

## Model 295 Transmitter (Frequency) Linearized, High Resolution

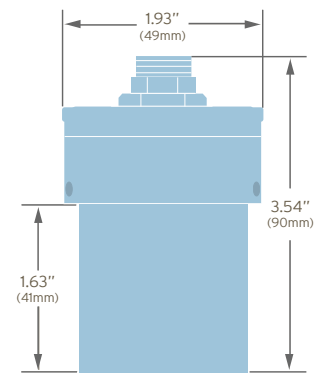
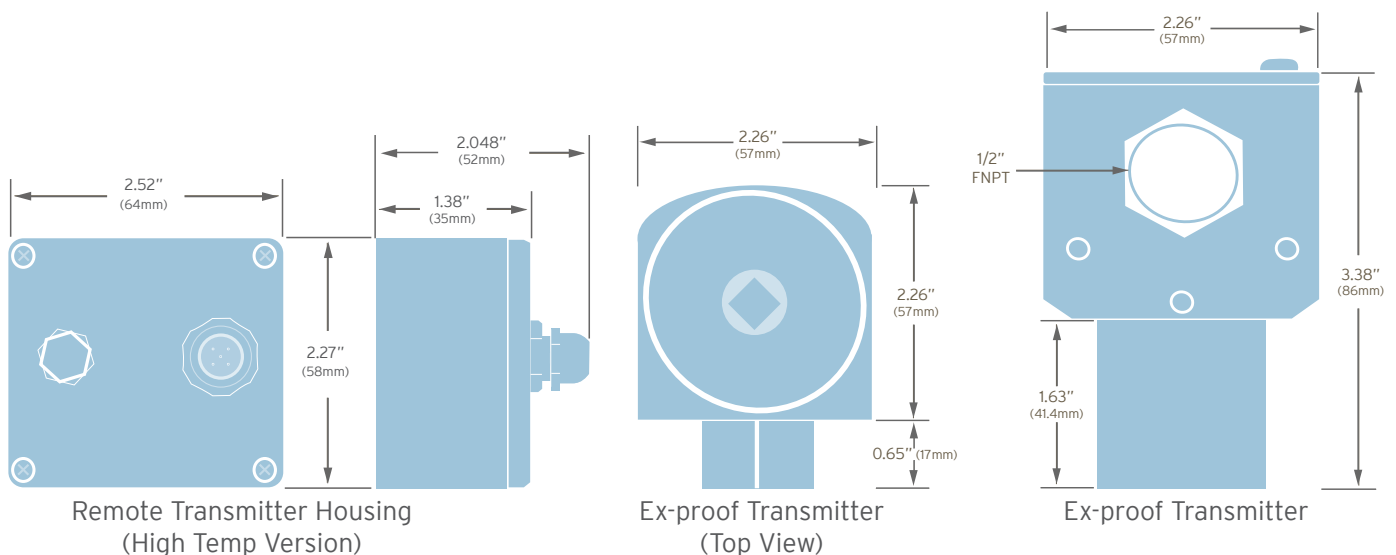
### FEATURES

- Flow accuracy to  $\pm 0.2\%$  of reading through 16 point linearizing capability
- Adjustable signal damping for optimal output stability
- Anti-dither adjustment to eliminate false signals due to vibration or flow reversal
- Selectable resolution or K-factor
- Windows® programming interface through RS-232 communication port
- CE certified
- Ex-proof version available with ATEX, UL, cUL certification for Class 1, Division 1, Groups C and D

### SPECIFICATIONS

Output Signal	5 Vdc standard - Current Sinking, 20mA max.- optional
Standard:	Single phase square wave, 1 - 1000 pulses/revolution
Optional:	Quadrature square wave, 1 - 500 pulses/revolution/channel
Power Supply Requirements	5-26 Vdc @ 30ma
Ambient Operational Range	-40°C to 80°C, Single piece – Two piece to 110°C
Metered Liquid Temp Range (based on 20° ambient)	-40°C to 90°C, Standard model -40°C to 225°C, Two piece high temp model

### DIMENSIONS



Transmitter

# Model 295 Transmitter (Frequency) *continued*

## General Description

The 290 Series of frequency transmitters work with Max flow meters to provide increased flow measurement accuracy in a cost effective package. The transmitters use Hall Effect sensors to detect the rotational position of a driven magnet inside a Max flow meter. The rotational position is tracked by a microprocessor, which generates an output frequency proportional to the flow rate. The standard model provides a single phase output.

The Voltage Shifter option also provides a single phase output with the pulse voltage equal to the power supply. (Note: A current limiting, pull up resistor is required between the power supply and the "pulse output" wire.)

The optional quadrature model outputs a two phase signal to facilitate bi-directional flow measurement.

Advanced signal processing provides both fine angular resolution (0.36 degrees rotation per pulse), rapid response (1 ms update time) and unprecedented linearity ( $\pm 0.2\%$  of reading over the meter's full flow range).

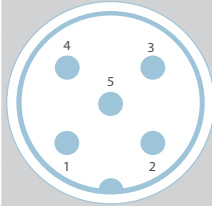
Options include Turck<sup>®</sup> connector or 1/2" NPT electrical connections and extended temperature ranges.

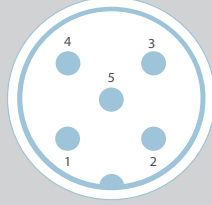
The Model 295 transmitter is typically mated to a mechanical flow meter, configured, and calibrated at the factory as a matched set. This ensures optimum accuracy and allows quick setup in the field. For field installations where the transmitter has not been mated to a flow meter at the factory, an optional serial interface kit provides full access to all configuration options and parameters

## Typical Wiring Diagram

The 5-pin connector version is pre-wired inside the transmitter and is ready to accept a mating cable (available from the factory). The remote transmitter version has an interface cable hard wired through the lid. Attach this line to the sending unit. The 5-pin plug on the remote lid is the sensor output connection.

The hazardous location models require wiring during the installation as shown below

Standard Model	Liquid - tight & NPT model	Single Phase Turck <sup>®</sup> Connector		
		Connector Terminal	Mating Cable Wire Color	Pin #
Case Ground	Case	Blue	3	
Common	Com	Black	4	
Power (+5-26 Vdc)	V+	Brown	1	
Pulse Output	Ph A	White	2	
N/A	NC	Grey	5	

Quadrature Model	Liquid - tight & NPT model	Quadrature Output Turck <sup>®</sup> Connector		
		Connector Terminal	Mating Cable Wire Color	Pin #
Case Ground	Case	Blue	3	
Common	Com	Black	4	
Power (+5-26 Vdc)	V+	Brown	1	
Phase A *	Ph A	White	2	
Phase B	Ph B	Grey	5	

\* Phase A leads Phase B during forward flow

