

Maximum flow ranges from 3-200 GPM (11-750 LPM)  
 Max pressure 300 PSI (20 Bar)  
 Temperature range 32-210°F (2-99°C)

CT 1/4-2 inch Flow  
 and Temperature  
 Transmitter

# UNIVERSAL<sup>®</sup> Flow Monitors

## Vortex Shedding Flowmeter and Temperature Transmitter

# CoolPoint™



Flow/Temp  
 CoolPoint™ with  
 Rotatable Enclosure

### Description

This flowmeter/temperature transmitter is made for water, water/glycol coolant or low viscosity fluids. It has the following features:

- Flow rate transmitter 4-20 mA
- Temperature 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: 4-20mA for flow with solid state relay configurable for set point or pulse out
- Output: 4-20mA for temperature
- 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. PEEK sensors used for high temp for fluids above 150° F.

### 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)
- Fahrenheit or Celsius

### Instrument Specifications

- Flow
  - Visual readout: 3 digit LED, 0.3" digit height
  - Response time: 450 ms.
  - Deadband for alarm: 5% of full scale (maximum flow)
  - Accuracy: ±2% full scale
  - Repeatability: ±.25% of indicated
  - Turndown (ratio of max to minimum flow rates):10:1 at all temperatures and 20:1 available optionally for standard temperatures.
- Temperature
  - Response time: 1 1/2 seconds to 66% of change
  - Deadband for alarm: ±2% full scale
  - Accuracy: ±3% of indicated temperature
  - Repeatability: ± .25% of indicated
  - Output: 4 mA @32°F, 20mA @210°F linear
- Pressure
  - 300 PSIG (20 Bar) operating pressure
- General
  - Fluid temperature limits: 35-150° F (2-66° C) standard, 150-210° F (66-99° C) optional.
  - Enclosure rating: IP 65, Type 1, 3, 4, 12 and 13
- Pipe Connections:
  - Female NPT, BSPP & BSPT
- Back pressure of 10 PSIG usually required. (See manual for elevated temperature.)

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

## MODEL CODES

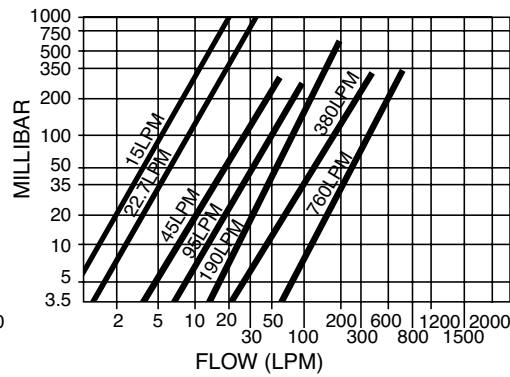
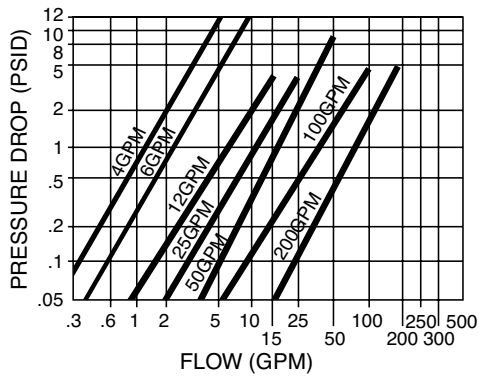
Flow maximum GPM (LPM)	Pipe size in inches	Model code	Material	Thread options available	Connector or conduit box options available	Special options
3 (11)	1/4	<b>CT2</b>	-M1*=Brass	<b>T1</b> *=NPT	<b>C1</b> *=Pin connector	<b>W1</b> =20:1 extended turndown** <b>E20</b> =High temp (150-210° F)
6 (22.7)	3/8	<b>CT3</b>	-M2=316 Stainless Steel	<b>T2</b> =BSPT	<b>C2</b> =Pig tails	
12 (45)	1/2	<b>CT4</b>		<b>T3</b> =BSPP	<b>C3</b> =Conduit box, terminal strip	
25 (95)	3/4	<b>CT6</b>				
50 (190)	1	<b>CT8</b>				
100 (380)	1 1/2	<b>CT12</b>				
200 (750)	2	<b>CT16</b>				

\*\* Not available on CT2  
 \*\* Needs grounding  
 \*\* Turndown is 20:1 standard temp.

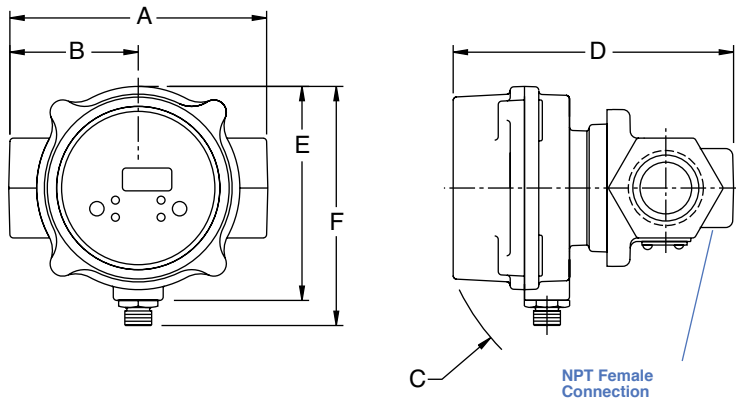
\* Indicates default selection. If no selection is made, this option is assumed.

