

# Victaulic Stainless Steel Ball Valve

## Series 726S



Lever Operator  
Series 726S



Lever Operator with  
Stem Extension



Gear  
Operator

### 1.0 PRODUCT DESCRIPTION

#### Available Sizes

- 1 ¼ – 6"/DN32 – DN150

#### Maximum Working Pressure

- Accommodates pressures up to 1000 psi/6895 kPa/69 bar

#### Application

- Two piece, end-entry valve featuring a floating ball design
- Intended for use in full open or shut-off service; throttling is not recommended with standard ball valves

### 2.0 CERTIFICATIONS/LISTINGS



NACE MR0175 compliant material.

The Series 726S stainless steel ball valve is UL Classified in accordance with NSF/ANSI/CAN 61 for domestic hot 140°F/60°C potable water service and NSF/ANSI 372.

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

### 3.0 SPECIFICATIONS – MATERIAL

---

#### Series 726S Stainless Steel Ball Valve

**Body and End Cap:** Stainless steel, CF8M.

**Ball:** 316 stainless steel.

☐ Optional: 316 stainless steel with vent.

**Seats:** Glass-reinforced polytetrafluoroethylene (PTFE).

**Seals:** Fluoroelastomer (Blue color code). Temperature range +20°F to +250°F/ -7°C to +121°C. NOT RECOMMENDED FOR STEAM SERVICES.

#### Operators: (specify choice)

##### Lever Operator:

☐ 1 ½ – 3"/DN40 – DN80: Carbon steel, zinc-plated, plastic grip.

☐ 4 – 6"/DN100 – DN150: Carbon steel, enamel paint.

☐ Optional trim: Stainless steel.

##### Gear Operator:

☐ Standard: Manual with hand wheel.

☐ Optional trim: Stainless steel.

**Operator Bracket:** Hot rolled steel, black enamel-coated.

**Bracket Bolts/Washers:** Cold rolled steel, zinc-plated.

**Integral Locking Drive Components:** Stamped carbon steel, zinc-plated.

##### Stem Extension:

☐ Stem Extension: 316 stainless steel.

☐ Packing: TFE.

☐ Adapter: ASTM A351 Grade CF8M stainless steel

☐ Stem Extension Hardware (1 ½ – 6"/DN40 – DN150 ): 304 stainless steel.

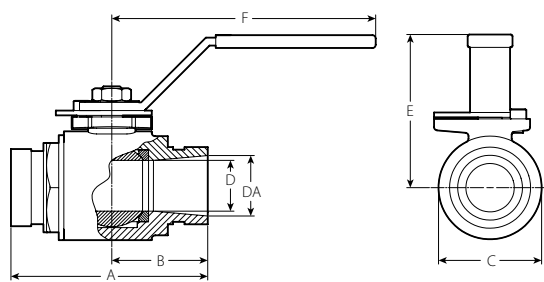
☐ Handle Hub (4 – 6"/DN100 – DN150 Sizes): ASTM A536 Grade 65-45-12.

☐ Handle Bolt (4 – 6"/DN100 – DN150 Sizes): Carbon steel.

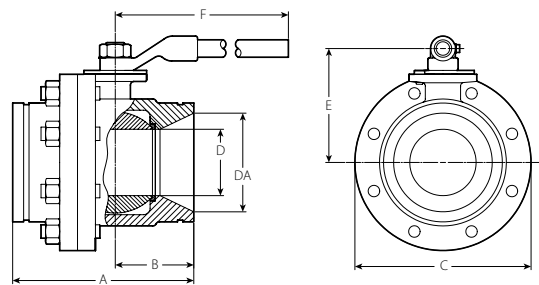
☐ Pipe Handle (4 – 6"/DN100 – DN150 Sizes): ASTM A53.

