

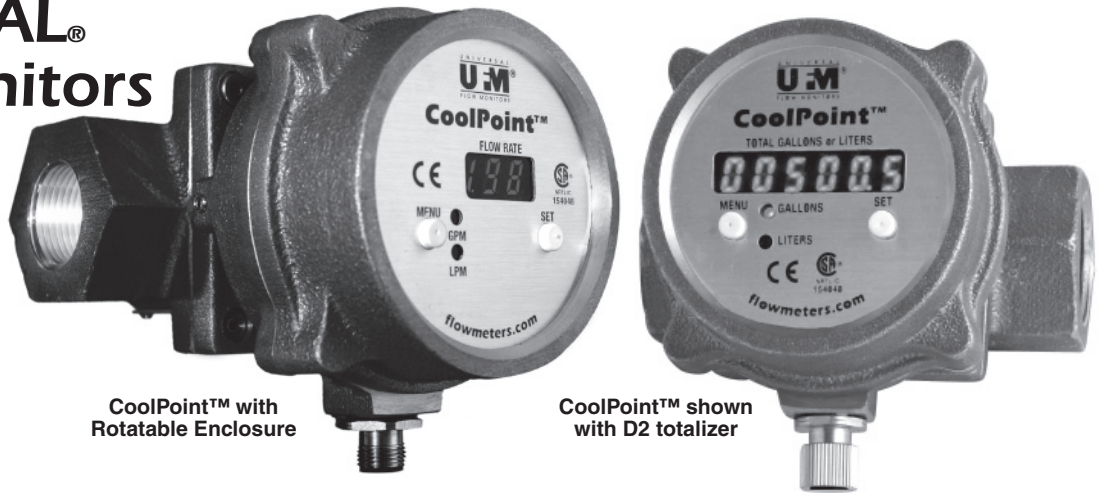
**FLOW RANGE** 25-200 GPM (95-750 LPM)  
**MAX PRESSURE** 300 PSI (20 Bar)

CP 3/4-2 inch

## CoolPoint™

### UNIVERSAL® Flow Monitors

**Vortex  
 Shedding  
 Flowmeter  
 for Water  
 and Coolant**



CoolPoint™ with Rotatable Enclosure

CoolPoint™ shown with D2 totalizer

#### 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
- Optional temperature transmitter
- Flow totalizer optional with pulse output only

#### Electrical Specifications

- Input Power: 10 - 30 VDC @ 80 mA
- Output: 4-20mA for flow 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® seals standard.

#### Special Options

- Totalize flow with 6-digit LED. Toggle between two totals, one running and one resettable. Push button selection for LPM or GPM. Electronic output is pulse only for this option.

#### 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

Features selectable on all including totalizing units:

- Engineering units (GPM, LPM)

Features selectable on temperature sensing (CT) units:

- Fahrenheit or Celsius

#### Instrument Specifications

- Flow
  - Visual readout: 3 digit LED, 0.3" digit height (6 digit for totalizing)
  - Response time: user selectable from 0.9 to 7.5 seconds,
  - Alarm: 5% F.S. deadband
  - Accuracy: ±2% F.S.
  - Repeatability: ±.25% of indicated flow
  - Turndown: 10:1 (20:1 available)
- Temperature (CT units only)
  - Response time: 1.8 seconds
  - Alarm: ±2% deadband
  - Accuracy: ±1% F.S.
  - Repeatability: ± .25% of indicated flow
  - Output: 4 mA @32°F, 20mA @210°F linear
- 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

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>CP6</b>	3/4	NPT	25 (95)	2.5 (9.5)	1.25 (4.75)
<b>CP8</b>	1	NPT	50 (190)	5.0 (19.0)	2.5 (9.5)
<b>CP12</b>	1 1/2	NPT	100 (380)	10.0 (38.0)	5 (19)
<b>CP16</b>	2	NPT	200 (750)	20.0 (75.0)	10 (37.5)

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: CP12** is an 1 1/2 inch flowmeter with above characteristics.

