment including: hydro-test, gas leak (bubble) test all in conjunction with the electrical testing for the SST Transmitters. The Solartron name is your assurance that the instrument meets or exceeds the highest international standards.

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## Key Specifications

- ✓ Depth 6,666ft (2000m)
- ✓ Pressure 15,000psi (1034 bar)
- ✓ Accurate to  $\pm 0.1\%$  of span
- ✓ Stability  $\pm 0.1\%$  of URL/3 years
- ✓ Optional Close Couple Seal

## Features

- ✓ 4-20mA
- ✓ CANopen (Hi-speed)
- ✓ CANopen (Fault Tolerant - SIFS-2 Compliant)
- ✓ Modbus (RS485)

## Qualifications

- ✓ API 6A
- ✓ ISO 10423
- ✓ ISO 13628-6
- ✓ IEC 61000-4
- ✓ ISO 9001



**AMETEK**<sup>®</sup>  
OIL & GAS

# SST2015 DP Differential Pressure Transmitter For Deepwater Applications

## Specifications

### Performance Specifications

#### Transmitter output

4-20 mA, HART, Modbus (RS485), CANopen (High-Speed, Fault Tolerant)

#### Accuracy

Reference accuracy of calibrated span (including the effects of zero-based linearity, hysteresis, and repeatability) :  $\pm 0.1\%$  of span

For Spans greater than 1/10 of URL:  $\pm 0.1\%$  of span

#### Temperature

Total ambient temperature effects per 50°F (28°C) change

Zero:  $\pm(0.1+0.025 \times \text{URL}/\text{Span})$  in % URL/28°C

Span:  $\pm(0.125+0.025 \times \text{URL}/\text{Span})$  in % URL/28°C

#### Static Pressure Effect

Total static pressure effects per change

Zero :  $\pm 0.1\%$  of URL/10 MPa

Span :  $-0.6\%$  of span/10 MPa

#### Stability

$\pm 0.1\%$  of URL per 36 months

#### Calibration

High static line pressure calibration optional

Operating temperature calibration optional

## Functional Specifications

### Ambient Temperature Limits

32 to 176°F (0 to +80°C)

### Process Temperature Limits

32 to 248°F (0 to 120°C) (Autoclave only)

-4 to 248°F (-20 to 120°C) (Closed Coupled Diaphragm Seal)

### Working Pressure Limits

Maximum working pressure limit 15,000 psi (1034 bar)

Maximum test pressure limit 22,500 psi (1551 bar)

## INSTALLATION

### Supply Voltage

16.1 to 28 VDC for analog operation

## SPAN AND RANGE LIMITS

### Measurement Range

| Capsule | Range (min/max)  |
|---------|------------------|
| 3       | 130 – 320 mbar   |
| 5       | 130 – 1300 mbar  |
| 6       | 130 – 5000 mbar  |
| 8       | 300 – 30000 mbar |

## PHYSICAL SPECIFICATIONS

### Weight

Unit weight 36.4 lbs (16.5Kg)

### Process Connections

Autoclave fitting (9/16 Medium Pressure)

Closed couple diaphragm seal (Welded or Autoclave)

### Wetted Parts Materials

Diaphragm: Hastalloy C276

Cover Flanges: 316 Stainless Steel

Vent and Plug: 316 Stainless Steel

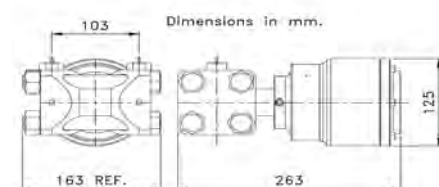
### Non-Wetted Parts Materials

Flange Bolting: 660 Stainless Steel

Housing: 316 Stainless Steel

Seal: Viton O-rings

## Dimensions



## SOLARTRON ISA

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