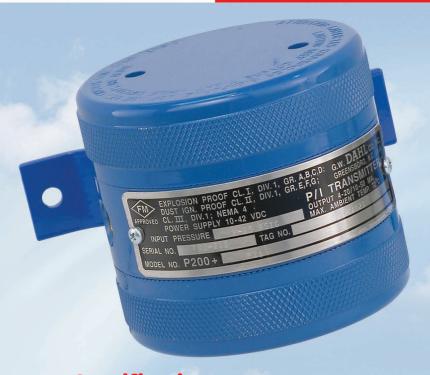


# Type P200

## Pneumatic-to-Current P/I Transducer

Reliable, user-oriented performance



ControlAir's P200 P/I transducer represents outstanding value in pneumatic to current technology. All solid state circuitry converts standard 3-15 psig instrument air into 4-20 mA output with uncompromising accuracy and durability.

The P200 is a self-contained unit with an explosion proof housing and is designed to stand up to the most hazardous and demanding applications.

The P200 is FM approved and CSA (option) certified as NEMA 4 (Enc. 4) for all locations and explosion-proof for Class I, Div. 1, Groups A, B, C, D; dust ignition-proof for Class II, Div. 1, Groups E, F, G; and suitable for Class III, Div. 1 locations.

## **Features**



- ±0.10% Accuracy
- Explosion proof housing
- Quick response time

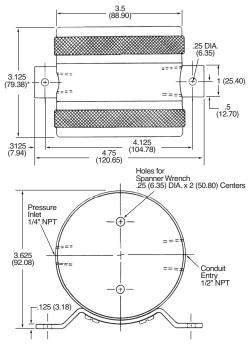
## **Specifications**

	P200
Inputs	Instrument Air: 3-15 psig (0.2-1.0 bar)
Maximum Input	3 times full scale without recalibration / 4 times full scale without failure
Outputs	P200, 2 wire: 4-20 mA with over-current limit
Allowable Loads(24 VDC Power)	700 Ω
Accuracy	± 0.15% of span guaranteed; ±0.10% of span typical. Includes combined effects of linearity, hysteresis and repeatability errors
Hysteresis	Negligible
Repeatability	±0.10% of span max; ±0.03% of span typical
Resolution	Infinite
Output Ripple	None
Response Time	10 m Sec to 99% of step change
Temperature Stability	Span and Zero: ±0.007% of span per °F maximum deviation from 77°F calibration
Power Supply Stability	Less than 0.005% of span change in output per volt change at the input terminals
Power Supply	10 VDC min. to 42 VDC max. at input terminals. Can indefinitely withstand up to 100 VDC without for
RFI/EMI Effect	Meets or exceeds SAMA PMC 33.1, 1978, 2-abc: 0.1% of span at 10 volts/meter
Operating Temperature Range	-40°F to 161°F (-40°C to 72°C)
Storage Temperature Range	-60°F to 161°F (-51°C to 72°C)
Calibration Adjustments	Multiturn span and zero potentiometers with approximately ±20% of span adjustment range
Mounting Position Effect	None
In-process Output Monitoring	Current: For accurate reading, ampmeter must have less than 20 $\Omega$ input resistance on 4-20 mA output (0.40 VDC drop)
Connections	Signal Air: 1/4" NPT female Electrical Wiring: 1/2" NPT female to barrier terminal strip up to 14 AWG

## Type P200

### **Dimensions**

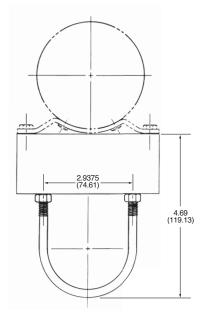
#### **P200**



\*Allow 1" (25.40) each end for removal of covers

## P200 2" Pipe, "U" Bolt Mounting

Kit # 748-542-010



## **Ordering**

Part Number Description

P200 P/I Device, 2-wire, FM explosion-proof, CSA (option), 4-20 mA

### **Input Ranges - P200**

P/N	Standard Input Ranges	
P11	3-15 psig (0.2-1.0 bar)	
P13	6-30 psig (0.4-2.0 bar)	

#### **Options - P200**

P/N	Custom Input Ranges (psig) Specify Range
P51	0-6.0 to 0-18.0 (0.4-1.2 bar)

F	P/N	Description
	P21	Lightening Surge Protector
	P23	Extra 316 SS Tag
	P28	CSA Intrinsically Safe
	P29	CSA Explosion-proof

Part Number = Model + Input Range + Options

**Example:** P200 + P11 + P21

## **Approvals**



The P200 has been approved by Factory Mutual and the Canadian Standards Association as NEMA 4 (Enc. 4) for all locations and explosion-proof for Class I, Div. 1, Groups A, B, C, D; dust ignition-proof for Class II, Div. 1, Groups E, F, G; and suitable for Class III, Div. 1 locations.CSA intrinsic safety approvals for Class I, Div. 1, Groups A, B, C, D. Contact ControlAir for further details.

Warranty ControlAir LLC products are warranted to be free from defects in materials and workmanship for a period of eighteen months from the date of sale, provided said products are used according to ControlAir LLC recommended usages. ControlAir LLC's liability is limited to the repair, purchase price refund, or replacement in kind, at ControlAir LLC's sole option, of any products proved defective. ControlAir LLC reserves the right to discontinue manufacture of any products or change products materials, designs or specifications without notice. Note: ControlAir does not assume responsibility for the selection, use, or maintenance of any product. Responsibility for the proper selection, use, and maintenance of any ControlAir product remains solely with the purchaser and end user. Drawing downloads available at www.controlair.com

