

# Victaulic Stainless Steel Ball Valve

## Series 726S



17.22



Series 726S

### 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
- Offered with manual handles with integral/tamper resistant lock/seal and gear operators. A full range of power actuators can be mounted

### 2.0 CERTIFICATION/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

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#### Series 726S Stainless Steel Ball Valve

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

**Ball:** 316 stainless steel.

**Seats:** (RTFE) Reinforced polytetrafluorethylene.

**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)**

**1 ¼ – 3"/DN32 – DN80:** Carbon steel, zinc-plated. Plastic grip.

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

**Gear Operator: (specify choice)**

Manual with hand wheel.

Optional: Stainless steel.

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

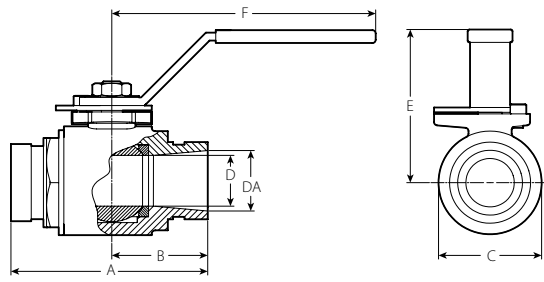
**Bracket Bolts/Washers:** Cold rolled steel, zinc-plated.

**Power Actuators:** Electric, pneumatic, hydraulic.

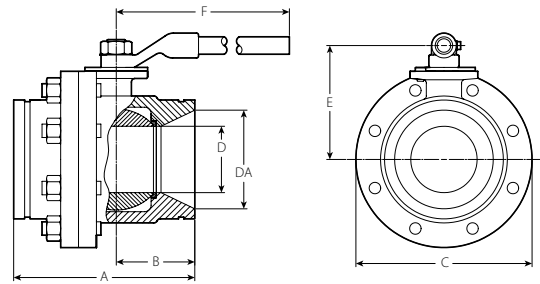
**Integral Locking Device Components:** Stamped carbon steel, zinc-plated.

## 4.0 DIMENSIONS

### Series 726S Stainless Steel Ball Valve with Standard Handle



1 ¼ – 3"/DN32 – DN80

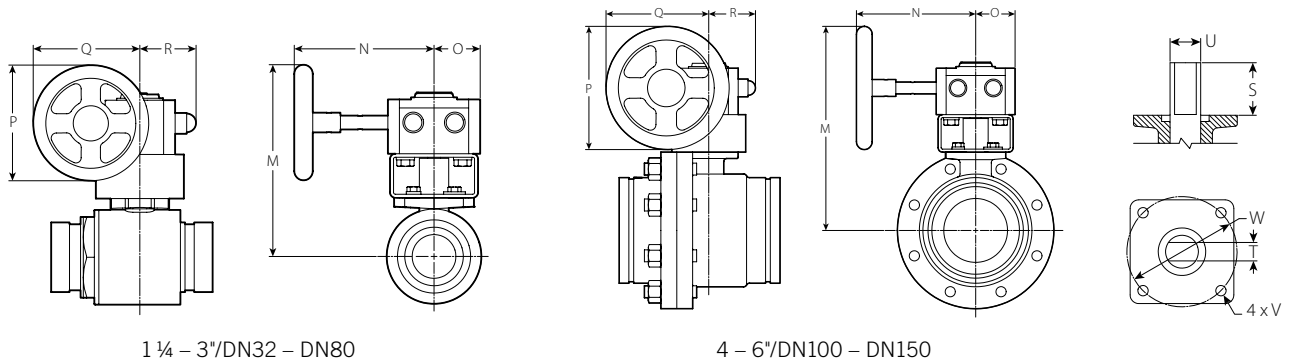


4 – 6"/DN100 – DN150

Size		Dimensions							Weight
Nominal inches DN	Actual Outside Diameter inches mm	A inches mm	B inches mm	C inches mm	D inches mm	DA inches mm	E inches mm	F inches mm	Approx. (Each) lb kg
1 ¼	1.660	4.96	2.36	2.25	1.00	1.50	2.88	7.00	3.4
DN32	42.4	126	60	57	25	38	73	178	1.5
1 ½	1.900	5.12	2.36	2.75	1.25	1.50	3.00	7.00	4.8
DN40	48.3	130	60	70	32	38	76	178	2.2
2	2.375	5.50	2.48	3.25	1.50	2.00	3.38	7.00	7.5
DN50	60.3	140	63	83	38	51	86	178	3.4
2 ½	2.875	6.30	2.80	4.00	2.00	2.50	4.00	9.88	11.6
	73.0	160	71	102	51	64	102	251	5.3
DN65	3.000	6.30	2.80	4.00	2.00	2.50	4.00	9.88	11.6
	76.1	160	71	102	51	64	102	251	5.3
3	3.500	6.60	3.15	4.88	2.50	3.00	4.63	10.00	17.2
DN80	88.9	168	80	124	64	76	118	254	7.8
4	4.500	8.30	3.35	7.75	3.00	4.00	5.50	15.75	45.0
DN100	114.3	211	85	197	76	102	140	400	20.4
	6.500	10.10	4.53	9.88	4.00	6.00	6.88	18.13	82.0
	165.1	257	115	251	102	152	175	461	37.2
6	6.625	10.10	4.53	9.88	4.00	6.00	6.88	18.13	82.0
DN150	168.3	257	115	251	102	152	175	461	37.2