**Example:** CT6 is the same as CT6-M1T1C1.

## PRESSURE DROP

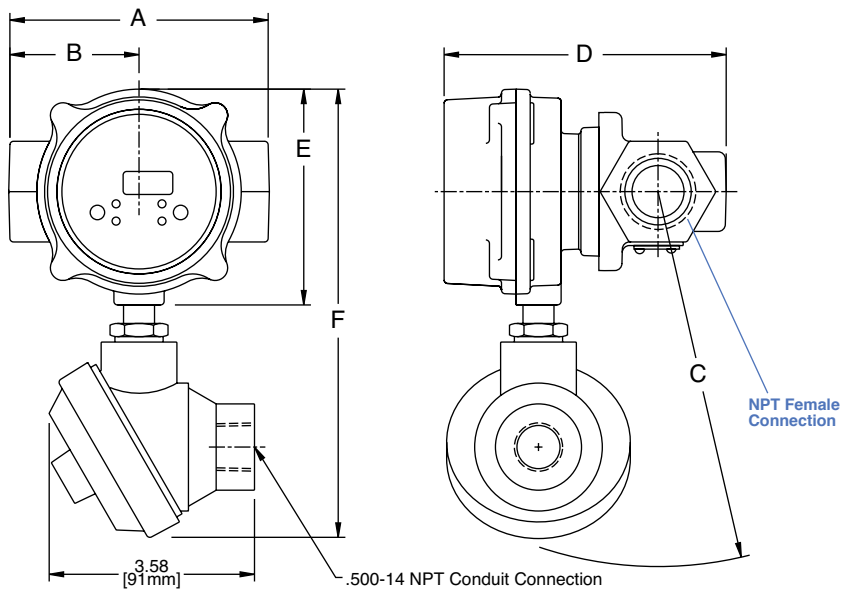


## INSTALLATION DRAWING – BASIC METERS



Size	A	B	C	D	E	F
CT2 through CT8	4.50 [113mm]	2.25 [57mm]	4.04 [103mm]	4.92 [125mm]	3.75 [95mm]	4.19 [113mm]
CT12 and CT16	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



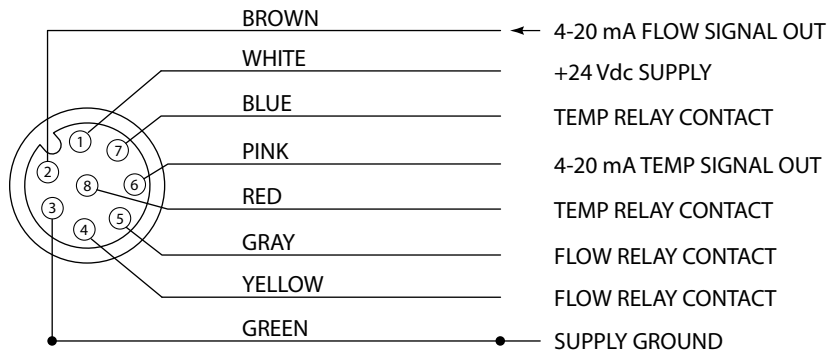
Size	A	B	C	D	E	F
CT2 through CT8	4.50 [114mm]	2.25 [57mm]	6.52 [166mm]	4.92 [125mm]	3.75 [95mm]	7.79 [198mm]
CT12 and CT16	6.75 [171mm]	3.37 [86mm]	6.87 [175mm]	6.14 [156mm]	3.75 [95mm]	7.79 [198mm]

## ACCESSORY CABLES AVAILABLE FOR PIN CONNECTOR METERS

Series	Description	Length in Meters	Part Number
CT	8 pin female	2	6242-2M
		5	6242-5M
		10	6242-10M

# PIN CONNECTOR PINOUTS

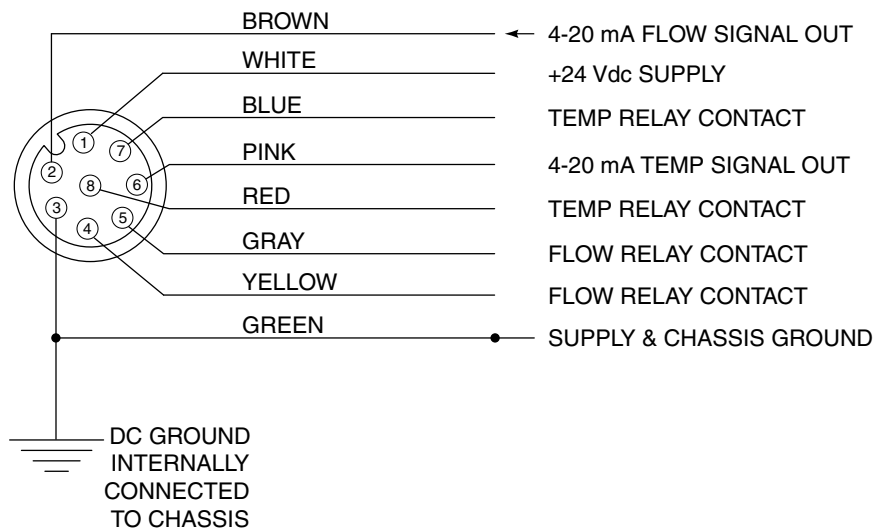
## CT



### PIN CONFIGURATION:

- 1: + 24 VDC power supply
- 2: 4-20 mA flow signal out
- 3: supply ground
- 4: flow relay contact
- 5: flow relay contact
- 6: 4-20 mA temp signal out
- 7: temp relay contact
- 8: temp relay contact

## CT WITH W1 OPTION (GROUNDED)



### PIN CONFIGURATION:

- 1: + 24 VDC power supply
- 2: 4-20 mA flow signal out
- 3: supply & chassis ground
- 4: flow relay contact
- 5: flow relay contact
- 6: 4-20 mA temp signal out
- 7: temp relay contact
- 8: temp relay contact