FLOW MONITORS

Maximum flow ranges from Max pressure Temperature range

25-200 GPM (95-750 LPM) 300 PSI (20 Bar) 32-210°F (2-99°C)

CP 3/4-2 inch

UNIVERSAL® Flow Monitors

Vortex Shedding Flowmeter

CoolPoint[™]



Description

This flowmeter is made for water, water/glycol coolant of low viscosity fluids. There are no moving parts to clog or wear. They are certified CSA and CE. They have a 4-20 mA output. There are two versions. The three wire version (power supplied separate from the 4-20) has a solid state relay that can be configured as an alarm or as a pulse out. It has a bright LED digital display of flow rate.

The two wire version (option E14) has no display, pulse out or alarm point. It can be operated in an intrinsically safe mode only when used in conjunction with an approved intrinsic safety barrier meeting required entity parameters.

Electrical Specifications

- Input Power: 10 30 VDC @ 80 mA standard, 25 mA for the 2 wire option
- · Output: 4-20mA for flow
- 100 pulses per gallon from the solid state relay for 3 wire (standard) option – all units except the 2 inch CP16 which is 25 pulses per gallon
- 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. PEEK sensors used for high temp for fluids above 150° F.

User-Configurable Options

Features that are selectable on the 3 wire standard 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. Deadband for Alarm: 5% of full scale (maximum flow) 3 wire units only.

Accuracy: ±2% of full scale (maximum flow). Repeatability: ±.25% of indicated flow. Turndown (ratio of max to minimum flow rates): 10:1 at all temperatures and 20:1 available optionally for standard temperatures.

- Pressure 300 PSIG (20 Bar) operating pressure
- Response time 450 ms.
- General

Fluid temperature limits: 35-150° F (2-66° C) standard, 150-210° F (66-99° C) optional 3 wire units only.

Enclosure rating: IP 65, Type 1, 3, 4, 12 and 13

- Pipe Connections: Female NPT, BSPP & BSPT
- Back pressure of 10 PSIG required

Viton® is a registered trademark for DuPont Performance Elastomers.

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

MODEL CODES

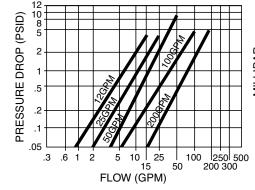
Flow maximum GPM (LPM)	Pipe size in inches	Model code Standard	Material	Thread options available	Connector or conduit box options available	Special options
25 (95) 50 (190) 100 (380) 200 (750) 25 (95) 50 (190) 100 (380) 200 (750)	3/4 1 1 1 1/2 2 3/4 1 1 1/2 2	CN6 CN8 CN12 CN16 Rotatable Heads** CP6 CP8 CP12 CP16	-M1*=Brass -M2=316 Stainless Steel	T1*=NPT T2=BSPT T3=BSPP	C1*=Pin connector C2=Pig tails C3=Conduit box, terminal strip	W1=20:1 extended turndown*** E20=High temp (150-210° F)**** Available with CN units only: E14 = 2wire 4-20 mA loop- powered transmitter. No alarms, display or high temp available with this option. NOTE: E14 option can be oper- ated in an intrinsically safe mode only when used in conjunction with an approved instrinsic safety barrier meeting required entity parameters. 8140R-ASSY = Optional approved barrier

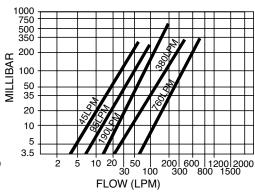
^{*} Indicates default selection. If no selection is made, this option is assumed.

*** Requires grounded wiring, standard temp units only.

Example: CPN12 is the same as CPN12-M1T1C1

PRESSURE DROP





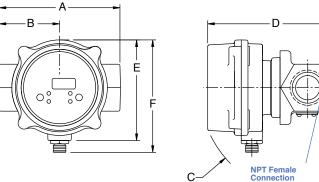
2

CP-CNMed091412

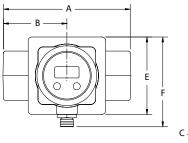
^{**} Rotatable head option allows control box to be rotated 270° in field for readability.

