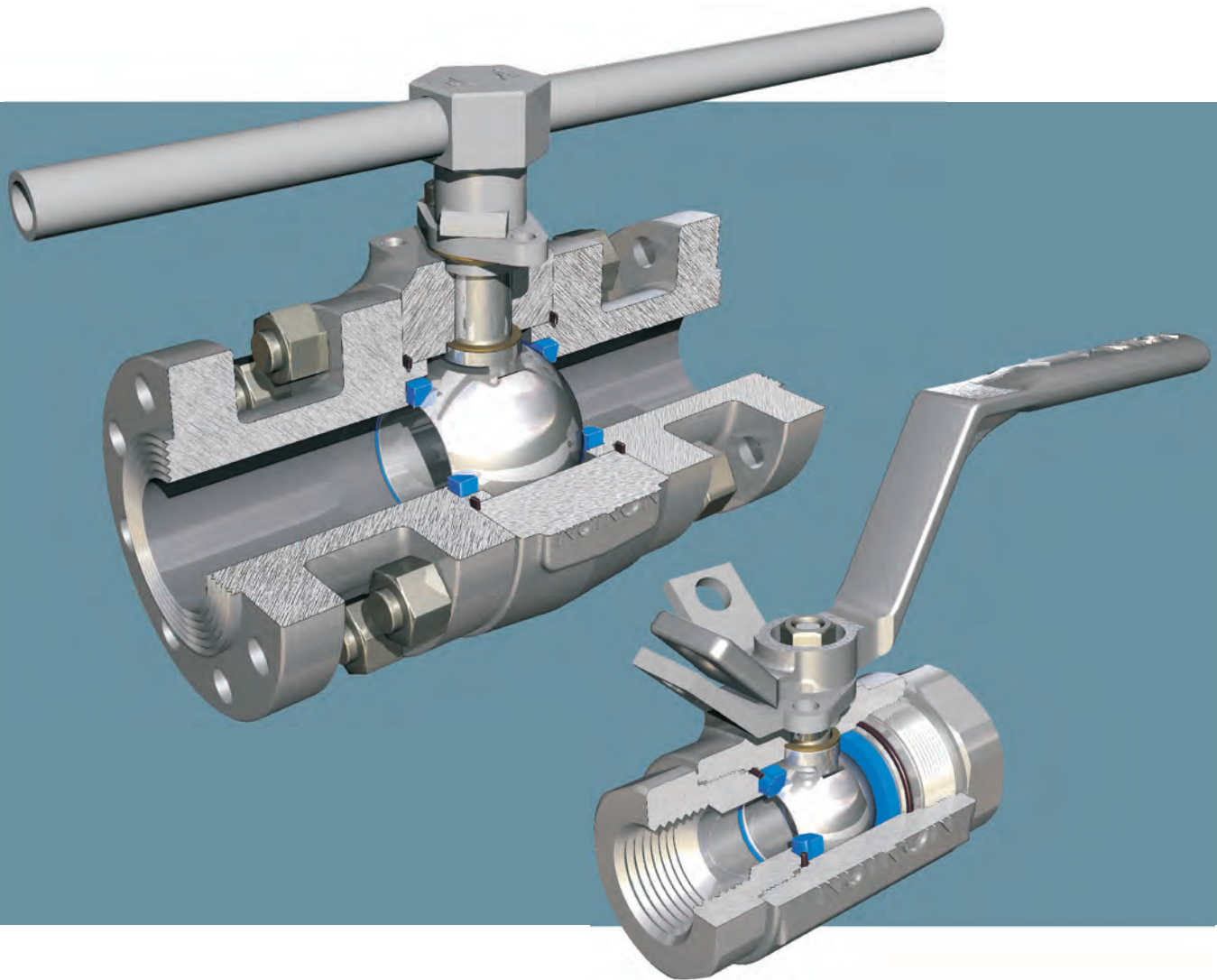


NUTRON[®] Model T3 & B3 Forged Steel Floating Ball Valves



NUTRON[®]

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FORGED STEEL FLOATING BALL VALVES

MODEL T3 3 PIECE THREADED FLOATING BALL VALVES

- Full Port sizes 1/2 in. through 3 in. (15 mm through 80 mm)
- Reduced Port sizes 3/4 in. through 4 in. (20 mm through 100 mm)
- ASME Class 150 through 2500 (PN 20 through 420) (see page 3)
- WOG 1000 through 6000 psi (see page 3)
- End Connections: Threaded, Flanged, Socket Weld, Butt Weld

MODEL B3 3 PIECE BOLTED FLOATING BALL VALVES

- Full Port sizes 1 1/2 in. through 4 in. (40 mm through 100 mm)
- Reduced Port sizes 2 in. and 6 in. (50 mm and 150 mm)
- ASME Class 150 through 1500 (PN 20 through 250) (see page 17)
- WOG 2000 and 4000 psi (see page 17)
- End Connections: Flanged, Threaded, Butt Weld

MATERIALS AND ACTUATION

- Materials: Carbon Steel, Stainless Steel, Special Alloys
- Operator: Manual Lever Handle
- Actuation: Consult Cameron, Valves & Measurement Sales Department for information on various types of actuators including; Gear Operators (B3), Pneumatic, Hydro-Pneumatic, Electric, Electro-Pneumatic and Hydraulic

COMPLIANCE TO STANDARDS AND SPECIFICATIONS:

- ISO 9001-2000: Registered Quality System
- ASME B16.34
- API 598 and API 607 4th Edition (Fire Safe)
- CE Mark Number 0879
- ASME Section VIII Division 1 Boiler and Pressure Vessel Code
- CSA Z245.15 Steel Valves
- NACE MR0175 (Rev. 2002)
- Canadian Registration Number (CRN)

FORGED STEEL FLOATING BALL VALVES STANDARD FEATURES

MODEL T3

BODY CONSTRUCTION

Forged steel three piece threaded construction. A machined pad area is drilled and tapped for actuation as a standard. Threaded construction allows for combinations of end connections.

STEM

Blowout proof stem is back-seated through the valve body.

HANDLE

Rugged cast handle. Handle position indicates flow position. When the handle is positioned in line with the pipe, the valve is open. When the handle is positioned perpendicular to the pipe, the valve is closed. Locking handle is standard for all 2 in. (50 mm) reduced port and smaller valves with either socket weld or FNPT end connections.

CAP SCREWS

Dual purpose; allows for easy stem packing adjustment without handle removal while providing a stop for the handle.

PACKING

Self adjusting by means of a Belleville washer. Allows for long service life before manual packing adjustment is necessary.

THRUST WASHER

Acts as a bearing between the body and stem.

BALL

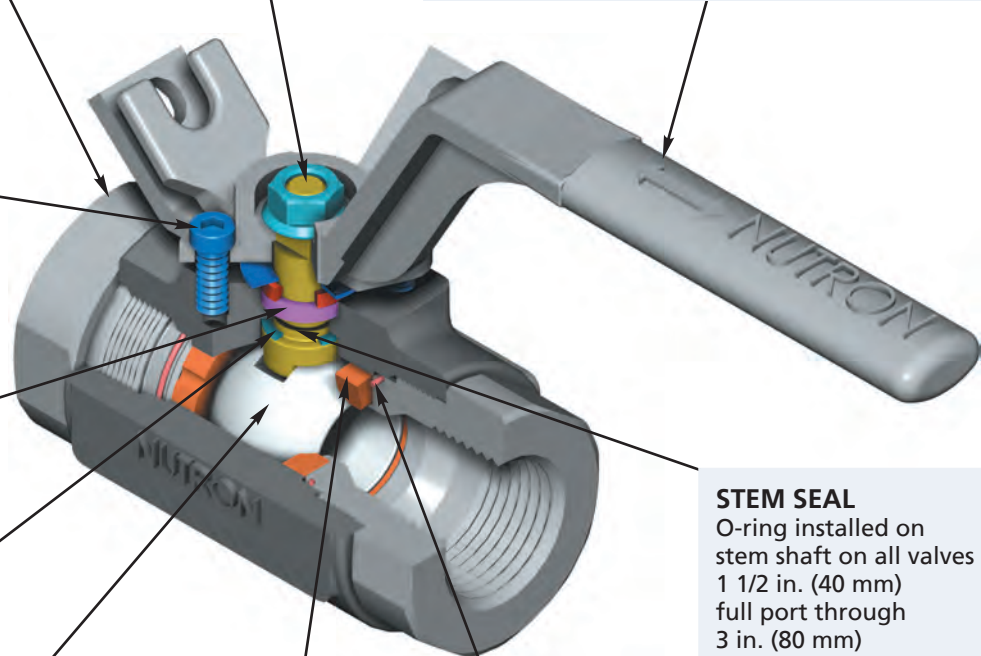
The floating ball design allows for positive shut off in either flow direction. Includes pressure equalization hole to prevent trapping of pressure in the body cavity.

SEATS

Materials available are Teflon, Delrin, PEEK and Devlon.

BODY SEALS

Body seal O-rings are placed ahead of the body cap threads to protect the threads from the flow media.

