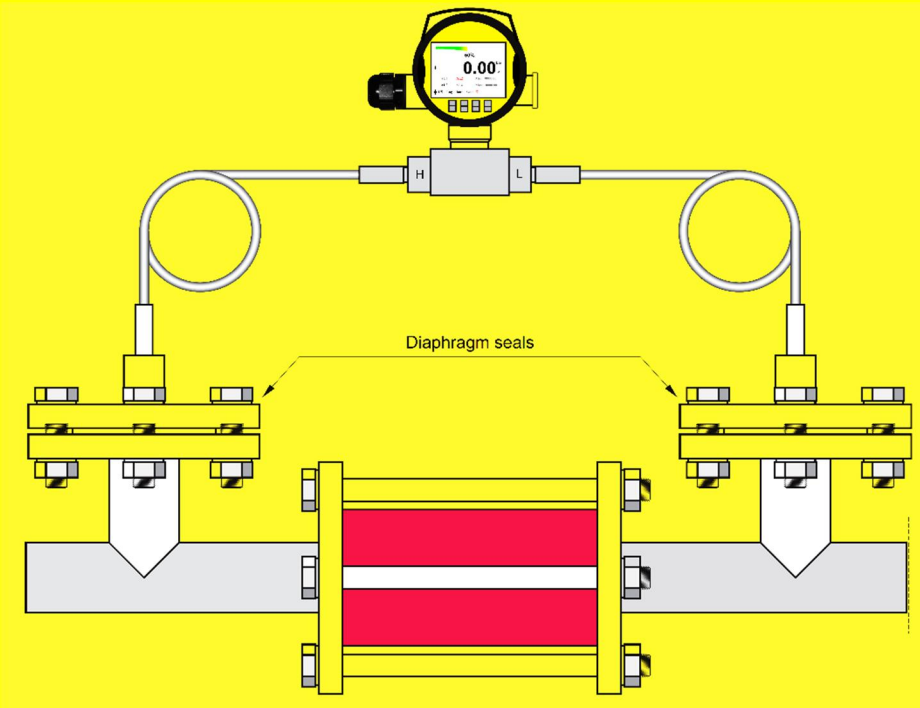


# Differential Pressure Transmitter MODEL: SB-DP

# SMART BIENE.



**Example of filter loss measurement**





## MECHANICAL SPECIFICATIONS

- Robust NEMA 4X (IP65) aluminum die cast housing.
- Easily rotatable display, 90° increments.
- Absolute or relative pressure measurement.
- Weight: ~ 2100 g.
- Mounting Accessories: U-Bolt with screw threads on both ends.
- Media: Fluids and gases compatible with 316SS and pH17-4.
- Standard Ranges (Gauge): -1 to 1 ... -250 to 250 bar.
- Sensor Material: ceramic, Al<sub>2</sub>O<sub>3</sub>, (96%)
- O-ring (media contacting): FKM, CR, EPDM.
- Mounting torque: 15...20 N.m.

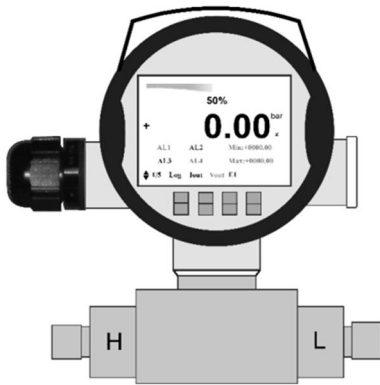
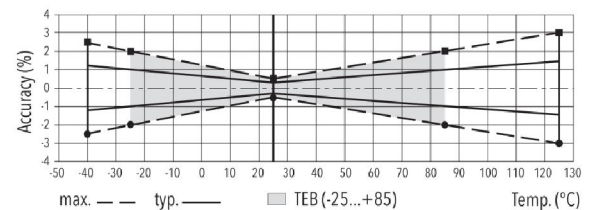
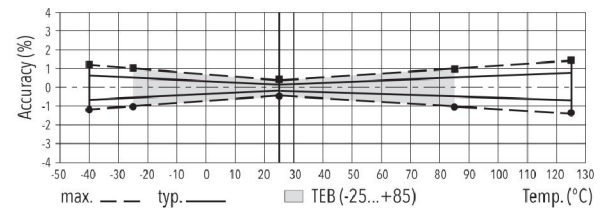


