

***Series B780***  
***General Service Ball Valve***

*A screwed end, two-piece ball valve in carbon steel or stainless steel*

## General Purpose Ball Valves

The line of general purpose ball valves offers outstanding performance, durability and economy for a variety of applications, including:

- new construction
- water, oil, gas utility services
- industrial process services

Versatility is provided with the availability of two body materials – **carbon steel and stainless steel** in 1/4" - 2" sizes. And because it is a ball valve, it can offer significant performance advantages over conventional gate and globe valves.



### Ball Valves also offer ...

Reliable stem seal arrangement with RTFE packing and thrust washer. Bubble-tight performance.

Latching locking handle standard.

Adjustable packing nut to maintain seal integrity. Handle removal without packing leaks.

Safety is ensured by anti-blowout stem design.

Low operating torque provided by specially designed RTFE seats. Quarter-turn operation visual indication of valve position.

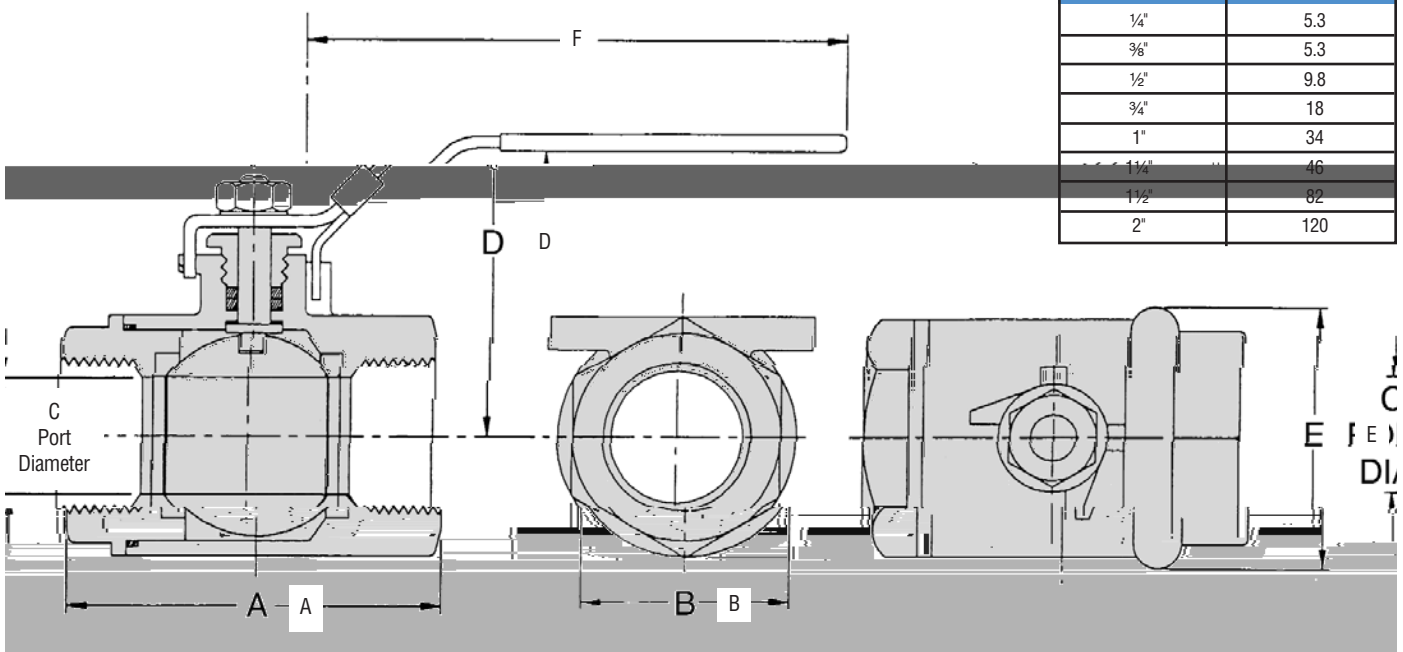
Two-piece cast body design for durability.

## Specifications

**Sizes:** 1/4", 3/8", 1/2", 3/4", 1", 1 1/4", 1 1/2", 2"  
**Ends:** Screw ends (NPT) to ANSI B2.1  
**Body:** One-piece body with end plug insert available in carbon steel and stainless steel (316)  
**Ball:** Solid bore, 316 stainless steel  
**Stem:** One-piece bottom-entry style with anti-blowout shoulder. Stainless steel to ASTM A479-316  
**Seat:** Reinforced TFE  
**Body Seal:** Reinforced TFE, 1/4" - 2" carbon steel and stainless steel only  
**Stem Seal:** Reinforced TFE  
**Thrust Washer:** Reinforced TFE

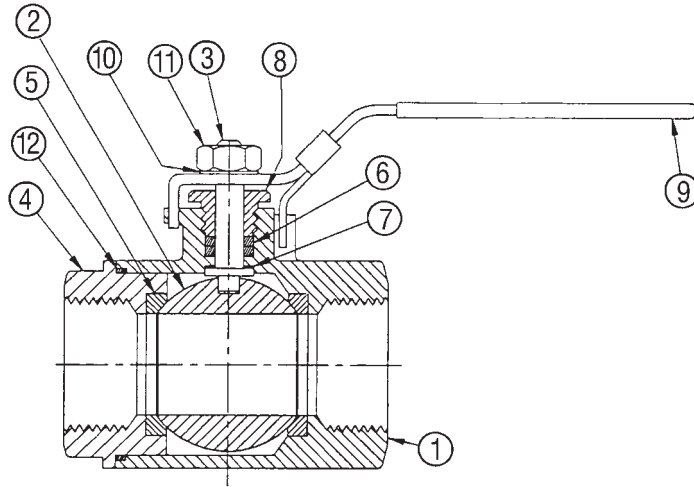
**External Hardware:** Carbon steel – Carbon steel, zinc plated;  
 Stainless steel – Series 300 stainless steel  
**Handle:** Lever type standard – with lockout  
**Operation:** Bidirectional  
**Steam Rating:** 150 psi saturated steam  
**Options:** Oval handle  
**Temperature Range:** -20 to 450°F  
**Pressure Rating:** 1/4" - 2" carbon steel and stainless steel  
 2000 psi WOG