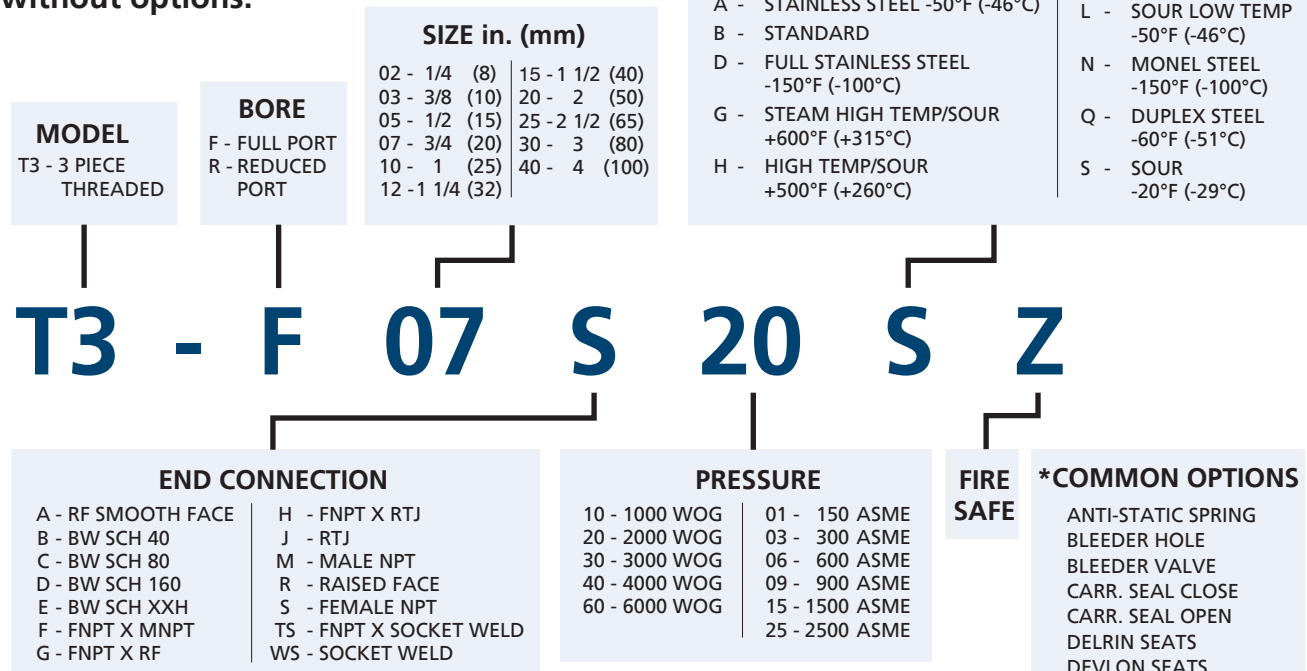


FORGED STEEL FLOATING BALL VALVES MODEL T3 SIZES AVAILABLE

ASME CLASS (PN)	150 (20)	300 (50)	600 (100)	900 (150)	1500 (250)	2500 (420)
Full Port Excluding 1 in. (25 mm)	in. 1/2 thru 3 (mm) (15 thru 80)	1/2 thru 3 (15 thru 80)	1/2 thru 2 (15 thru 50)	1/2 thru 2 (15 thru 50)	1/2 thru 2 (15 thru 50)	1/2 thru 2 (15 thru 50)
Reduced Port Excluding 1 1/2 in. (40 mm)	3/4 thru 4 (20 thru 100)	3/4 thru 4 (20 thru 100)	3/4 thru 3 (20 thru 100)	3/4 thru 3 (20 thru 80)	3/4 thru 3 (20 thru 80)	3/4 thru 3 (20 thru 80)
WOG (psi)		1000	2000	3000	4000	6000
Full Port, Threaded	in. (mm)	3 (80)	1/4 thru 3 (8 thru 80)	1/4 thru 2 (8 thru 50)	1/4 thru 2 (8 thru 50)	1/4 thru 2 (8 thru 50)
Reduced Port, Threaded		4 (100)	3/4 thru 3 (20 thru 80)	3/4 thru 3 (20 thru 80)	3/4 thru 3 (20 thru 80)	3/4 thru 3 (20 thru 80)
Full Port, Socket Weld			1/2 thru 2 (15 thru 50)	1/2 thru 2 (15 thru 50)	1/2 thru 2 (15 thru 50)	1/2 thru 2 (15 thru 50)
Reduced Port, Socket Weld			3/4 thru 3 (20 thru 80)	3/4 thru 3 (20 thru 80)	3/4 thru 3 (20 thru 80)	3/4 thru 3 (20 thru 80)

ORDERING INFORMATION

How to develop typical figure numbers without options:



Examples:

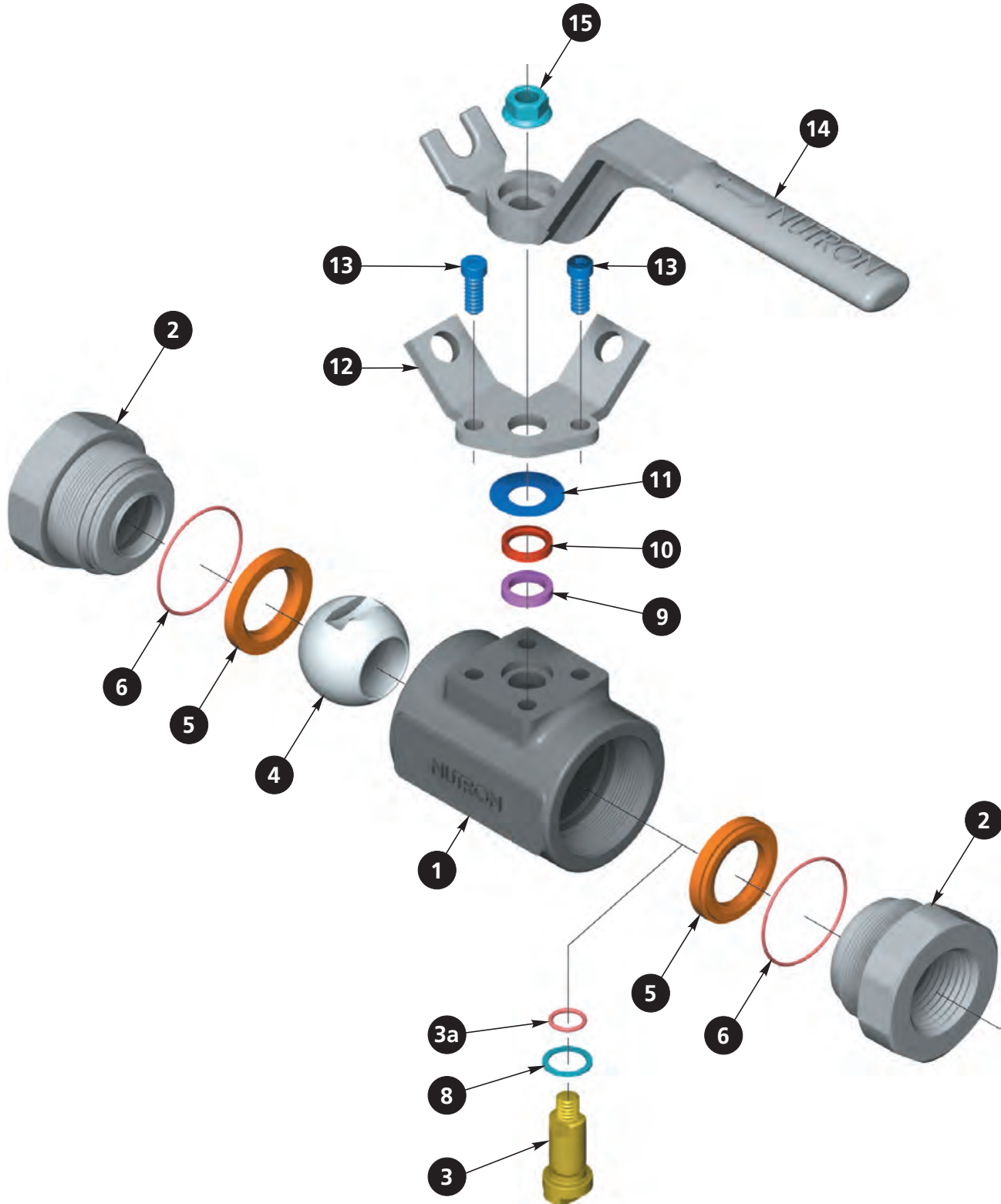
T3-F07S20SZ = Model T3, Full Port, 3/4 in. (20 mm), Female NPT, 2000 WOG, Sour Valve, Fire Safe.

T3-R10TS30B = Model T3, Reduced Port, 1 in. (25 mm), Female NPT x Socket Weld, 3000 WOG, Standard Valve.








* Consult Cameron, Valves & Measurement Sales Department for detailed valve style descriptions, full range of options, materials, actuation packages or for a particular special valve service application.








Cameron reserves the right to substitute materials listed on the following pages with alternate materials for the designated service.


**FORGED STEEL FLOATING BALL VALVES
MODEL T3 THREADED END CONNECTIONS**




FORGED STEEL FLOATING BALL VALVES MODEL T3 MATERIALS LIST - THREADED END CONNECTIONS

ITEM	PART	WORKING PRESSURE	STANDARD -20°F (-29°C)	SOUR -20°F (-29°C)
1	Body	All	ASTM A105	ASTM A105
2	End Caps	All	ASTM A105	ASTM A105
 3	Stem	2000 & 3000 4000 & 6000	ASTM A108, Plated ASTM A564 17-4PH	ASTM A564 17-4PH ASTM A564 17-4PH
 3a*	Stem O-Ring	All	Buna	HSN
 4	Ball	2000, 3000 & 4000 6000	Carbon Steel, Chrome Plated ASTM A564 17-4PH	ASTM A351 Gr. CF8M ASTM A564 17-4PH
 5	Seats	2000 3000 & 4000 6000	Teflon Delrin PEEK	Teflon Delrin PEEK
 6	Body O-Rings	All	Buna	HSN
 8	Thrust Washer	2000 3000 & 4000 6000	Teflon Delrin PEEK	Teflon Delrin PEEK
 9	Packing	All	Teflon	Teflon
10	Packing Follower	All	Carbon Steel, Plated	Stainless Steel
11	Belleville Washer	All	Carbon Steel	Stainless Steel
12	Gland Flange **	All	Carbon Steel, Plated	Carbon Steel, Plated
13	Cap Screws	All	Carbon Steel	Stainless Steel
14	Handle	All	Carbon Steel	Carbon Steel
15	Handle Nut	All	Carbon Steel, Plated	Carbon Steel, Plated

ITEM	PART	WORKING PRESSURE	SOUR & LOW TEMP -50°F (-46°C)	STAINLESS STEEL -50°F (-46°C)
1	Body	All	ASTM A350 LF2	ASTM A479 TYPE 316
2	End Caps	All	ASTM A350 LF2	ASTM A479 TYPE 316
 3	Stem	All	ASTM A564 17-4PH	ASTM A564 17-4PH with Nitriding
 3a*	Stem O-Ring	All	HSN	HSN
 4	Ball	2000 3000 & 4000 6000	ASTM A351 Gr. CF8M ASTM A351 Gr. CF8M ASTM A564 17-4PH	ASTM A351 Gr. CF8M ASTM A564 17-4PH ASTM A564 17-4PH
 5	Seats	2000 3000 & 4000 6000	Teflon Delrin PEEK	Teflon PEEK PEEK
 6	Body O-Rings	All	HSN	Teflon
 8	Thrust Washer	2000 3000 & 4000 6000	Teflon Delrin PEEK	Teflon PEEK PEEK
 9	Packing	All	Teflon	Teflon
10	Packing Follower	All	Stainless Steel	Stainless Steel
11	Belleville Washer	All	Stainless Steel	Stainless Steel
12	Gland Flange **	All	Carbon Steel, Plated	Carbon Steel, Plated
13	Cap Screws	All	Stainless Steel	Stainless Steel
14	Handle	All	Carbon Steel	Carbon Steel
15	Handle Nut	All	Carbon Steel, Plated	Carbon Steel, Plated

 Major repair kit.

