Vic-Ball® Valve
Series 726

08.23

Lever Operator

Gear Operator

Product Description:

The Series 726 is a high-pressure standard port ball valve with grooved ends. This two piece, end-entry valve features a floating ball design. Series 726 valves are NACE compliant and are capable of pressures up to 1000 psi/6900 kPa/69 Bar. The valve is available in 1 ½ – 6"/40 – 150 mm sizes. The internal design has been streamlined to provide excellent flow characteristics. Series 726 valves conform to ASME A17.1-2007/ CSA B44-07.

Series 726 features ISO standard mounting holes for easier mounting of remote actuation. 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.

NOTE: Vic-Ball valves are designed for full open or shut-off service; throttling is not recommended with standard ball valves as damage to the seat can result from high velocity flow over the exposed seat.

Pressure Rating Chart		
Valve Size		
Nominal Size inches mm	Actual Outside Diameter inches mm	Max. Work Pressure psi kPa
1 ½ – 3 40 – 80	1.900 – 3.5000 48.3 – 88.9	1000 6900
4 – 6 100 – 150	4.500 – 6.625 114.3 – 168.3	800 5515

Material Specifications:

Body and End Cap: Ductile iron conforming to ASTM A-395.

Stem: Carbon steel, chrome plated

☐ Optional: 316 stainless steel

Ball: Carbon steel, chrome plated

☐ Optional: 316 stainless steel

Seals: PTFE (Polytetrafluoroethylene) glass-reinforced

Seals: Fluoroelastomer

Operators:

Lever Handle:

☐ **1 ½ – 3"/40 – 80 mm**
Carbon steel, zinc plated, plastic grip

☐ **4 & 6"/100 & 150 mm**
Carbon steel, enamel paint

• **Gear Operator:** 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 Drive Components:** Stamped carbon steel, zinc plated

Job/Owner

System No.	
Location	

Contractor

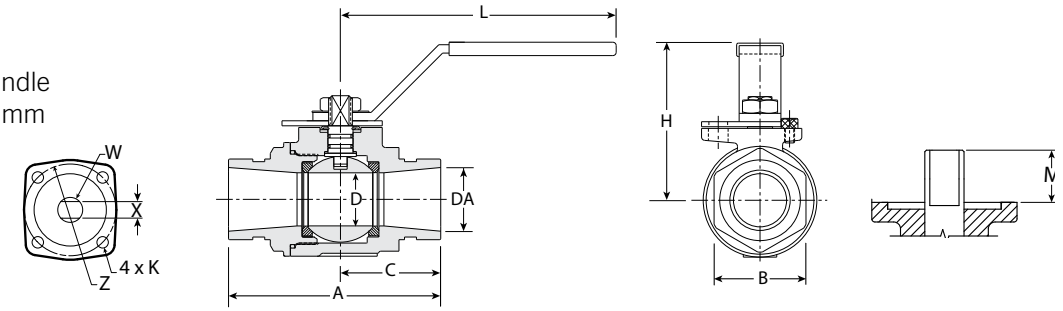
Submitted By	
Date	

Engineer

Spec Section	
Paragraph	
Approved	
Date	

Dimensions:

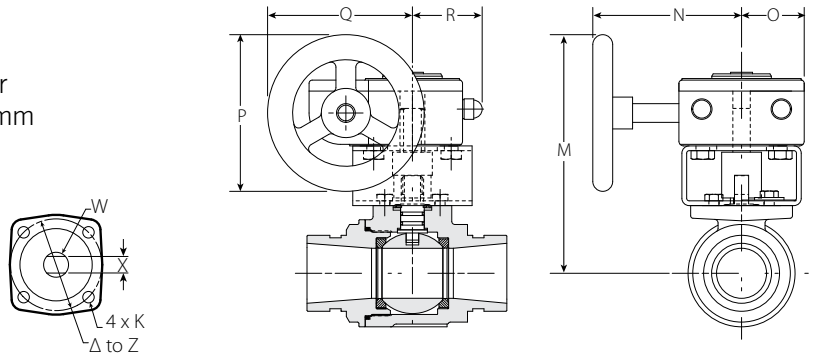
Series 726
With Standard Handle
1 ½ – 3"/40 – 80 mm



Size		Dimensions												Approx. Weight Each
Nominal Size inches mm	Actual Outside Diameter inches mm	A inches mm	B inches mm	C inches mm	D inches mm	DA inches mm	H inches mm	K inches mm	L inches mm	M inches mm	W inches mm	X inches mm	Z inches mm	lbs kg
1 ½ 40	1.900 48.3	5.12 130	2.00 51	2.36 60	1.25 32	1.50 38	3.00 76	M6 x 1	6.97 177	0.81 20.6	0.56 14.2	0.35 9.0	1.97 50.0	4.4 2.0
2 50	2.375 60.3	5.50 140	2.64 67	2.48 63	1.50 38	2.00 51	3.31 84	M6 x 1	6.97 177	0.81 20.6	0.56 14.2	0.35 9.0	1.97 50.0	6.5 3.0
2 ½ 65	2.875 73.0	6.25 159	3.03 77	2.80 71	1.97 50	2.50 64	4.00 102	M8 x 1.25	9.84 250	1.00 25.4	0.56 14.2	0.47 12.0	2.76 70.0	10.4 4.7
76.1	2.875 73.0	6.25 159	3.03 77	2.80 71	1.97 50	2.50 64	4.00 102	M8 x 1.25	9.84 250	1.00 25.4	0.75 19.0	0.47 12.0	2.76 70.0	10.4 4.7
3 80	3.500 88.9	6.56 167	3.50 89	3.15 80	2.50 64	3.00 76	4.53 115	M8 x 1.25	9.84 250	1.03 26.2	0.75 19.0	0.47 12.0	2.76 70.0	14.9 6.8