Figure 1: Typical Differential Pressure Transmitter

## ELECTRICAL SPECIFICATIONS

- Display: 2.8 inch full-color TFT LCD with LED Backlight.
- Supply Voltage: 24VDC.
- Voltage Output: 0-10, 0-5 V, MIN Load: 10KΩ
- Current Output: 0-10, 0-20 , 4-20 mA , MAX Load: 500Ω
- Relays Outputs: 2 or 4 Relays, 0.5A-220VAC or 4A-30VDC.
- 2 Wire Modbus-RTU communication protocol.
- Insulation Resistance: 50Vdc (>100MΩ).
- All In-Out Ports: 30VDC Circuit Protected.
- CE Compliance: EMC Directive 2004/108/EC, IEC/EN 61326-1: 2006 (EMI Class A/ EMS Table 2).
- IEC/EN 61326-2-3: 2006 (Annex BB (Pressure Transducer)).



## ENVIRONMENTAL CONDITIONS

- Operating temperature: -25 ...+85°C
- Media temperature: -25 ...125°C
- Humidity: max. 95%
- Relative vibration: 2g (10...2000 Hz)
- Shock: 5g/ 8 ms.

## MEASURING SPECIFICATIONS

- Reference Condition: 23°C (73F).
- Accuracy: +/-0.1% FS (URL), +/-0.25% FS (URL), +/-0.3% FS (URL), +/-0.5% FS.
- (URL) (Accuracy includes the effects of linearity, Hysteresis, and repeatability).
- Stability: ±0.25% FS/year
- Response Time: 30msec.
- Output Resolution: 0.1% FS (URL)
- LCD Accuracy: ±0.1% FS (URL) + last digit



## MODEL SELECTION

S B - D P - 1 - G - 1 0 4 0 - 1 - 0 0 2 5 - U L - -

**Device Type:**

DP: Digital Pressure Transmitter.

**Measuring Accuracy:**

- 1: ±0.1% FS.
- 2: ±0.25% FS.
- 3: ±0.3% FS.
- 4: ±0.5% FS.

**Connection Type:**

- G: G ¼"-male
- N: NPT ¼"-male

**Output:**

- |                                  |                      |
|----------------------------------|----------------------|
| 1: Current Output (0-20/4-20 mA) | 0: NO Current Output |
| 1: Voltage Output (0-5/0-10 V)   | 0: NO Voltage Output |
| 2: Two-Relay Output              | 4: Four-Relay Output |
| 1: RS-485 Output                 | 0: NO RS-485 Output  |

**O-ring:**

- 1: FKM
- 2: CR
- 3: EPDM

**Measuring Range: (bar)**

- 0010: -1 to 1
- 0016: -1.6 to 1.6
- 0025: -2.5 to 2.5
- 0040: -4 to 4
- 0060: -6 to 6
- 0100: -10 to 10
- 0160: -16 to 16
- 0250: -25 to 25
- 0400: -40 to 40
- 0600: -60 to 60
- 1000: -100 to 100
- 0160: -160 to 160
- 0250: -250 to 250

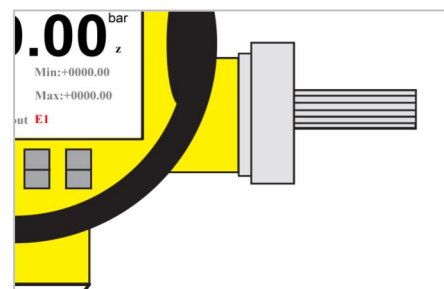
**Options:**

- UL: USB Connection & Data Logger
- T: External trimming Potentiometer.

## EXTERNAL TRIMPOT

External trimming Potentiometer can be used for External Configuration of ALARM Value:

- No need to Enter in Menu
- You can see alarm value in main page 1.
- User friendly for machine operators.



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