 Minor repair kit.

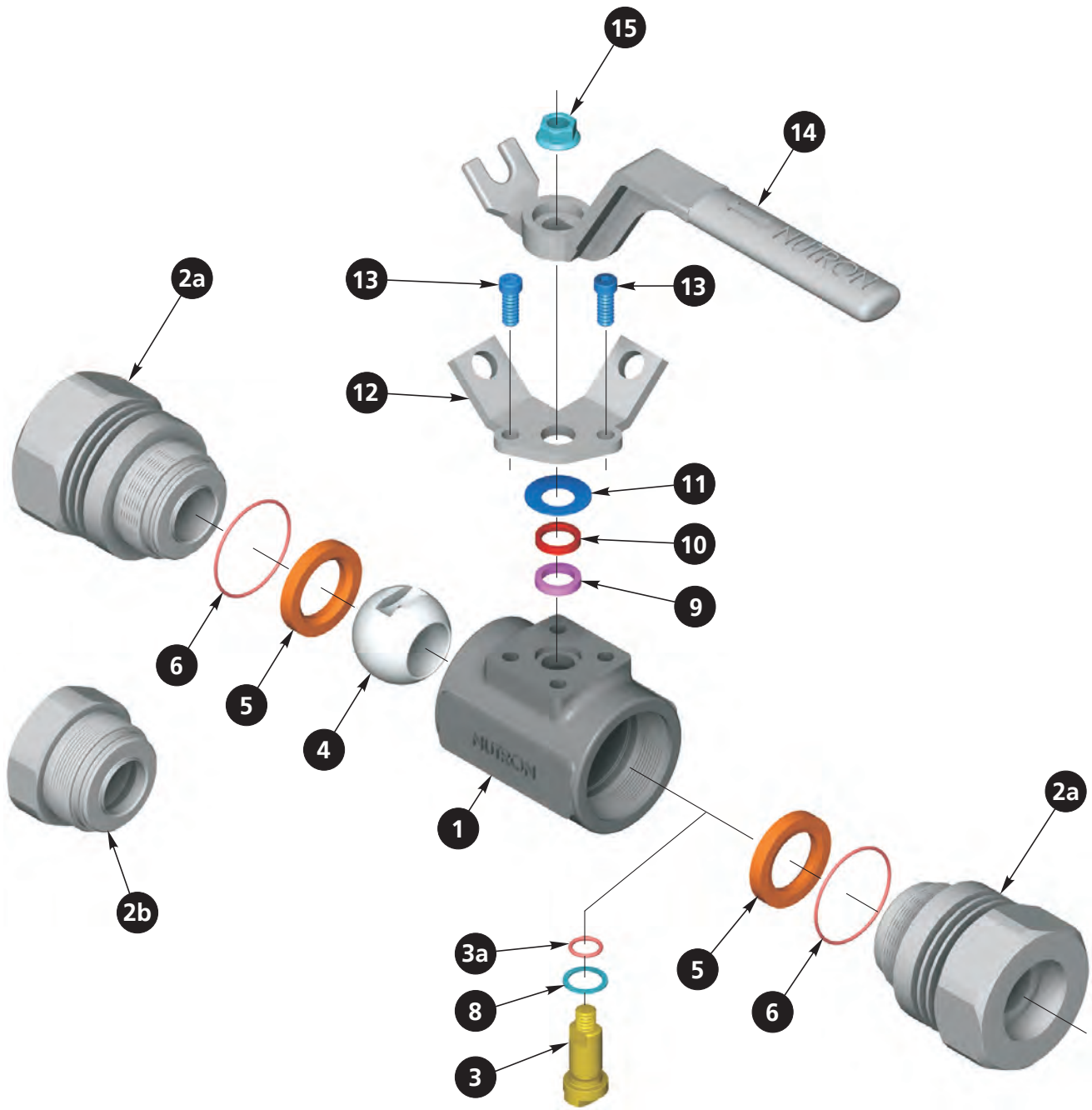
* Item 3a is only available on sizes 1 1/2 in. full port through 3 in. reduced port (40 mm through 80 mm) valves.

** Locking device is standard on 1/4 in. full port through 2 in. reduced port (8 mm through 50 mm) valves.








Note: Fire safe trim offered as standard whenever possible.








Consult Cameron, Valves & Measurement Sales Department for fire safe trim.


**FORGED STEEL FLOATING BALL VALVES
MODEL T3 SOCKET WELD and
THREADED x SOCKET WELD END CONNECTIONS**




FORGED STEEL FLOATING BALL VALVES MODEL T3 MATERIALS LIST SOCKET WELD and THREADED x SOCKET WELD END CONNECTIONS

ITEM	PART	WORKING PRESSURE	STANDARD -20°F (-29°C)	SOUR -20°F (-29°C)
1	Body	All	ASTM A105	ASTM A105
2a	End Caps - SW	All	ASTM A350 Gr. LF2	ASTM A350 Gr. LF2
2b	End Cap - NPT	All	ASTM A105	ASTM A105
 3	Stem	2000 & 3000 4000 & 6000	ASTM A108, Plated ASTM A564 17-4PH	ASTM A564 17-4PH ASTM A564 17-4PH
 3a*	Stem O-Ring	All	HSN	Viton
 4	Ball	2000 3000, 4000 & 6000	ASTM A351 Gr. CF8M ASTM A564 17-4PH	ASTM A351 Gr. CF8M ASTM A564 17-4PH
 5	Seats	2000 3000, 4000 & 6000	Teflon PEEK	Teflon PEEK
 6	Body O-Rings	All	Viton	Viton
 8	Thrust Washer	2000 3000, 4000 & 6000	Teflon PEEK	Teflon PEEK
 9	Packing	All	Teflon	Teflon
10	Packing Follower	All	Carbon Steel, Plated	Stainless Steel
11	Belleville Washer	All	Carbon Steel	Stainless Steel
12	Gland Flange **	All	Carbon Steel, Plated	Carbon Steel, Plated
13	Cap Screws	All	Carbon Steel	Stainless Steel
14	Handle	All	Carbon Steel	Carbon Steel
15	Handle Nut	All	Carbon Steel, Plated	Carbon Steel, Plated

ITEM	PART	WORKING PRESSURE	SOUR & LOW TEMP -50°F (-46°C)	STAINLESS STEEL -50°F (-46°C)
1	Body	All	ASTM A350 LF2	ASTM A479 TYPE 316
2a	End Caps - SW	All	ASTM A350 LF2	ASTM A479 TYPE 316 L
2b	End Cap - NPT	All	ASTM A350 LF2	ASTM A479 TYPE 316
 3	Stem	All	ASTM A564 17-4PH	ASTM A564 17-4PH with Nitriding
 3a*	Stem O-Ring	All	Viton	HSN
 4	Ball	2000 3000, 4000 & 6000	ASTM A351 Gr. CF8M ASTM A564 17-4PH	ASTM A351 Gr. CF8M ASTM A564 17-4PH
 5	Seats	2000 3000, 4000 & 6000	Teflon PEEK	Teflon PEEK
 6	Body O-Rings	All	Viton	Teflon
 8	Thrust Washer	2000 3000, 4000 & 6000	Teflon PEEK	Teflon PEEK
 9	Packing	All	Teflon	Teflon
10	Packing Follower	All	Stainless Steel	Stainless Steel
11	Belleville Washer	All	Stainless Steel	Stainless Steel
12	Gland Flange **	All	Carbon Steel, Plated	Carbon Steel, Plated
13	Cap Screws	All	Stainless Steel	Stainless Steel
14	Handle	All	Carbon Steel	Carbon Steel
15	Handle Nut	All	Carbon Steel, Plated	Carbon Steel, Plated

 Major repair kit.

 Minor repair kit.

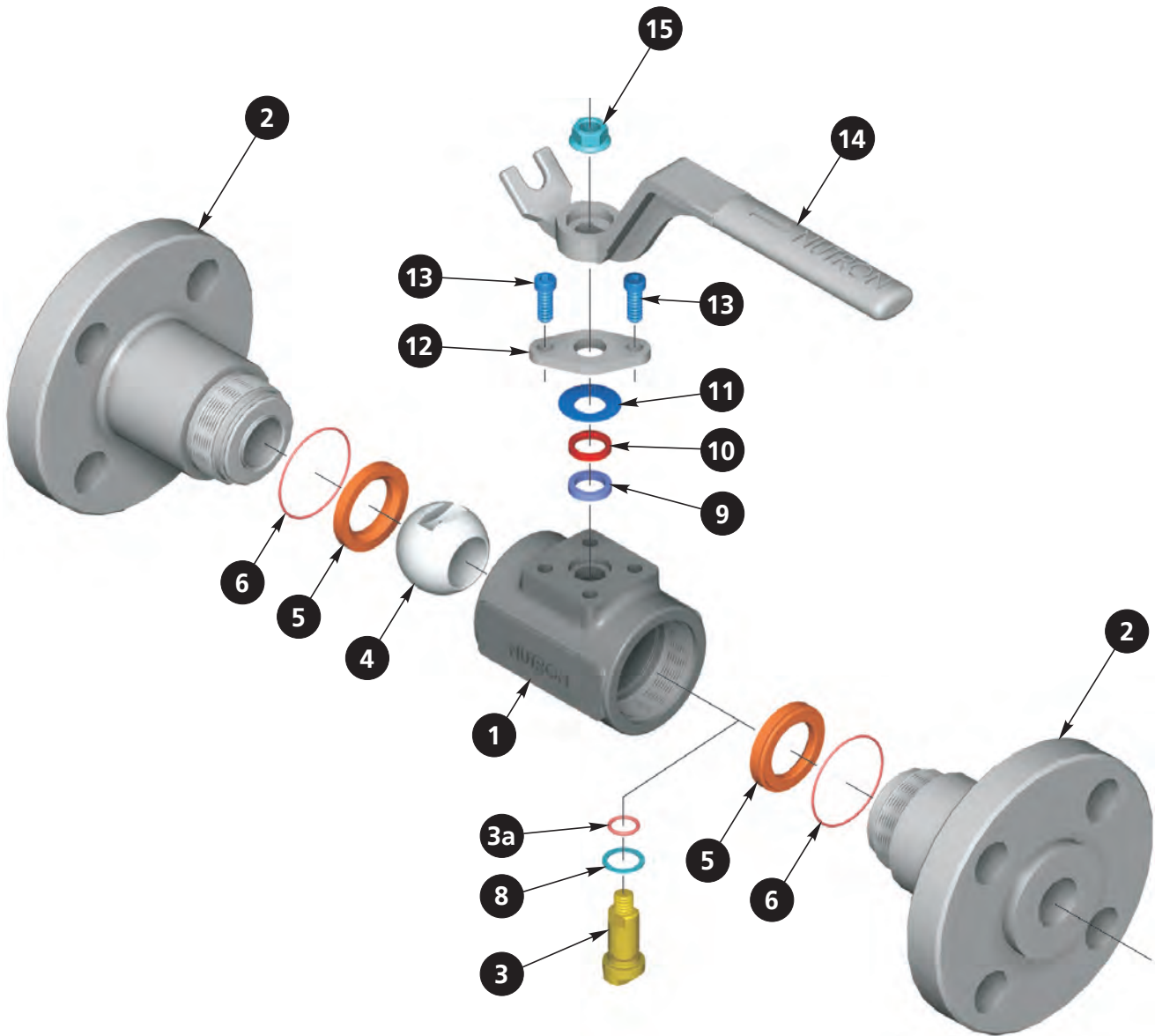
* Item 3a is only available on sizes 1 1/2 in. full port through 3 in. reduced port (40 mm through 80 mm) valves.

