



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 or 6-30 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

- $\pm 0.10\%$ Accuracy
- Explosion proof housing
- Quick response time



Specifications

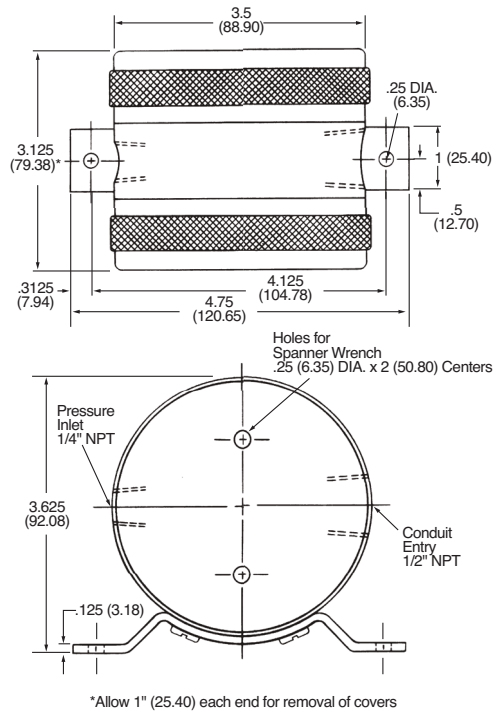
P200

| | | |
|--------------------------------------|--|--|
| Inputs | Instrument Air: 3-15 psig (0.2-1.0 bar), 6-30 psig (0.4-2.0 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 | $\pm 0.15\%$ of span guaranteed; $\pm 0.10\%$ of span typical. Includes combined effects of linearity, hysteresis and repeatability errors | |
| Hysteresis | Negligible | |
| Repeatability | $\pm 0.10\%$ of span max; $\pm 0.03\%$ of span typical | |
| Resolution | Infinite | |
| Output Ripple | None | |
| Response Time | 10 m Sec to 99% of step change | |
| Temperature Stability | Span and Zero: $\pm 0.007\%$ of span per $^{\circ}\text{F}$ 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 failure | |
| 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 $\pm 20\%$ 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 |

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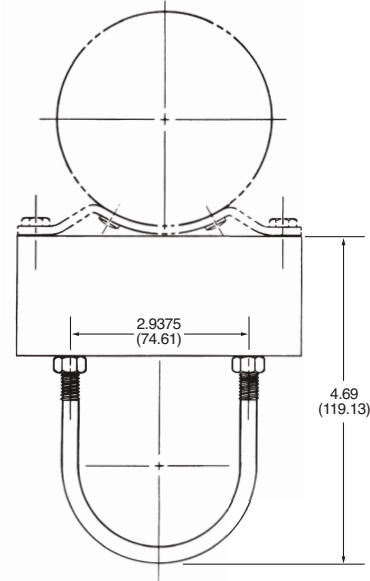
Dimensions

P200



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

Call the factory to inquire about custom range calibrations

| 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



8 Columbia Drive / Amherst, NH 03031 USA / www.controlair.com / sales@controlair.com / 603-886-9400 / FAX 603-889-1844
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