# 69XX

## Wireless Pressure Transducer With LoRaWAN

## SPECIFICATIONS

- **316L Stainless Steel Wetted Surface**
- **LoRaWAN Class A Wireless Connection**
- **Digital 24-bit ADC Output**
- **Weatherproof (IP66/IP67)**
- **CE Certified**
- **ATEX Certified**
- **Variety of Pressure Ports**

## FEATURES

- Accuracy as high as ±0.1%FS
- Total Error Band down to±1%FS
- Integrated sensor temperature output typical accuracy as ±5°C
- Available LoRaWAN frequencies: 868MHz (EU) /915MHz (USA)
- Wide operating Temperature range as -30°C to 75°C
- Rugged Construction can withstand 50g Shock/8g Vibration
- 10 V/m EMI Protection
- Excellent stability can withstand 1M 0~FS pressure cycles @25°C

## APPLICATIONS

- Process Controls
- Tank Level Measurement
- Filter Performance Monitoring
- Corrosive Fluids and Gas Measurement Systems
- Flow Measurements

The 69XX wireless pressure transducer is enclosed in a stainless steel and PET+15%GF housing. This high accuracy wireless transducer eliminates hard wiring and provides remote process monitoring via LoRaWAN wireless communication. This series is suitable for measurement of liquid or gas pressure, even for difficult media such as contaminated water and mildly corrosive fluids.

The Intrinsically Safe 69XX is certified to:

Class I, Division 1 Groups A, B, C, D, T4

Class I Zone 0, AEx ia IIC T4 Ga

Ex ia IIC T4 Ga

Ta / Process Temp: -30 °C to +75 °C

The wetted material of the pressure port is 316L stainless steel and the transducer's durability is excellent with no O-rings or organics exposed to the pressure media. The 69XX is weatherproof and exceeds the latest heavy industrial CE requirements.

## STANDARD RANGES

| Pressure range (Bar) | Absolute |
|---|---|
| 0 to 7 | • |
| 0 to 20 | • |
| 0 to 35 | • |
| 0 to 350 | • |

## PERFORMANCE SPECIFICATIONS

**Ambient Temperature: 25°C (unless otherwise specified)**

| PARAMETERS | MIN | TYP | MAX | UNITS | NOTES |
|---|---|---|---|---|---|
| Supply Voltage | 2.8 | 3 | 3.6 | $V_{DC}$ | Replaceable LS17330 battery |
| Accuracy | 7, 20, 35 bar: ±0.1%<br>350 bar: ±0.25% | | 0.1<br>0.25 | %Span | 1 |
| Resolution | | 24 | | Bit | |
| Pressure Cycles | 1.00E+06 | | | 0-FS Cycles | |
| Proof Pressure | | | 3X | Rated | |
| Burst Pressure | | | 4X | Rated | |
| Long Term Stability | | ±0.1 | | %Span/year | |
| Total Error Band | -1 | | 1 | %Span | |
| Compensated Temperature | -30 | | 70 | °C | |
| Operating Temperature | -30 | | 75 | ºC | With battery |
| Storage Temperature | -40 | | 80 | ºC | Without battery |
| Wireless Protocol | LoRaWAN Class A | | | | |
| Signal Transmission Distance | 2 KM TBD | | | | |
| Battery Life | 2.5-year TBD | | | | |
| Weatherproof | IP66 & IP67 | | | | |
| Sensor Type | Oil filled capsule | | | | |
| Pressure Port Material | 316L Stainless Steel | | | | |
| Shock | 50g, 11 msec Half sine shock per MIL-STD-202F, Method 213B, Condition A | | | | |
| Vibration | Max 8g, 7Hz-200Hz, IEC 62133-2:2017 | | | | |

**Notes**

1. RSS combined linearity, hysteresis and repeatability.
2. Battery life depends on its capacity, operating temperature and signal transmission interval.
3. Temperature can impact battery capacity retention even in idle. Check battery specifications for more details.
4. Factory default data transmission rate is 10-30min, The specific time period depends on

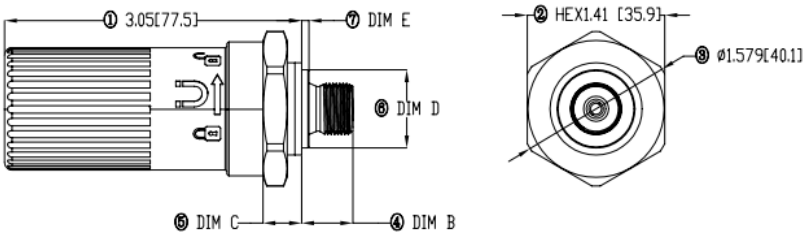
**Compliances**

| |
|---|
| ATEX, IECEx, US/CAN |
| ISED |
| RoHS |
| FCC |
| RED |
| Bluetooth® |
| LoraWAN |

**Pressure Port Options**

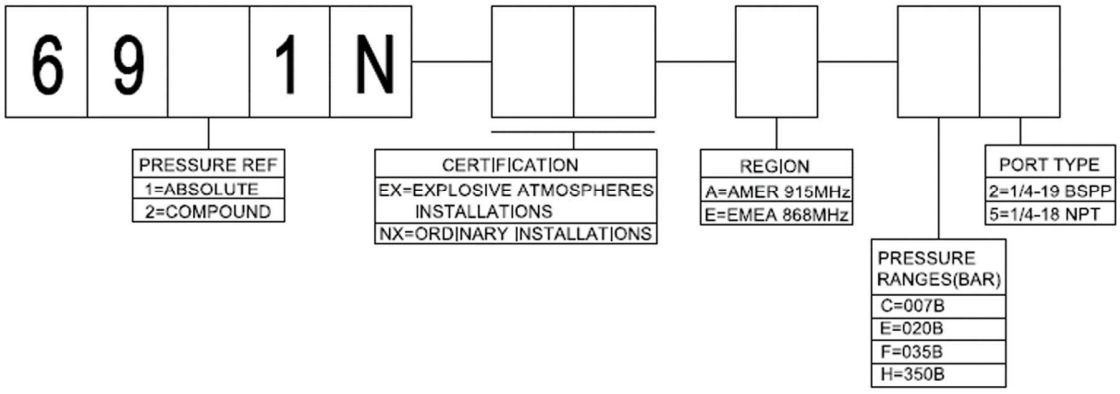
| |
|---|
| 2 = 1/4-19 BSPP Male |
| 5 = 1/4-18 NPT Male |

## DIMENSIONS




| PORT TYPE | PRESSURE RANGE | DIM B TYP. | DIM C TYP. | DIM D TYP. | DIM E TYP. |
|---|---|---|---|---|---|
| 1/4-18 NPT | 7 BAR | 0.60 [15.24] | 0.397 [10.08] | NA | NA |
| | 20 BAR | | | | |
| | 35 BAR | | | | |
| | 350 BAR | | | | |
| 1/4-19 BSPP | 20 BAR | 0.526 [13.36] | | 0.80 [20.32] | 0.075 [1.905] |
| | 350 BAR | | | | |

## ORDERING INFORMATION



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