** Locking device is standard on 1/4 in. full port through 2 in. reduced port (8 mm through 50 mm) valves.

Note: Fire safe trim offered as standard whenever possible.

Consult Cameron, Valves & Measurement Sales Department for fire safe trim.

**FORGED STEEL FLOATING BALL VALVES
MODEL T3 FLANGED END CONNECTIONS**



FORGED STEEL FLOATING BALL VALVES MODEL T3 MATERIALS LIST - FLANGED END CONNECTIONS ASME CLASS 150 THROUGH 2500 (PN 20 THROUGH 420)

ITEM	PART	ASME CLASS	STANDARD -20°F (-29°F)	SOUR -20°F (-29°C)
1	Body	All	ASTM A105	ASTM A105
2	End Caps	All	ASTM A105	ASTM A105
☒ 3	Stem	150, 300, 600 & 900 1500 & 2500	ASTM A108, Plated ASTM A564 17-4PH	ASTM A564 17-4PH ASTM A564 17-4PH
☒ 3a*	Stem O-Ring	All	Buna	HSN
☒ 4	Ball	150 thru 1500 2500	Carbon Steel, Chrome Plated ASTM A564 17-4PH	ASTM A351 Gr. CF8M ASTM A564 17-4PH
☒ 5	Seats	150, 300 & 600 900 & 1500 2500	Teflon Delrin PEEK	Teflon Delrin PEEK
☒ 6	Body O-Rings	All	Buna	HSN
☒ 8	Thrust Washer	150, 300 & 600 900 & 1500 2500	Teflon Delrin PEEK	Teflon Delrin PEEK
☒ 9	Packing	All	Teflon	Teflon
10	Packing Follower	All	Carbon Steel, Plated	Stainless Steel
11	Belleville Washer	All	Carbon Steel	Stainless Steel
12	Gland Flange	All	Carbon Steel, Plated	Carbon Steel, Plated
13	Cap Screws	All	Carbon Steel	Stainless Steel
14	Handle	All	Carbon Steel	Carbon Steel
15	Handle Nut	All	Carbon Steel, Plated	Carbon Steel, Plated

ITEM	PART	ASME CLASS	SOUR & LOW TEMP -50°F (-46°C)	STAINLESS STEEL -50°F (-46°C)
1	Body	All	ASTM A350 LF2	ASTM A479 TYPE 316
2	End Caps	All	ASTM A350 LF2	ASTM A479 TYPE 316
☒ 3	Stem	All	ASTM A564 17-4PH	ASTM A564 17-4PH with Nitriding
☒ 3a*	Stem O-Ring	All	HSN	HSN
☒ 4	Ball	150, 300 & 600 900 & 1500 2500	ASTM A351 Gr. CF8M ASTM A351 Gr. CF8M ASTM A564 17-4PH	ASTM A351 Gr. CF8M ASTM A564 17-4PH ASTM A564 17-4PH
☒ 5	Seats	150, 300 & 600 900 & 1500 2500	Teflon Delrin PEEK	Teflon PEEK PEEK
☒ 6	Body O-Rings	All	HSN	Teflon
☒ 8	Thrust Washer	150, 300 & 600 900 & 1500 2500	Teflon Delrin PEEK	Teflon PEEK PEEK
☒ 9	Packing	All	Teflon	Teflon
10	Packing Follower	All	Stainless Steel	Stainless Steel
11	Belleville Washer	All	Stainless Steel	Stainless Steel
12	Gland Flange	All	Carbon Steel, Plated	Carbon Steel, Plated
13	Cap Screws	All	Stainless Steel	Stainless Steel
14	Handle	All	Carbon Steel	Carbon Steel
15	Handle Nut	All	Carbon Steel, Plated	Carbon Steel, Plated

☒ Major repair kit.

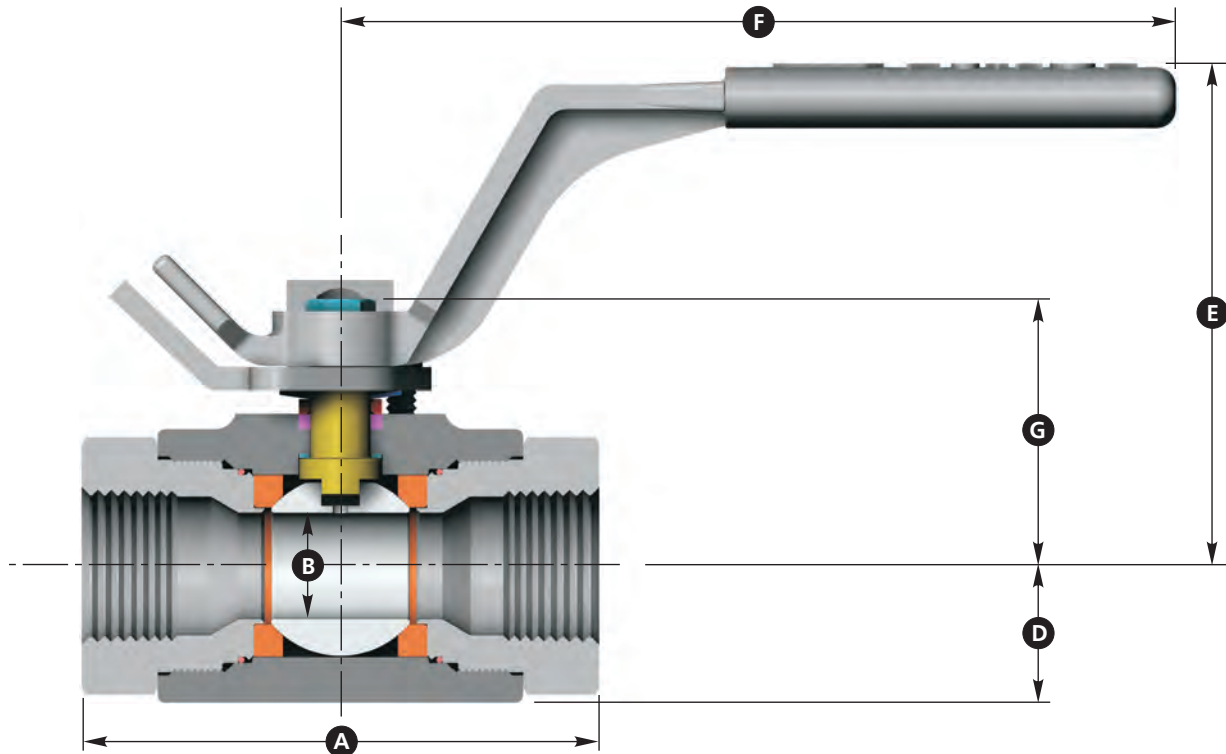
☒ Minor repair kit.

* Item 3a is only available on sizes 1 1/2 in. full port through 3 in. reduced port (40 mm through 80 mm) valves.

Note: Fire safe trim offered as standard whenever possible.

Consult Cameron, Valves & Measurement Sales Department for fire safe trim.