### 4.1 DIMENSIONS

#### Series 726S Stainless Steel Ball Valve with Gear Operator



Size		Dimensions											Weight
Nominal inches DN	Actual Outside Diameter inches mm	M inches mm	N inches mm	O inches mm	P inches mm	Q inches mm	R inches mm	S inches mm	T inches mm	U inches mm	V inches mm	W inches mm	Approx. (Each) lb kg
1 1/4 DN32	1.660 42.4	6.25 159	4.88 124	1.63 41	3.94 100	3.75 95	2.00 51	0.81 21	0.35 9	0.56 14	M6 x 1.00	1.97 50	7.1 3.2
1 1/2 DN40	1.900 48.3	6.38 162	4.88 124	1.63 41	3.94 100	3.75 95	2.00 51	0.81 21	0.35 9	0.56 14	M6 x 1.00	1.97 50	7.5 3.4
2 DN50	2.375 60.3	6.63 168	4.88 124	1.63 41	3.94 100	3.75 95	2.00 51	0.81 21	0.35 9	0.56 14	M6 x 1.00	1.97 50	10.1 4.6
2 1/2	2.875 73.0	6.88 175	4.88 124	1.63 41	3.94 100	3.75 95	2.00 51	1.00 25	0.47 12	0.75 19	M8 x 1.25	2.76 70	15.4 7.0
DN65	3.000 76.1	6.88 175	4.88 124	1.63 41	3.94 100	3.75 95	2.00 51	1.00 25	0.47 12	0.75 19	M8 x 1.25	2.76 70	15.4 7.0
3 DN80	3.500 88.9	8.00 203	7.38 187	2.00 51	5.00 125	4.50 114	2.25 57	1.03 26	0.47 12	0.75 19	M8 x 1.25	2.76 70	21.2 9.6
4	4.500 114.3	10.00 254	7.38 187	2.00 51	5.00 125	4.50 114	2.25 57	1.64 42	0.55 14	0.81 21	M10 x 1.50	4.02 102	48.2 21.9
	6.500 165.1	13.00 330	9.00 229	2.88 73	8.00 203	6.38 162	3.13 80	1.98 50	0.67 17	1.02 26	M10 x 1.50	4.02 102	92.5 42.0
6 DN150	6.625 168.3	13.00 330	9.00 229	2.88 73	8.00 200	6.38 162	3.13 80	1.98 50	0.67 17	1.02 26	M10 x 1.50	4.02 102	92.5 42.0

## 5.0 PERFORMANCE

### Maximum Working Pressure

Size		Maximum Working Pressure psi kPa
Nominal inches DN	Actual Outside Diameter inches mm	
1 ¼ – 3 DN32 – DN80	1.660 – 3.500 42.4 – 88.9	1000 6895
4 – 6 DN100 – DN150	4.500 – 6.625 114.3 – 168.3	800 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 inches DN	Actual Outside Diameter inches mm	Full Open C <sub>v</sub> K <sub>v</sub>
1 ¼ DN32	1.660 42.4	95 82
1 ½ DN40	1.900 48.3	130 112
2 DN50	2.375 60.3	180 156
2 ½	2.875 73.0	340 294
DN65	3.000 76.1	340 294
3 DN80	3.500 88.9	600 519
4 DN100	4.500 114.3	650 562
	6.500 165.1	800 692
6 DN150	6.625 168.3	800 692

## 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.

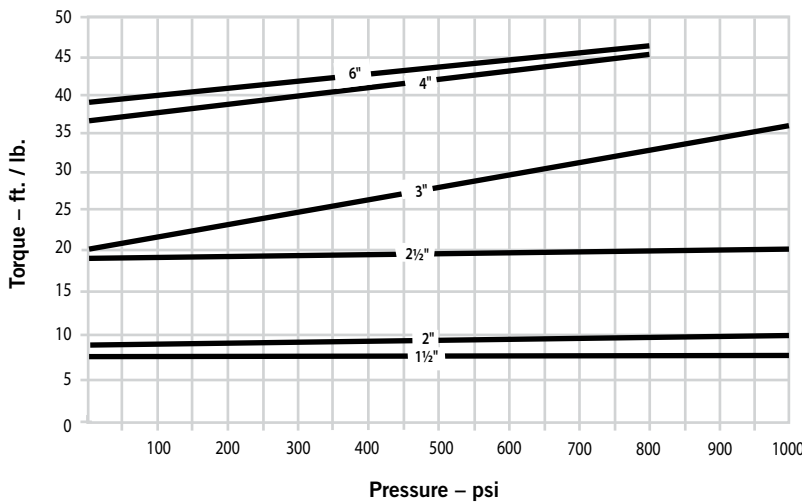
These torque values were derived from test data in water at ambient temperature. All torque values are for normal service conditions where corrosion is expected to be minor, and the media is clean and non abrasive. The torque shown on the chart should be multiplied by the appropriate factor listed below.

**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 In./mm	Size Code	Pressure Rating	Body	Ball & Stem	Seat	Operator
B	1.660/42.4	012	1 - 1,000 psi <sup>2</sup>	2 - 316 Stainless Steel	2 - 316 Stainless Steel	6 - Reinforced Teflon	00 - Bare
	1.900/48.3	014	8 - 800 psi <sup>2</sup>				16 - 2-Position Handle with Tamper-proof Locking Device
	2.375/60.3	020		9 - Special <sup>1</sup>	9 - Special <sup>1</sup>	9 - Special <sup>1</sup>	20 - Gear Operator
	2.875/73.0	024					21 - Gear Operator with Memory
	3.000/76.1	761					22 - Gear Operator with Chain Wheel
	3.500/88.9	030					23 - Gear Operator with AWWA Square Nut
	4.500/114.3	040					29 - Non-standard Gear Operator <sup>1</sup>
	6.500/165.1	060					
	6.625/168.3	165					

**NOTES:**

(1) Details required.

(2) For sizes 1/4 - 3"

(3) For sizes 4 - 6"

\* 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 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](http://www.victaulic.com).

### Warranty

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

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