4.0 DIMENSIONS

Series 726S Stainless Steel Ball Valve with Standard Handle



1 ¼ – 3"/DN32 – DN80

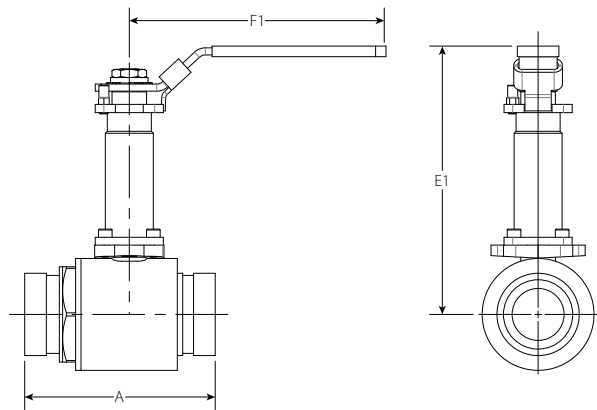


4 – 6"/DN100 – DN150

| Size                    |                                               | Dimensions        |                   |                   |                   |                    |                   |                   | Weight                        |
|-------------------------|-----------------------------------------------|-------------------|-------------------|-------------------|-------------------|--------------------|-------------------|-------------------|-------------------------------|
| Nominal<br>inches<br>DN | Actual<br>Outside<br>Diameter<br>inches<br>mm | A<br>inches<br>mm | B<br>inches<br>mm | C<br>inches<br>mm | D<br>inches<br>mm | DA<br>inches<br>mm | E<br>inches<br>mm | F<br>inches<br>mm | Approx.<br>(Each)<br>lb<br>kg |
| 1 ¼<br>DN32             | 1.660<br>42.4                                 | 4.96<br>126       | 2.36<br>60        | 2.25<br>57        | 1.00<br>25        | 1.50<br>38         | 2.88<br>72        | 7.00<br>178       | 3.4<br>1.5                    |
| 1 ½<br>DN40             | 1.900<br>48.3                                 | 5.10<br>130       | 2.36<br>60        | 2.75<br>70        | 1.25<br>32        | 1.50<br>38         | 3.00<br>76        | 7.00<br>178       | 4.8<br>2.2                    |
| 2<br>DN50               | 2.375<br>60.3                                 | 5.50<br>140       | 2.48<br>63        | 3.25<br>83        | 1.50<br>38        | 2.00<br>51         | 3.38<br>86        | 7.00<br>178       | 7.5<br>3.4                    |
| 2 ½                     | 2.875<br>73.0                                 | 6.30<br>160       | 2.80<br>71        | 4.00<br>102       | 2.00<br>51        | 2.50<br>64         | 4.00<br>102       | 9.88<br>251       | 11.6<br>5.3                   |
| DN65                    | 3.000<br>76.1                                 | 6.30<br>160       | 2.80<br>71        | 4.00<br>102       | 2.00<br>51        | 2.50<br>64         | 4.00<br>102       | 9.88<br>251       | 11.6<br>5.3                   |
| 3<br>DN80               | 3.500<br>88.9                                 | 6.60<br>168       | 3.15<br>80        | 4.88<br>124       | 2.50<br>64        | 3.00<br>76         | 4.63<br>118       | 10.00<br>254      | 17.2<br>7.8                   |
| 4<br>DN100              | 4.500<br>114.3                                | 8.30<br>211       | 3.35<br>85        | 7.75<br>197       | 3.00<br>76        | 4.00<br>102        | 5.50<br>140       | 15.75<br>400      | 45.0<br>20.5                  |
|                         | 6.500<br>165.1                                | 10.10<br>257      | 4.53<br>115       | 9.88<br>251       | 4.00<br>102       | 6.00<br>152        | 6.88<br>175       | 18.13<br>461      | 82.0<br>37.0                  |
| 6<br>DN150              | 6.625<br>168.3                                | 10.10<br>257      | 4.53<br>115       | 9.88<br>251       | 4.00<br>102       | 6.00<br>152        | 6.88<br>175       | 18.13<br>461      | 82.0<br>37.0                  |