FORGED STEEL FLOATING BALL VALVES MODEL T3 FULL PORT - THREADED



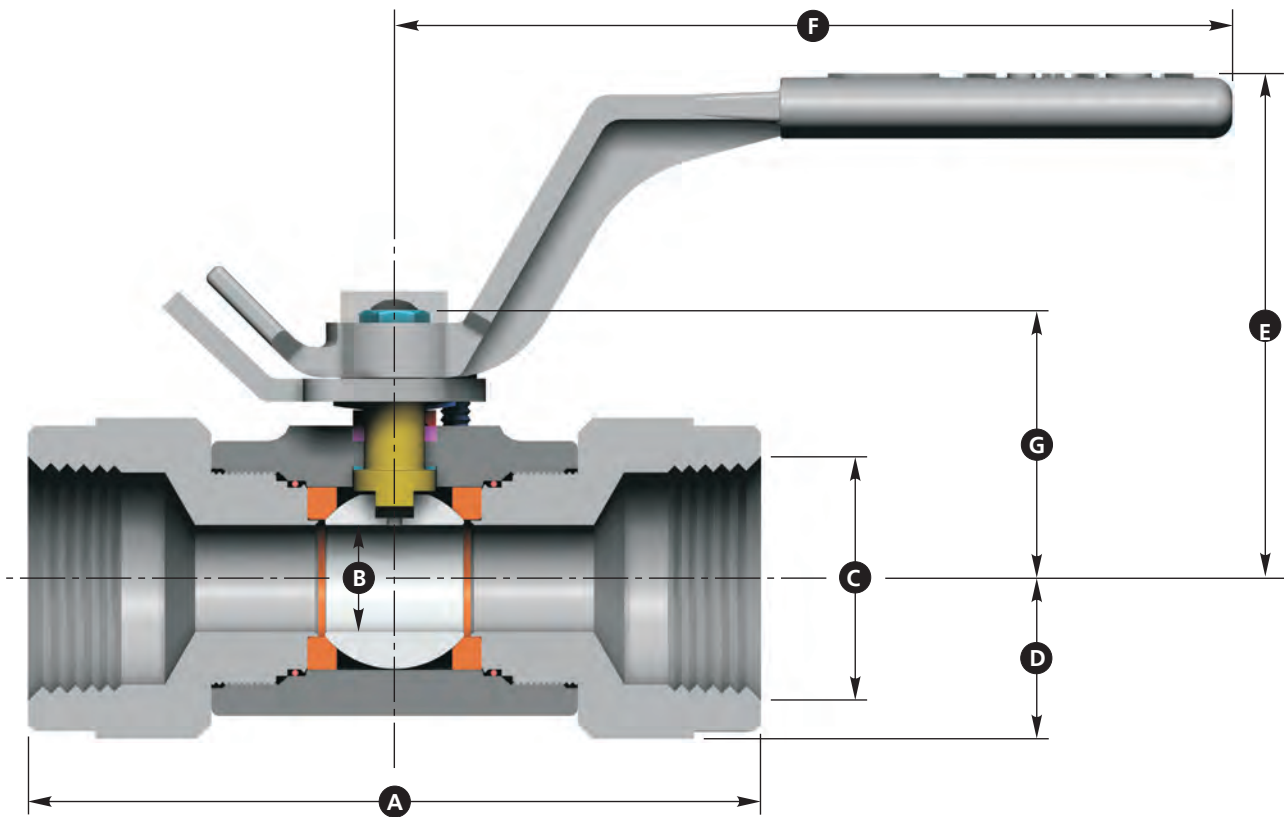
DIMENSIONS

SIZE in. (mm)	WOG	A	B	D	E	F	G	C _v	WEIGHT lb. (kg)
1/4 (8)	2000	3.88 (98)	0.50 (13)	0.82 (21)	3.29 (83)	4.82 (122)	1.73 (44)	9	2.5 (1.1)
	3000	3.88 (98)	0.50 (13)	0.82 (21)	3.29 (83)	4.82 (122)	1.73 (44)	9	2.5 (1.1)
	4000	3.88 (98)	0.50 (13)	0.82 (21)	3.29 (83)	4.82 (122)	1.73 (44)	9	2.5 (1.1)
	6000	3.88 (98)	0.50 (13)	0.82 (21)	3.29 (83)	4.82 (122)	1.73 (44)	9	2.5 (1.1)
3/8 (10)	2000	3.88 (98)	0.50 (13)	0.82 (21)	3.29 (83)	4.82 (122)	1.73 (44)	9	2.4 (1.0)
	3000	3.88 (98)	0.50 (13)	0.82 (21)	3.29 (83)	4.82 (122)	1.73 (44)	9	2.4 (1.0)
	4000	3.88 (98)	0.50 (13)	0.82 (21)	3.29 (83)	4.82 (122)	1.73 (44)	9	2.4 (1.0)
	6000	3.88 (98)	0.50 (13)	0.82 (21)	3.29 (83)	4.82 (122)	1.73 (44)	9	2.4 (1.0)
1/2 (15)	2000	3.88 (98)*	0.50 (13)	0.82 (21)	3.29 (83)	4.82 (122)	1.73 (44)	26	2.2 (0.9)
	3000	3.88 (98)*	0.50 (13)	0.82 (21)	3.29 (83)	4.82 (122)	1.73 (44)	26	2.2 (0.9)
	4000	3.88 (98)*	0.50 (13)	0.82 (21)	3.29 (83)	4.82 (122)	1.73 (44)	26	2.2 (0.9)
	6000	4.38 (111)	0.50 (13)	0.82 (21)	3.29 (83)	4.82 (122)	1.73 (44)	26	2.2 (0.9)
3/4 (20)	2000	4.25 (108)	0.88 (22)	1.12 (29)	4.40 (112)	6.75 (172)	2.16 (55)	50	4.8 (2.1)
	3000	4.25 (108)	0.88 (22)	1.12 (29)	4.40 (112)	6.75 (172)	2.16 (55)	50	4.8 (2.1)
	4000	4.25 (108)	0.88 (22)	1.12 (29)	4.40 (112)	6.75 (172)	2.16 (55)	50	4.8 (2.1)
	6000	4.25 (108)	0.88 (22)	1.50 (38)	4.40 (112)	6.75 (172)	2.16 (55)	50	6.5 (2.9)
1 1/2 (40)	2000	6.25 (159)	1.50 (38)	1.98 (50)	5.62 (143)	11.00 (279)	3.52 (89)	260	18.0 (8.1)
	3000	6.25 (159)	1.50 (38)	1.98 (50)	5.62 (143)	11.00 (279)	3.52 (89)	260	18.0 (8.1)
	4000	6.25 (159)	1.50 (38)	1.98 (50)	5.62 (143)	11.00 (279)	3.52 (89)	260	18.0 (8.1)
	6000	6.25 (159)	1.50 (38)	1.98 (50)	5.62 (143)	11.00 (279)	3.52 (89)	260	18.0 (8.1)
2 (50)	2000	6.25 (159)	2.00 (51)	2.53 (64)	6.96 (177)	11.88 (302)	4.83 (123)	480	30.0 (13.6)
	3000	6.25 (159)	2.00 (51)	2.53 (64)	6.96 (177)	11.88 (302)	4.83 (123)	480	30.0 (13.6)
	4000	6.25 (159)	2.00 (51)	2.53 (64)	6.96 (177)	11.88 (302)	4.83 (123)	480	30.0 (13.6)
	6000	6.25 (159)	2.00 (51)	2.53 (64)	6.96 (177)	11.88 (302)	4.83 (123)	480	30.0 (13.6)
3 (80)	1000	9.70 (246)	3.00 (76)	3.50 (89)	8.26 (210)	23.88 (607)	5.37 (137)	1300	67.0 (30.4)
	2000	9.70 (246)	3.00 (76)	3.50 (89)	8.26 (210)	23.88 (607)	5.37 (137)	1300	67.0 (30.4)

* 4.38 in. (111 mm) for Stainless Steel valves.

NOTE: " A " dimension to be within ± 0.062 in. (1.5 mm).