### FLOW AND TEMPERATURE

<b>CT6</b>	3/4	NPT	25 (95)	2.5 (9.5)	1.25 (4.75)
<b>CT8</b>	1	NPT	50 (190)	5.0 (19.0)	2.5 (9.5)
<b>CT12</b>	1 1/2	NPT	100 (380)	10.0 (38.0)	5 (19)
<b>CT16</b>	2	NPT	200 (750)	20.0 (75.0)	10 (37.5)

For Special Options - Added symbols required.

**Example: CP12-T2** is a standard model with BSPT threads.

## SPECIAL OPTIONS AVAILABLE

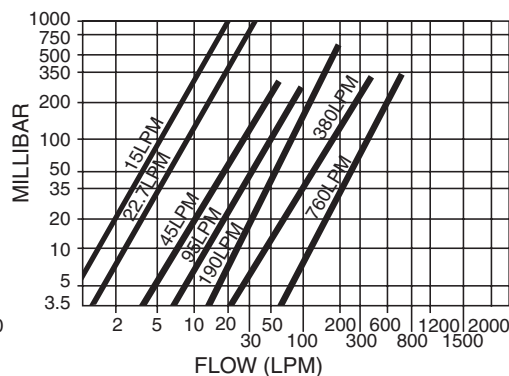
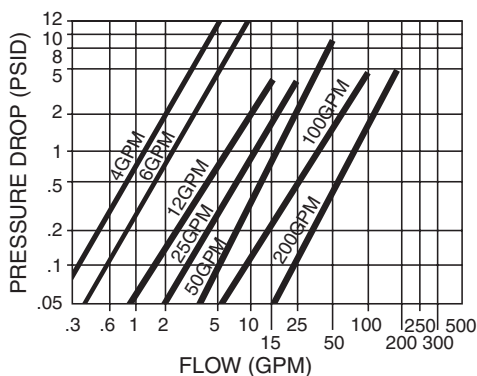
Thread type or connection type	Flow rate GPM (LPM)	Body material	Switch and electronic options	Connector or conduit box	Enhanced Performance	Mode
BSPT = T2	4 (15) = F1	316 SS = M2		Pig tails = C2	20:1 Turndown = W1	Total = D2
	6 (23) = F9					
BSPP = T3	12 (45) = F2			Conduit box, terminal strip = C3		
	25 (95) = F3					
	50 (190) = F4		Temperature max to 225° for one hour wherein the 4-20 mA signal functions but the set points do not = E15			
	100 (380) = F5					

## SPECIAL OPTION AVAILABILITY BY PIPE SIZE AND UNIT TYPE

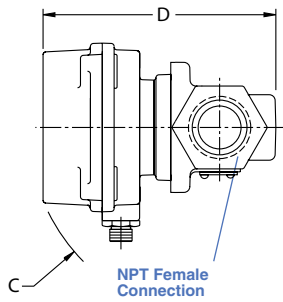
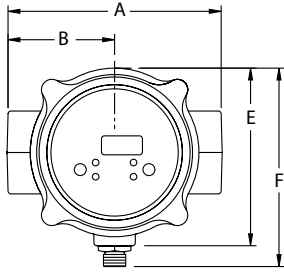
Model Code	Pipe size in inches							
<b>CP6</b>	3/4	= T2, T3		= M2	= E15	= C2, C3	= W1	= D2
<b>CP6-F1D2</b>	3/4	= T2, T3	= F1*	= M2	= E15	= C2, C3		= D2*
<b>CP6-F9D2</b>	3/4	= T2, T3	= F9*	= M2	= E15	= C2, C3	= W1	= D2*
<b>CP6-F2D2</b>	3/4	= T2, T3	= F2*	= M2	= E15	= C2, C3	= W1	= D2*
<b>CP8</b>	1	= T2, T3	= F3	= M2	= E15	= C2, C3	= W1	= D2
<b>CP12</b>	1 1/2	= T2, T3	= F4	= M2	= E15	= C2, C3	= W1	= D2
<b>CP16</b>	2	= T2, T3	= F5	= M2	= E15	= C2, C3	= W1	= D2
<b>CT6</b>	3/4	= T2, T3		= M2		= C2, C3	= W1	
<b>CT6-F1</b>	3/4	= T2, T3	= F1*	= M2		= C2, C3		
<b>CT6-F9</b>	3/4	= T2, T3	= F9*	= M2		= C2, C3	= W1	
<b>CT6-F2</b>	3/4	= T2, T3	= F2*	= M2		= C2, C3	= W1	
<b>CT8</b>	1	= T2, T3	= F3	= M2		= C2, C3	= W1	
<b>CT12</b>	1 1/2	= T2, T3	= F4	= M2		= C2, C3	= W1	
<b>CT16</b>	2	= T2, T3	= F5	= M2		= C2, C3	= W1	

