

# Series 865

## Pressure Transducer with Display



### Features & Applications

- Easy to read display (0.38" height)
- Available in custom pressure ranges from 0/0.25"WC up to 0/15PSI, including bi-directional
- Output Stability of 0.5% FSO
- Perfect for a variety of air and inert gas applications such as duct static, VAV and fan control
- Easy wiring via a pluggable screw terminal block
- Pressure range calibrated to customer's specific requirement
- Able to handle high overpressure
- Internally conditioned allowing it to automatically accept unregulated 12-24 VDC or 24 VAC power
- Reverse voltage protection

### Specifications

|                         |   |
|-------------------------|---|
| Accuracy*:              | +/-1.0% FSO   |
| Stability:              | +/-0.5% FSO/yr  |
| Thermal Effects:        | +/-0.075% FSO/°C  |
| Overpressure:           | 1-10"WC = 100"WC<br>11-20"WC = 10x rated pressure<br>21-30"WC = 5x rated pressure<br>Over 30"WC = 45PSI                       |
| FSO Pressure Range:     | 0/0.25"WC up to 0/15PSI<br>(bi-directional ranges available)  |
| Compensated Range:      | 10° to 50°C   |
| Media:                  | Non-corrosive, non-ionic gases  |
| Operating Humidity:     | 90% RH non-condensing   |
| Operating Temp:         | -25° to 70°C  |
| Input Supply**:         | 12-24 VDC/24VAC   |
| Supply Current:         | <30mA   |
| Load Resistance:        | 2KΩ minimum on voltage out, 250Ω maximum loop resistance on 4-20mA output (500Ω max loop resistance available upon request**) |
| Output Signal:          | 1-5VDC, 1-6VDC, 1-10VDC** or 4-20mA*** (call for custom outputs)  |
| Circuit Protection:     | Output limited and reverse voltage protected  |
| Electrical Connections: | Pluggable Screw Terminal Block  |
| Pressure Connections:   | Barbed fitting for 1/8" ID tubing   |
| Enclosure:              | Impact resistant ABS plastic  |
| Dimensions:             | Approx. 3.5" x 2.7" x 1.4" (8.7cm x 6.8cm x 3.5cm)  |

\* Includes non-linearity hysteresis and non-repeatability at a fixed temperature

\*\* An input of 18-24VDC/AC is required to drive a 500Ω load; the same input is also required for a 1-10VDC output

\*\*\* 3-wire 4-20mA

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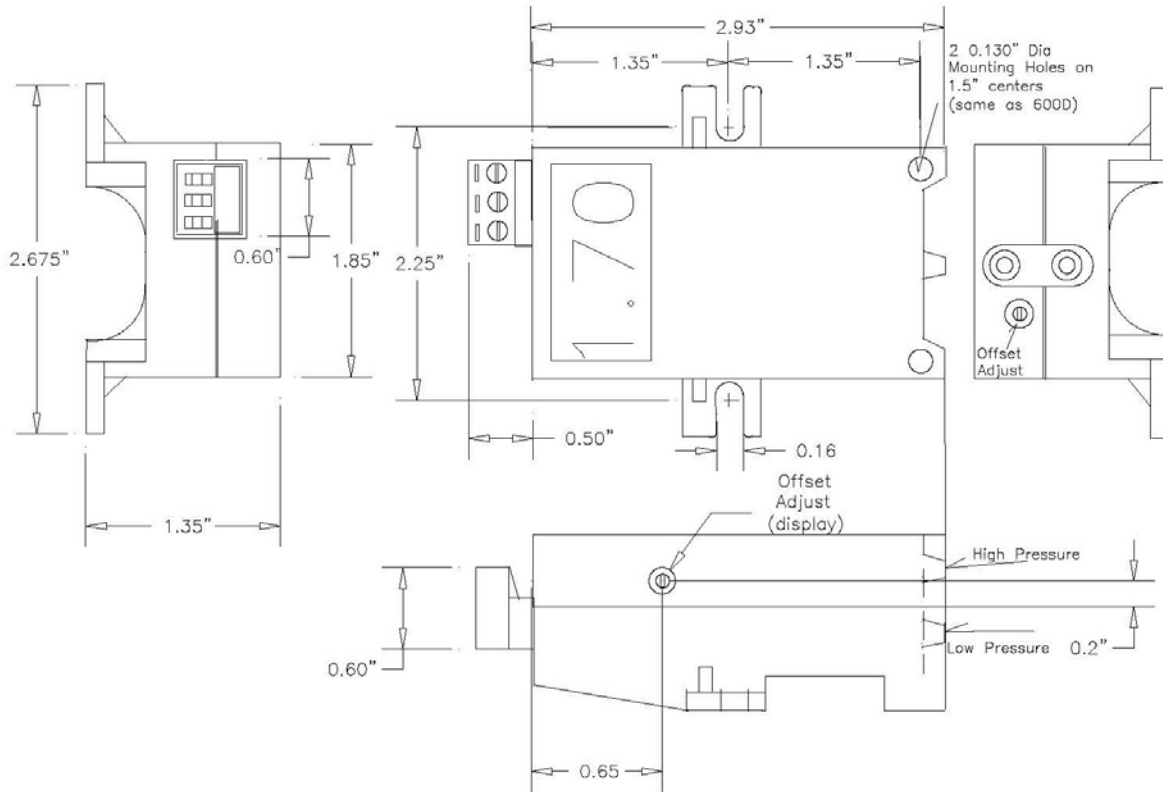
**controller**  
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DS-865 Rev A

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## Physical Drawing



## How to Order

A typical order number consists of the **model** number, **type**, **output signal**, **pressure range** and **calibration pressure**.

| <u>Model</u> | <u>Type</u>               | <u>Output Signal</u>   | <u>FSO Pressure Range</u>  | <u>Calibration Pressure</u>   |
|--------------|---------------------------|--|--|-------------------------------|
| 865          | D = Differential or Gage* | 0.....1 to 5 volts<br>1.....1 to 6 volts<br>2.....1 to 10 volts**<br>3.....4-20mA (250Ω load)<br>4.....4-20mA (500Ω load)**<br>5.....Custom Output | 0.....0.25"WC to 5"WC<br>1.....>5"WC to 13" WC<br>2.....>0.5PSI to 1PSI<br>3.....>1PSI to 5PSI<br>4.....>5PSI to 15PSI | Customer designated exact FSO |

*Example: 865D-01 Cal Pressure = 6" WC. "Pressure Range" is not a specific number. Please indicate exact calibration pressure. (This unit has an output of 1-5 VDC and will be calibrated to 6" WC.) If a custom output is needed, the exact output must be specified.*

\* With a gage application, one of the two pressure ports is vented to atmosphere

\*\* With a 1-10 VDC output as well as with a 4-20mA output that needs to drive a 500Ω load a 18-24 VDC/24VAC input is required.