**Introduction**

Yokogawa’s pressure sensor is uniquely designed to measure both differential pressure and static pressure. This eliminates the need for two transmitters to measure these process variables. This saves the cost of a gauge pressure transmitter and the manifold, piping, wiring, I/O, construction, and engineering man hours associated with it.

![Separate Gauge Pressure transmitter not needed.](FGP180-01.a)

Figure 1: No need for additional Gauge Pressure Transmitter.

**Applicable Models**

- **EJA-E Series**: EJA10E, EJA120E, and EJA130E
- **EJX-A Series**: EJX110A, EJX120A, and EJX130A

**Set Up**

Static Pressure is transmitted as the second variable in HART communication. The variable has several features that can be tuned to get the type of measurement needed. These features can be set using FieldMate.

- **SP LRV**: Sets the Lower Range Value.
- **SP URV**: Sets the Upper Range Value.
- **SP Unit**: Sets the Unit of measure.
- **SP Damp**: Sets the Damping time.
- **A/G Select**: Selects if the measurement uses an Absolute pressure or Gauge pressure reference.
- **Atm. Pres Value**: Enter the value of the local Atmospheric Pressure. The value is used to calculate the Static Pressure in Gauge reference.
- **SP H/L Select**: Select if the measurement is based on the High-pressure or Low-pressure side of the transmitter.

**Settings When Shipped**

Although FieldMate is highlighted here, any Hart Communicator has access to these functions. Refer to the User’s Manual for the HART programming tree.

This function is available in HART 5 or HART 7.

**BRAIN PROTOCOL**

The features described in this FieldGuide are also available for EJA-E and EJX-A transmitters with BRAIN Protocol communication. Please refer to the User’s Manual for details.