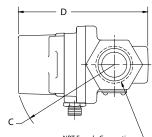
^{****}Available standard 3 wire units only

INSTALLATION DRAWING - BASIC METERS



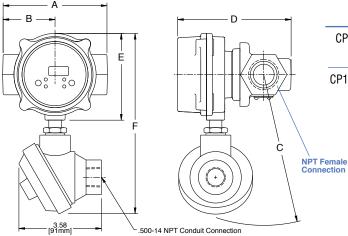
		0	Conne	CHOIL		
Size	A	В	С	D	E	F
CP6 and CP8	4.50	2.25	4.04	4.92	3.75	4.19
	[113mm]	[57mm]	[103mm]	[125mm]	[95mm]	[113mm]
CP12 and CP16	6.75	3.37	4.71	6.14	3.75	4.19
	[171mm]	[86mm]	[120mm]	[156mm]	[95mm]	[106mm]





Size	Α	В	С	D	E	F
CN6 &	4.50"	2.25"	3.55"	4.60"	2.75"	3.19"
CN8	[114mm]	[57mm]	[90mm]	[117mm]	[70mm]	[81mm]
CN12 &	6.75"	3.37"	4.24"	5.85"	2.88"	3.25"
CN16	[171mm]	[86mm]	[108mm]	[149mm]	[73mm]	[183mm]

INSTALLATION DRAWING - METERS WITH OPTIONAL JUNCTION BOX



Size	Α	В	С	D	E	F
CP6 and CP8	4.50	2.25	6.52	4.92	3.75	7.79
	[11411111]	[3/11111]	[166mm]	[12311111]	[aoiiiii]	[19011111]
CP12 and CP16	6.75	3.37	6.87	6.14	3.75	7.79
	[171mm]	[86mm]	[175mm]	[156mm]	[95mm]	[198mm]

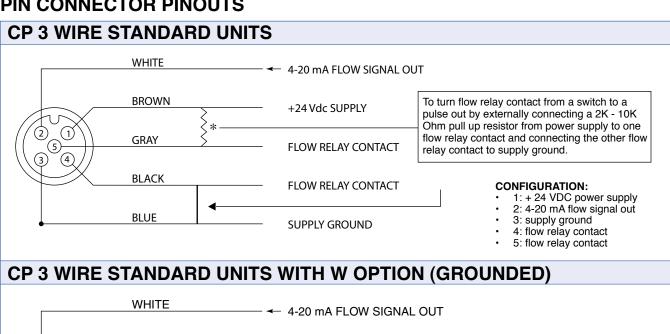
B D NPT Female Connection

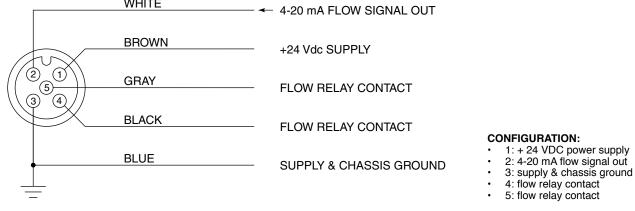
Size	Α	В	С	D	E	F
CN6 &	4.50"	2.25"	5.69"	4.60"	2.75"	6.79"
CN8	[114mm]	[57mm]	[145mm]	[117mm]	[90mm]	[172mm]
CN12 &	6.75"	3.37"	6.00"	5.85"	2.88"	6.85"
CN16	[171mm]	[86mm]	[152mm]	[149mm]	[73mm]	[174mm]

ACCESSORY CABLES AVAILABLE FOR PIN CONNECTOR METERS						
Series	Description	Length in Meters	Part Number			
CP/CN	5 pin female	1 3 10	6241-1M 6241-3M 6241-10M			

Barrier used for 2 wire option where Intrinsic Safety is required. Part number: 8140-ASSY

PIN CONNECTOR PINOUTS





CP 2 WIRE TRANSMITTER

