



Bare Valve



Valve with Lever Handle

1.0 PRODUCT DESCRIPTION

Available Sizes

- 2 – 6"/DN50 – DN150

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.

NOTES

- Not recommended for use in potable water systems using stainless steel piping or copper tubing. Refer to [publication 17.45](#): Victaulic Vic-300 MasterSeal™ Stainless Steel Butterfly Valve – Series 861 or [publication 22.14](#): Victaulic Copper Connection Butterfly Valve – Series 608N for more information.
- The Series 727 Ball Valve shall not be installed with flange adapters, such as the Victaulic Style 741 or 743 Vic-Flange Adapters. When connecting to flanged components, a No. 45F or No. 45R Flanged Nipple shall be used.

Maximum Working Pressure

- Rated up to 1500 psi/10350 kPa/103 bar

Operating Temperature

- Reference section 3.0 for seat performance

Function

- High pressure enhanced port NACE MR0175 compliant ball valve
- Integral/tamper resistant lock

Pipe Preparation

- Cut or roll groove pipe in accordance with [publication 25.01](#): Original Groove System (OGS) Groove Specifications or [publication 25.02](#): Victaulic® EndSeal™ Pipe Groove Specifications

Configuration Options

- Grooved by Grooved End Connection
- Grooved by Male Threaded End Connection
- Uni-Directional Ball (Freeze Port) to equalize upstream line pressure

2.0 CERTIFICATION/LISTINGS

Product designed and manufactured under Victaulic's Quality Management System, as certified by LPCB in accordance with ISO-9001:2015.

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

3.0 SPECIFICATIONS – MATERIAL

Body and Endface: Ductile iron conforming to ASTM A395/395M-99 Grade 60-40-18. NACE compliant.

Stem: ASTM A105 Carbon Steel. Electroless Nickel Plated to ASTM B733-04 to SC4 Severe Service. NACE compliant.
Optional: UNS S31600 Type 316 stainless steel. NACE compliant.

Ball: ASTM A105 Carbon Steel. Electroless Nickel Plated to ASTM B733-04 to SC4 Severe Service. NACE compliant.
Optional: UNS S31600 Type 316 stainless steel. NACE compliant.

Seats: Acetal Copolymer Temperature range -20°F to 150°F/-29°C to + 66°C continuous.

Seals: Nitrile.

Operators:

Lever Handle: 2 – 6"/DN50 – DN150

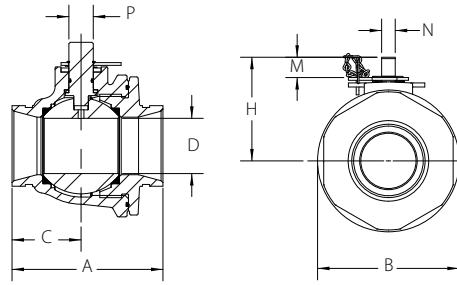
Ductile Iron per ASTM A 536 Grade 65-45-12, enamel paint

Integral Locking Drive Components:

Stamped carbon steel ASTM A572 Grade 50 and ASTM A1008, with ASTM B633 SC2 Type III zinc plating.

