

## 265 Series - Low Differential Pressure Transducers

- ▶ For Air or non-conductive gas
- ▶ 0.25 to 100 inches in W.C.(differential)/±0.1 to ±50 inches in W.C. (bi-directional)
- ▶ High proof pressure

The 265 Series are low-pressure transducers for ranges as low 0.25" W.C. and feature ±1% full scale static accuracy. Primarily used in Building Energy Management, these transducers are capable of measuring pressures and flows with the accuracy necessary for proper building pressurisation and air flow control. 265 Series transducers utilise an all-stainless steel micro-tig welded sensor that allows up to 10psi overpressure (in either direction) with no damage to the unit. All sensor components have thermally matched coefficients, which promote improved temperature performance and excellent long-term stability.



### Specifications

#### Input

<b>Pressure Range</b>	See ordering chart
<b>Proof Pressure</b>	700mbar
<b>Fatigue Life</b>	7 million cycles

#### Performance

<b>Supply Voltage (Vs)</b>	9-30Vdc
<b>Accuracy</b>	±1.0% FS (Standard); .4% & .25% versions available
<b>Thermal Error Zero</b>	±0.06% FS/°C (±0.033% FS/°F)
<b>Thermal Error Span</b>	±0.06% FS/°C (±0.033% FS/°F)
<b>Compensated Temperatures</b>	-18°C to +65°C (0° to +150°F)
<b>Operating Temperatures</b>	-18°C to +65°C (0° to +150°F)
<b>Storage Temperatures</b>	-40°C to +85°C (-40° to +185°F)
<b>Zero Tolerance</b>	1% (.5% for high accuracy option)
<b>Span Tolerance</b>	1% (.5% for high accuracy option)

#### Mechanical Configuration

<b>Pressure Port</b>	1/4" Fitting
<b>Wetted Parts</b>	Stainless Steel and Glass-Filled Polyester
<b>Electrical Connection</b>	Screw Terminal Strip
<b>Enclosure</b>	Fire Retardant Glass-Filled Polyester; Option A1 Conduit Enclosure Available
<b>Approvals</b>	CE
<b>Weight</b>	85gms

### Individual Specifications

#### Voltage Output Units

<b>Output</b>	0-5Vdc or 0-10Vdc (3 wire) (see ordering chart)
<b>Min. Load Resistance</b>	5000 kohms

#### Current Output Units

<b>Output</b>	4-20mA (2 wire)
<b>Max. Loop Resistance</b>	(Vs-9) x 50 ohms

### Applications

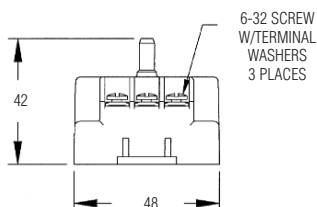
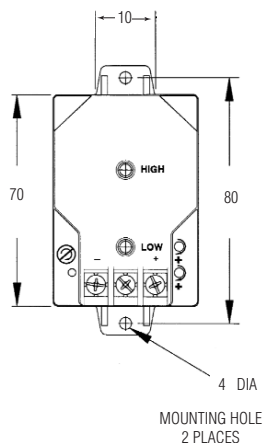
- ▶ HVAC
- ▶ Energy Management Systems
- ▶ Variable Air Volume and Fan Control (VAV)
- ▶ Environmental Pollution Control
- ▶ Static Duct and Clean Room Pressures
- ▶ Oven Pressurization and Furnace Draft Controls

### How They Operate

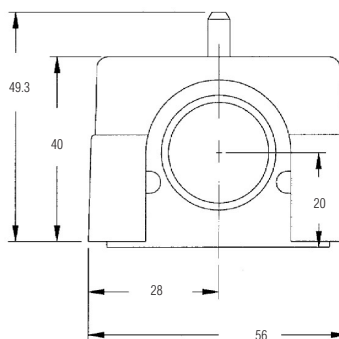
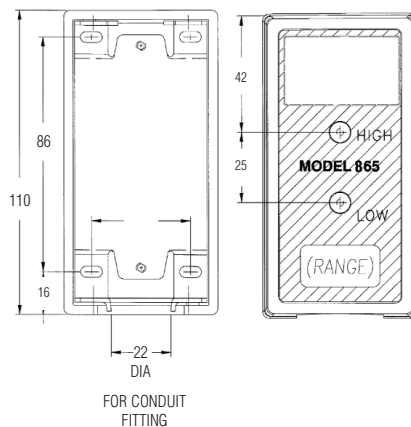
A tensioned stainless steel diaphragm and insulated stainless steel electrode, positioned close to the diaphragm, form a variable capacitor. Positive pressure moves the diaphragm toward the electrode, increasing the capacitance. A decrease in pressure moves the diaphragm away from the electrode, decreasing the capacitance. The change in capacitance is detected and converted to a linear DC electrical signal by Gems' unique electronic circuitry.

Dimensions (in mm)

Standard 265 Series



Optional Conduit Enclosure - Code A1



How to Order

Use the **bold** characters from the chart below to construct a product code

SELECT

Series

**2651** - 265 Series

Pressure Range Code

Unidirectional		Bidirectional	
Code	Range (Inches W.C.)	Code	Range (Inches W.C.)
<b>R25WD</b>	0 to 0.25	<b>OR1WB</b>	±0.1
<b>OR5WD</b>	0 to 0.5	<b>R25WB</b>	±0.25
<b>001WD</b>	0 to 1.0	<b>OR5WB</b>	±0.5
<b>2R5WD</b>	0 to 2.5	<b>001WB</b>	±1.0
<b>005WD</b>	0 to 5.0	<b>2R5WB</b>	±2.5
<b>010WD</b>	0 to 10.0	<b>005WB</b>	±5.0
<b>025WD</b>	0 to 25.0	<b>010WB</b>	±10.0
<b>050WD</b>	0 to 50.0	<b>025WB</b>	±25.0
<b>100WD</b>	0 to 100.0	<b>050WB</b>	±50.0

Output

**11** - 4-20mA (9-30Vdc excitation)  
**2B** - 0-5Vdc (9-30Vdc excitation)

**2651 OR5WD 2B T1 C**

Accuracy

**C** - ±1%FS (Standard)  
Option (with Calibration Certificate)  
**E** - ±0.4% FS  
**F** - ±0.25% FS  
**G** - ±1% FS

Electrical Connection

**T1** - Terminal Strip  
**A1** - Supplied with Optional 7/8" Knock-Out Hole for 1/2" Conduit Enclosure