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

## PRESSURE DROP CHARTS

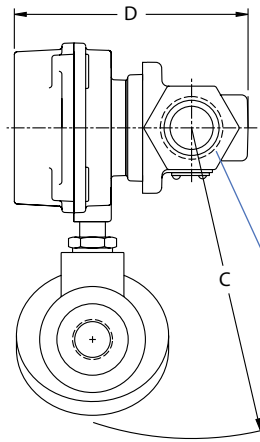
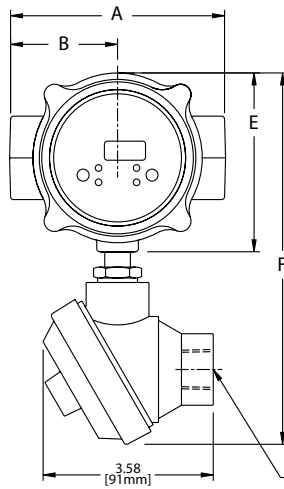


## INSTALLATION DRAWING – BASIC METERS



Size	A	B	C	D	E	F
CP6, CP6-F1D2, CP6-F9D2, CP6-F2D2, CP8, CT6, CT6-F1, CT6-F9, CT6-F2 and CT8	4.50 [113mm]	2.25 [57mm]	4.04 [103mm]	4.92 [125mm]	3.75 [95mm]	4.19 [113mm]
CP12, CT12 CT16 & CP16	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



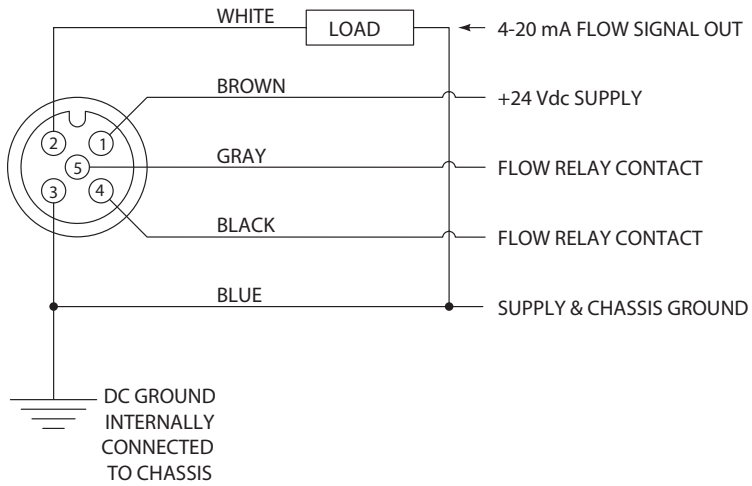
Size	A	B	C	D	E	F
CP6, CP6-F1D2, CP6-F9D2, CP6-F2D2, CP8, CT6, CT6-F1, CT6-F9, CT6-F2 and CT8	4.50 [114mm]	2.25 [57mm]	6.52 [166mm]	4.92 [125mm]	3.75 [95mm]	7.79 [198mm]
CP12, CT 12 CT16 & CP16	6.75 [171mm]	3.37 [86mm]	6.87 [175mm]	6.14 [156mm]	3.75 [95mm]	7.79 [198mm]

