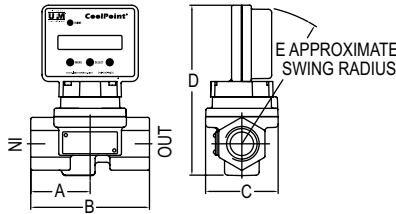
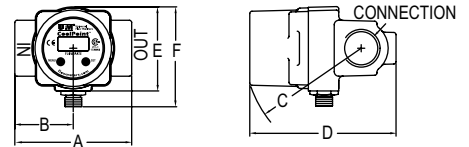


COOLPOINT® VORTEX SHEDDING FLOWMETER

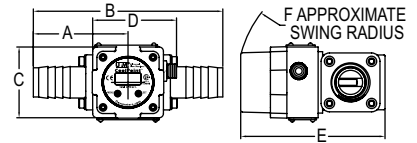
No Moving Parts, Low Maintenance, Low Pressure Drop, Temperature Sensing Option



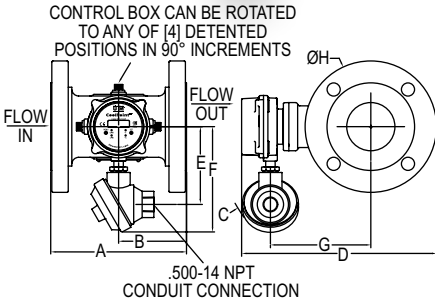
CPX-V8



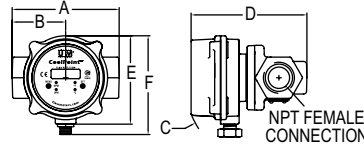
CP2, CP3, CP4



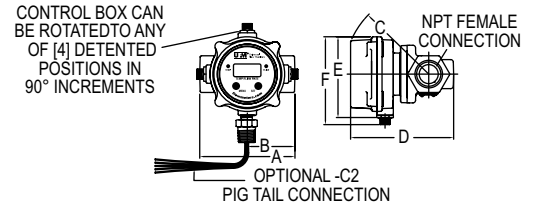
CX8-M7



CP24, 32 (shown with -C3/-C14 conduit box)



CP/CN6, CP/CN8, CN12, CN16



CTx (shown with -C2 pig tail connection)

