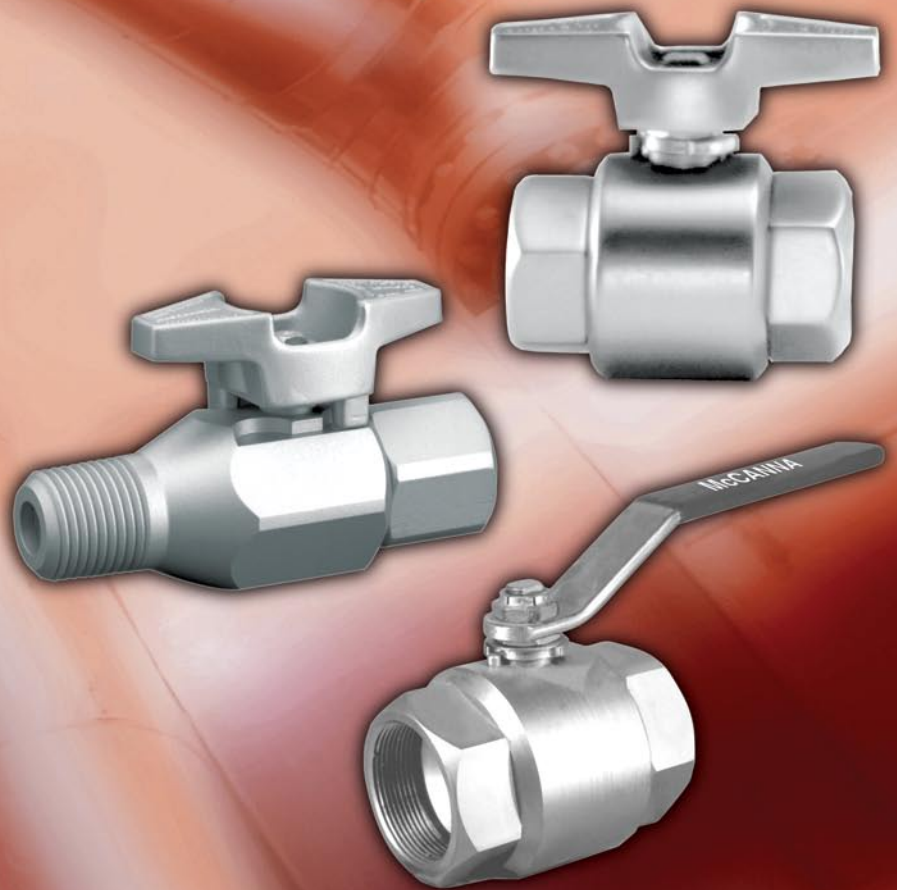




# **McCANNA/MARPAC** **McCannaflo® F602 Series**

Threaded Ends



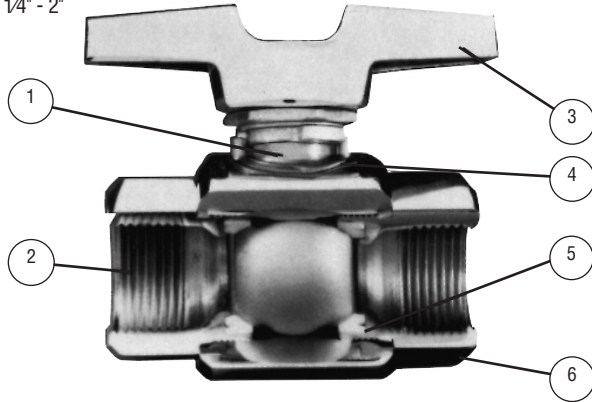
*Experience In Motion*

## McCANNAFLO SERIES F602 THREADED ENDS

### Design Features and Performance Data

#### Design Features

Sizes 1/4" - 2"



1. **Double Sealed, Back-Seated Stem**
  2. **Straight-Line Flow** for minimum turbulence.
  3. **T-Handle Interchangeable** with lever and automatic actuators.
  4. **Grounding Washer** for static electricity discharge.
  5. **Prestressed Seats** assure leaktight operation.
  6. **Materials Available** to match any type of metallic pipe.
7. **E602 Fire Safe Version** (not shown) is designed and tested to the exacting requirements of API 607. Available with Carbon Steel or Stainless Steel bodies, these Fire Safe Ball Valves feature secondary metal-to-metal seating and high temperature PTFE or RTFE body seals and flexible graphite packing. Flowserve facilities include a fully equipped fire test lab which test not only external leakage through the body/body end joints and stem packing but also internal downstream leakage.

