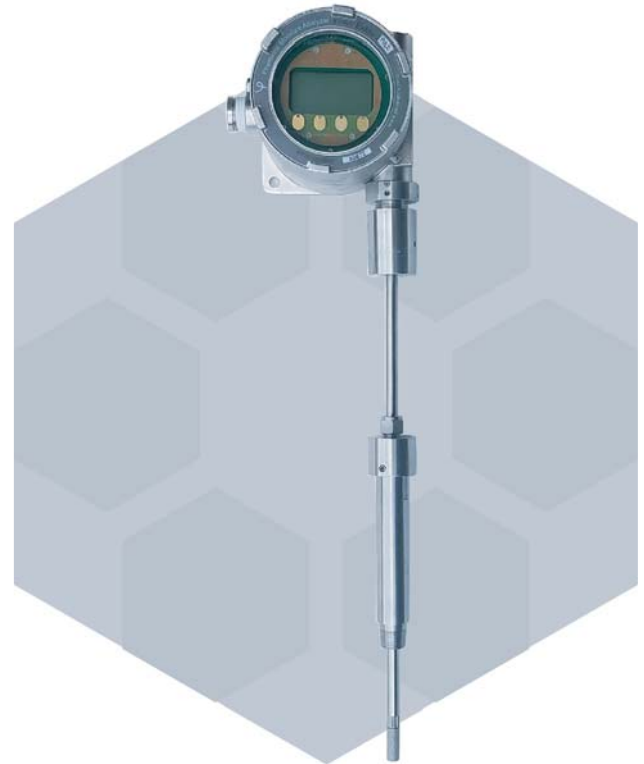
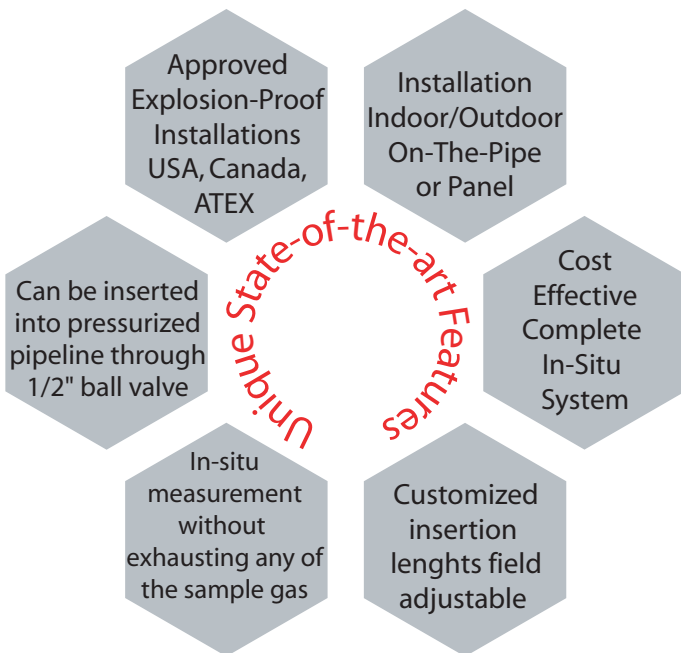


Leading edge Nanosensor Technology



more FEATURES

- -110°C to +20°C dewpoint Sensor
- Fast, Accurate and Repeatable
- Built-in temperature compensation
- 90-260VAC, 12 to 24VDC & opt. Loop Powered
- Optional 4/20 mA sink or source w/HART®
- 3" viewport, Stainless IP68 & Explosionproof
- State-of-the-art electronics & software
- Advanced User-friendly Interface
- Continuous Status and Diagnostics display
- On-screen histogram and trend graph
- Optional Built in Pressure Sensor
- Optional RS-485 Modbus® interface
- 316 Stainless Steel & PTFE wetted parts
- NIST calibrations

