

spirax/sarco®

M610 DP Transmitter Assembly

Description

The M610 DP Transmitter assembly consists of two items:
 a) A high accuracy (0.1 %) differential pressure transmitter
 b) A 3 way carbon steel isolation manifold
 Items a) and b) are supplied already assembled.

Function

The M610 DP Transmitter Assembly is designed to accept a differential pressure input from a primary flow element such as an orifice plate or Gilflo flowmeter and convert it into an analog 4-20 mA output signal. This signal is transmitted to the M240/M250 Series Flow Computer. The 3 way manifold which is supplied already assembled to the DP Transmitter acts as a means of secondary isolation and as a pressure equalization valve to check the zero of the DP Transmitter.

Technical data-M610

Span	0-25.2" H ₂ O (0-6.27 kPa) minimum 0-252" H ₂ O (0-62.7 kPa) maximum
Output	4-20 mA DC
Power Supply	11V to 45V DC (for non-certified application) 22V to 28V DC (for E Ex 1a 11c T4/T5)
Pressure limits	-1 to 2320 psig
Temperature limits	-40°F to + 185°F (ambient for non-certified application) -40°F to + 185°F (ambient for E Ex ia 11c T4) -40°F to + 122°F (ambient for E Ex ia 11c T5) -40°F to + 248°F (process)
Accuracy	± 0.1% of calibrated span to include effects of linearity, hysteresis and repeatability.
Materials of construction	body - stainless steel. diaphragm - Hastelloy C 3 way manifold - carbon steel. fluid fill - silicone oil
Approvals	E Ex ia 11c T4/T5 (cenelec)
Enclosure rating	NEMA4

Calibration

The M610 DP Transmitter Assembly is supplied with a span factor set to suit a particular application. However, should load conditions and/or details of actual installation change, the range of the M610 can be adjusted within the limits 0-25.2" H₂O and 0-252" H₂O as described in the Installation and Maintenance Instructions that accompany the product.

Pipe connections

The process ports on the 3 way manifold are threaded 1/2" NPT at 2.1" centers.

Dimensions (approximate) in inches

A	B	C	weight DP Transmitter	weight 3 Way Manifold	weight M610 Assy
8.86	9.49	6.57	14.3 lb	2.2 lb	16.5 lb

Installation

Full installation details are given in the literature that accompanies the M610 DP Transmitter Assembly.

How to specify

1 - Spirax Sarco M610 DP Transmitter Assembly calibrated to give an output of 20mA at an applied differential pressure of (specified value).

Associated equipment

Orifice Plate Flowmeter System TIS 8.202
 Gilflo Flowmeter System TIS 8.008

