

# Victaulic Grooved End Metering Station – Orifice Type

## Series 7340



### 1.0 PRODUCT DESCRIPTION

#### Available Sizes

- 2 – 12"/DN50 – DN300

#### Pipe Material

- Carbon steel

#### Maximum Working Pressure

- Accommodates pressures ranging from full vacuum (29.9 in Hg/760 mm Hg) up to 750 psi/5171 kPa

#### Operating Temperature Range

- –30°F to +250°F/–34°C to +121°C

#### Function

- Used to obtain flow measurements in HVAC systems
- To obtain an accuracy of +/- 3%, the Series 7340 should be installed in a straight run of pipe having at least five (5) pipe diameters upstream and three (3) pipe diameters downstream free of flow disturbances (i.e., valves, outlets, fittings, etc.).
- When the Series 7340 is close coupled to a globe-style or butterfly balancing valve, five (5) straight pipe diameters upstream of the valve is required to obtain +/-5% accuracy.
- Install the Series 7340 with two (2) Style 107N Installation-Ready™ rigid couplings

#### Pipe Preparation

- Exclusively for use on pipe and fittings which feature the Victaulic Original Groove System (OGS) groove profile (see section 7.0 for Reference Materials)

### 2.0 CERTIFICATION/LISTINGS

Not applicable. Contact Victaulic with any questions.

### 3.0 SPECIFICATIONS – MATERIAL

Body:

- Sizes 2 – 6"/DN50 – DN150: EN1A nickel plated steel (BS230M07).
- Sizes 8 – 12"/DN200 – DN300: EN3BM07 nickel plated steel (BS070M20).

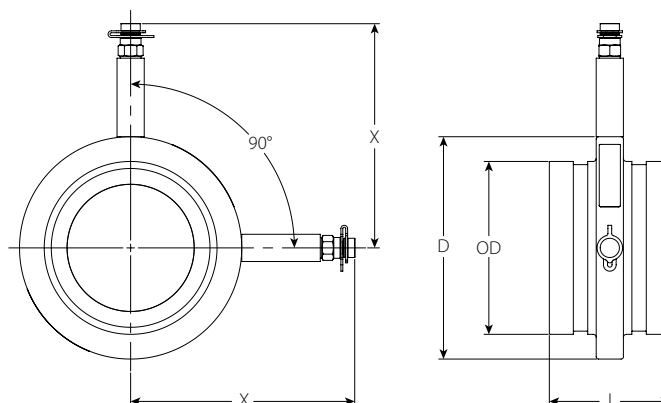
All sizes fitted with two (2) extended pressure test ports (marked red upstream and blue downstream).

ALWAYS REFER TO ANY NOTIFICATIONS AT THE END OF THIS DOCUMENT REGARDING PRODUCT INSTALLATION, MAINTENANCE OR SUPPORT.



## 4.0 DIMENSIONS

### Series 7340 Grooved End Metering Station



Size		Dimensions			Weight
Nominal inches DN	Actual Outside Diameter inches mm	L inches mm	D inches mm	X inches mm	Approx. (Each) lb kg
2	2.375	3.15	3.74	6.63	2.7
DN50	60.3	80	95	168	1.2
2 ½	2.875	3.15	4.25	7.25	3.1
	73.0	80	108	184	1.4
DN65	3.000	3.15	4.25	7.25	3.1
	76.1	80	108	184	1.4
3	3.500	3.15	4.92	7.88	3.4
DN80	88.9	80	125	200	1.5
4	4.500	3.15	5.79	8.75	4.7
DN100	114.3	80	147	222	2.1
DN125	5.500	3.15	6.89	9.88	5.9
	139.7	80	175	251	2.7
5	5.563	3.15	6.89	9.88	5.9
	141.3	80	175	251	2.7
	6.500	3.15	7.95	10.88	6.6
	165.1	80	202	276	3.0
6	6.625	3.15	7.95	10.88	7.4
DN150	168.3	80	202	276	3.4
8	8.625	3.94	9.88	12.88	9.4
DN200	219.1	100	251	327	4.3
10	10.750	3.94	11.81	14.75	19.3
DN250	273.0	100	300	375	8.8
12	12.750	3.94	13.58	16.50	21.1
DN300	323.9	100	345	419	9.6

## 5.0 PERFORMANCE

### Series 7340 Grooved End Metering Station

$C_v/K_v$  values for flow of water at ambient temperature are shown in the table below.

Formulas for  $C_v/K_v$  values:

$$\Delta P = \frac{Q^2}{C_v^2}$$

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

**Where:**

Q = Flow (GPM)

$\Delta P$  = Pressure Drop (psi)

$C_v$  = Flow Coefficient

$$\Delta P = \frac{Q^2}{K_v^2}$$

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

**Where:**

Q = Flow (m<sup>3</sup>/hr)