APPLICATIONS

- Natural Gas
- Petrochemical
- Industrial Gases
- Power Generation
- Furnace Gas / Heat Treating
- Air Dryers
- Pharmaceutical
- Aerospace
- Medical



PhyMetrix, Inc.
Moisture Measurement
Innovation at work

- ◆ Test
- ◆ Measure
- ◆ Calibrate
- ◆ Quick
- ◆ Reproducible
- ◆ NIST Traceable

Proudly Designed, Developed and Manufactured in the USA

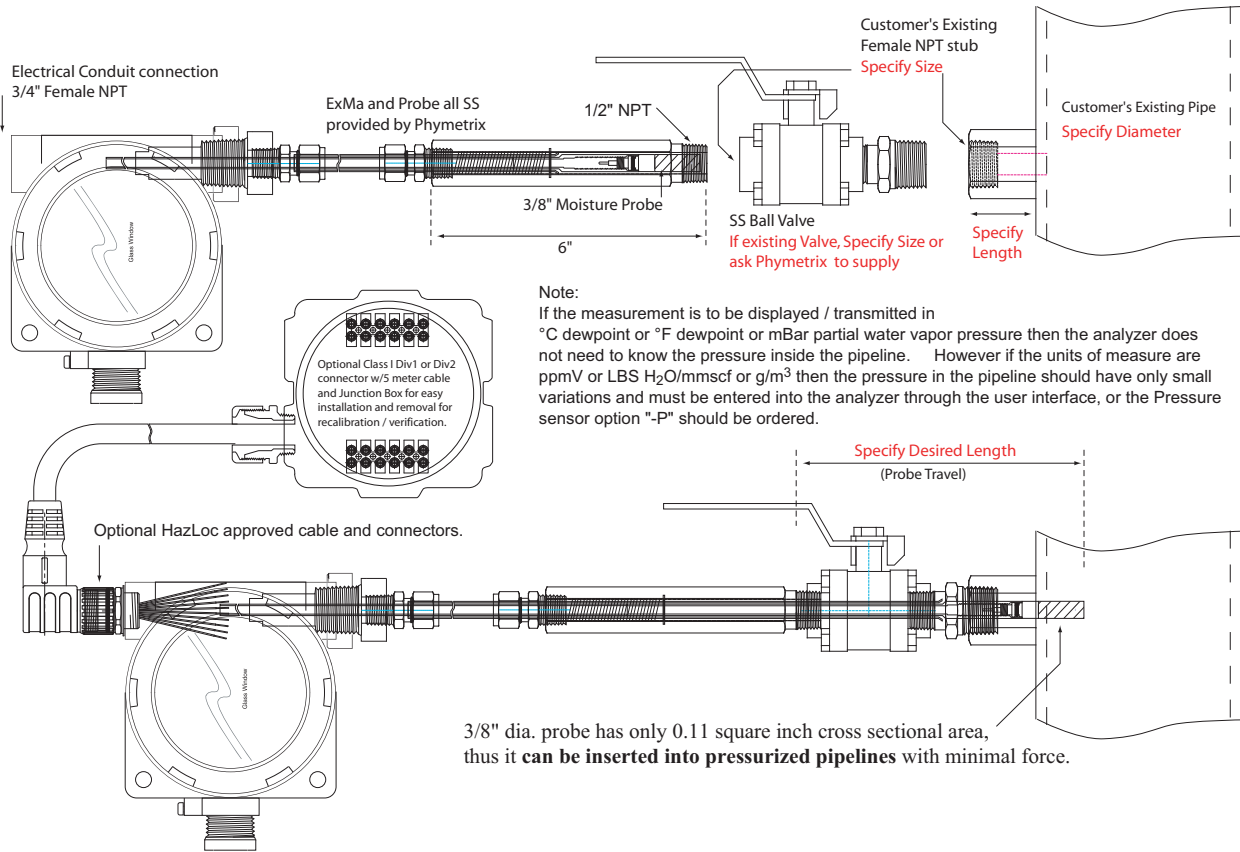


ExMaProbe

PhyMetrix Explosion-Proof Moisture Probe



Installation and Connection Options



Note:
 If the measurement is to be displayed / transmitted in °C dewpoint or °F dewpoint or mBar partial water vapor pressure then the analyzer does not need to know the pressure inside the pipeline. However if the units of measure are ppmV or LBS H₂O/mmscf or g/m³ then the pressure in the pipeline should have only small variations and must be entered into the analyzer through the user interface, or the Pressure sensor option "-P" should be ordered.

