

5266 Very Low Range Differential Pressure Transmitter

- ▶ 24 VAC/DC Excitation
- ▶ Excellent long term stability
- ▶ Easy to install
- ▶ Voltage or 4-20mA two wire output

Gems 5266 low range pressure transmitter measures gauge or differential pressure by means of a stainless steel diaphragm, and capacitive sensor. The model 5266 incorporates an ASIC to provide a temperature compensated high level analogue output over the temperature range -18 to +65°C. Mounted in a glass filled polyester case with pipe fittings the 5266 can measure pressures in the range 100 - 5000 pascals.

The 5266 utilises an all stainless steel microtig welded sensor. The tensioned stainless steel diaphragm and insulated stainless steel electrode, positioned close to the diaphragm, form a variable capacitor. Positive pressure moves the diaphragm towards 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 circuit.

The micro-tig welded tension sensor allows up to 69 kPa overpressure (in either direction) with no damage to the unit. In addition, the sensor parts have thermally matched coefficients, which promote improved temperature performance and excellent long-term stability



Specifications

Input

Pressure Range	Unidirectional 0-100 Pascals to 0 to 5000 Pascals Bi-directional ± 50 Pascals to ± 2500 Pascals	
Proof Pressure	100 and 250 kPa range	14 kPa
	500 Pascal range	35kPa
	1000 to 5000 Pascal range	69kPa
Line Pressure	69kPa max.	

Performance

Long Term Drift	0.5%/a
Accuracy	$\pm 1\%$ F.S.
Thermal Error	$\pm 5\%$ F.S.
Compensated Temperature	-18 to 65°C
Operable Temperature	-18 to 65°C
Zero Tolerance	$\pm 1\%$ F.S. (10V output $\pm 0.5\%$)
Span Tolerance	$\pm 1\%$ F.S. (10V output $\pm 0.5\%$)

Mechanical Construction

Pressure Ports	6.2mm
Wetted Parts	Compatible with air or non-conductive gases
Electrical Connection	Via terminal strip

Enclosure

Housing	Fire retardant glass filled polyester
Approvals	CE
Weight	150grams

Individual Specifications

Voltage Output units

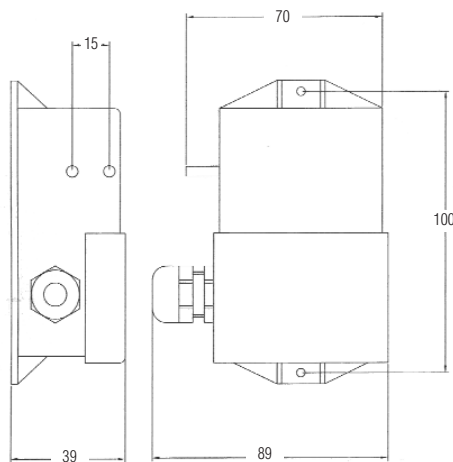
Supply Voltage	5V output 9 to 30 Vdc/a.c 10V output 12 to 30 Vdc/a.c
Output	0 to 5Vdc, 0 to 10Vdc For bi-directional ranges output at zero pressure 2.5V and 5Vdc respectively
Output Impedance	1000 ohms

Current Output Unit

Supply Voltage (Vs)	24Vdc
Output	4-20mA two wire for bi-directional ranges output at 0 pressure 12mA
Loop Resistance	(Vs-9) x 50 ohms

Applications

- ▶ Heating, Ventilating and Air Conditioning (HVAC)
- ▶ Energy Management Systems
- ▶ Variable Air Volumes and Fan Control (VAV)
- ▶ Environmental Pollution Control
- ▶ Static Duct and Clean Room Pressures
- ▶ Fume Hood Control
- ▶ Oven Pressurisation and Furnace Draft Controls



How to Order

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

SELECT Series	5266	500L	D	H	TI	C
Accuracy						
±1%						
Pressure Range (Pascals)						
Termination						
100L - 0 to 100	050L ±50					
250L - 0 to 250	100L ±100					
500L - 0 to 500	250L ±250					
10CL - 0 to 1000	500L ±500					
25CL - 0 to 2500	25CL ±2500					
50CL - 0 to 5000						
Datum						
D - Uni-directional						
B - Bi-directional						
Excitation - Output						
AC 24Vdc/a.c. - 0 to 10V						
AB 24Vdc/a.c. - 0 to 5V						
H 24Vdc - 4-20mA						
Electrical						
TI Terminal Block						
C Series						
C						