

# Paine 220-30-020 Series Pressure Transmitter

## Digital, CANopen®, Submersible, +60°C, Pressure & Temperature



Designed for remote subsea systems, our **220-30-020 Series** meets the requirements of API 17F / ISO 13628-6 and CIA 443 (SIIS Level 2 device) and provides designers with an intelligent CANopen® networking solution for pressure and temperature measurement.

Designed for pressure ranges of 0-15,000 PSIA (1034 BAR) and temperature measurement from +25°F to +140°F (-4°C to +60°C) the **220-30-020 Series** also features a micro Subconn® MCBH4F subsea connector and all welded construction for long term subsea operation.

## Solutions

- Subsea Environment Ready.
- Digital CANopen® Accuracy.
- Longer & Simpler Network Connections.
- Extreme Depths & Pressure.

## Potential Applications

- Subsea Production & Controls Systems.
- Remote / Extreme Pressure Monitoring.
- Corrosive Environment Pressure Monitoring.
- Submersible Subsea Applications.
- ROV's & AUV's.
- Subsea Valves & Manifolds.

## Features

- **Operating Temperature:** +25°F to +140°F (-4°C to +60°C).
- **Digital Output:** CANopen® Fault Tolerant.
- **Pressure Range:** 0-15,000 PSIA (0 to 1034 BAR).
- **Accuracy:** 0.1%.
- **Repeatability:** ± 0.015%.
- **Resolution:** 16 Bits Minimum. 0.08 PSI for 5,000 PSI (344 BAR) Full Scale.
- **Temperature Output:** °F or °C.
- **Temperature Resolution:** 10 Bits Minimum, Better Than 0.5°F.

# Specifications

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

## Performance

**Accuracy:** ± 0.1% of the Full Scale (F.S.). Accuracy is relative to primary standard at time of calibration and includes resolution, hysteresis, non-repeatability and thermal effects.

**Pressure Output in BAR:** Compensated for the effects of temperature and non-linearity.

**Pressure Resolution:** 16 Bits Minimum. See Pressure Table.

**Temperature Output:** °F or °C.

**Temperature Measurement:** 20°F to +150°F (-6°C to +65°C).

**Temperature Resolution:** 10 Bits minimum. Better than 0.5°F (+28°C).

## Environmental

**Operating Temperature Range:** +25°F to +140°F (-4°C to +60°C).

**Calibrated Temperature Range:** +32°F to +100°F (0°C to +38°C).

**Operating Media:** Any compatible with Inconel® 725.

## Mechanical

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

Pressure Table						
Standard Part Number	Pressure Range PSIA (BAR)	Proof Pressure PSIA (BAR)	Burst Pressure PSIA (BAR)	MAX External Case Pressure PSIA (BAR)	MAX Fitting End Pressure PSIA (BAR)	Pressure Resolution (Better Than) PSI (BAR)
220-30-020-01	0-10,000 (0-689)	15,000 (1034)	20,000 (1378)	10,000 (689)	20,000 (1378)	0.38 PSI (.026)
220-30-020-02	0-15,000 (0-1034)	22,500 (1551)	30,000 (2068)	10,000 (689)	60,000 (4136)	0.23 PSI (.016)

**External Case Pressure:** 10,000 PSIA (689 BAR).

**Secondary Containment:** 15,000 PSI (1034 BAR), Safety factor 1.25 minimum.

**Pressure Fitting:** 220-30-010-01: 3/8" medium pressure female autoclave fitting.

220-30-010-02: 3/8" high pressure female autoclave fitting.

## Electrical

**Input Voltage:** +20.00 to +27.00 VDC.

**Input Current:** 25 mA maximum.

**Baud Rate:** 50K default.

**Over Voltage Protection:** Protected from damage up to 36 VDC.

**Reverse Polarity Protection:** "Power In" is protected from application of reverse polarity.

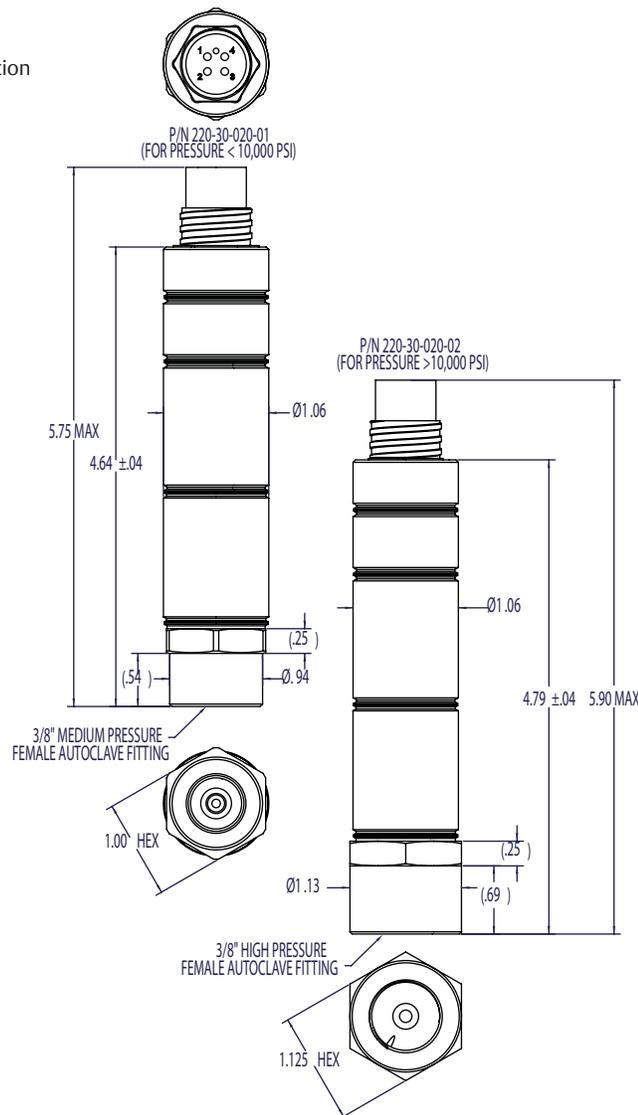
Baud Rate: 50K default.

**Electrical Connections:** Subconn® MCBH4F subsea bulkhead connector. Mates with MCL4M (not supplied).

**Insulation Resistance:** All pins together to case 100MΩ minimum at 50 VDC and 75°F, ± 10°F (24°C, ± 6°C).

**User Guide:** Document 200.302 provided.

## Dimensions (inches)



## Connections

PIN	FUNCTION
1	POWER IN
2	POWER RETURN
3	CAN HIGH
4	CAN LOW

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