## ACCESSORY CABLES AVAILABLE FOR PIN CONNECTOR METERS

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

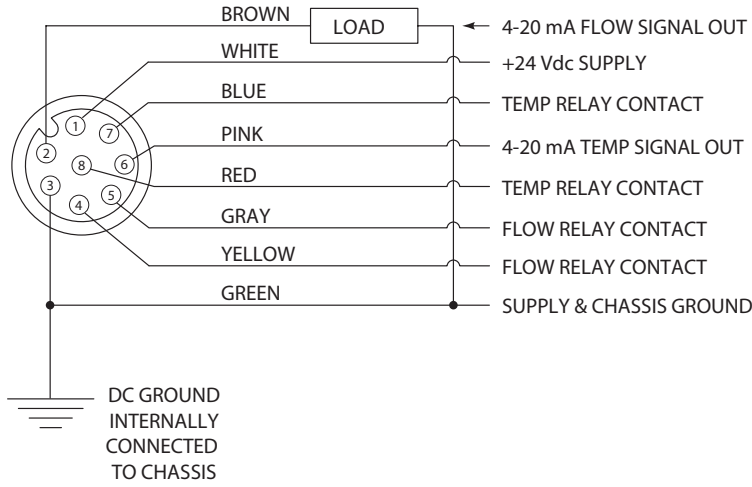
# PIN CONNECTOR PINOUTS

## CP (FLOW ONLY)



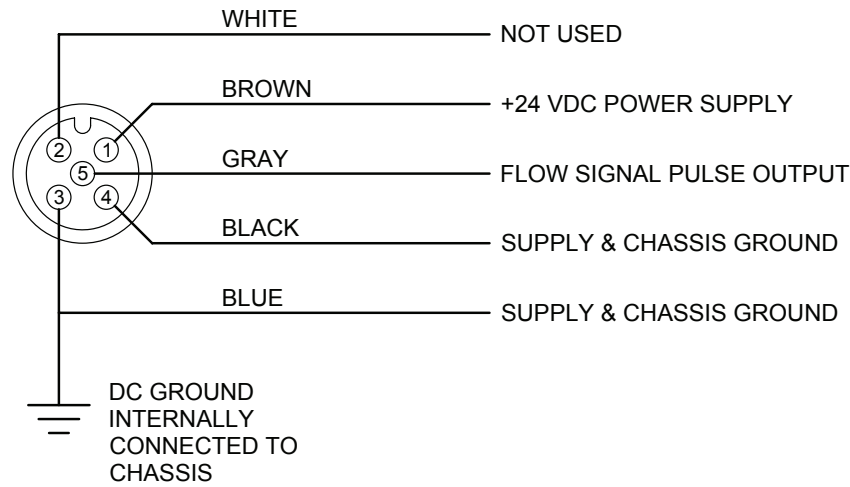
- PIN CONFIGURATION:**
- 1: + 24 VDC power supply
  - 2: 4-20 mA flow signal out
  - 3: power supply ground
  - 4: flow relay contact
  - 5: flow relay contact

## CT (FLOW AND TEMPERATURE)



- PIN CONFIGURATION:**
- 1: + 24 VDC power supply
  - 2: 4-20 mA flow signal out
  - 3: power 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

## D2 (TOTALIZER)



- PIN CONFIGURATION**
- 1: + 24 VDC power supply
  - 2: not used
  - 3: supply & chassis ground
  - 4: supply & chassis ground
  - 5: flow signal pulse output
- Note: There is an internal 10KΩ pull-up resistor on the pulse output line (pin 5).