4.0 DIMENSIONS

Series 727 Grooved Ball Valve

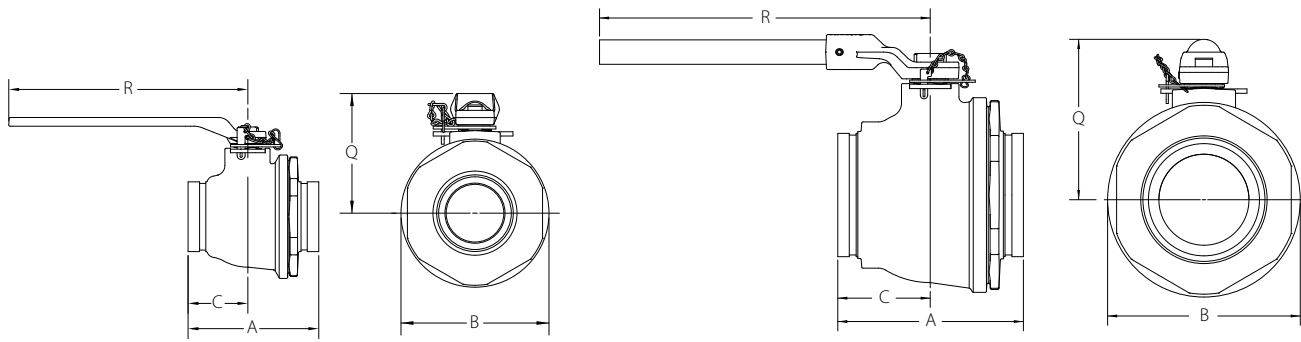


Bare Valve Grooved End
2 – 6"/DN50 – DN150

Size		Dimensions								Weight
Nominal inches DN	Actual Outside Diameter inches mm	A E to E inches mm	B inches mm	C inches mm	D inches mm	H inches mm	M inches mm	N inches mm	P inches mm	Approx. (Each) lb kg
2 DN50	2.375 60.3	5.53 140	4.50 115	2.50 64	1.65 42	3.88 97	1.00 23	0.59 15	1.10 27	11.0 5.0
3 DN80	3.500 88.9	6.56 167	6.25 157	3.00 77	2.40 61	4.63 115	1.00 23	0.59 15	1.10 27	22.0 10.0
4 DN100	4.500 114.3	8.26 210	8.13 204	3.88 97	3.40 86	5.75 145	1.13 29	0.75 19	1.38 35	48.0 22.0
6 DN150	6.625 168.3	10.10 256	10.50 267	5.13 128	4.90 124	7.63 194	1.50 37	0.95 24	1.75 45	105.0 47.5

4.0 DIMENSIONS (CONTINUED)

Series 727 Grooved Ball Valve with Handle



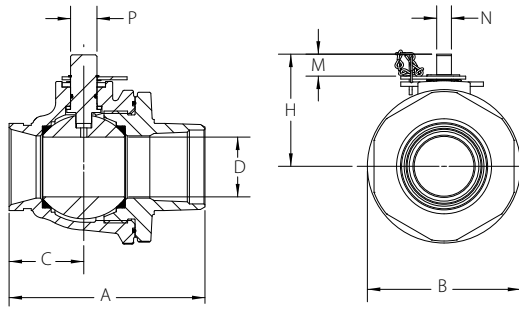
Grooved End Valve with Lever Handle
2 – 3"/DN50 – DN75

Grooved End Valve with Lever Handle
4 – 6"/DN100 – DN150

Size		Dimensions					Weight
Nominal inches DN	Actual Outside Diameter inches mm	A E to E inches mm	B inches mm	C inches mm	Q inches mm	R inches mm	Approx. (Each) lb kg
2 DN50	2.375 60.3	5.53 140	4.50 115	2.50 64	4.38 109	12.00 305	13.0 5.9
3 DN80	3.500 88.9	6.56 167	6.25 158	3.00 77	5.00 127	12.00 305	24.0 11.0
4 DN100	4.500 114.3	8.26 210	8.13 204	3.88 97	7.13 179	18.00 457	54.0 24.5
6 DN150	6.625 168.3	10.10 256	10.50 267	5.13 128	8.75 220	18.00 457	115.0 52.0

