# Paine 226-30-0020 Series Pressure Transmitter

CANopen® Digital, Submersible Differential Pressure and Temperature



The 226-30-0020 Series CANopen® Submersible Differential Transmitters offer precise pressure measurement of liquids and gases from 0-10,000 PSID (690 BAR), with the added value of temperature measurements from +25 °F to +175 °F (-4 °C to +80 °C).

Industry standard CANopen®, Subsea Instrumentation Interface Standardization (SIIS) Fault Tolerant Level 2 output, the 226-30-0020 Series is fully submersible and perfect for subsea networking solutions providing high resolution differential measurement, reliability and performance.



Paine 226-30-0020-DS April 2016

#### **Solutions**

- Fully Submersible.
- CANopen® Network Ready.
- Digital Measurement Accuracy.
- Pressure and Temperature.
- Universal Mounting.

### **Potential Applications**

- Subsea Processing, Pressure and Temperature.
- Control Pod Pressure and Temperature
- Wellhead Pressure and Temperature.
- ROV Controls.
- Subsea Hydraulic Controls.

#### **Features**

- **Differential Pressure Range:** 0-10,000 PSID (690 BAR) each port.
- External Case Pressure: 6,000 PSI (414 BAR).
- Operating Temperature:  $+25 \,^{\circ}\text{F}$  to  $+175 \,^{\circ}\text{F}$  ( $-4 \,^{\circ}\text{C}$  to  $+80 \,^{\circ}\text{C}$ ).
- **Digital Output:** CANopen<sup>®</sup>, CIA 443 (Fault Tolerant SIIS Level 2).
- Pressure Resolution: 16 bits minimum.
- Temperature Output: °F or °C.
- **Temperature Resolution:** 13 bits minimum, better than 0.05 °F.

# **Specifications**

**Calibration:** Calibration Certificates are supplied with each unit and available on-line.

#### **Performance**

**Pressure Output in PSI:** Fully compensated for the effects of temperature and non-linearity.

**Pressure Resolution:** 16 Bits minimum (see Pressure Table).

**Temperature Output:** °F or °C.

**Temperature Measurement:**  $-4 \,^{\circ}\text{F}$  to  $+175 \,^{\circ}\text{F}$  ( $-20 \,^{\circ}\text{C}$  to  $+80 \,^{\circ}\text{C}$ ). **Temperature Resolution:** 13 bits minimum. Better than  $0.05 \,^{\circ}\text{F}$ .

#### **Environmental**

**Operating Temperature Range:** +25 °F to +175 °F (-4 °C to +80 °C). Connector Rating.

**Calibrated Temperature Range:** +32 °F to +122 °F (0 °C to +50 °C)

**Pressure Media:** Fluids and gases compatible with NO7725, solution annealed and aged to a maximum hardness of 43 HRC.

**External Case Pressure Media:** Fluids and gases compatible with NO7725, solution annealed and aged to a maximum hardness of 43 HRC and 316SS.

**Proof Pressure:** 150% of rated range (line). **Burst Pressure:** 250% of rated range (line).

External Case Pressure: 6,000 PSI (414 BAR) maximum.

#### **Contents**

#### Mechanical

**Pressure Range**: Contact factory for additional pressure ranges.

Pressure Table					
Standard Part Number	Common Mode (Line) Range PSI MAX (BAR)	Differential Pressure Range PSID (BAR)	Pressure Resolution (Better Than)	Common Mode Differential Pressure Error (% of Full Scale)	
226-30-0020-10K0	0-10,000 PSI (0-690 BAR)	± 10,000 PSID (± 690 BAR)	0.10 PSI	± 0.25%	

**Proof Pressure:** 3/8-in. female Autoclave Engineers medium

pressure fitting. Fitting torque: 25-30 ft-lb.

Weight: 30.0 oz maximum.

#### **Electrical**

**Digital Output:** CANopen<sup>®</sup>. Meets the requirements of CIA 433, Subsea Instrumentation Interface Standardization (SIIS) Level 2, Fault Tolerant.

**Input Voltage:** 20 – 27 VDC.

**Input Current:** 25 mA maximum.

Insulation Resistance: All pins together to case. 1,000 M  $\Omega$ 

minimum at 50 VDC, 75 °F  $\pm$ 10 °F (24 °C to  $\pm$  6 °C).

**Over Voltage Protection:** Protected from damage up to

36 VDC.

**Reverse Polarity:** "POWER IN" is protected from the application of reverse polarity.

**Differential Pressure Signal Polarity:** Positive pressure signal if

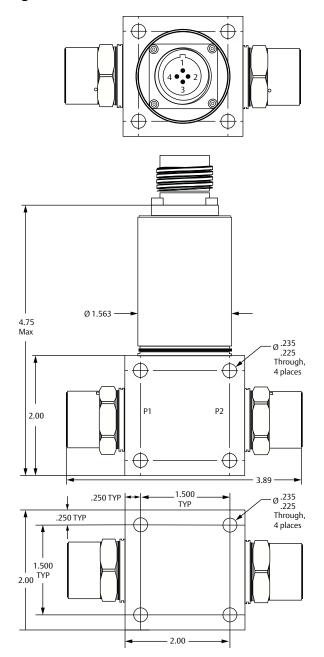
**Electrical Connection:** Mates with Teledyne® subsea MHDG-4-CCP or equivalent. Mating connector not provided.

**User Guide and Programming:** Document 200.303 provided.

Paine 226-30-0020-DS April 2016

# **Dimensional Drawings**

Figure 1. 226-30-0020 Series



Connections			
PIN	Function		
1	Power in		
2	Power return		
3	Can high		
4	Can Low		

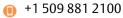
Dimensions are inches.

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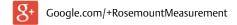
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