

Stainless Steel Ball Valve

Series 726S



17.22



Series 726S

1.0 PRODUCT DESCRIPTION

Available Sizes

- 1 ¼ – 6"/DN32 – DN150

Pressure Class

- Up to 1000 psi/6895 kPa/69 bar

Application

- Two piece, end-entry valve featuring a floating ball design
- The valve is offered with manual handles with integral/tamper resistant lock/seal and gear operators. A full range of power actuators can be mounted
- Intended for use in full open or shut-off service; throttling is not recommended with standard ball valves

2.0 CERTIFICATION/LISTINGS



- NACE MR0175 compliant material
- The Series 726S Stainless Steel Ball Valve is UL Classified in accordance with ANSI/NSF 61 for cold +73F°/+23°C potable water service and ANSI/NSF 372.

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

System No.		Location	
Submitted By		Date	

Spec Section		Paragraph	
Approved		Date	



3.0 SPECIFICATIONS – MATERIAL

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 HOT WATER SERVICES OR 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:

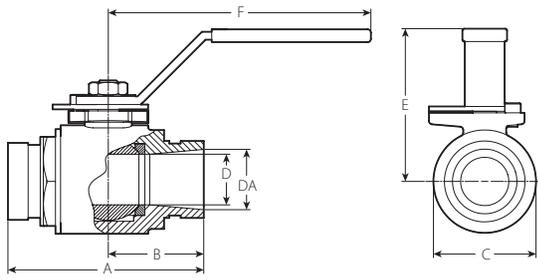
Electric, pneumatic, hydraulic.

Integral Locking Device Components:

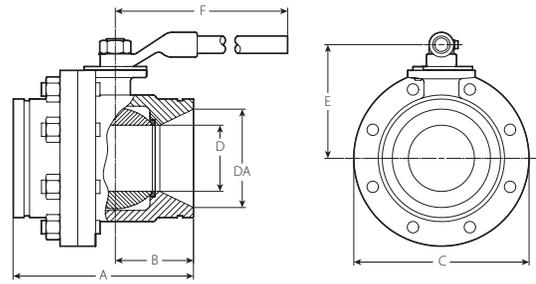
Stamped carbon steel, zinc-plated.

4.0 DIMENSIONS

Series 726S 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 DN32	1.660 42.4	4.96 126	2.36 60	2.25 57	1.00 25	1.50 38	2.88 73	7.00 178	3.4 1.5
1 ½ DN40	1.900 48.3	5.12 130	2.36 60	2.75 70	1.25 32	1.50 38	3.00 76	7.00 178	4.8 2.2
2 DN50	2.375 60.3	5.50 140	2.48 63	3.25 83	1.50 38	2.00 51	3.38 86	7.00 178	7.5 3.4
2 ½	2.875 73.0	6.30 160	2.80 71	4.00 102	2.00 51	2.50 64	4.00 102	9.88 251	11.6 5.3
DN65	3.000 76.1	6.30 160	2.80 71	4.00 102	2.00 51	2.50 64	4.00 102	9.88 251	11.6 5.3
3 DN80	3.500 88.9	6.60 168	3.15 80	4.88 124	2.50 64	3.00 76	4.63 118	10.00 254	17.2 7.8
4 DN100	4.500 114.3	8.30 211	3.35 85	7.75 197	3.00 76	4.00 102	5.50 140	15.75 400	45.0 20.4
	6.500 165.1	10.10 257	4.53 115	9.88 251	4.00 102	6.00 152	6.88 175	18.13 461	82.0 37.2
6 DN150	6.625 168.3	10.10 257	4.53 115	9.88 251	4.00 102	6.00 152	6.88 175	18.13 461	82.0 37.2

5.0 PERFORMANCE

Pressure Rating Chart

Size		Maximum Working Pressure
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

Flow testing for Series 726S ball valves demonstrated superior flow characteristics to all other competitive standard port valves. Smaller size valves actually have flow coefficients comparable to full port valves. Testing for the Victaulic Ball Valve and competitive valves was performed in a Victaulic engineering laboratory facility with systems and equipment calibrated to National Bureau of Standards.

C_v values for flow of water at +60°F (+16°C) with a fully open valve are shown in the table 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 Coefficient
Nominal inches DN	Actual Outside Diameter inches mm	Full Open C _v K _v
1 ¼ DN32	1.660 42.4	
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 Torque Requirements

The following chart details required torque to operate Victaulic Series 726S Ball Valves 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.

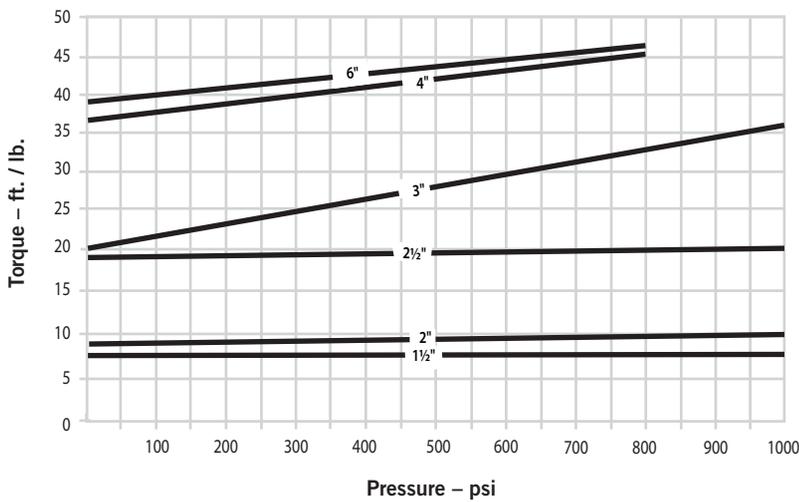
These torque values were derived from test data in water at ambient temperature. All torque values are for normal service conditions where corrosion is expected to be minor, and the media is clean and non abrasive. The torque shown on the chart should be multiplied by the appropriate factor listed below.

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 are:

- 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

Ball Valve Numbering System for Series 726S

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 ²	2 - 316 Stainless Steel	2 - 316 Stainless Steel	6 - Reinforced Teflon	00 - Bare
	1.900/48.3	014	8 - 800 psi ³				16 - 2-Position Handle with Tamper-proof Locking Device
	2.375/60.3	020		9 - Special ¹	9 - Special ¹	9 - Special ¹	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 ¹
	6.500/165.1	060					
	6.625/168.3	165					

NOTES:

(1) Details required.

(2) For sizes 1½ - 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.

Warranty

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

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