

3½ DIGIT EXPLOSION-PROOF LOOP-POWERED PROCESS METER

ProtEX-One • MODEL PD6870



ProtEX™
One



*Approvals presently apply to explosion-proof enclosure only.
Complete product approvals expected soon, contact factory for details.*

- **4-20 mA input**
- **1 V drop (4 V with backlight)**
- **3½ digits LCD, 1" high**
- **Loop-powered backlight option**
- **Explosion-proof, IP68, NEMA 4X enclosure**
- **Flanges for wall or pipe mounting**
- **Easy calibration and installation**
- **Operates from -40 to 75°C**

**PRECISION
DIGITAL**

MODEL PD6870 3½ DIGIT EXPLOSION-PROOF LOOP-POWERED METER

SPECIFICATIONS

Except where noted all specifications apply to operation at +25°C.

Display: 3½ digit LCD, 1" (25.4 mm); -1999 to 1999

Display Update Rate: 2.5 Updates/Second

Overrange: Display reads 1 on the left most digit

Programming Method: Four front mounted rotary control dials accessed when the cover is removed.

Recalibration: Recommended at least every 12 months.

Normal Mode Rejection: 60 dB rejection ratio

Operating Temperature Range: -40 to 75°C

Storage Temperature Range: -40 to 75°C

Relative Humidity: 0 to 90% non-condensing

Connections: Screw terminals accept 12 to 22 AWG wire

Enclosure: Explosion-proof die cast aluminum with glass window, 0.30% max copper content, corrosion resistant epoxy coating, color: blue.

NEMA 4X, IP68. Two ¾" NPT threaded conduit openings. One ¾" NPT nickel plated brass conduit plug with 10 mm hex key fitting installed.

Mounting: May be mounted directly to conduit. Two slotted flanges for wall mounting or NPS 1½" to 2½" or DN 40 to 65 mm pipe mounting.

Overall Dimensions: 5.65" x 5.25" x 4.86"

(144 mm x 133 mm x 124 mm) (W x H x D)

Weight: 5.00 lbs (80 oz, 2.27 kg)

Warranty: 3 years parts and labor

Input

Input: 4-20 mA

Accuracy: ±0.1% of full span ±1 count

Temperature Drift: 150 PPM/°C from -40 to 75°C ambient

Decimal Point: User selectable decimal point

Calibration Range: 4 mA input: -1000 to +1000; 20 mA between 20 and 2000 counts greater than 4 mA display. Two point linear display span.

Maximum Voltage Drop: 1 VDC @ 20 mA with backlight; 4 VDC @ 20 mA with loop-powered backlight

Input Overload: Over current protection to 2 A max.

Enclosure Approvals

FM & CSA: FM Approved & CSA Certified. Explosion-proof for use in Class I, Division 1, Groups B, C, and D; Dust-Ignition-proof for Class II, Division 1, Groups E, F, and G, Class III; hazardous (classified) locations, indoor and outdoor (Type 4X and IP66)

USA: Indoor and outdoor (Type 4X and IP66); Ta = -40°F to +185°F

FM Certificate: 3032880

Canada: Indoor and outdoor (Type 4X); Ta = -40°C to +85°C

CSA Certificate: 2210414

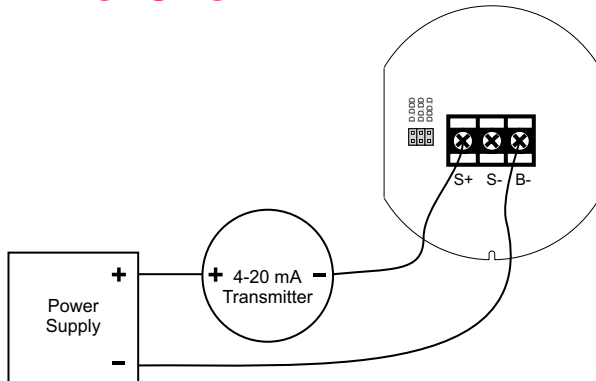
ATEX & IECEx: ATEX Certified: Group 2, Category 1 (Zone 1), Gases, Vapors, Mists, or Dusts: II 2 G D, Ex d IIC Gb, Ex tb Db IIIC IP68.

Ta = -40°C to +85°C. ATEX Certificate: Sira 08ATEX1325U

IECEx Certified: Flameproof, Gas Group IIC, Ex d IIC Gb, Ex tb IIIC IP68.

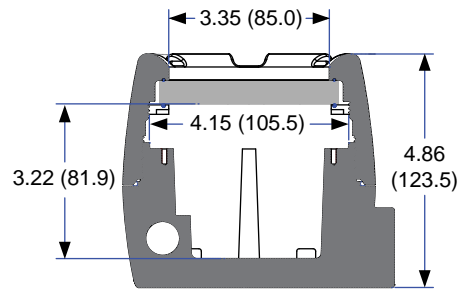
Ta = -40°C to +85°C. IECEx Certificate: IECEx SIR 08.0126U

CONNECTIONS

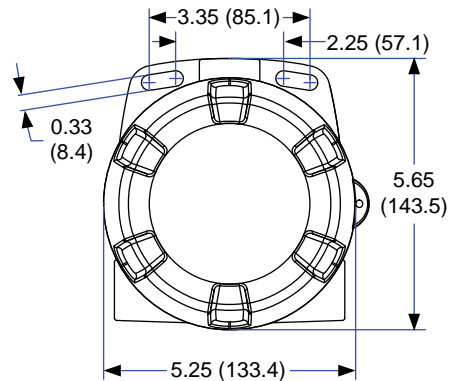


DIMENSIONS

Inch (mm)



Side View



Front View

ORDERING INFORMATION

PD6870 Loop-Powered Ex-Proof Process Meter	
Model	Options Installed
PD6870-0L0	None
PD6870-0K0	Backlight



PRECISION
DIGITAL