Flow Transmitters,
Vortex Shedding Flowmeters

Model	Option	A in [mm]	B in [mm]	C in [mm]	D in [mm]	E in [mm]	F in [mm]	G in [mm]	H in [mm]
CT2-CT8	Standard	4-1/2 [114.3]	2-1/4 [57.15]	4-3/64 [102.62]	4-59/64 [124.97]	3-3/4 [95.25]	4-3/16 [106.43]	-	-
CT12, CT16		6-3/4 [171.45]	3-3/8 [85.72]	4-23/32 [119.85]	6-9/64 [155.96]	3-3/4 [95.25]	4-3/16 [106.43]	-	-
CP2-V8 CP3-V8 CP4-V8		1-53/64 [46.48]	3-21/32 [92.71]	2-3/8 [60.32]	5-29/32 [50.11]	4-61/64 [125.73]	-	-	-
CP6-V8 CP8-V8	C1 and C2 options	2-1/4 [57.15]	4-1/2 [114.3]	2-3/4 [69.85]	6-7/16 [163.51]	5-17/64 [133.6]	-	-	-
CP12-V8 CP16-V8		3-3/8 [85.72]	6-3/4 [171.45]	2-7/8 [73.02]	7-11/16 [195.33]	6 [152.4]	-	-	-
CP2, CP3, CP4		3-1/4 [82.55]	1-11/64 [41.15]	3-1/4 [82.55]	4-5/64 [103.38]	2-15/64 [59.44]	2-49/64 [70.36]	-	-
CN6, CN8	C3 = Conduit box	4-1/2 [114.3]	2-1/4 [57.15]	3-35/64 [90.17]	4-39/64 [116.84]	2-3/4 [69.85]	3-3/16 [80.96]	-	-
CP6, CP8		4-1/2 [114.3]	2-1/4 [57.15]	4-3/64 [102.62]	4-59/64 [124.97]	3-3/4 [95.25]	4-3/16 [106.43]	-	-
CN12, CN16		6-3/4 [171.45]	3-3/8 [85.72]	4-1/4 [107.7]	5-55/64 [148.59]	2-7/8 [73.02]	3-1/4 [82.55]	-	-
CP24 CT24	C3 = Conduit box	7-3/4 [196.85]	3-7/8 [98.55]	8-29/32 [226]	11-1/8 [282.57]	11-1/8 [282.57]	7-1/2 [190.5]	5-47/64 [146]	7-1/2 [190.5]
CP32 CT32		10-3/4 [273.05]	5-3/5 [136.65]	9-15/32 [240]	12-37/64 [319.48]	12-37/64 [319.48]	9 [228.6]	6-7/16 [163.51]	9 [228.6]
CP2, CP3, CP4		3-1/4 [82.55]	1-11/64 [41.15]	5-13/32 [137.16]	4-5/64 [103.38]	2-15/64 [59.44]	6-13/32 [162.81]	-	-
CN6, CN8	C3 = Conduit box	4-1/2 [114.3]	2-1/4 [57.15]	5-11/16 [144.53]	4-39/64 [116.84]	2-3/4 [69.85]	6-51/64 [172.47]	-	-
CP6, CP8		4-1/2 [114.3]	2-1/4 [57.15]	6-33/64 [165.61]	4-59/64 [124.97]	3-3/4 [95.25]	7-51/64 [198.04]	-	-
CN12, CN16		6-3/4 [171.45]	3-3/8 [85.72]	6 [152.4]	5-55/64 [148.59]	2-7/8 [73.02]	6-55/64 [173.99]	-	-
CP12, CP16	C3 = Conduit box	6-3/4 [171.45]	3-3/5 [91.44]	6-7/8 [174.5]	6-9/64 [155.96]	3-3/4 [95.25]	7-51/64 [198.04]	-	-
CT2-CT8		4-1/2 [114.3]	2-1/4 [57.15]	6-3/64 [165.61]	4-59/64 [124.97]	3-3/4 [95.25]	7-51/64 [198.04]	-	-
CT12, CT16		6-3/4 [171.45]	3-3/8 [85.72]	6-23/32 [174.5]	6-9/64 [155.96]	3-3/4 [95.25]	7-51/64 [198.04]	-	-
CP24 CT24	C3 = Conduit box	7-3/4 [196.85]	3-7/8 [98.55]	8-29/32 [226]	11-1/8 [282.57]	11-1/8 [282.57]	7-1/2 [190.5]	5-47/64 [146]	7-1/2 [190.5]
CP32 CT32		10-3/4 [273.05]	5-3/5 [136.65]	9-15/32 [240]	12-37/64 [319.48]	12-37/64 [319.48]	9 [228.6]	6-7/16 [163.51]	9 [228.6]
CX8		M7 = Hose barb	3-3/16 [80.77]	6-23/64 [161.54]	2-1/2 [63.5]	2-27/32 [72.14]	4-21/32 [118.27]	3-39/64 [91.69]	-
CX2, CX3, CX4	T1 = NPT female thread	1-63/64 [50.29]	3-31/32 [100.84]	2-13/32 [60.96]	4-13/16 [122.17]	4-9/32 [108.71]	3-39/64 [91.69]	-	-
CX6, CX8	T1 = NPT female thread	2-3/8 [60.32]	4-3/4 [120.65]	2-13/32 [60.96]	2-13/16 [71.37]	4-55/64 [123.19]	3-13/16 [96.52]	-	-

USA: California Proposition 65
WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov



COOLPOINT® VORTEX SHEDDING FLOWMETER

No Moving Parts, Low Maintenance, Low Pressure Drop, Temperature Sensing Option

The Series CP/CN/CT/CX Coolpoint® Vortex Shedding Flowmeter is made for water, water/glycol mixtures, or low viscosity fluids. These units contain no moving parts to clog or wear, allowing for minimal maintenance in the field. This series has two versions: a 3-wire version, where power is supplied separate from the 4-20 mA output, and a 2-wire loop-powered version. The 3-wire version is equipped with a solid state relay that can be configured in the field to be either an alarm or a pulse output, an LED display which allows the user to choose between selectable engineering units (GPM or LPM), and a high temperature option. The alarm on this version is selectable between a high or low alarm (NO or NC) and the pulse output option is set at a frequency at a specific pulses per gallon. The 2-wire option allows for operation in an intrinsically safe mode only when used in conjunction with an approved intrinsic safety barrier meeting required entity parameters. This version does not come with a display or relay contacts to allow for this operation mode.

BENEFITS/FEATURES

- No moving parts to clog or wear
- Easy to set up and read, with menu buttons and bright LED display
- Lower pressure drop compared to other primary flow elements
- Selectable alarm states for increased application flexibility
- Reading unaffected by conductivity, pressure, density, temperature, and viscosity of the fluid
- Long-term stability with no zero-point shift, increasing application longevity
- Selectable engineering units
- Integrated temperature sensing option for additional sensing parameter

APPLICATIONS

- Mining
- Concrete - Fleet management water batching
- Manufacturing
- Steel making
- Power generation
- District heating water and temperature sensing
- Water treatment
- Pulp and paper
- Semiconductor