4.1 DIMENSIONS

Series 727 Grooved x Male Threaded Ball Valve



Bare Valve Threaded End
2 – 4"/DN50 – DN100

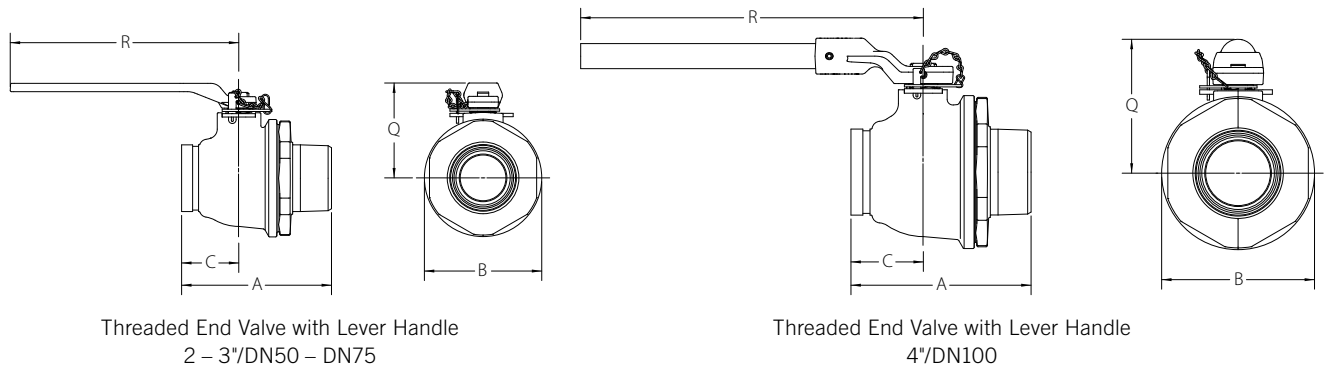
Size		Dimensions								Weight
Nominal inches DN	Actual Outside Diameter inches mm	A E to E inches mm	B inches mm	C inches mm	D inches mm	H inches mm	M inches mm	N inches mm	P inches mm	Approx. (Each) lb kg
2 DN50	2.375 60.3	6.35 161	4.50 115	2.50 64	1.65 42	3.88 97	1.00 23	0.59 15	1.10 27	12.0 5.4
3 DN80	3.500 88.9	7.87 200	6.25 157	3.00 77	2.40 61	4.63 115	1.00 23	0.59 15	1.10 27	25.0 11.5
4 DN100	4.500 114.3	9.46 240	8.13 204	3.88 97	3.40 86	5.75 145	1.13 29	0.75 19	1.38 35	50.0 22.5

NOTE

- For the Uni-Directional Ball (Freeze Port) configuration, the Male Threaded side is the inlet side.

4.1 DIMENSIONS (CONTINUED)

Series 727 Grooved x Male Threaded Ball Valve with Handle



Size		Dimensions					Weight
Nominal inches DN	Actual Outside Diameter inches mm	A E to E inches mm	B inches mm	C inches mm	Q inches mm	R inches mm	Approx. (Each) lb kg
2 DN50	2.375 60.3	6.35 161	4.50 115	2.50 64	4.38 109	12.00 305	14.0 6.4
3 DN80	3.500 88.9	7.87 200	6.25 157	3.00 77	5.00 127	12.00 305	26.0 12.0
4 DN100	4.500 114.3	9.46 240	8.13 204	3.88 97	7.13 179	18.00 457	55.0 25.0

NOTE

- For the Uni-Directional Ball (Freeze Port) configuration, the Male Threaded side is the inlet side.

5.0 PERFORMANCE

Flow Characteristics

C_v values for flow of water at +60°F/+16°C with a fully open valve are shown in tables below.

Formulas for C_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

Size		Flow Characteristics
Nominal inches DN	Actual Outside Diameter inches mm	Full Open C _v K _v
2 DN50	2.375 60.3	282 244
3 DN80	3.500 88.9	543 470
4 DN100	4.500 114.3	1460 1263
6 DN150	6.625 168.3	1871 1618

6.0 NOTIFICATIONS

⚠ WARNING

- Read and understand all instructions before attempting to install, remove, adjust, or maintain any Victaulic piping products.
- Depressurize and drain the piping system before attempting to install, remove, adjust, or maintain any Victaulic piping 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

V - 040 - 727 P O - S

Type	In./mm	Size Code	Series	End Configuration	Operator/ Ball Option	Trim
V	2/50 3/80 4/100 6/150	020 030 040 060	727	P - Grooved Ends T - Grooved x Male Threaded	0 - Standard Ball w/o handle 1 - Uni-Directional Ball (Freeze Port) w/o handle H - Standard Ball with handle 2 - Uni-Directional Ball (Freeze Port) with handle	C - Electroless nickel plated (ENP) Carbon Steel Trim S - CF8M/316SS Stainless Steel Trim

NOTE

- End configurations dependent on sizes. See Section 4.0 for details.

[25.01: Original Groove System \(OGS\) Groove Specifications](#)

[25.02: Victaulic EndSeal™ Pipe Groove Specifications](#)

[29.01: Terms and Conditions/Warranty](#)

[I-100: 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. All products to 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.

Installation

Reference should always be made to the Victaulic installation handbook or installation instructions of 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 www.victaulic.com.

Warranty

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

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