FORGED STEEL FLOATING BALL VALVES MODEL T3 REDUCED PORT - THREADED

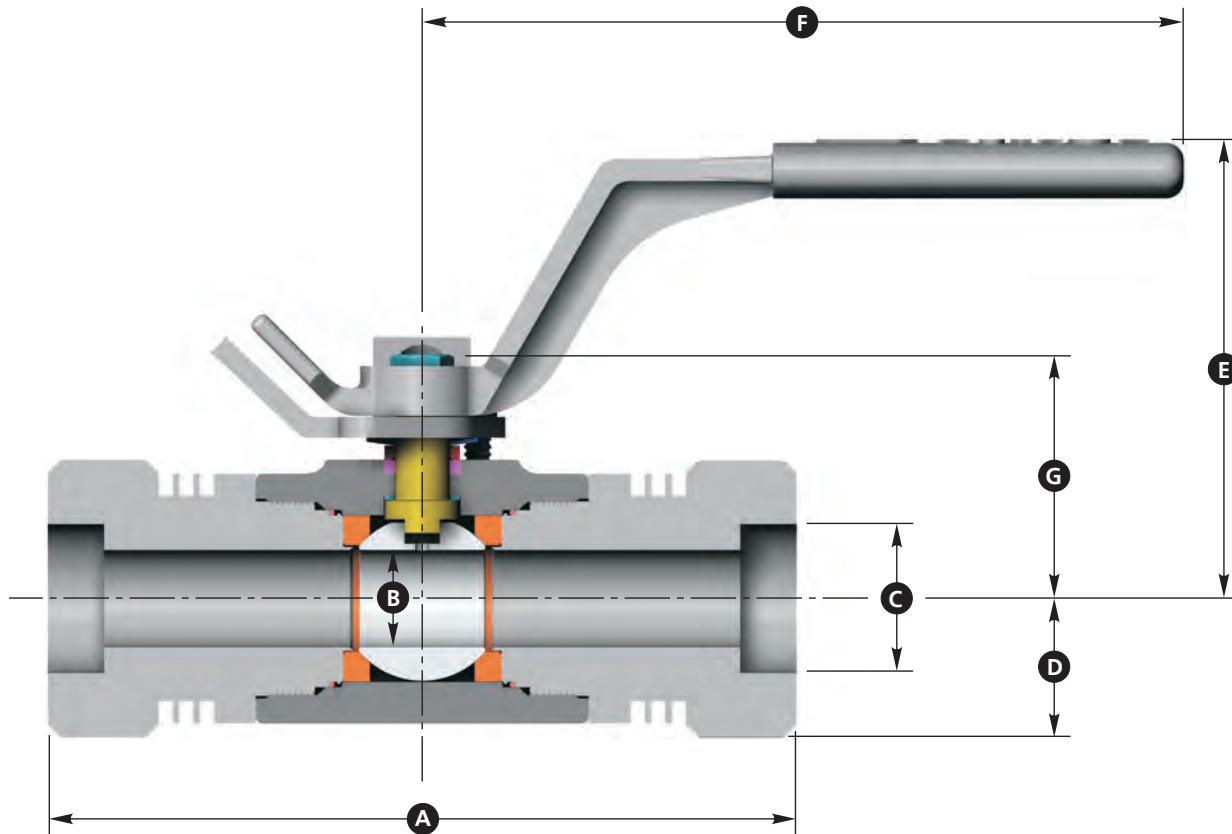


DIMENSIONS

SIZE in. (mm)	WOG	A	B	C	D	E	F	G	C _v	WEIGHT lb. (kg)
3/4 (20)	2000	4.38 (111)	0.50 (13)	0.75 (19)	0.82 (21)	3.29 (83)	4.82 (122)	1.73 (44)	14	2.5 (1.1)
	3000	4.38 (111)	0.50 (13)	0.75 (19)	0.82 (21)	3.29 (83)	4.82 (122)	1.73 (44)	14	2.5 (1.1)
	4000	4.38 (111)	0.50 (13)	0.75 (19)	0.82 (21)	3.29 (83)	4.82 (122)	1.73 (44)	14	2.5 (1.1)
	6000	4.38 (111)	0.50 (13)	0.75 (19)	0.82 (21)	3.29 (83)	4.82 (122)	1.73 (44)	14	2.5 (1.1)
1 (25)	2000	4.25 (108)	0.88 (22)	1.00 (25)	1.12 (28)	4.40 (112)	6.75 (172)	2.16 (55)	35	4.5 (2.0)
	3000	4.25 (108)	0.88 (22)	1.00 (25)	1.12 (28)	4.40 (112)	6.75 (172)	2.16 (55)	35	4.5 (2.0)
	4000	4.25 (108)	0.88 (22)	1.00 (25)	1.12 (28)	4.40 (112)	6.75 (172)	2.16 (55)	35	4.5 (2.0)
	6000	5.25 (133)	0.88 (22)	1.00 (25)	1.50 (38)	4.40 (112)	6.75 (172)	2.16 (55)	35	7.5 (3.4)
1 1/4 (32)	2000	6.00 (152)	0.88 (22)	1.25 (32)	1.30 (33)	4.40 (112)	6.75 (172)	2.16 (55)	35	8.0 (3.6)
	3000	6.00 (152)	0.88 (22)	1.25 (32)	1.30 (33)	4.40 (112)	6.75 (172)	2.16 (55)	35	8.0 (3.6)
2 (50)	2000	6.25 (159)	1.50 (38)	2.00 (51)	1.98 (50)	5.62 (143)	11.00 (279)	3.52 (89)	100	17.5 (7.9)
	3000	6.25 (159)	1.50 (38)	2.00 (51)	1.98 (50)	5.62 (143)	11.00 (279)	3.52 (89)	100	17.5 (7.9)
	4000	6.25 (159)	1.50 (38)	2.00 (51)	1.98 (50)	5.62 (143)	11.00 (279)	3.52 (89)	100	17.5 (7.9)
	6000	7.25 (184)	1.50 (38)	2.00 (51)	1.98 (50)	5.62 (143)	11.00 (279)	3.52 (89)	100	21.0 (9.5)
3 (80)	2000	10.0 (254)	2.00 (51)	3.00 (76)	2.53 (64)	6.96 (177)	11.88 (302)	4.83 (123)	420	39.0 (17.6)
	3000	10.0 (254)	2.00 (51)	3.00 (76)	2.53 (64)	6.96 (177)	11.88 (302)	4.83 (123)	420	39.0 (17.6)
	4000	10.0 (254)	2.00 (51)	3.00 (76)	2.53 (64)	6.96 (177)	11.88 (302)	4.83 (123)	420	39.0 (17.6)
	6000	10.0 (254)	2.00 (51)	3.00 (76)	2.53 (64)	6.96 (177)	11.88 (302)	4.83 (123)	420	48.0 (21.8)
4 (100)	1000	9.5 (241)	3.00 (76)	4.00 (102)	3.50 (89)	8.26 (210)	23.88 (607)	5.37 (137)	770	80.0 (36.3)

NOTE: " A " dimension to be within ± 0.062 in. (1.5 mm).

FORGED STEEL FLOATING BALL VALVES MODEL T3 FULL PORT - SOCKET WELD & THREADED x SOCKET WELD



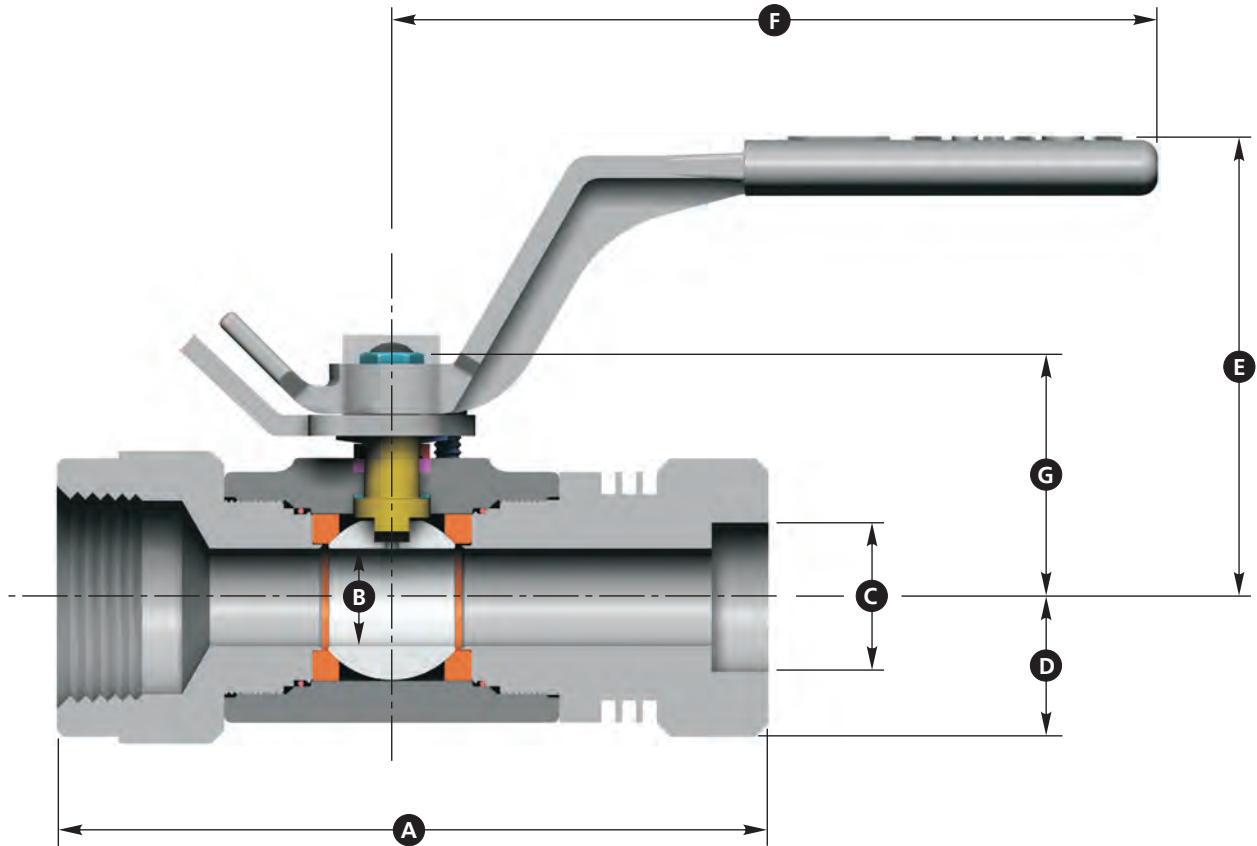
DIMENSIONS

SIZE in. (mm)	WOG	A		B	C			D	E	F	G	C _v	WEIGHT lb. (kg)	
		FNPT x SW	SW		FNPT x SW	SW	FNPT x SW						SW	
1/2 (15)	2000	4.44 (113)*	5.00 (127)	0.50 (13)	0.50 (13)	0.86 (22)	0.94 (24)	3.29 (83)	4.82 (122)	1.73 (44)	26	3.5 (1.5)	4.8 (2.1)	
	3000	4.44 (113)*	5.00 (127)	0.50 (13)	0.50 (13)	0.86 (22)	0.94 (24)	3.29 (83)	4.82 (122)	1.73 (44)	26	3.5 (1.5)	4.8 (2.1)	
	4000	4.44 (113)*	5.00 (127)	0.50 (13)	0.50 (13)	0.86 (22)	0.94 (24)	3.29 (83)	4.82 (122)	1.73 (44)	26	3.5 (1.5)	4.8 (2.1)	
	6000	4.69 (119)	5.00 (127)	0.50 (13)	0.50 (13)	0.86 (22)	0.94 (24)	3.29 (83)	4.82 (122)	1.73 (44)	26	3.5 (1.5)	4.8 (2.1)	
3/4 (20)	2000	5.50 (140)	6.75 (172)	0.88 (22)	0.75 (19)	1.07 (27)	1.25 (32)	4.40 (112)	6.75 (172)	2.16 (55)	50	5.7 (2.5)	6.4 (2.9)	
	3000	5.50 (140)	6.75 (172)	0.88 (22)	0.75 (19)	1.07 (27)	1.25 (32)	4.40 (112)	6.75 (172)	2.16 (55)	50	5.7 (2.5)	6.4 (2.9)	
	4000	5.50 (140)	6.75 (172)	0.88 (22)	0.75 (19)	1.07 (27)	1.25 (32)	4.40 (112)	6.75 (172)	2.16 (55)	50	5.7 (2.5)	6.4 (2.9)	
	6000	5.50 (140)	6.75 (172)	0.88 (22)	0.75 (19)	1.07 (27)	1.50 (38)	4.40 (112)	6.75 (172)	2.16 (55)	50	8.6 (3.9)	9.2 (4.1)	
1 1/2 (40)	2000	7.40 (188)	8.54 (217)	1.50 (38)	1.50 (38)	1.92 (49)	2.50 (64)	5.62 (143)	11.00 (279)	3.52 (89)	260	21.9 (9.9)	25.7 (11.6)	
	3000	7.40 (188)	8.54 (217)	1.50 (38)	1.50 (38)	1.92 (49)	2.50 (64)	5.62 (143)	11.00 (279)	3.52 (89)	260	21.9 (9.9)	25.7 (11.6)	
	4000	7.40 (188)	8.54 (217)	1.50 (38)	1.50 (38)	1.92 (49)	2.50 (64)	5.62 (143)	11.00 (279)	3.52 (89)	260	21.9 (9.9)	25.7 (11.6)	
	6000	7.40 (188)	8.54 (217)	1.50 (38)	1.50 (38)	1.92 (49)	2.50 (64)	5.62 (143)	11.00 (279)	3.52 (89)	260	21.9 (9.9)	25.7 (11.6)	
2 (50)	2000	9.50 (241)	12.75 (324)	2.00 (51)	2.00 (51)	2.41 (61)	2.53 (64)	6.96 (177)	11.88 (302)	4.83 (123)	480	38.3 (17)	46.5 (21.0)	
	3000	9.50 (241)	12.75 (324)	2.00 (51)	2.00 (51)	2.41 (61)	2.53 (64)	6.96 (177)	11.88 (302)	4.83 (123)	480	38.3 (17)	46.5 (21.0)	
	4000	9.50 (241)	12.75 (324)	2.00 (51)	2.00 (51)	2.41 (61)	2.53 (64)	6.96 (177)	11.88 (302)	4.83 (123)	480	38.3 (17)	46.5 (21.0)	
	6000	9.50 (241)	12.75 (324)	2.00 (51)	2.00 (51)	2.41 (61)	2.53 (64)	6.96 (177)	11.88 (302)	4.83 (123)	480	38.3 (17)	46.5 (21.0)	

* 4.69 in. (119.1 mm) for Stainless Steel valves.