3/8" dia. probe has only 0.11 square inch cross sectional area, thus it can be inserted into pressurized pipelines with minimal force.

Technical Specifications

Moisture Sensor	Range: -110°C to +20°C dewpoint (-166°F to +68°F dewpoint) (0.001588 ppmV to 23597ppmV) Detection Limit: 0.001 ppmV Accuracy: ±2°C temperature corrected (10% of reading in ppmV) Repeatability: 0.8°C (5% of reading in ppmV) Response time: 95% of step change in 3 min. Sample flow: >1 LPM
Temperature Sensors	Range: -40°C to +70°C; Accuracy: ±2°C
Pressure Sensor	2 to 1000 PSIA ±1%, 316L stainless steel wetted parts
Electrical	3 automatic detection - self configuring power modes: 1) 90-260VAC 47-440Hz or 2) 12-24VDC 10VA or 3) 4/20mA Loop Powered Optional Pwr modes 1&2 have I/O options: a) RS-485 isolated Modbus® b) 4/20mA sink or source isolated with HART® c) 3 Alarm Relays - 3A, 250VAC contacts
Mechanical	Process threads 1/2" NPT specify if adapter is needed. All 316 Stainless Steel and PTFE wetted parts, small surface area stainless steel sampling chamber for fast response time. Enclosure Aluminum or optional 316 Stainless Steel, Glass lens, IP66 & IP68 FM/CSA Explosion Proof Certified Class I, Div I, Groups B, C And D Class II, III, Div 1, Groups E, F And G ATEX Explosion Proof Certified ATEX 2 GD, Exd I & IIC; IECEx, Exd I & IIC Dimensions- L: 8.5" (216mm) W: 5.7" (145mm) H: 4.7" (120mm) Weight Total: 5.5 Lbs (2.5 Kg) Pressure: 1000 PSIA (68 Bar) Flow Control Orifice can be placed at Inlet or Outlet; Built in serviceable/cleanable 100 micron Filter
Temperature Range	ExMa Analyzer: -20°C to +60°C Electronics: -40°C to +85°C Moisture Sensor: -20°C to +60°C Pressure Sensor: -20°C to +85°C LCD operating: -20°C to +70°C storage: -30°C to +80°C
Miscellaneous Features	Through the glass user interface buttons, allow operation while enclosure is closed NIST traceable calibrations Units of measure: °C & °F dewpoint, ppmV, ppmW, µB H ₂ O vapor pressure, grams of H ₂ O / m ³ and Lbs H ₂ O / 10 ⁶ standard cubic feet in Natural Gas Virtual Analyzer PC software for training and evaluation, allows the user to experience the exact interface on their own PC with voice explanations Optional Modbus® has ASCII and RTU modes

ORDERING INFORMATION	Part Number
PhyMetrix Explosion Proof Moisture Probe	ExMaProbe
Stainless Steel Enclosure	suffix - S
Pressure sensor option 0-1000 psia automatic pressure correction	suffix - P
Mounting Legs	suffix - M
Analog Output 4/20 mA with HART® option	suffix - A
Explosion Proof ATEX option	suffix - I
Digital RS485 Modbus interface	suffix - D
Class I Div2 connector with 5 meter cable & junction-box	suffix - C

Represented by:

If Adapters are Required Specify 1/2" FNPT to your valve size

Doc. Revision 0