4.1 DIMENSIONS

Series 726 Ball Valve  
With Lever Operator and Stem Extension

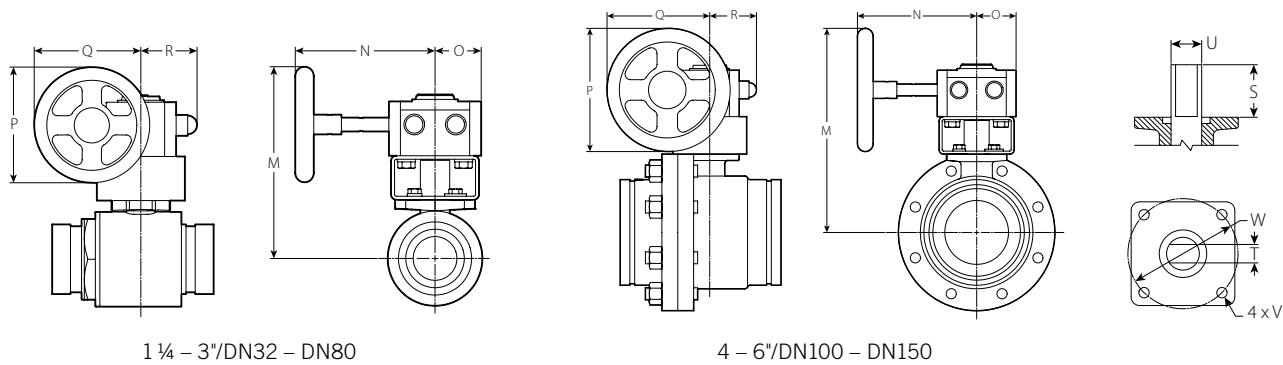


1 ½ – 3"/DN40 – DN80

| Size                    |                                               | Dimensions        |                    |                    | Weight                        |
|-------------------------|-----------------------------------------------|-------------------|--------------------|--------------------|-------------------------------|
| Nominal<br>inches<br>DN | Actual<br>Outside<br>Diameter<br>inches<br>mm | A<br>inches<br>mm | E1<br>inches<br>mm | F1<br>inches<br>mm | Approx.<br>(Each)<br>lb<br>kg |
| 1 ¼<br>DN32             | 1.660<br>42.4                                 | –                 | –                  | –                  | –                             |
| 1 ½<br>DN40             | 1.900<br>48.3                                 | 5.10<br>130       | 7.38<br>185        | 7.50<br>188        | 6.5<br>2.9                    |
| 2<br>DN50               | 2.375<br>60.3                                 | 5.50<br>140       | 7.38<br>186        | 7.50<br>188        | 9.3<br>4.2                    |
| 2 ½                     | 2.875<br>73.0                                 | 6.30<br>160       | 8.50<br>215        | 11.50<br>292       | 13.0<br>5.9                   |
| DN65                    | 3.000<br>76.1                                 | 6.30<br>160       | 8.50<br>215        | 11.50<br>292       | 13.0<br>5.9                   |
| 3<br>DN80               | 3.500<br>88.9                                 | 6.60<br>168       | 8.75<br>221        | 11.50<br>292       | 21.0<br>9.5                   |
| 4<br>DN100              | 4.500<br>114.3                                | 8.30<br>211       | 9.63<br>243        | 15.75<br>398       | 52.0<br>23.5                  |
|                         | 6.500<br>165.1                                | 10.10<br>257      | 10.88<br>276       | 18.13<br>459       | 89.0<br>40.5                  |
| 6<br>DN150              | 6.625<br>168.3                                | 10.10<br>257      | 10.88<br>276       | 18.13<br>459       | 89.0<br>40.5                  |