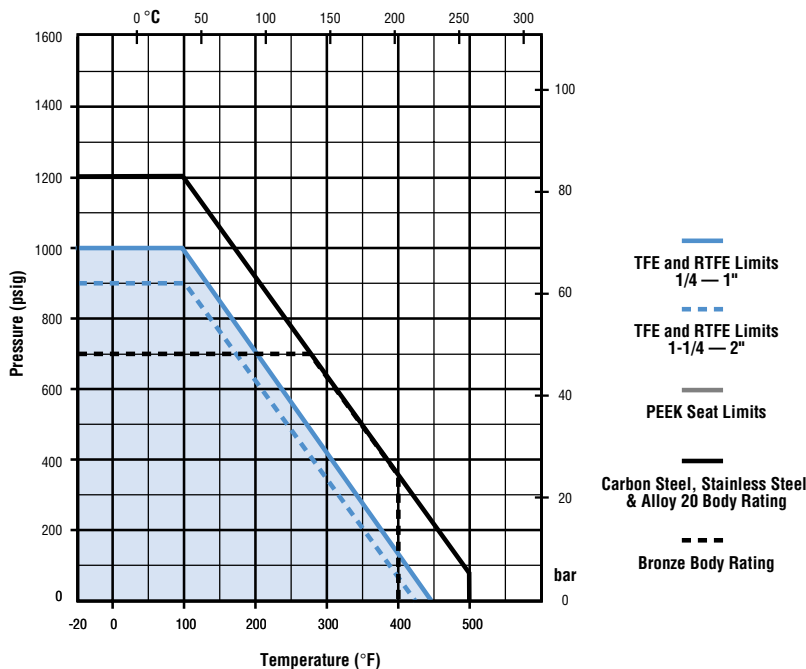
#### Flow Capacities

Size IN/mm	Port Dia. IN/mm	Cv Kv
1/4 8	.38 9.6	6.5 5.6
3/8 10	.38 9.6	6.5 5.6
1/2 15	.44 11.2	8.3 7.2
3/4 20	.59 15.0	18.5 6.0

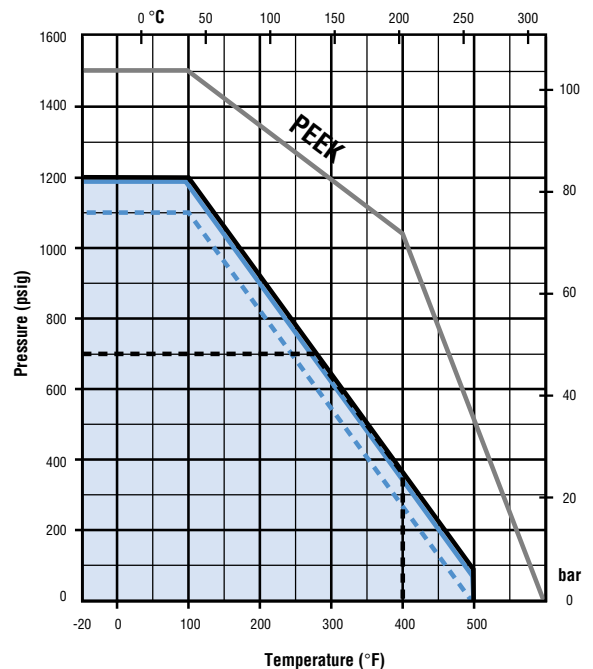
Size IN/mm	Port Dia. IN/mm	Cv Kv
1 25	.81 20.6	27.5 23.7
1-1/4 32	1.16 29.5	70 60.3
1-1/2 40	1.16 29.5	70 60.3
2 50	1.50 38.1	118 101.7

