# **Bi-directional Flow Measurement**



### Introduction

Yokogawa Differential Pressure transmitters are capable of measuring bi-directional flow. The direction of the flow is indicated in the analog output signal and the display.

# Applicable Models

> EJA-E Series: EJA110E, EJA120E, and EJA130E > EJX-A Series: EJX110A, EJX120A, and EJX130A

### Setup

The Bi-directional Flow Measurement capability must be enabled. Once enabled, the transmitter assigns 50% of the 4 to 20 mA analog signal to the 0 DP measurement (No flow). This also sets the display to read –100% to +100%. The sign indicates the direction of the flow.

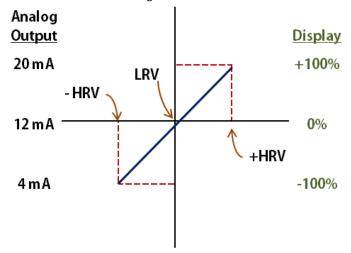


Figure 1: Bi-directional flow with Output mode "Linear"

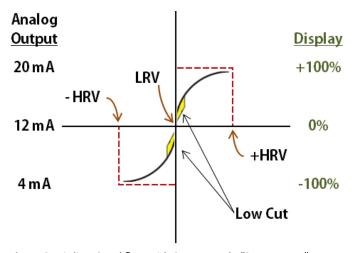
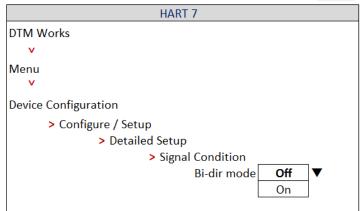


Figure 2: Bi-directional flow with Output mode "Square Root"

The Bi-directional Flow Measurement can be enabled via FieldMate.



HART 7



FGP200-03 a

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

The function is available on HART 5 and HART 7.

# Setting when Shipped

Item	Setting
Bi-dir mode	Off

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#### BRAIN PROTOCOL

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



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