4.2 DIMENSIONS

Series 726S Stainless Steel Ball Valve with Gear Operator



| Size                    |                                               | Dimensions        |                   |                   |                   |                   |                   |                   |                   |                    |                   |                   | Weight                        |
|-------------------------|-----------------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|-------------------|-------------------|-------------------------------|
| Nominal<br>inches<br>DN | Actual<br>Outside<br>Diameter<br>inches<br>mm | M<br>inches<br>mm | N<br>inches<br>mm | O<br>inches<br>mm | P<br>inches<br>mm | Q<br>inches<br>mm | R<br>inches<br>mm | S<br>inches<br>mm | T<br>inches<br>mm | ØU<br>inches<br>mm | V<br>inches<br>mm | W<br>inches<br>mm | Approx.<br>(Each)<br>lb<br>kg |
| 1 1/4<br>DN32           | 1.660<br>42.4                                 | 6.28<br>160       | 4.88<br>121       | 1.63<br>40        | 3.94<br>100       | 3.75<br>93        | 2.00<br>49        | 0.81<br>21        | 0.35<br>9         | 0.56<br>14         | M6 x 1.00         | 1.97<br>50        | 7.1<br>3.2                    |
| 1 1/2<br>DN40           | 1.900<br>48.3                                 | 6.38<br>160       | 4.88<br>121       | 1.63<br>40        | 3.94<br>100       | 3.75<br>93        | 2.00<br>49        | 0.81<br>21        | 0.35<br>9         | 0.56<br>14         | M6 x 1.00         | 1.97<br>50        | 7.5<br>3.4                    |
| 2<br>DN50               | 2.375<br>60.3                                 | 6.63<br>166       | 4.88<br>121       | 1.63<br>40        | 3.94<br>100       | 3.75<br>93        | 2.00<br>49        | 0.81<br>21        | 0.35<br>9         | 0.56<br>14         | M6 x 1.00         | 1.97<br>50        | 9.1<br>4.1                    |
| 2 1/2                   | 2.875<br>73.0                                 | 6.88<br>174       | 4.88<br>121       | 1.63<br>40        | 3.94<br>100       | 3.75<br>93        | 2.00<br>49        | 1.00<br>25        | 0.47<br>12        | 0.75<br>19         | M8 x 1.25         | 2.76<br>70        | 15.4<br>7.0                   |
| DN65                    | 3.000<br>76.1                                 | 6.88<br>174       | 4.88<br>121       | 1.63<br>40        | 3.94<br>100       | 3.75<br>93        | 2.00<br>49        | 1.00<br>25        | 0.47<br>12        | 0.75<br>19         | M8 x 1.25         | 2.76<br>70        | 15.4<br>7.0                   |
| 3<br>DN80               | 3.500<br>88.9                                 | 8.00<br>202       | 7.38<br>186       | 2.00<br>51        | 5.00<br>127       | 4.50<br>113       | 2.25<br>56        | 1.03<br>26        | 0.47<br>12        | 0.75<br>19         | M8 x 1.25         | 2.76<br>70        | 21.2<br>9.6                   |
| 4                       | 4.500<br>114.3                                | 10.00<br>253      | 7.38<br>186       | 2.00<br>51        | 5.00<br>127       | 4.50<br>113       | 2.25<br>56        | 1.64<br>42        | 0.55<br>14        | 0.81<br>21         | M10 x 1.50        | 4.02<br>102       | 48.2<br>22.0                  |
|                         | 6.500<br>165.1                                | 13.00<br>329      | 9.00<br>228       | 2.88<br>73        | 8.00<br>203       | 6.38<br>161       | 3.13<br>79        | 1.98<br>50        | 0.67<br>17        | 1.02<br>26         | M10 x 1.50        | 4.02<br>102       | 92.5<br>42.0                  |
| 6<br>DN150              | 6.625<br>168.3                                | 13.00<br>329      | 9.00<br>228       | 2.88<br>73        | 8.00<br>203       | 6.38<br>162       | 3.13<br>79        | 1.98<br>50        | 0.67<br>17        | 1.02<br>26         | M10 x 1.50        | 4.02<br>102       | 92.5<br>42.0                  |

## 5.0 PERFORMANCE

### Maximum Working Pressure

| Size                    |                                         | Maximum Working Pressure<br>psi<br>kPa |
|-------------------------|-----------------------------------------|----------------------------------------|
| Nominal<br>inches<br>DN | Actual Outside Diameter<br>inches<br>mm |                                        |
| 1 ¼ – 3<br>DN32 – DN80  | 1.660 – 3.500<br>42.4 – 88.9            | 1000<br>6895                           |
| 4 – 6<br>DN100 – DN150  | 4.500 – 6.625<br>114.3 – 168.3          | 800<br>5516                            |

## 5.1 PERFORMANCE

### Flow Characteristics

C<sub>v</sub> values for flow of water at +60°F/+16°C with a fully open valve are shown in the table below.

Formulas for C<sub>v</sub> 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<sub>v</sub> = Flow Coefficient

| Size                    |                                         | Flow Coefficient      |
|-------------------------|-----------------------------------------|-----------------------|
| Nominal<br>inches<br>DN | Actual Outside Diameter<br>inches<br>mm | Full Open<br>Cv<br>Kv |
| 1 ¼<br>DN32             | 1.660<br>42.4                           | 95<br>82              |
| 1 ½<br>DN40             | 1.900<br>48.3                           | 130<br>112            |
| 2<br>DN50               | 2.375<br>60.3                           | 180<br>156            |
| 2 ½                     | 2.875<br>73.0                           | 340<br>294            |
| DN65                    | 3.000<br>76.1                           | 340<br>294            |
| 3<br>DN80               | 3.500<br>88.9                           | 600<br>519            |
| 4<br>DN100              | 4.500<br>114.3                          | 650<br>562            |
|                         | 6.500<br>165.1                          | 800<br>692            |
| 6<br>DN150              | 6.625<br>168.3                          | 800<br>692            |

## 5.2 PERFORMANCE

### Series 726S Stainless Steel Ball Valve Torque Requirements

The following chart details required torque to operate the Victaulic Series 726S stainless steel ball valve under varied working pressure conditions. This chart may be used to determine optional gear operator or remote electric or pneumatic actuator requirement. Contact Victaulic for specific operator/actuator recommendations.

