

# CoolPoint™

## UNIVERSAL<sup>®</sup> Flow Monitors

### Vortex Shedding Flowmeter for Water and Coolant



#### Description

This flowmeter is made for water, water/glycol coolant or low viscosity fluids.

It has the following features:

- Flow rate transmitter 4-20 mA
- Solid state relay can be configured as alarm or pulse out
- LED digital display
- No moving parts to clog or wear
- Certified CSA and CE

#### Electrical Specifications

- Input Power: 10 - 30 VDC @ 80 mA
- Output: 4-20 mA for flow rate with solid state relay
- Electrical Connection
  - Pin Connector (standard)
  - Pigtails (optional)
  - Junction Box with terminal strip (optional)

#### Material Specifications

Flow bodies of brass or 316 Stainless Steel with PVDF sensors and Viton<sup>®</sup> seals standard.

#### User-Configurable Options

Features that are selectable on 4-20 mA units include:

- Selectable alarm state (N.O. or N.C.)
- Set point or pulse output
- Engineering units (GPM, LPM)

#### Instrument Specifications

- Flow
  - Visual readout: 3 digit LED, 0.3" digit height
  - Response time: user selectable from 0.9 to 7.5 seconds,
  - Alarm: 5% F.S. deadband
  - Accuracy:  $\pm 2\%$  F.S.
  - Repeatability:  $\pm 0.25\%$  of indicated flow
  - Turndown: 10:1 (20:1 available some sizes)
- Pressure
  - 300 PSIG (20 Bar) operating pressure
- General
  - Fluid temperature limits: 35-210°F (2-99°C)
  - High temperature option with maximum fluid temperature extended to 225°F for one hour wherein the 4-20 mA signal functions but the set points do not.
  - Enclosure rating: IP 65, Type 1, 3, 4, 12 and 13
- Pipe Connections:
  - Female NPT, BSPP & BSPT

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

## STANDARD CONSTRUCTION FOR BASIC PRODUCTS

FLOW ONLY

Model Code	Pipe Size Inches	Thread or Connection Type	Max Flow Rate GPM (LPM)	10:1 Turndown Min Flow Rate GPM (LPM)	20:1 Turndown (optional) Min Flow Rate GPM (LPM)
<b>CP2</b>	1/4	NPT	4 (15)	0.4 (1.5)	N/A
<b>CP3</b>	3/8	NPT	6 (22.7)	0.6(2.3)	0.3(1.13)
<b>CP4</b>	1/2	NPT	12 (45)	1.2 (4.5)	0.6 (0.75)
<b>CP6-F1</b>	3/4	NPT	4(15)	0.4(1.5)	N/A
<b>CP6-F9</b>	3/4	NPT	6(22.7)	.06(2.3)	0.3(1.13)
<b>CP6-F2</b>	3/4	NPT	12(45)	1.2(4.5)	.6(0.75)

Standard models have fixed flow rates for each pipe size, brass construction, Viton® seals, 4-20mA output with programmable set point or pulse out selectable.

**Example: CP2** is a 1/4 inch flowmeter with above characteristics.

For Special Options - Added symbols required.

**Example: CP2-T2** is a standard model with BSPT threads.

## SPECIAL OPTIONS AVAILABLE

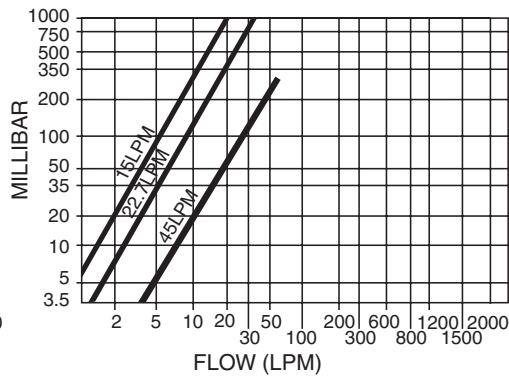
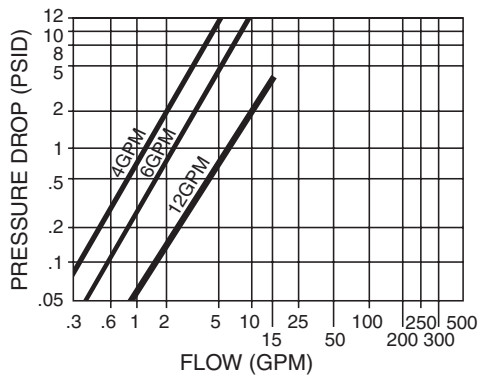
Thread type or connection type	Flow rate GPM (LPM)	Body material	Switch and electronic options	Connector or conduit box	Enhanced Performance
BSPT = <b>T2</b>	4 (15) = <b>F1</b> 6(22.7) = <b>F9</b>	316 SS = <b>M2</b>		Pig tails = <b>C2</b>	20:1 Turndown = <b>W1</b>
BSPP = <b>T3</b>	12 (45) = <b>F2</b>			Conduit box, terminal strip = <b>C3</b>	
			Temperature max to 225° for one hour wherein the 4-20 mA signal functions but the set points do not = <b>E15</b>		

