Victaulic® Butterfly Valve
Series 700

08.05



1.0 PRODUCT DESCRIPTION

Available Sizes

- 1 ½ – 6"/DN40 – DN150

Maximum Working Pressure

- 200 psi/1400 kPa/14 bar

Operating Temperature

- Dependent on seat selection from Section 3.0

Application

- For use in carbon steel, ductile iron, and plastic piping systems. When used with other piping materials, the system designer shall confirm the materials utilized are acceptable for use with the intended application.

2.0 CERTIFICATION/LISTINGS

CE

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

© 2025 Victaulic Company. All rights reserved.

3.0 SPECIFICATIONS – MATERIAL

Housing: Ductile Iron conforming to ASTM A536, Grade 65-45-12

Body: Carbon Steel, elastomer lined

Coating: Black Alkyd Enamel

Seat/Liner: (specify choice)

☐ **Victaulic EPDM**

EPDM (Green color code). Temperature range –30°F to +230°F/–34°C to +110°C. NOT RECOMMENDED FOR PETROLEUM SERVICES OR STEAM SERVICES.

☐ **Victaulic Nitrile**

Nitrile (Orange color code). Temperature range –20°F to +180°F/–29°C to +82°C. Not compatible for hot water services over +150°F/+66°C or for hot dry air over +140°F/60°C. NOT RECOMMENDED FOR HOT WATER SERVICES OR STEAM SERVICES.

Upper and Lower Stem: 416 Stainless Steel

Disc: (specify choice)

☐ Standard: Aluminum Bronze Alloy C95300 conforming to ASTM B148 and B106; Aluminum Bronze Alloy C64200 conforming to ASTM B283

☐ Optional: Stainless Steel Grade CF8M conforming to ASTM A743

Handle: Cast Ductile Iron

O-Ring: Same as Seat

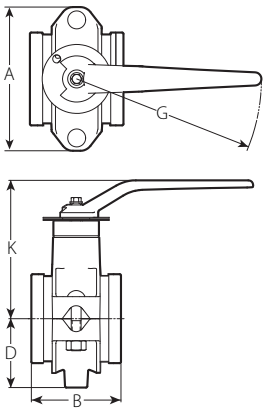
Track Bolts: Electroplated Steel

Nuts: Electroplated Steel

 © 2025 Victaulic Company. All rights reserved.

4.0 DIMENSIONS

Series 700 Butterfly Valve



1 ½ – 6"/DN40 – DN150 (Typical)

Size		Dimensions					Weight
Nominal inches DN	**Actual Outside Diameter** inches mm	**A** inches mm	**B** inches mm	**D** inches mm	**G** inches mm	**K** inches mm	**Approximate (Each)** lb kg
1 ½ DN40	1.900 48.3	3.63 92.2	3.38 85.9	1.63 41.4	5.50 139.7	4.44 112.8	2.8 1.3
2 DN50	2.375 60.3	4.06 103.1	3.19 81.0	1.87 47.5	5.50 139.7	4.71 119.6	3.3 1.5
2 ½	2.875 73.0	4.87 123.7	3.81 96.8	2.50 63.5	7.00 177.8	5.31 134.9	6.4 2.9
3 DN80	3.500 88.9	5.62 142.7	3.81 96.8	2.75 69.9	7.00 177.8	5.62 142.7	6.8 3.1
4 DN100	4.500 114.3	7.00 177.8	4.56 115.8	3.50 88.9	9.00 228.6	6.69 179.9	12.1 5.5
5	5.563 141.3	8.50 215.9	5.81 147.6	4.00 101.6	12.00 304.8	8.25 209.6	26.1 11.8
6 DN150	6.625 168.3	9.50 241.3	5.81 147.6	4.50 114.3	12.00 304.8	8.78 223.0	32.5 14.7

 © 2025 Victaulic Company. All rights reserved.

5.0 PERFORMANCE

Series 700 Butterfly Valve

Cv values for flow of water at +60°F/+16°C with single disc position is shown in the table below.

Formulas for Cv/Kv 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

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

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

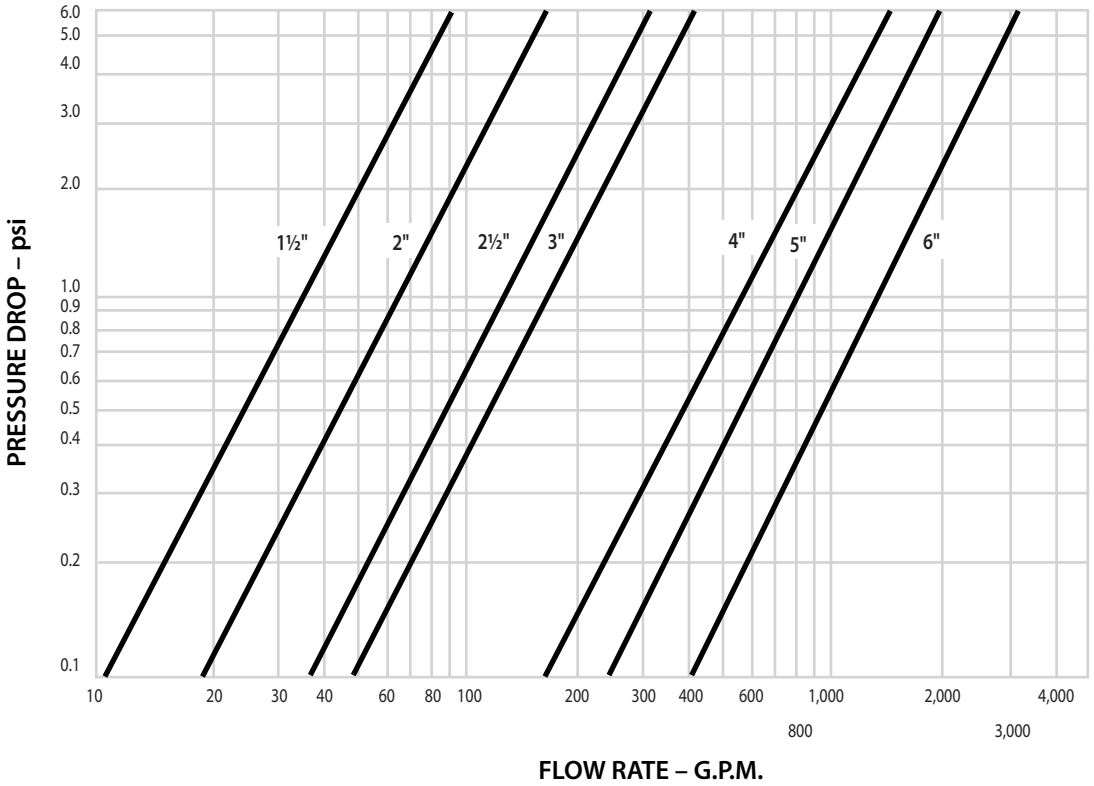
Where:
Q = Flow (m^3/hr)
ΔP = Pressure Drop (Bar)
K_v = Flow Coefficient