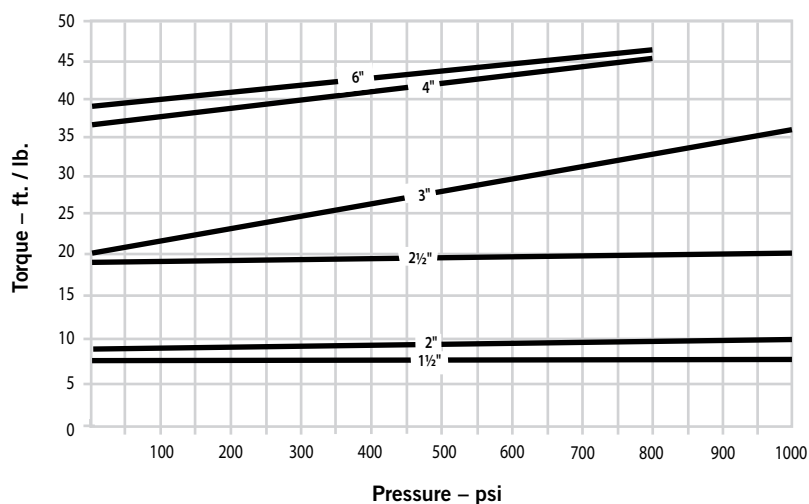
These torque values were derived from test data in water at ambient temperature. All torque values are for normal service conditions where corrosion is expected to be minor, and the media is clean and non abrasive. The torque shown on the chart should be multiplied by the appropriate factor listed below.

**Breakaway Factor:** Ball valves will require additional breakaway torque if they are not continuously operated. A breakaway factor of between 2:1 and 3:1 should be applied to break the ball loose after being in a static condition for more than a few hours.

#### Typical service factors commonly used in the industry:

- Water and other liquids: 1.0
- Dry gasses: 1.5 – 2.0

**Actuation Factor:** A minimum factor of 1.2 is recommended for directly actuated valves and 1.5 for 3-way assemblies. Apply the actuation factor to the higher of the breakaway or service factor.



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

Numbering System for Series 726S Stainless Steel Ball Valve

B

-

020

-

1

2

2

6

-

16

| Type | Actual OD<br>In./mm                                                                                                           | Size<br>Code                                                | Pressure<br>Rating                                     | Body                                                | Ball & Stem                                                                                        | Seat                                              | Operator                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------|-------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|--------------------------------------------------------|-----------------------------------------------------|----------------------------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| B    | 1.660/42.4<br>1.900/48.3<br>2.375/60.3<br>2.875/73.0<br>3.000/76.1<br>3.500/88.9<br>4.500/114.3<br>6.500/165.1<br>6.625/168.3 | 012<br>014<br>020<br>024<br>761<br>030<br>040<br>165<br>060 | 1 - 1,000 psi <sup>2</sup><br>8 - 800 psi <sup>3</sup> | 2 - 316 Stainless Steel<br>9 - Special <sup>1</sup> | 2 - 316 Stainless Steel<br>3 - 316 Stainless steel<br>with vented ball<br>9 - Special <sup>1</sup> | 6 - Reinforced Teflon<br>9 - Special <sup>1</sup> | 00 - Bare<br>16 - 2-Position Handle (Standard Trim)<br>with Tamper- Proof Locking<br>Device<br>18 - 2-Position Handle (Standard Trim)<br>with Stem Extension and<br>Tamper-Proof Locking Device<br>20 - Gear Operator<br>21 - Gear Operator with Memory<br>Stop<br>22 - Gear Operator with Chainwheel<br>23 - Gear Operator with AWWA<br>Square Nut<br>26 - 2 Position Handle (Stainless Trim)<br>with Tamper-Proof Locking<br>Device<br>28 - 2 Position Handle (Stainless Trim)<br>with Stem Extension and<br>Tamper-Proof Locking Device<br>29 - Non-standard Gear Operator <sup>1</sup> |

NOTES:  
(1) Details required.  
(2) For sizes 1¼" / 42,4mm thru 3" / 88,9mm  
(3) For sizes 4" / 114,3mm thru 6" / 168,3mm  
\* For ductile iron Series 726, request publication 08.23.

## 7.1 REFERENCE MATERIALS

- [08.23: Victaulic Ball Valve Series 726](#)
- [26.01: Victaulic Design Data](#)
- [29.01: Victaulic Terms and Conditions](#)
- [I-100: Victaulic 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](http://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.