NOTE: " A " dimension to be within ± 0.062 in. (1.5 mm).

FORGED STEEL FLOATING BALL VALVES MODEL T3 REDUCED PORT - SOCKET WELD & THREADED x SOCKET WELD



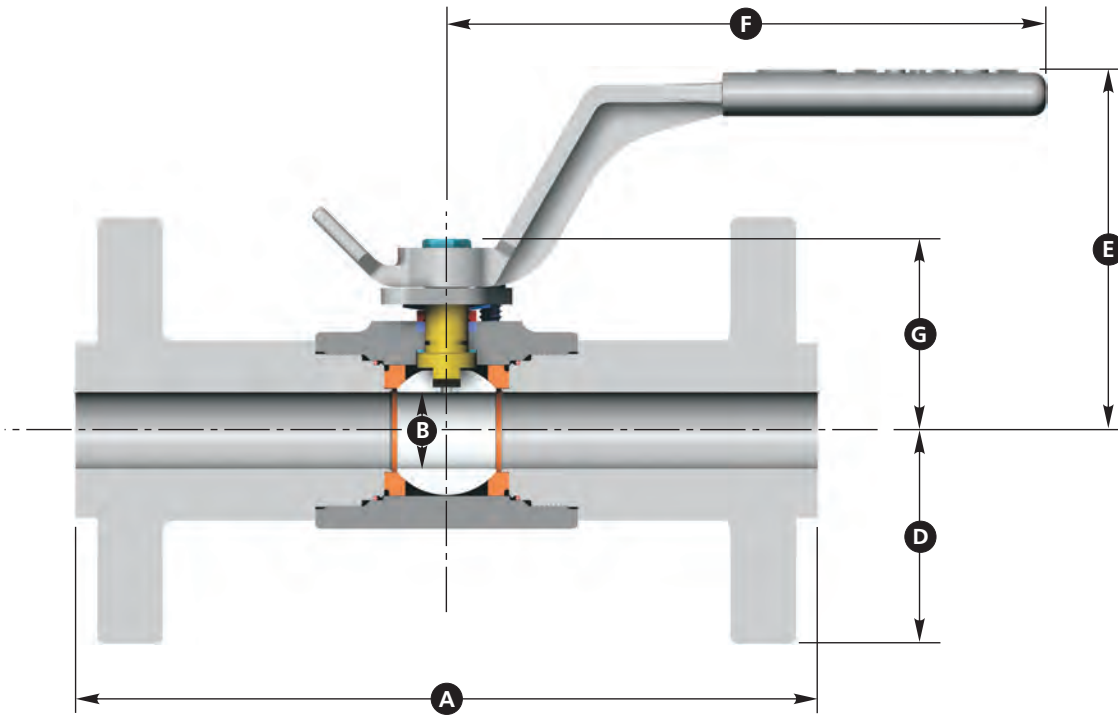
DIMENSIONS

SIZE	WOG	A		B	C		D	E	F	G	C _v	WEIGHT lb. (kg)	
in. (mm)		FNPT x SW	SW		FNPT x SW	SW						FNPT x SW	SW
3/4 (20)	2000	5.56 (141)	6.75 (172)	0.50 (13)	0.75 (19)	1.07 (27)	1.19 (30)	3.29 (83)	4.82 (122)	1.73 (44)	14	3.5 (1.5)	4.4 (1.9)
	3000	5.56 (141)	6.75 (172)	0.50 (13)	0.75 (19)	1.07 (27)	1.19 (30)	3.29 (83)	4.82 (122)	1.73 (44)	14	3.5 (1.5)	4.4 (1.9)
	4000	5.56 (141)	6.75 (172)	0.50 (13)	0.75 (19)	1.07 (27)	1.19 (30)	3.29 (83)	4.82 (122)	1.73 (44)	14	3.5 (1.5)	4.4 (1.9)
	6000	5.56 (141)	6.75 (172)	0.50 (13)	0.75 (19)	1.07 (27)	1.19 (30)	3.29 (83)	4.82 (122)	1.73 (44)	14	3.5 (1.5)	4.4 (1.9)
1 (25)	2000	5.50 (140)*	6.75 (172)	0.88 (22)	1.00 (25)	1.34 (34)	1.25 (32)	4.40 (112)	6.75 (172)	2.16 (55)	35	5.4 (2.4)	6.2 (2.8)
	3000	5.50 (140)*	6.75 (172)	0.88 (22)	1.00 (25)	1.34 (34)	1.25 (32)	4.40 (112)	6.75 (172)	2.16 (55)	35	5.4 (2.4)	6.2 (2.8)
	4000	5.50 (140)*	6.75 (172)	0.88 (22)	1.00 (25)	1.34 (34)	1.25 (32)	4.40 (112)	6.75 (172)	2.16 (55)	35	5.4 (2.4)	6.2 (2.8)
	6000	6.00 (152)	6.75 (172)	0.88 (22)	1.00 (25)	1.34 (34)	1.50 (38)	4.40 (112)	6.75 (172)	2.16 (55)	35	8.3 (3.7)	9.0 (4.0)
2 (50)	2000	7.40 (188)	8.55 (217)	1.50 (38)	2.00 (51)	2.42 (62)	2.50 (64)	5.62 (143)	11.00 (280)	3.52 (90)	100	22.5 (10.2)	26.0 (11.7)
	3000	7.40 (188)	8.55 (217)	1.50 (38)	2.00 (51)	2.42 (62)	2.50 (64)	5.62 (143)	11.00 (280)	3.52 (90)	100	22.5 (10.2)	26.0 (11.7)
	4000	7.40 (188)	8.55 (217)	1.50 (38)	2.00 (51)	2.42 (62)	2.50 (64)	5.62 (143)	11.00 (280)	3.52 (90)	100	22.5 (10.2)	26.0 (11.7)
	6000	7.90 (201)	8.55 (217)	1.50 (38)	2.00 (51)	2.42 (62)	2.50 (64)	5.62 (143)	11.00 (280)	3.52 (90)	100	22.5 (10.2)	26.0 (11.7)
3 (80)	2000	11.38 (289)	12.75 (324)	2.00 (51)	3.00 (76)	3.55 (90)	2.53 (64)	6.96 (177)	11.88 (302)	4.83 (123)	420	49.0 (22.2)	60.0 (27.2)
	3000	11.38 (289)	12.75 (324)	2.00 (51)	3.00 (76)	3.55 (90)	2.53 (64)	6.96 (177)	11.88 (302)	4.83 (123)	420	49.0 (22.2)	60.0 (27.2)
	4000	11.38 (289)	12.75 (324)	2.00 (51)	3.00 (76)	3.55 (90)	2.53 (64)	6.96 (177)	11.88 (302)	4.83 (123)	420	49.0 (22.2)	60.0 (27.2)

* 6.00 in. (152 mm) for Stainless Steel valves.

NOTE: " A " dimension to be within ± 0.062 in. (1.5 mm).