#### Pressure/Temperature

Threaded F602 Valves TFE Seats and Seals

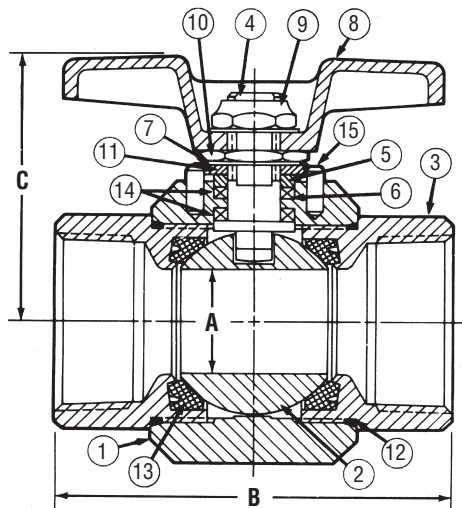


Threaded F602 Valves RTFE Seats and Seals



McCANNAFLO SERIES F602 THREADED ENDS

Materials of Construction/Dimensions & Weights



Dimensions and Weights

A — Port Diameter      B — End to End      C — Center to Top of Handle

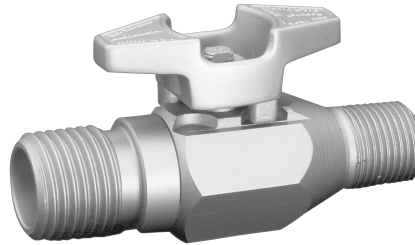
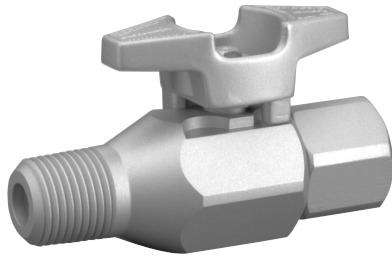
Size	IN/mm			Weight lb/kg
	A	B	C	
<b>1/4</b> 8	<b>.38</b> 9.6	<b>2.00</b> 50.8	<b>1.38</b> 35.0	<b>1.0</b> .45
<b>3/8</b> 10	<b>.38</b> 9.6	<b>2.12</b> 53.8	<b>1.38</b> 35.0	<b>1.0</b> .45
<b>1/2</b> 15	<b>.44</b> 11.2	<b>2.56</b> 65.0	<b>1.72</b> 43.7	<b>1.0</b> .45
<b>3/4</b> 20	<b>.59</b> 15.0	<b>2.81</b> 71.4	<b>1.85</b> 47.0	<b>1.0</b> .45
<b>1</b> 25	<b>.81</b> 20.6	<b>3.50</b> 88.9	<b>2.53</b> 64.3	<b>3.0</b> 1.36
<b>1-1/4</b> 32	<b>1.16</b> 29.5	<b>4.06</b> 103.1	<b>3.52</b> 89.4	<b>5.0</b> 2.27
<b>1-1/2</b> 40	<b>1.16</b> 29.5	<b>4.19</b> 106.4	<b>3.52</b> 89.4	<b>5.0</b> 2.27
<b>2</b> 50	<b>1.50</b> 38.1	<b>4.69</b> 119.1	<b>3.77</b> 95.7	<b>7.0</b> 3.17

\* Lever handles standard; optional on other sizes.

Materials of Construction

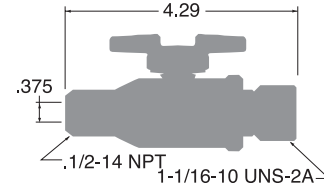
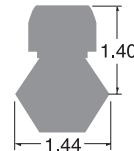
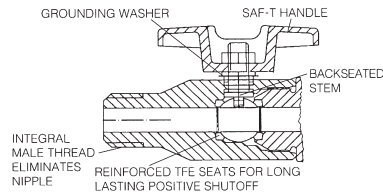
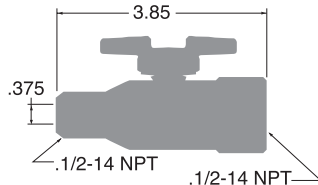
No.	Part Description	Bronze	Carbon Steel	Stainless Steel	Alloy 20	Monel	Nickel	Titanium	Hastelloy C
1	Body	ASTM B16 Alloy 36000 H02 Temper	ASTM A108 GR 1215 Zinc Plated	ASTM A276 Ty. 316	ASTM B473 Alloy 20 CB3	ASTM B164 Alloy 400	ASTM B160 Alloy 200	ASTM B348 GR.4	ASTM B574 Hast. C276
2	Ball	ASTM B16 Alloy 36000 H02 Temper	ASTM A108 GR. 1215*	ASTM A276 Ty. 316	ASTM B473 Alloy 20 CB3	ASTM B164 Alloy 400	ASTM B160 Alloy 200	ASTM B348 GR.4	ASTM B574 Hast. C276
3	Adapter	ASTM B16 Alloy 36000 H02 Temper	ASTM A108 GR 1215 Zinc Plated	ASTM A276 Ty. 316	ASTM B473 Alloy 20 CB3	ASTM B164 Alloy 400	ASTM B160 Alloy 200	ASTM B348 GR.4	ASTM B574 Hast. C276
4	Stem	ASTM A276 Ty. 316	ASTM A108 GR. 1215*	ASTM A276 Ty. 316	ASTM B473* Alloy 20 CB3	Alloy K500 TFE Coated	Inconel 625 TFE Coated	ASTM B348 GR.4 TFE Coated	ASTM B574 Hast. C276 TFE Coated
5	Gland Ring	SS316	SS316	SS316	SS316	SS316	Inconel 625	ASTM B348 GR.4	SS316
6	Grounding Washer	SS302							
7	Bellville Washer	Spring Steel (Zinc Plated)							
8	Handle  T-Handle Lever Handle	(1/4" — 1" sizes) Die Cast AL ASTM B85 A380 (1-1/4" — 2" sizes) Carbon Steel (Zinc Plated) / Plastisol Coated Grip							
9	Handle Retainer Nut	Carbon Steel (Zinc Plated)							
10	Stem Nut	Carbon Steel (Zinc Plated)							
11	Travel Stop	Carbon Steel (Zinc Plated)							
12	Adapter Gasket	TFE; RTFE for Fire Safe							
13	Seat	TFE or Reinforced TFE							
14	Stem Seal	TFE or Reinforced TFE; Flexible Graphite for Fire Safe							
15	Travel Stop Pin	(1" — 2" sizes only) SS18-8							

