

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:

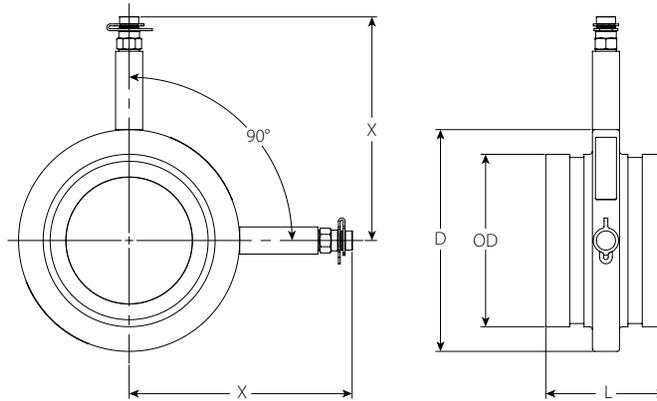
- Sizes 2 – 6"/DN50 – DN150: EN1A nickel plated steel (BS230M07).
- Sizes 8 – 12"/DN200 – DN300: EN3BM07 nickel plated steel (BS070M20).

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
2½	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)
 ΔP = Pressure Drop (psi)
 C_v = Flow Coefficient

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

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

Where:

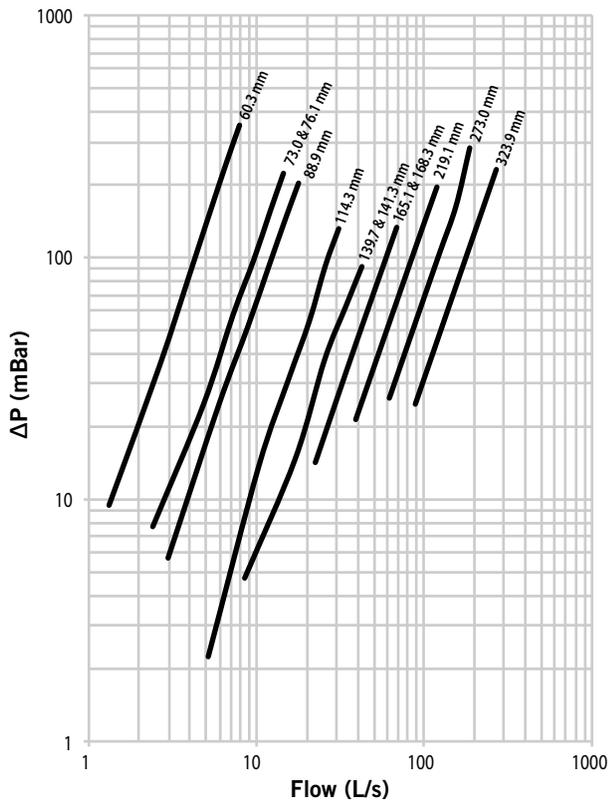
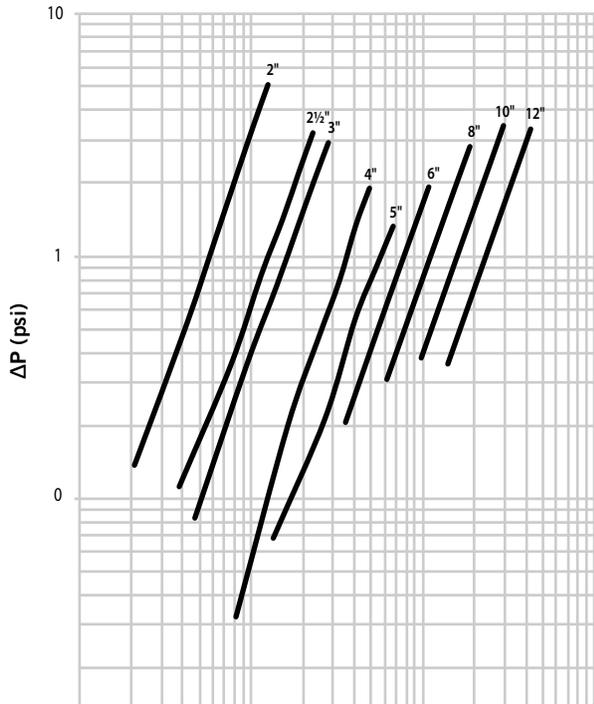
Q = Flow (m³/hr)
 ΔP = Pressure Drop (Bar)
 K_v = Flow Coefficient

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

Warranty

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

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