Dimensions:

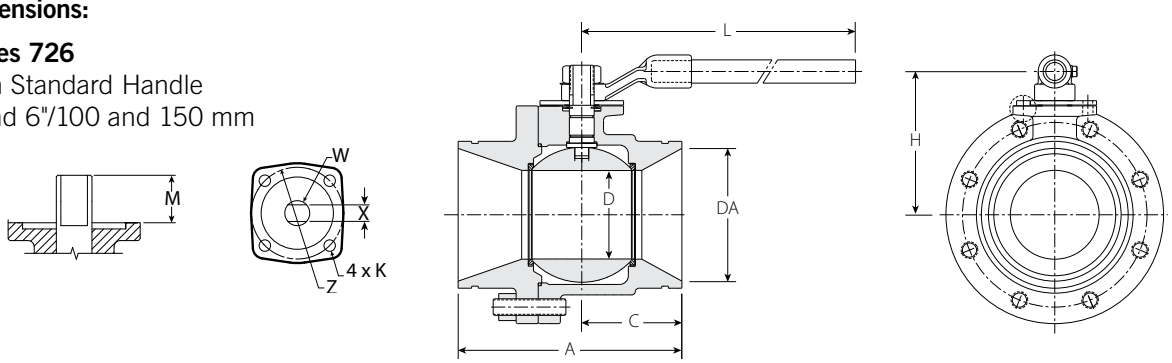
Series 726
With Gear Operator
1 ½ – 3"/40 – 80 mm



Size		Dimensions										Approx. Weight Each
Nominal Size inches mm	Actual Outside Diameter inches mm	K inches mm	M inches mm	N inches mm	O inches mm	P inches mm	Q inches mm	R inches mm	W inches mm	X inches mm	Z inches mm	lbs kg
1 ½ 40	1.900 48.3	M6 x 1	6.03 153	4.29 109	1.58 40	3.94 100	2.64 92	1.75 44	0.56 14.2	0.35 9.0	1.97 50.0	7.1 3.2
2 50	2.375 60.3	M6 x 1	6.30 160	4.29 109	1.58 40	3.94 100	2.64 92	1.75 44	0.56 14.2	0.35 9.0	1.97 50.0	9.1 4.1
2 ½ 65	2.875 73.0	M8 x 1.25	7.43 189	4.65 118	1.97 50	4.92 125	4.43 112	2.28 58	0.56 14.2	0.47 12.0	2.76 70.0	12.9 5.9
76.1	2.875 73.0	M8 x 1.25	7.43 189	4.65 118	1.97 50	4.92 125	4.43 112	2.28 58	0.75 19.0	0.47 12.0	2.76 70.0	12.9 5.9
3 80	3.500 88.9	M8 x 1.25	7.94 202	4.65 118	1.97 50	4.92 125	4.43 112	2.28 58	0.75 19.0	0.47 12.0	2.76 70.0	20.0 9.1

Dimensions:

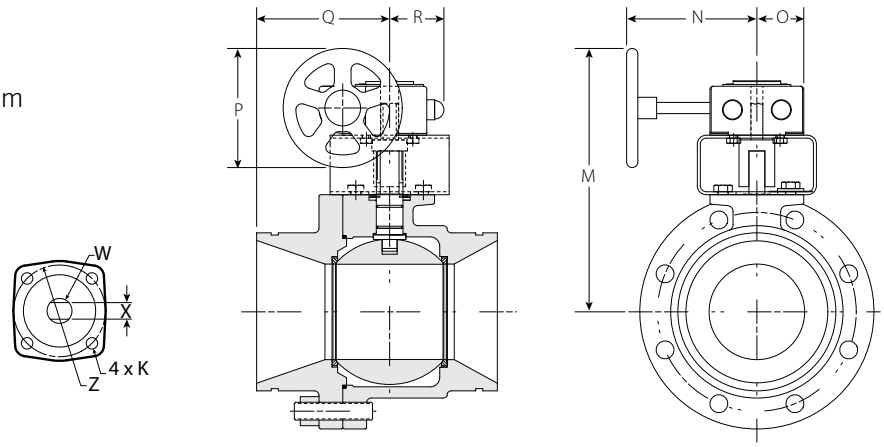
Series 726
With Standard Handle
4 and 6"/100 and 150 mm



