

# Style 733 Venturi Flow Metering Sensor

## PRODUCT DESCRIPTION



The Victaulic Venturi-type metering sensor provides an accurate and economical way to obtain flow measurements in HVAC, industrial, municipal and mining systems. Flow losses are minimized by this design. A flow loss equal to as little as 10% of the differential pressure is typical.

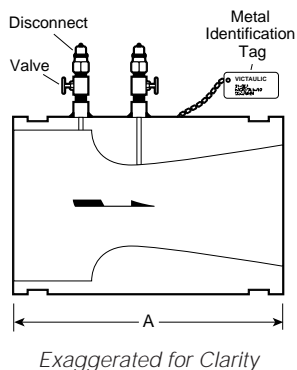
Grooved end design allows fast, easy installation with standard Victaulic couplings. All sizes have a minimum straight pipe requirement of five diameters upstream and two downstream.

Style 733 features a maintenance-free design that resists wear. Available in 2½" - 30" (65 - 750 mm) sizes for measuring flow balance from the smallest coils to the largest pumps.

Victaulic Venturi-type devices are accurate to ±1%. Standard rating for the system is 250 psi (1725 kPa) at +230° (+110°C) water.

For flow measuring with check capabilities, request 08.10.

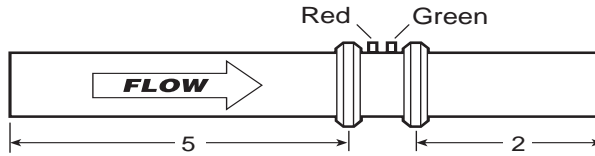
## DIMENSIONS



Pipe Size		Maximum Working Pressure PSI / kPa	End to End A Inches/mm	Approx. Weight Each Lbs./kg
Nominal Diameter Inches/mm	Actual Outside Diameter Inches/mm			
2½L 65	2.875 73,0	250 1725	4.63 118	2.5 1,1
2½H 65	2.875 73,0	250 1725	4.00 101.6	2.7 1,2
3L 80	3.500 88,9	250 1725	5.25 133	3.5 1,6
3H 80	3.500 88,9	250 1725	4.25 108.0	3.5 1,6
4L 100	4.500 114,3	250 1725	5.88 149	5.5 2,5
4H 100	4.500 114,3	250 1725	5.38 136.5	5.5 2,5
5L 125	5.563 141,3	250 1725	5.00 127	6.9 3,1
6L 150	6.625 168,3	250 1725	6.00 152	6.0 2,7
8 200	8.625 219,1	250 1725	7.00 178	19.0 8,6
10 250	10.750 273,0	250 1725	8.00 203	19.0 8,6
12 300	12.750 323,9	250 1725	12.00 305	60.0 27,2
14 350	14.000 355,6	250 1725	14.00 356	72.0 32,7
16 400	16.000 406,4	250 1725	26.00 660	153.0 69,4
18 450	18.000 457,0	250 1725	29.00 737	196.0 88,9
20 500	20.000 508,0	250 1725	32.00 813	245.0 111,1
24 600	24.000 610,0	250 1725	39.00 991	365.0 165,6
30 750	30.000 762,0	250 1725	48.00 1219	512.0 232,2

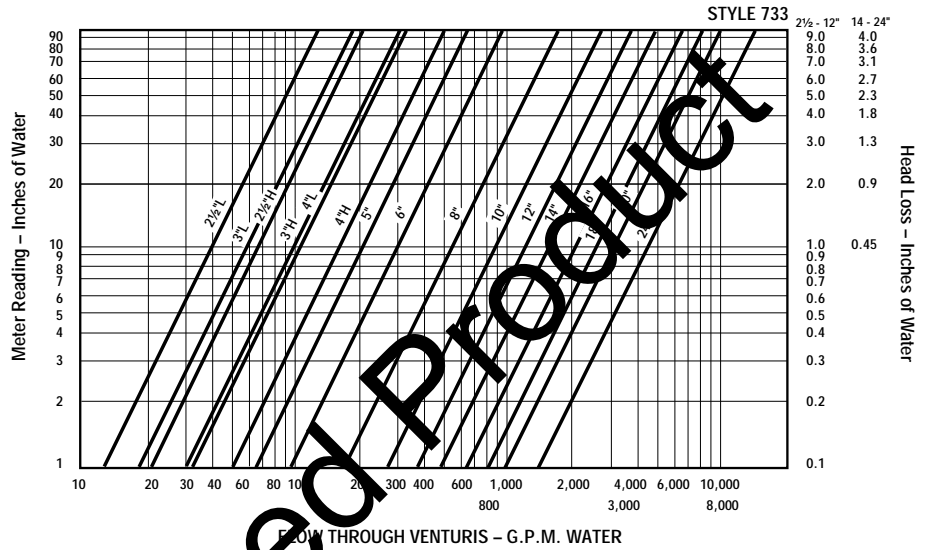
Discontinued Product

# INSTALLATION INSTRUCTIONS



Minimum pipe diameters from fitting or valve.

# PERFORMANCE



## C Values

Flow co-efficient (C) equal to GPM with 1 inch of water meter reading.

Formulas for C Values:

$$\Delta P = \frac{Q^2}{C^2} \text{ (GPM}^2\text{/C Value Squared)}$$

$$Q = C \times \sqrt{\Delta P}$$

Where:

Q = Flow (GPM)

C = Flow Coefficient

$\Delta P$  = Pressure Drop (Inches of H<sub>2</sub>O)

Pipe Size			Pipe Size			Pipe Size		
Nom. Dia. In./mm	Actual Out. Dia. In./mm	C Values	Nom. Dia. In./mm	Actual Out. Dia. In./mm	C Values	Nom. Dia. In./mm	Actual Out. Dia. In./mm	C Values
2 1/2L	2.875	13	5	5.563	65	16	16.000	635
65	73.0		125	141.3		400	406.4	
2 1/2	2.875	22	6	6.625	95	18	18.000	820
73	73.0		150	168.3		450	457.0	
3L	3.500	19	8	8.625	173	20	20.000	960
80	88.9		200	219.1		500	508.0	
3H	3.500	32	10	10.750	285	24	24.000	1500
80	88.9		250	273.0		600	610.0	
4L	4.500	35	12	12.750	380	30	30.000	1780
100	114.3		300	323.9		750	762.0	
4H	4.500	53	14	14.000	520			
100	114.3		350	355.6				

# MATERIAL SPECIFICATIONS

**Housing:** Steel – 4" (100 mm) and under, Schedule 40, conforming to ASTM A-53; 5" (125 mm) and above conforming to ASTM A-53B. Zinc electroplated

**Cone:** Steel conforming to ASTM A-569

- Optional:** Stainless steel Type 304 conforming to ASTM A-240

**Needle Valve:** Brass conforming to ASTM B-124 (377)

**Disconnect:** Brass

**Disconnect Type:** Quick disconnect conforming to Federal Specification #QQ-B-626

**NPT Size:** 1/8" (6 mm)

**Nipple:** Brass conforming to ASTM B-16 (360).

This product shall be manufactured by Victaulic Company. All products shall be installed in accordance with current Victaulic installation/assembly instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.