## Dimensions and Weights inches (mm) and lb. (kg)

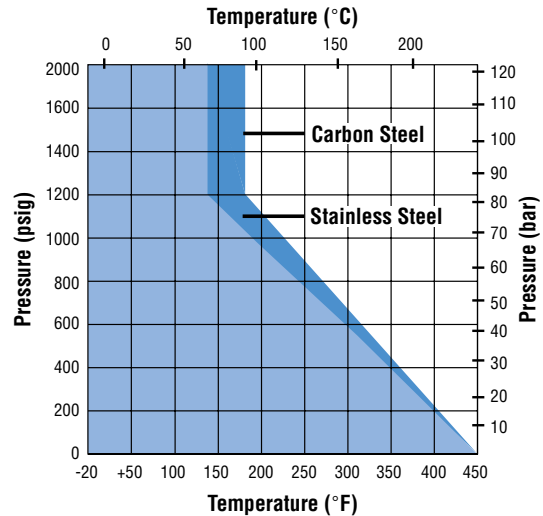


Size	A	B	C	D	E	F	Weight
1/4" (6)	2.09 (53.86)	.81 (2.057)	.37 (9.398)	1.65 (41.91)	1.56 (39.62)	4.25 (107.95)	.50 (.23)
3/8" (9)	2.09 (53.86)	.81 (2.057)	.37 (9.398)	1.65 (41.91)	1.56 (39.62)	4.25 (107.95)	.60 (.27)
1/2" (15)	2.36 (59.94)	1.06 (2.692)	.50 (12.70)	1.77 (44.96)	1.56 (39.62)	4.25 (107.95)	.65 (.29)
3/4" (20)	2.80 (71.12)	1.34 (3.404)	.69 (17.53)	2.05 (52.07)	1.81 (45.98)	5.98 (151.89)	1.10 (.50)
1" (25)	3.23 (82.04)	1.62 (41.15)	.87 (22.10)	2.24 (56.90)	1.81 (45.97)	5.98 (151.89)	2.00 (.90)
1 1/4" (32)	3.62 (91.95)	1.88 (47.75)	1.00 (25.40)	2.48 (63.00)	2.00 (50.80)	7.17 (182.12)	3.00 (1.35)
1 1/2" (40)	4.06 (103.12)	2.25 (57.15)	1.25 (31.75)	2.68 (68.07)	2.00 (50.80)	7.17 (182.12)	4.25 (1.91)
2" (50)	4.65 (118.11)	3.09 (78.49)	1.50 (38.10)	2.91 (73.91)	2.00 (50.80)	7.17 (182.12)	6.75 (3.04)

## Materials of Construction



## Pressure/Temperature Curves



No.	Part Description	Carbon Steel w/Stainless Steel Trim	Stainless Steel
1	Body	WCB Carbon Steel	CF8M Stainless Steel
2	Ball	316 Stainless Steel	316 Stainless Steel
3	Stem	316 Stainless Steel	316 Stainless Steel
4	End Adapter	WCB Carbon Steel	CF8M Stainless Steel
5	Seats (2)	RTFE	
6	Stem Seals (2)	RTFE	
7	Thrust Washer	RTFE	
8	Gland	Carbon Steel	316 Stainless Steel
9	Handle	Carbon Steel-Plastic Coated	Stainless Steel-Plastic Coated
10	Spring Washer	Carbon Steel	Stainless Steel
11	Lock Nut	Carbon Steel	Stainless Steel
12	Body Seal	RTFE	

## How To Order

Size	Series	Body & End/Plug	Ball & Stem	Seat	Ends	Option
$\frac{1}{2}$ " $\frac{1}{4}$ " $\frac{1}{2}$ " 1" $1\frac{1}{2}$ " $\frac{3}{8}$ " $\frac{3}{4}$ " $1\frac{1}{4}$ "    2"	*B780	4 - Carbon Steel 6 - Stainless Steel	6 - Stainless Steel	R - Reinforced TFE	SE - Screw Ends	D - Oval Handle

**Ordering Example:** A  $\frac{1}{2}$ " Series B780 with carbon body and end plug, stainless steel ball and stem, reinforced TFE seats, screw ends and oval handle.  
 \* Series designation formerly McCANNA M402.

**NOTICE:** MARPAC Valves are designed and manufactured using good workmanship and material, and they meet all applicable industry standards. Flowserve is anxious to avoid injuries and property damage which could result from misapplication of the product. Proper valve selection is imperative. Examples of misapplications or misuse of a valve include but are not limited to use in a service in which the pressure/temperature rating is exceeded or in a chemical service incompatible with the valve materials; use of undersized valve actuators; use of extremely fast valve actuation and/or continuous valve cycling on standard valves; making modifications of the product of any kind; failure to use caution in operating valves in high temperature, high pressure, or highly hazardous services; and the failure to maintain valves as recommended. The right is reserved to change or modify product design or construction without prior notice and without incurring any obligation to make such changes and modification on products previously or subsequently sold.

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