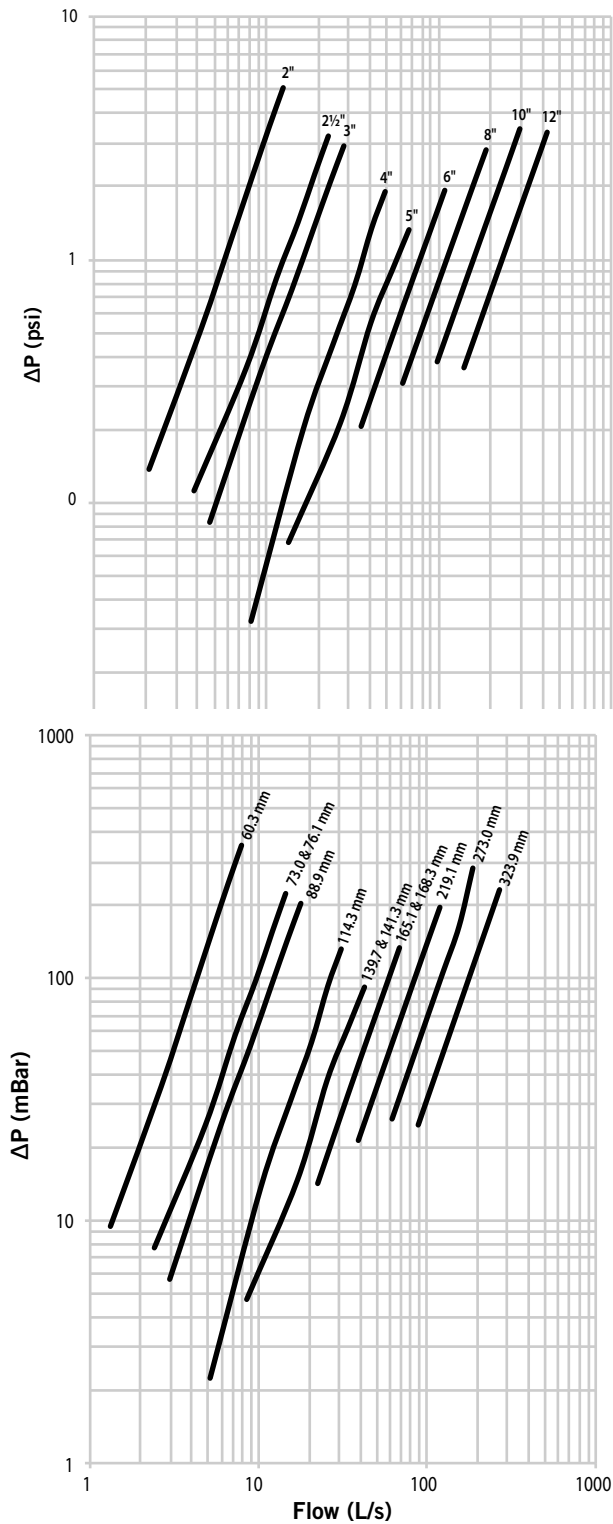
$\Delta P$  = Pressure Drop (Bar)

$K_v$  = Flow Coefficient

Size		$C_v$ $K_v$ (Full Open)
Nominal inches DN	Actual Outside Diameter inches mm	
2 DN50	2.375 60.3	55 48
2½	2.875 73.0	125 108
DN65	3.000 76.1	125 108
3 DN80	3.500 88.9	165 143
4 DN100	4.500 114.3	362 313
DN125	5.500 139.7	568 491
5	5.563 141.3	568 491
	6.500 165.1	773 669
6 DN150	6.625 168.3	773 669
8 DN200	8.625 219.1	1283 1110
10 DN250	10.750 273.0	1833 1586
12 DN300	12.750 323.9	2688 2325

5.0 PERFORMANCE (CONTINUED)

Series 7340 Grooved End Metering Station  
Flow Characteristics



## 6.0 NOTIFICATIONS

### ⚠ WARNING



- Read and understand all instructions before attempting to install, remove, adjust, or maintain any Victaulic piping products.
- Always verify that the piping system has been completely depressurized and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.
- Wear safety glasses, hardhat, and foot protection.

Failure to follow these instructions could result in death or serious personal injury and property damage.

## 7.0 REFERENCE MATERIALS

[06.23: Victaulic QuickVic™ Rigid Coupling Style 107N](#)

[08.16: Victaulic Balancing Valves TA Series 786H/787H/788/789 and Series 78KH](#)

[08.20: Victaulic Vic-300 MasterSeal Butterfly Valve Series 761](#)

[08.70: Oventrop Double Regulating and Commissioning Valve Series 7890](#)

[I-100: Victaulic Field Installation Handbook](#)

### User Responsibility for Product Selection and Suitability

Each user bears final responsibility for making a determination as to the suitability of Victaulic products for a particular end-use application, in accordance with industry standards and project specifications, and the applicable building codes and related regulations as well as Victaulic performance, maintenance, safety, and warning instructions. Nothing in this or any other document, nor any verbal recommendation, advice, or opinion from any Victaulic employee, shall be deemed to alter, vary, supersede, or waive any provision of Victaulic Company's standard conditions of sale, installation guide, or this disclaimer.

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### Note

This product shall be manufactured by Victaulic or to Victaulic specifications. Victaulic recommends all products to be installed in accordance with current IMI TA installation/assembly instructions. Victaulic and IMI TA reserve the right to change product specifications, designs and standard equipment without notice and without incurring obligations.

### Installation

Reference should always be made to the current IMI TA installation/assembly instructions for the product you are installing. For coupling and strainer installation, reference should always be made to the [I-100 Victaulic Field Installation Handbook](#) for the product you are installing. Handbooks are included with each shipment of Victaulic products for complete installation and assembly data, and are available in PDF format on our website at [www.victaulic.com](http://www.victaulic.com)

### Warranty

Refer to the Warranty section of the current Price List or contact Victaulic for details.

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