

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 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 circuit.

The micro-tig welded tension sensor allows up to 69kPa 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 250kPa range | 14kPa |
| | 500 Pascal range | 35kPa |
| | 1000 to 5000 Pascal range | 69kPa |
| Line Pressure | 69kPa max. | |

Performance

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

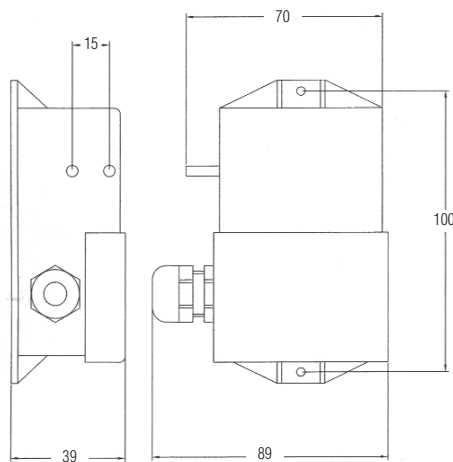
| | |
|-------------------------|---|
| Supply Voltage | 5V output 9 to 30 Vdc/a.c 10V output 12 to 30Vdc/a.c |
| Output | 0 to 5Vdc, 0 to 10Vdc For bi-directional ranges output at zero pressure 2.5V and 5Vdc respectively |
| Output Impedance | 1000 ohms |

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



ECONOMICAL

PRESSURE TRANSDUCERS

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) _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| 050L - 0 to 50 | | | | | | |
| 100L - 0 to 100 | | | | | | |
| 250L - 0 to 250 | | | | | | |
| 500L - 0 to 500 | | | | | | |
| 10CL - 0 to 1000 | | | | | | |
| 25CL - 0 to 2500 | | | | | | |
| 50CL - 0 to 5000 | | | | | | |
| Datum _____ | _____ | _____ | _____ | _____ | _____ | _____ |
| D - Uni-directional | | | | | | |
| B - Bi-directional e.g. 100LB = ± 100 pascals | | | | | | |
| 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 | | | | | | |

Notes

Calibration certificates not available for this product. If required please use series 265 or 267.