

# UNIVERSAL® Flow Monitors

# CoolPoint™/CalPoint™

## Vortex Shedding Flowmeter and Temperature Transmitter for Water and Coolant



### Description

This flowmeter is made for water, water based machine coolant, or water/glycol coolant. It has the following features:

- Flow transmitter 4-20 mA (Coolpoint & Calpoint)
- Optional temperature transmitter for 3/4 - 2 inch units (Calpoint only)
- Pulse out for totalization
- LED digital display
- User configurable alarm set points
- No moving parts to clog or wear
- Certified CSA and CE

### Instrument Specifications

- Flow
  - 300 PSIG (20 Bar) operating pressure
  - Visual readout 3 digit, .3 inches high 3 numeral LED
  - Response time: 1.5 seconds to 63% of flow change
  - Alarm 5% FS deadband
  - Accuracy  $\pm 2\%$  FS
  - Repeatability  $\pm .25\%$
- Temperature
  - Response time 1.8 seconds to 63% of change
  - Alarm  $\pm 2\%$  deadband
  - Accuracy  $\pm 1\%$  FS
  - Repeatability  $\pm .25\%$
  - Readout 4 mA @32°F, 20mA @210°F
- General
  - Fluid temperature limits 35-210°F (2-99°C)
  - Enclosure rating IP 65, Type 1, 3, 4, 12 and 13

### User-Configurable Options

Features that are selectable from a menu include:

- Engineering units (GPM, LPM, Fahrenheit or Celsius)
- Selectable alarm state
  - Closed below set point
  - Open below set point
- Set points or pulse out
- Flow direction
  - Rotatable control box for 3/4 - 2 inch sizes
  - Rotatable display by opening control box for 1/2 and 1/4 inch

### Electrical Specifications

- Output 4-20 mA
- Alarm or Pulse Output SPST Solid State Relay (NC or NO, selectable)
  - 1/4" & 1/2"  $\leq 185^\circ\text{F}$  (85°C) -250 mA,
  - $>185^\circ\text{F}$  (85°C) -100 mA
  - 3/4" to 2"  $\leq 185^\circ\text{F}$  (85°C) -125 mA,
  - $>185^\circ\text{F}$  (85°C) -50 mA
- Input Power 10 - 30 VDC @ 80 mA
- Electrical Connection
  - 5-Pin DC male micro (Flow Only)
  - 8-Pin DC male micro (Flow & Temperature)

### Material Specifications

Wetted parts of brass, Viton and PVDF

# How To Order Select the appropriate symbols to build a model code:

Example: **C P - 1 - T**

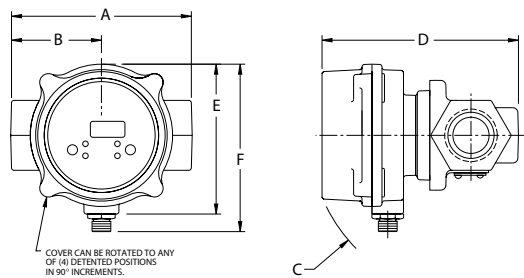
SERIES	
Coolpoint/Calpoint	= <b>C</b>

VARIABLE MEASURED	
Flow	= <b>P</b>
Temperature and Flow	= <b>T</b>

CONNECTOR	
Blank	= Pin Connector
<b>P</b>	= Pig Tails
<b>T</b>	= Junction box with terminal strip

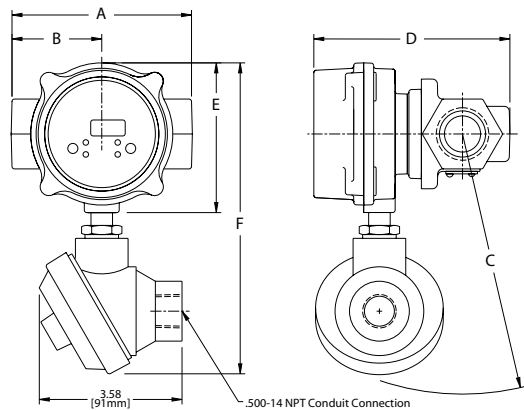
LINE SIZE		Flow Range			
In Inches	Symbol	GPM		LPM	
		Min	Max	Min	Max
1/4	= 1/4	0.40	4	2	15
1/2	= 1/2	1.2	12	5	45
3/4	= 3/4	2.5	25	9	95
<b>1</b>	= 1	5	50	20	190
1 1/2	= 1 1/2	10.00	100	40	380
2	= 2	20.00	200	75	750

## INSTALLATION DRAWING – BASIC METERS



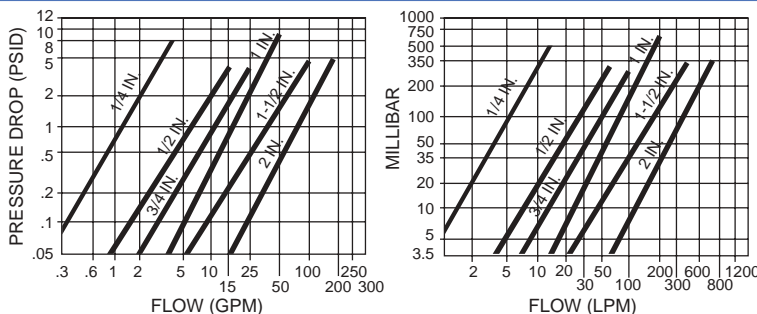
Size	A	B	C	D	E	F
1/4" & 1/2"	3.25 [83mm]	1.62 [41mm]	3.13 [80mm]	4.07 [103mm]	2.29 [59mm]	2.73 [94mm]
3/4" & 1"	4.50 [113mm]	2.25 [57mm]	4.04 [103mm]	4.92 [125mm]	3.75 [95mm]	4.19 [113mm]
1 1/2" & 2"	6.75 [171mm]	3.37 [86mm]	4.71 [120mm]	6.14 [156mm]	3.75 [95mm]	4.19 [106mm]

## INSTALLATION DRAWING – METERS WITH OPTIONAL JUNCTION BOX



Size	A	B	C	D	E	F
1/4" & 1/2"	3.25 [83mm]	1.62 [41mm]	5.42 [138mm]	4.07 [103mm]	2.31 [59mm]	6.39 [162mm]
3/4" & 1"	4.50 [114mm]	2.25 [57mm]	6.52 [166mm]	4.92 [125mm]	3.75 [95mm]	7.79 [198mm]
1 1/2" & 2"	6.75 [171mm]	3.37 [86mm]	6.87 [175mm]	6.14 [156mm]	3.75 [95mm]	7.79 [198mm]

## PRESSURE DROP CHARTS



## CABLING AVAILABLE with METERS

Series	Description	Length in Meters	Part Number
CP	5 pin female	1	6241-1M-ASSY
		3	6241-3M-ASSY
		10	6241-10M-ASSY
CT	8 pin female	2	6242-2M-ASSY
		5	6242-5M-ASSY
		10	6242-10M-ASSY

