

DESCRIPTION

The ExactSteam V-Cone System's innovative design delivers repeatable accuracy of +0.5% of rate with up to a 50:1 flow range under the most difficult flow conditions. The ExactSteam V-Cone System acts as its own flow conditioner, fully conditioning and mixing the flow prior to measurement. Readings are always precise and reliable, even under changing flow situations.

With this unique ability to self-condition flow, the ExactSteam V-Cone System virtually eliminates the need for upstream or downstream straight pipe runs. Thus, the ExactSteam V-Cone System can be installed virtually anywhere in a piping system or easily retrofit into an existing piping layout, resulting in significant installation flexibility and cost savings. In addition, the ExactSteam V-Cone System has proven to provide long-term performance with no moving parts to replace or maintain.

KEY FEATURES

- A complete flowmeter for steam metering, factory configured for energy metering or mass flow
- Accurately measure steam across the entire range with technology-leading low flow cut off
- Makes retrofitting and new installations easier with minimum installation requirements – no flow conditioner required!
- V-Cone technology enables the lowest permanent pressure loss to maximize plant efficiency
- Reduce maintenance costs with the V-Cone flowmeter primary element's 25+ year lifespan

SPECIFICATIONS

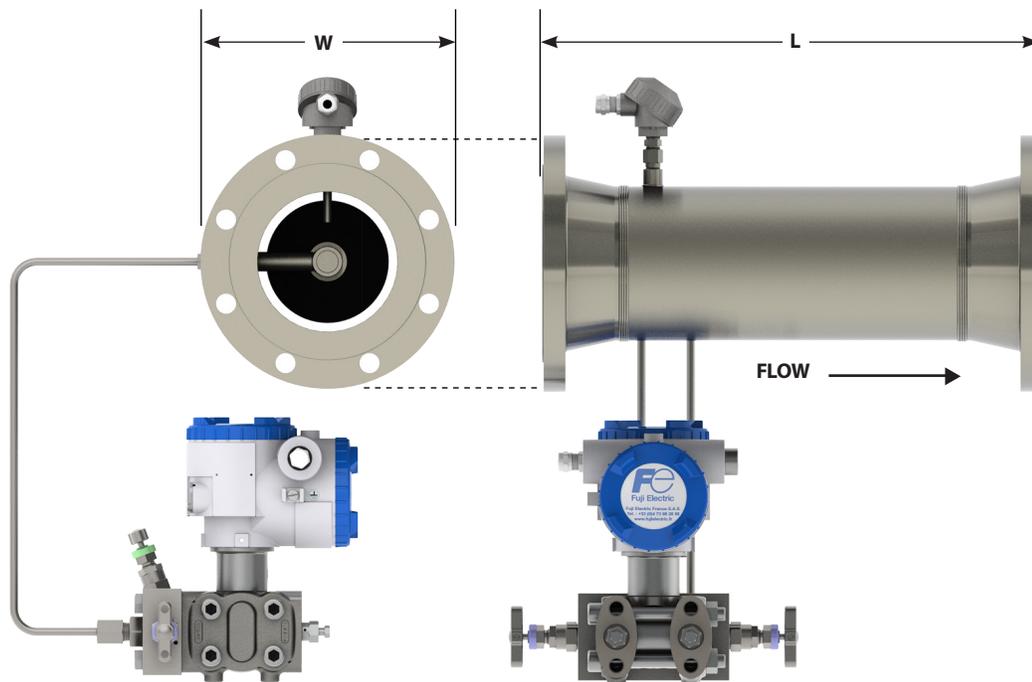
Accuracy:	± 0.5% for primary element ±1% for total system
Repeatability:	±0.1% or better
Turn Down:	Up to 50:1 with stacked configuration or 10:1 with compact
Installation Piping Requirements:	0-3 diameters upstream, 0-1 diameters downstream
Materials of Construction:	Stainless Steel or Carbon Steel
Line Sizes:	2" to 12" / 50 mm to 300 mm
End Fittings:	Beveled or DIN PN16 or DIN PN40 flanges
RTD:	• Sensor Type: PT-100, thin film • Range: -58° to 752° F (-50° to 400° C)
Manifold:	Configuration: 3-Valve
DP Transmitter:	• Housing Material: F30 Aluminum • Membrane Material: 316L • Enclosure Rating: NEMA 4X/6P, IP66/67 • Electrical Connections: NPT1/2 thread
Flow Computer:	• Output: 4-20 mA, Isolated Pulse



MODEL ExactSteam™ V-Cone®

SPECIFICATION SHEET

Fitting Options: Beveled Ends, DIN PN 16 Flanges, DIN PN40 Flanges



Fuji Electric France reserves the right to change design specifications without notice.