Size		Dimensions											Approx. Weight Each
Nominal Size inches mm	Actual Outside Diameter inches mm	A inches mm	C inches mm	D inches mm	DA inches mm	H inches mm	K inches mm	L inches mm	M inches mm	W inches mm	X inches mm	Z inches mm	lbs kg
4 100	4.500 114.3	8.25 210	3.35 85	2.99 76	4.00 102	5.48 139	M10 x 1.5	15.67 398	1.64 42	0.81 21	0.55 14	4.02 102	41.5 18.9
6 150	6.625 168.3	10.10 257	4.53 115	4.00 102	6.00 152	6.48 165	M10 x 1.5	18.07 459	1.98 50	1.02 26	0.67 17	4.02 102	78.5 35.7

Dimensions:

Series 726
With Gear Operator
4 and 6"/100 and 150 mm



Size		Dimensions										Approx. Weight Each
Nominal Size inches mm	Actual Outside Diameter inches mm	K inches mm	M inches mm	N inches mm	O inches mm	P inches mm	Q inches mm	R inches mm	W inches mm	X inches mm	Z inches mm	lbs kg
4 100	4.500 114.3	M10 x 1.5	9.95 253	4.65 118	1.97 50	4.92 125	4.43 112	2.28 58	0.81 21	0.55 14	4.02 102	44.7 20.3
6 150	6.625 168.3	M10 x 1.5	11.02 280	4.65 118	1.97 50	4.92 125	4.43 112	2.28 58	1.02 26	0.67 17	4.02 102	89.0 40.3

Performance:

Flow Characteristics

Flow testing for Vic-Ball Series 726 ball valves demonstrated superior flow characteristics to other competitive standard port valves. Testing for Vic-Ball valve and competitive valves was performed in our own engineering laboratory facilities with systems and equipment calibrated to National Bureau of Standards.

C_V values for flow of water at +60°F/+16°C are shown in the tables below.

Formulas for C_V values

$\Delta P = Q^2/C_V^2$

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

Where:

Flow Coefficient	C_v
ΔP (Pressure Drop)	psi/kPa
Q (Flow)	GPM/LPM

Size		Full Open	Size		Full Open
Nominal Size inches mm	Actual Outside Diameter inches mm	C_v	Nominal Size inches mm	Actual Outside Diameter inches mm	C_v
1 ½ 40	1.900 48.3	130	3 80	3.500 88.9	600
2 50	2.375 60.3	180	4 100	4.500 114.3	650
2 ½ 65	2.875 73.0	340	6 150	6.625 168.3	800

Torque Requirements

The following chart details required torque to operate Vic-Ball Series 726 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.

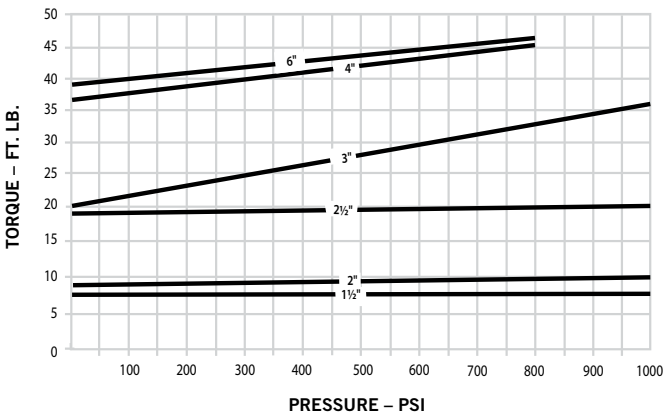
These torque values were derived from test data in water at ambient temperature. All torque values are for normal service conditions where corrosion is expected to be minor, and the media is clean and non abrasive. The torque shown on the chart should be multiplied by the appropriate factor listed below.

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.



Series 726 Valve Numbering System

B - 020 - 1 1 6 6 - 16

Type	Act. In./mm	Size Code	Pressure Rating	Body	Ball & Stem	Seat	Operator
B	1½/40 2/50 2½/65 3/80 4/100 6/150	014 020 024 030 040 060	1 - 1,000 psi 8 - 800 psi[3]	1 - Iron[2] 9 - Special[1]	2 - 316 Stainless Steel 6 - Chrome Plated Carbon Steel 9 - Special[1]	6 - Reinforced PTFE 9 - Special[1]	00 - Bare 16 - 2-Position Handle with Tamper-proof Locking Device 19 - Locking Device - Without Handle 20 - Gear Operator 21 - Gear Operator with Memory 22 - Gear Operator with Chain Wheel 23 - Gear Operator with AWWA Square Nut 29 - Non-standard Gear Operator[1]

NOTES:
(1) Details required.
(2) All Iron Body valves are NACE compliant.
(3) Pressure rating applicable to 4 and 6" sizes only.
* For Stainless Steel Series 726S, please see publication 17.22.

Installation
Reference should always be made to the I-100 Victaulic Field Installation Handbook for the product you are installing. Handbooks are included with each shipment of Victaulic products for 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.

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.

Trademarks
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