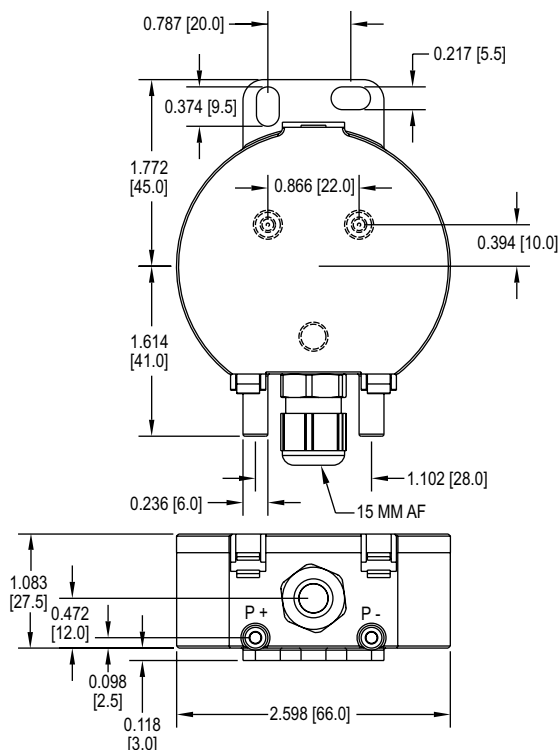


DIFFERENTIAL PRESSURE TRANSMITTER

Push-Button Zeroing, Adjustable Pressure Range and Response Time

CALIBRATION SERVICES AVAILABLE


The **Series 685 Differential Pressure Transmitter** is used to measure differential pressure and vacuum. The adjustable pressure range and output signal make it the ideal choice for installers and maintenance professionals. It has a user-configurable response time via a jumper and can be mounted in any orientation. Applications include building automation systems, clean room monitoring, valve and flap control, filter monitoring, and air flow control. It has an adjustable pressure range, a single button to zero, and can be reset to factory settings with a long button press. No additional reference pressure sources or separate calibration devices are necessary.

BENEFITS/FEATURES

- Cost effective and compact device suitable for OEM applications where space, simplicity, and value are key
- Single button to zero saves maintenance time
- Factory restore to defaults with a long button press
- User-adjustable response time provides versatility for many applications

APPLICATIONS

- Building automation, air-conditioning and clean room technology
- Valve and shutter control
- Filter, ventilator and fan monitoring
- Air-flow control

SPECIFICATIONS

Service: Air and non-corrosive gases.

Sensor Type: Piezoresistive pressure sensor.

Output Signal: 2-wire: 4-20 mA; 3-wire: 0-10 V.

Supply Voltage: 2-wire: 18-30 VDC; 3-wire: 18-30 VAC/DC.

Loop Resistance: 2-wire: 500 Ω max; 3-wire: ≥ 1 k Ω (≤ 10 mA).

Maximum Current Draw: 2-wire: 21 mA; 3-wire: 40 mA.

Accuracy*: $\leq \pm 0.5\%$ RSS (BFSL), ± 1 Pa.

Thermal Effects*: See model-dependent specifications table.

Long-Term Stability*: $\leq \pm 1\%$ RSS per year.

Temperature Limits: -4 to 158°F (-20 to 70°C).

Humidity Limits: 0 to 95% RH, non-condensing.

Response Time: 1 s (default) or 200 ms (user selectable).

Pressure Connections: 6 mm hose connection.

Electrical Connection: Spring connector for cable and leads up to 1.5 mm².

Cable Conduit: Cap nut conduit, 15 mm (across flats), made of polyamide.

Mounting: Screw fastening with sheet metal screws.

Housing Material: ABS.

Housing Dimensions: $\varnothing 66 \times 28$ mm.

Enclosure Rating: IP54.

Weight: 1.6 oz (46 g).

Compliance: CE, UKCA.

*Accuracy specifications are based on measurements at 73°F (23°C).

MODEL CHART

Model	Range	Output	Model	Range	Output
685-00	0 to 1 in w.c.	4-20 mA	685-00-V	0 to 1 in w.c.	0-10 V
685-01	0 to 2 in w.c.	4-20 mA	685-01-V	0 to 2 in w.c.	0-10 V
685-02	0 to 3 in w.c.	4-20 mA	685-02-V	0 to 3 in w.c.	0-10 V
685-03	0 to 5 in w.c.	4-20 mA	685-03-V	0 to 5 in w.c.	0-10 V
685-04	0 to 10 in w.c.	4-20 mA	685-04-V	0 to 10 in w.c.	0-10 V
685-05	0 to 15 in w.c.	4-20 mA	685-05-V	0 to 15 in w.c.	0-10 V
685-06	0 to 20 in w.c.	4-20 mA	685-06-V	0 to 20 in w.c.	0-10 V
685-07	0 to 25 in w.c.	4-20 mA	685-07-V	0 to 25 in w.c.	0-10 V
685-08	0 to 40 in w.c.	4-20 mA	685-08-V	0 to 40 in w.c.	0-10 V
685-09	0 to 250 Pa	4-20 mA	685-09-V	0 to 250 Pa	0-10 V
685-10	0 to 750 Pa	4-20 mA	685-10-V	0 to 750 Pa	0-10 V
685-11	0 to 1250 Pa	4-20 mA	685-11-V	0 to 1250 Pa	0-10 V
685-12	0 to 2500 Pa	4-20 mA	685-12-V	0 to 2500 Pa	0-10 V
685-13	0 to 5000 Pa	4-20 mA	685-13-V	0 to 5000 Pa	0-10 V

ACCESSORIES

Model	Range
A-685-DIN	DIN rail adapter kit for Series 685