## SPECIAL OPTION AVAILABILITY BY PIPE SIZE AND UNIT TYPE

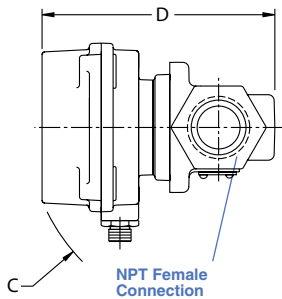
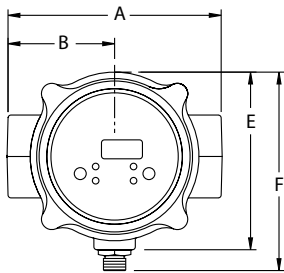
	Pipe size in inches						
<b>CP2</b>	1/4	= <b>T2, T3</b>		= <b>M2</b>	= <b>E15</b>	= <b>C2, C3</b>	
<b>CP3</b>	3/8	= <b>T2, T3</b>		= <b>M2</b>	= <b>E15</b>	= <b>C2, C3</b>	= <b>W1</b>
<b>CP4</b>	1/2	= <b>T2, T3</b>	= <b>F9, F1</b>	= <b>M2</b>	= <b>E15</b>	= <b>C2, C3</b>	= <b>W1</b>
<b>CP6-F1</b>	3/4	= <b>T2, T3</b>	= <b>F1*</b>	= <b>M2</b>	= <b>E15</b>	= <b>C2, C3</b>	
<b>CP6-F9</b>	3/4	= <b>T2, T3</b>	= <b>F9*</b>	= <b>M2</b>	= <b>E15</b>	= <b>C2, C3</b>	= <b>W1</b>
<b>CP6-F2</b>	3/4	= <b>T2, T3</b>	= <b>F2*</b>	= <b>M2</b>	= <b>E15</b>	= <b>C2, C3</b>	= <b>W1</b>

\*These symbols are already incorporated in the basic model code at the left but are repeated here for clarity.

## PRESSURE DROP CHARTS

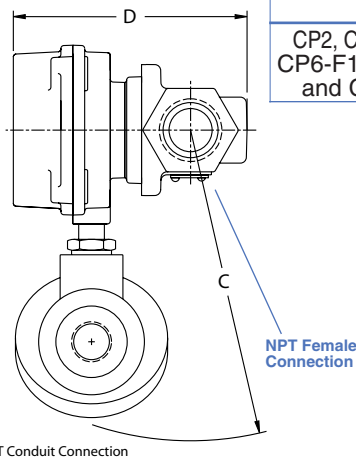
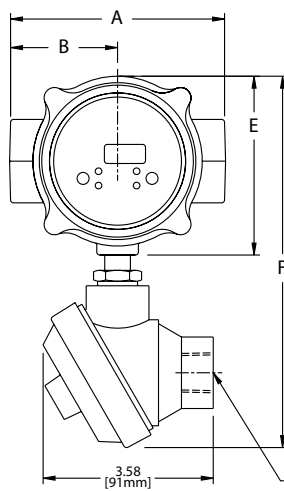


## INSTALLATION DRAWING – BASIC METERS



Size	A	B	C	D	E	F
CP2, CP3, CP4, CP6-F1, CP6-F9 and CP6-F2	3.25 [83mm]	1.62 [41mm]	3.13 [80mm]	4.07 [103mm]	2.31 [59mm]	2.73 [94mm]

## INSTALLATION DRAWING – METERS WITH OPTIONAL JUNCTION BOX



Size	A	B	C	D	E	F
CP2, CP3, CP4, CP6-F1, CP6-F9 and CP6-F2	3.25 [83mm]	1.62 [41mm]	5.42 [138mm]	4.07 [103mm]	2.31 [59mm]	6.39 [162mm]

## ACCESSORY CABLES AVAILABLE FOR PIN CONNECTOR METERS

Series	Description	Length in Meters	Part Number
CP	5 pin female	1 3 10	6241-1M 6241-3M 6241-10M

## PIN CONNECTOR PINOUTS

### CP (FLOW ONLY)