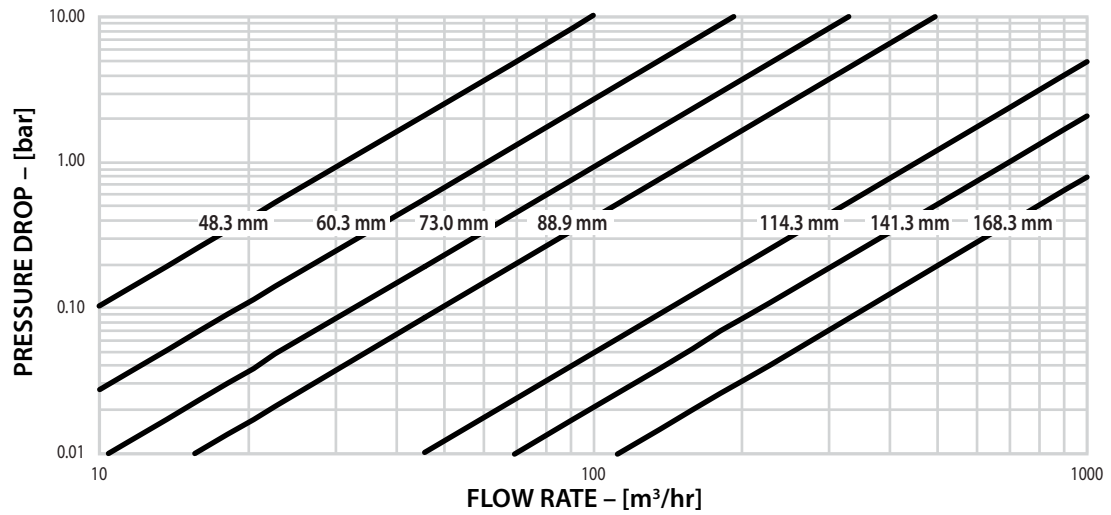
Valve Size		Flow Coefficients
Nominal inches DN	**Actual Outside Diameter** inches mm	**Disc Position (Degrees open) 90**  Cv Kv
1½ DN40	1.900 48.3	36 31
2 DN50	2.375 60.3	70 61
2½	2.875 73.0	120 104
3 DN80	3.500 88.9	180 156
4 DN100	4.500 114.3	520 450
5	5.563 141.3	800 692
6 DN150	6.625 168.3	1300 1125

 © 2025 Victaulic Company. All rights reserved.

5.1 PERFORMANCE

Flow Characteristics





 © 2025 Victaulic Company. All rights reserved.

6.0 NOTIFICATIONS

⚠ WARNING



- **Read and understand all instructions before attempting to install any Victaulic 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.**
- **Confirm that any equipment, branch lines, or sections of piping that may have been isolated for/during testing or due to valve closures/positioning are identified, 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

I-100: Field Installation Handbook

User Responsibility for Product Selection and Suitability

Each user bears final responsibility for determining the suitability of Victaulic products for their end-use application, in accordance with industry standards, project specifications, and Victaulic's published performance, maintenance, and safety data, as well as all warnings and installation 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, warranty, installation instructions, or this disclaimer.

Installation

Always refer to and follow the Victaulic Installation Handbook or installation instructions for the product you are installing. Handbooks are included with each shipment of Victaulic products, providing complete installation and assembly data, and are available in PDF format on our website at victaulic.com.

Warranty

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

Intellectual Property Rights

No statement concerning the use of any material, product, service, or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Victaulic or any of its affiliates, or as a recommendation for the use of such material, product, service, or design in the infringement of any patent or other intellectual property right. The terms "Patented" or "Patent Pending" refer to design or utility patents or patent applications for articles and/or methods of use in the United States and/or other countries. Victaulic and all other Victaulic marks are the trademarks or registered trademarks of Victaulic Company, and/or its affiliated entities, in the U.S. and/or other countries.

Note

All products bearing a Victaulic trademark are manufactured by Victaulic or to Victaulic specifications. All products are to be installed only in accordance with the applicable Victaulic installation instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.

08.05 1664 Rev K Updated 02/2025 © 2025 Victaulic Company. All rights reserved.