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 10 psi 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	
Pressure Range	See ordering chart
Proof Pressure	700mbar
Fatigue Life	7 million cycles
Performance	
Supply Voltage (Vs)	9-30 Vdc
Accuracy	±1.0% FS (Standard); .4% & .25% versions available
Thermal Error Zero	±0.06% FS/°C (±0.033% FS/°F)
Thermal Error Span	±0.06% FS/°C (±0.033% FS/°F)
Compensated Temperatures	-18°C to +65°C (0° to +150°F)
Operating Temperatures	-18°C to +65°C (0° to +150°F)
Storage Temperatures	-40°C to +85°C (-40° to +185°F)
Zero Tolerance	1% (.5% for high accuracy option)
Span Tolerance	1% (.5% for high accuracy option)
Mechanical Configuration	
Pressure Port	1/4" Fitting
Wetted Parts	Stainless Steel and Glass-Filled Polyester
Electrical Connection	Screw Terminal Strip
Enclosure	Fire Retardant Glass-Filled Polyester; Option A1 Conduit Enclosure Available
Approvals	CE
Weight	85 gms

Individual Specifications

Voltage Output Units	
Output	0-5 Vdc or 0-10 Vdc (3 wire) (see ordering chart)
Min. Load Resistance	5000 kohms
Current Output Units	
Output	4-20 mA (2 wire)
Max. Loop Resistance	(Vs-9) x 50 ohms

Applications

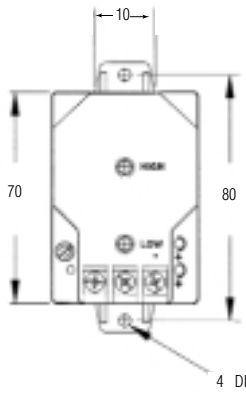
- HVAC
- Energy Management Systems
- Variable Air Volume and Fan Control (VAV)
- Environmental Pollution Control
- Static Duct and Clean Room Pressures
- Oven Pressurization and Furnace Draft Controls

How They Operate

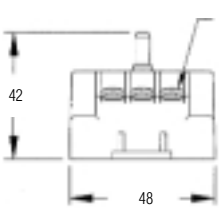
A tensioned stainless steel diaphragm and insulated stainless steel electrode, positioned close to the diaphragm, form a variable capacitor. Positive pressure moves the diaphragm toward the electrode, increasing the capacitance. A decrease in pressure moves the diaphragm away from the electrode, decreasing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

Dimensions (in mm)

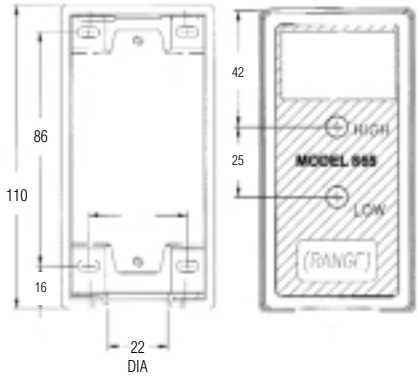
Standard 265 Series



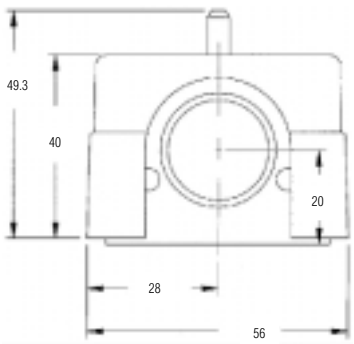
MOUNTING HOLE
2 PLACES



Optional Conduit Enclosure - Code A1



FOR CONDUIT
FITTING



How to Order

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

SELECT **2651** **OR5WD** **2B** **T1** **C**

Series
2651 - 265 Series

Pressure Range Code

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

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

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

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