Size (in / mm)	2 / 50	4 / 100	6 / 150	8 / 200	10 / 250	12 / 300
Beveled Flanges						
Approx. Weight - lbs / kg (meter only)	12 / 5.4	25 / 11.3	50 / 22.7	110 / 49.9	120 / 54.4	157 / 71.2
W (width - in / mm)	2.375 / 60.3	4.5 / 114.3	6.625 / 168.3	8.625 / 219.1	10.75 / 273.1	12.75 / 323.9
L (length - in / mm)	11.63 / 295.4	15.5 / 393.7	21.5 / 546.1	25.25 / 641.4	27.25 / 692.2	29.25 / 743.0
DIN PN16						
Approx. Weight - lbs / kg (meter only)	20 / 9.1	50 / 22.7	110 / 49.9	160 / 72.6	259 / 117.5	336 / 152.4
W (width - in / mm)	6 / 152.4	9 / 228.6	11 / 279.4	13.5 / 342.9	16 / 406.4	19 / 482.6
L (length - in / mm)	12 / 304.8	16 / 406.4	22 / 558.8	26 / 660.4	28 / 711.2	30 / 762.0
No. of Bolts per Flange	4	8	8	8	12	12
DIN PN40						
Approx. Weight - lbs / kg (meter only)	25 / 11.3	70 / 31.8	125 / 56.7	220 / 99.8	330 / 149.7	456 / 206.8
W (width - in / mm)	6.5 / 165.1	10 / 254.0	12.5 / 317.5	15 / 381.0	17.5 / 444.5	20.5 / 520.7
L (length - in / mm)	12 / 304.8	16 / 406.4	22 / 558.8	26 / 660.4	28 / 711.2	30 / 762.0
No. of Bolts per Flange	8	8	12	12	16	16

Beveled: Overall length (A) tolerance varies with line size:

- ½" to 1", ±0.01" (±0.3mm)
- 1½" to 4", ±0.06" (±2mm)
- 6" to 10", ±0.12" (±4mm)
- 12" to 24", ±0.19" (±6mm)

DIN Flanges: Overall length (L) tolerance varies with line size:

- ½" to 1", ±1/16" (±2mm)
- 1½" to 10", ±1/8" (±4mm)
- 12", ±3/16" (±6mm)

ORDERING INFORMATION:

1. Select Nominal Pipe Size and include Maximum Flow Rate.
2. Specify units of measurement for both the flow rate indicator and totalizer.
3. For vertical installation, specify upflow or downflow.

Meter will be 10:1 flow range standard (i.e. 400 to 40 GPM)

NOTE: Larger meter sizes, special laying lengths, other flow ranges available by special order.

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Primary Element

Steam Designation	Line Size		Materials		Schedule		Class		Process Connection	
	Code	Description (in / mm)	Code	Description	Code	Description	Code	Description	Code	Description
EVS	02*	2 / 50	A	All S316/L	D	Standard	21	Beveled	N	Traditional Mount (1/2" NPT 3000#)
	04*	4 / 100	G	Body: A333 Gr. 6 Low Temp Carbon Steel			23	DIN PN16 Weld Neck	W	Universal Mount for Vertical Flow
	06	6 / 150		Cone: S316/L			24	DIN PN40 Weld Neck		
	08	8 / 200		Coupling: A350LF2 CL1 Low Temp Carbon Steel						
	10	10 / 250								
	12	12 / 300		Flange: P250GH						

*Carbon steel construction not recommended for line sizes less than 6". All line sizes are schedule standard.

Notes:

- RTD orientation is viewed from upstream.
- Standard RTD location (90° clockwise from HP tap viewed upstream).
- Steam package includes 3-valve traditional manifold.

Electronics

-	Make		DP Range		LCD Display		Communication Protocol		Output*		Flow Computer*	
	Code	Description	Code	Description	Code	Description	Code	Description	Code	Description	Code	Description
-	F	Fuji Electric DP Transmitter	1	Standard DP Range	N	No LCD	1	HART	V	Mass Flow Rate	1	Panel Mount
	N	No Transmitter	2	Low DP Range	Y	LCD	0	None	N	None	2	NEMA 4X
			3	High DP Range							0	No Flow Computer
			4	Very High DP range								
			0	None								

Manufacturer - DP Range		
Fuji Electric	1 - 0 to 10 mbar	
	2 - 0 to 60 mbar	
	3 - 0 to 320 mbar	
	4 - 0 to 1300 mbar	
	0 - None	

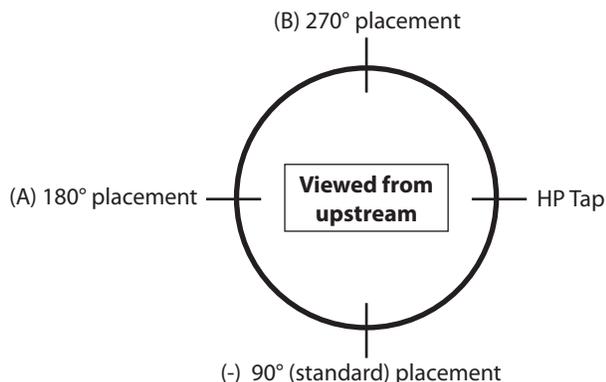
* Standard output

Options

RTD Positioning Options	
Code	Description
-	90° (6 o'clock)
A	180° (9 o'clock)
B	270° (12 o'clock)
C	No RTD or thermowell

Required

Accreditation Included	
-	PED



Any published technical data and instructions are subject to change without notice.