\* Crack-Free Chrome Plated



The McCANNA gauge valve provides a simple, compact, economical solution to the problem of easy access to pipelines. It can be used as a gauge connection, to test pressure or vacuum of orifice meters, as a drain, for sampling, or an isolating valve.

The compressor analyzer valve provides a simple, compact, economical solution to the problem of easy access to compressor testing. The valve may be permanently installed on the compressor for analyzing efficiency and output of the compressor.



### Advantages

- **Quick 1/4-turn opening**
- **Positive shutoff and extended valve life provided by prestressed reinforced TFE seats** — An annular groove on the rear face of the resilient seat permits flexure under compression during valve assembly; no further flexing of the seat occurs. This exclusive McCANNA design prolongs seat life and insures leaktight closure.
- **Vibration-resistant**
- **Large port facilitates quick instrument response time**
- **Blowout-proof backseated stem; Belleville stem seals** — The “live” double stem seals are under constant compression which is increased as line pressure increases. In fact, increased line pressure increases stem sealing. This design eliminates any possibility of stem blowout, assures safe containment of toxic, corrosive, and explosive chemicals.
- **Grounding washer** — Provides static electricity discharge.
- **Ball is wiped clean each time the valve is operated** — The mating surfaces between ball and seats are smooth, clean and nonabrading. No lubrication is required.
- **Pressures to 1500 psig at 100°F temperature** — Pressures to 1200 psig at 150°F temperature.

### Materials of Construction

Part Description	W/Carbon Steel Trim	W/Stainless Steel Trim
Body†	Carbon Steel ASTM A108 GR 12L14	Stainless Steel
Ball*	Carbon Steel ASTM A108 GR 1215	Stainless Steel ASTM A276 Type SS316
Seal+	Reinforced TFE	
Stem*	Carbon Steel ASTM A108 GR 1215	Stainless Steel ASTM A276 Type SS316
Stem Seal	Reinforced TFE	
Stem Nut	SS316	
Gland Ring	SS316	
Adapter†	Carbon Steel ASTM A108 GR 12L14	
Adapter Gasket	TFE	
Grounding Washer	SS302	
Handle	Die Cast Aluminum B85-Alloy 380	
Handle Retainer Nut†	Carbon Steel	

† Zinc Plated + Also available with PEEK seats. \* Chrome Plated

### How To Order

#### Gauge Valve

For standard carbon steel valve with reinforced TFE seats and  
 1/2" adapter, specify: 1/2" F602-CS-R-CS/183  
 1/4" adapter, specify: 1/2" F602-CS-R-CS/184

For carbon steel valve with stainless steel trim reinforced TFE seats and  
 1/2" adapter, specify: 1/2" F602-CS-R-S6/183  
 1/4" adapter, specify: 1/2" F602-CS-R-S6/184

#### Compressor Analyzer Valve

For standard carbon steel valve with reinforced TFE seats,specify:  
 1/2" F602-CS-R-CS/182

For standard carbon steel valve with reinforced TFE seats & stainless steel trim, specify:  
 1/2" F602-CS-R-S6/182

For standard carbon steel valve with PEEK seats, specify:  
 1/2" F602-CS-J-S6/333

#### NOTICE

McCANNA and MARPAC Ball Valves are designed and manufactured using good workmanship and materials, 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 the 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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For more information about Flowserve Corporation, contact [www.flowserve.com](http://www.flowserve.com) or call USA 1 800 225 6989.

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