MODEL CHART									
Example	CP	2	-M1	T1	C1	-W1	CP2-M1T1C1-W1		
Series	CP						Metal body vortex shedding flowmeter with rotatable display		
	CN						Metal body vortex shedding flowmeter		
	CT						Metal body vortex shedding flowmeter with temperature sensor and rotatable display		
Pipe Size							GPM	LPM	Port Size
	2						3	11	1/4" (8 mm)
	3						6	23	3/8" (10 mm)
	4						12	45	1/2" (15 mm)
	6						25	95	3/4" (20 mm)
	8						50	190	1" (25 mm)
	12						100	380	1-1/2" (40 mm)
	16						200	750	2" (50 mm)
	24						300	1136	3" (80 mm)
	32						600	2271	4" (100 mm)
Battery Option			V8				No battery Battery operated		
Material			M1				Brass		
			M2				316 SS		
Process Connection				T1			NPT female		
				T2			BSPT		
				T3			BSPP		
Electrical Connection					C1		Male 5 pin		
					C2		3-wire pig tail leads 3.3 ft (1 m)		
					C3		Aluminum conduit box		
					C7		3-wire pig tail leads with PG7 connector 3.3 ft (1 m)		
					C14		316 SS conduit box		
Output and Display						-	4-20 mA output with high and low solid state relays		
Orientation						-	Standard display orientation		
Special Options						E14	4-20 mA 2 wire, intrinsically safe		
						NIST	NIST traceable calibration certificate		
						W1	20:1 extended turndown		

RESPONSE TIME VS. FILTER VALUE	
Filter Value	Response Time (S)
2	0.9
4	1.4
8	2.3
16	4
32	7.5

SPECIFICATIONS
Service: Compatible liquids.
Range: See flow rate chart.
Display: 3-digit or 4-digit LED (pipe sizes > 3"), 0.3" (7.6 mm) digit height; CP-V8: 3-digit LCD (6-digit LCD totalizer mode), 0.3" (7.6 mm) digit height.
Wetted Materials: Flow body: 316 SS or brass; Sensor: PEEK; Seals: FKM.
Accuracy: Flow: ±2% FS; Temperature: ±2°F (±0.1°C) (model selectable).
Repeatability: ±0.25% of reading.
Turndown: 10:1 (20:1 optional).
Temperature Limits: 35 to 210°F (2 to 99°C).
Pressure Limits: 10 to 300 psig (0.7 to 20.7 bar); CP flange and CX: 200 psig (20.7 bar) max.
Response Time: 450 ms.
Power Requirements: 10-30 VDC @ 80 mA standard; 25 mA for 2 wire option; CP-V8: 2 AA alkaline batteries, not included (45 day battery life).
Output: 4-20 mA; 100 pulses per gallon (3-wire models only); 2", 3", and 4": 25 pulses per gallon.
Deadband: Alarm output: 2.5% FS for up to 1/2"; 5% FS for larger than 1/2".
Viscosity: 15 cP max.
Enclosure Rating: NEMA 4X (IP65).
Process Connection: Female NPT, BSPT, or BSPP (model selectable).
Electrical Connection: Male DC micro 5 pin connector; Pigtails or junction box with terminal strip (model selectable).
Weight: CX: 1.5 lb (0.7 kg); CP: 3.3 lb (1.5 kg); CP-V8: 4 lb (1.8 kg); CN, CT: 7 lb (3.2 kg).
Compliance: CSA.

MODEL CHART	
Model	Description
8140R-ASSY	Intrinsically safe barriers
6241-1M	5 pin female cable 3 ft (1 m)
6241-3M	5 pin female cable 9 ft (3 m)
6241-10M	5 pin female cable 30 ft (10 m)
MDCM-3FP-1M	3 pin female cable 3 ft (1 m)
MDCM-3FP-3M	3 pin female cable 9 ft (3 m)
MDCM-3FP-10M	3 pin female cable 30 ft (10 m)
6242-2M	8 pin female cable 6 ft (2 m)
6242-5M	8 pin female cable 15 ft (5 m)
6242-10M	8 pin female cable 30 ft (10 m)

FLOWRATE			
Size	Port Size	Flow Rate	
		GPM	LPM
2	1/4"	3	11
3	3/8"	6	23
4	1/2"	12	45
6	3/4"	25	95
8	1"	50	190
12	1-1/2"	100	380
16	2"	200	750
24	3"	300	1136
32	4"	600	2271

TEMPERATURE SET POINT RANGES						
Meter Size	Setpoint Min.		Setpoint Max.		Hysteresis	
	°F	°C	°F	°C	°F	°C
All CT models	35	1	200	93	4	2

FLOW SET POINT RANGES						
Meter Size	Setpoint Min.		Setpoint Max.		Hysteresis	
	GPM	LPM	GPM	LPM	GPM	LPM
1/4"	0.4	1.5	3	12	0.1	0.4
3/8"	0.6	2.3	6	23	-	-
1/2"	1.2	4.5	12	45	-	-
3/4"	3	11	22.5	85	1.2	5
1"	7.5	30	45	170	2.5	9
1 1/2"	15	56	90	341	5	18
2"	30	113	180	682	10	37
3"	40	151	280	1059	15	57
4"	80	302	560	2119	30	114

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