FORGED STEEL FLOATING BALL VALVES MODEL T3 FULL PORT - FLANGED



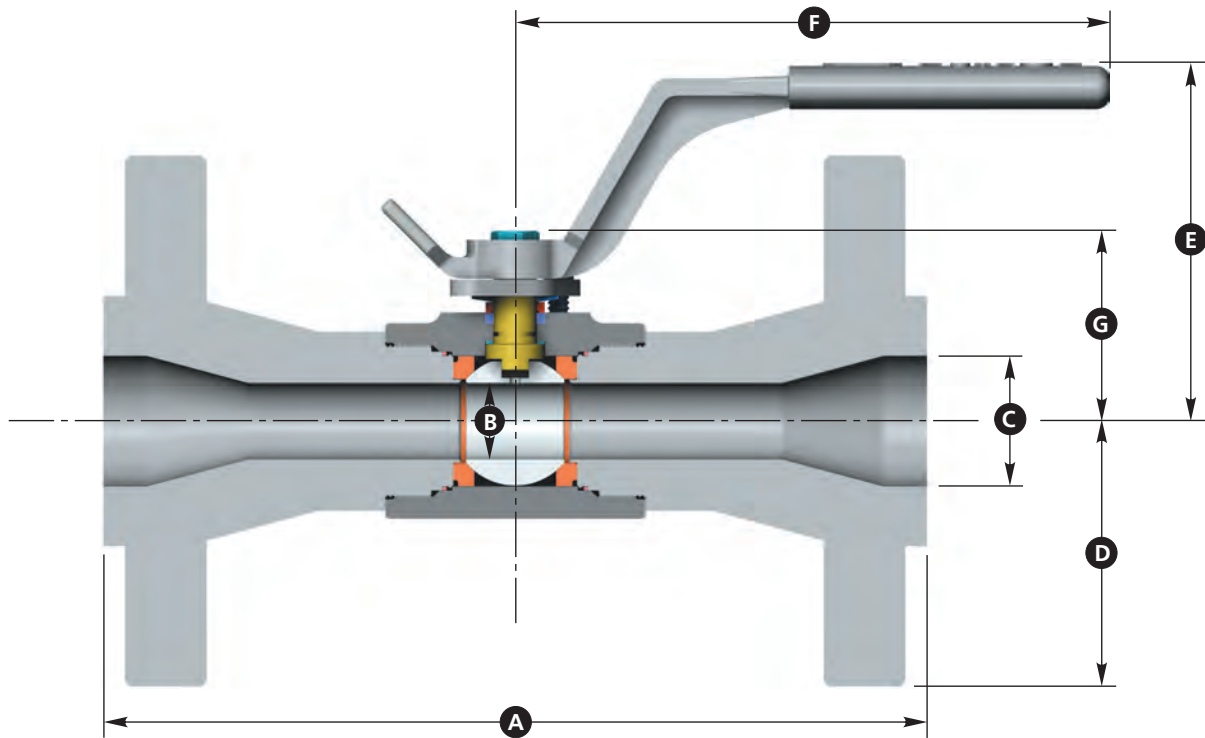
DIMENSIONS

SIZE in. (mm)	ASME CLASS	(PN)	A		B	D	E	F	G	C _v	WEIGHT lb. (kg)
			RF	RTJ							
1/2 (15)	150	(20)	4.25 (108)	-	0.50 (13)	1.75 (45)	3.29 (83)	4.82 (122)	1.73 (44)	26	4.0 (1.8)
	300	(50)	5.50 (140)	5.94 (151)	0.50 (13)	1.87 (48)	3.29 (83)	4.82 (122)	1.73 (44)	26	4.4 (1.9)
	600	(100)	6.50 (165)	6.50 (165)	0.50 (13)	1.87 (48)	3.29 (83)	4.82 (122)	1.73 (44)	26	5.5 (2.4)
	900/1500	(150/250)	8.50 (216)	8.50 (216)	0.50 (13)	2.37 (60)	5.73 (146)	8.00 (203)	1.73 (44)	26	11.0 (4.9)
	2500	(420)	10.37 (264)	10.37 (264)	0.50 (13)	2.63 (67)	5.73 (146)	8.00 (203)	1.73 (44)	26	17.5 (7.9)
3/4 (20)	150	(20)	*6.00 (152)	-	0.88 (22)	1.94 (49)	4.40 (112)	6.75 (172)	2.16 (55)	50	10.3 (4.6)
	300	(50)	6.00 (152)	6.50 (165)	0.88 (22)	2.31 (59)	4.40 (112)	6.75 (172)	2.16 (55)	50	10.3 (4.6)
	600	(100)	7.50 (191)	7.50 (191)	0.88 (22)	2.31 (59)	4.40 (112)	6.75 (172)	2.16 (55)	50	13.3 (6.0)
	900/1500	(150/250)	9.00 (229)	9.00 (229)	0.88 (22)	2.56 (65)	4.40 (112)	6.75 (172)	2.16 (55)	50	16.3 (7.3)
	2500	(420)	10.75 (273)	10.75 (273)	0.88 (22)	2.75 (70)	6.20 (158)	8.12 (206)	2.16 (55)	50	22.8 (10.3)
1 1/2 (40)	150	(20)	6.50 (165)	7.00 (178)	1.50 (38)	2.50 (64)	5.62 (143)	11.00 (279)	3.52 (89)	260	21.0 (9.5)
	300	(50)	7.50 (191)	8.00 (203)	1.50 (38)	3.06 (78)	5.62 (143)	11.00 (279)	3.52 (89)	260	29.0 (13.1)
	600	(100)	9.50 (241)	9.50 (241)	1.50 (38)	3.06 (78)	5.62 (143)	11.00 (279)	3.52 (89)	260	32.5 (14.7)
	900/1500	(150/250)	12.00 (305)	12.00 (305)	1.50 (38)	3.50 (89)	5.62 (143)	11.00 (279)	3.52 (89)	260	46.0 (20.8)
	2500	(420)	15.12 (384)	15.25 (387)	1.50 (38)	4.00 (102)	5.62 (143)	11.00 (279)	3.52 (89)	260	74.0 (33.5)
2 (50)	150	(20)	7.00 (178)	7.50 (191)	2.00 (51)	3.00 (76)	6.96 (177)	11.88 (302)	4.83 (123)	480	36.2 (16.4)
	300	(50)	8.50 (216)	9.12 (232)	2.00 (51)	3.25 (83)	6.96 (177)	11.88 (302)	4.83 (123)	480	43.3 (19.6)
	600	(100)	11.50 (292)	11.62 (295)	2.00 (51)	3.25 (83)	6.96 (177)	11.88 (302)	4.83 (123)	480	51.5 (23.3)
	900/1500	(150/250)	14.50 (368)	14.62 (371)	2.00 (51)	4.25 (108)	6.96 (177)	11.88 (302)	4.83 (123)	480	81.0 (36.7)
	2500	(420)	17.75 (451)	17.87 (454)	2.00 (51)	4.62 (118)	6.96 (177)	11.88 (302)	4.83 (123)	480	121.0 (54.8)
3 (80)	150	(20)	8.00 (203)	8.50 (216)	3.00 (76)	3.75 (95)	8.26 (210)	23.89 (607)	5.37 (137)	1300	58.0 (26.3)
	300	(50)	11.12 (282)	11.75 (299)	3.00 (76)	4.12 (105)	8.26 (210)	23.89 (607)	5.37 (137)	1300	77.5 (35.1)

NOTE: " A " dimension to be within ± 0.062 in. (1.5 mm).

* Non-Standard Length.

FORGED STEEL FLOATING BALL VALVES MODEL T3 REDUCED PORT - FLANGED



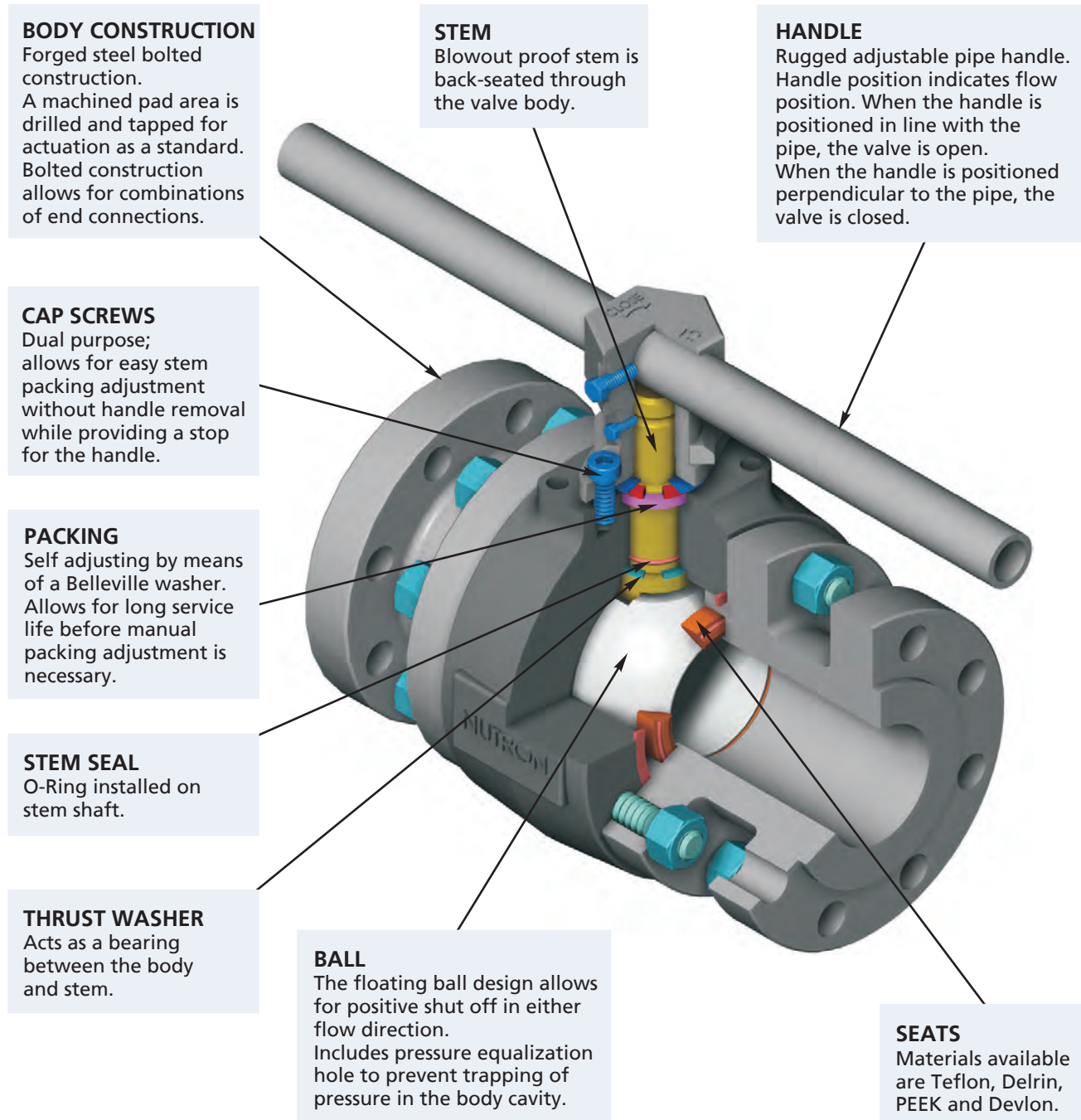
DIMENSIONS

SIZE in. (mm)	ASME CLASS	PN	A		B	C	D	E	F	G	C _v	WEIGHT lb. (kg)
			RF	RTJ								
3/4 (20)	150	(20)	4.63 (118)	-	0.50 (13)	0.75 (19)	1.94 (49)	3.29 (83)	4.82 (122)	1.73 (44)	14	5.0 (2.2)
	300	(50)	6.00 (152)	6.50 (165)	0.50 (13)	0.75 (19)	2.31 (59)	3.29 (83)	4.82 (122)	1.73 (44)	14	7.0 (3.1)
	600	(100)	7.50 (191)	7.50 (191)	0.50 (13)	0.75 (19)	2.31 (59)	3.29 (83)	4.82 (122)	1.73 (44)	14	9.0 (4.0)
900/1500 (150/250)	1500	(250)	9.00 (229)	9.00 (229)	0.50 (13)	0.75 (19)	2.56 (65)	5.73 (146)	8.00 (203)	1.73 (44)	14	14.0 (6.3)
	2500	(420)	10.75 (273)	10.75 (273)	0.50 (13)	0.75 (19)	2.75 (70)	5.73 (146)	8.00 (203)	1.73 (44)	14	20.5 (9.2)
1 (25)	150	(20)	5.00 (127)	5.50 (140)	0.88 (22)	1.00 (25)	2.12 (54)	4.40 (112)	6.75 (172)	2.16 (55)	35	8.0 (3.6)
	300	(50)	6.50 (165)	7.00 (178)	0.88 (22)	1.00 (25)	2.44 (62)	4.40 (112)	6.75 (172)	2.16 (55)	35	11.5 (5.2)
	600	(100)	8.50 (216)	8.50 (216)	0.88 (22)	1.00 (25)	2.44 (62)	4.40 (112)	6.75 (172)	2.16 (55)	35	13.8 (6.2)
900/1500 (150/250)	1500	(250)	10.00 (254)	10.00 (254)	0.88 (22)	1.00 (25)	2.94 (75)	4.40 (112)	6.75 (172)	2.16 (55)	35	23.0 (10.4)
	2500	(420)	12.12 (308)	12.12 (308)	0.88 (22)	1.00 (25)	3.13 (79)	6.20 (158)	8.12 (206)	2.16 (55)	35	32.0 (14.5)
2 (50)	150	(20)	7.00 (178)	7.50 (191)	1.50 (38)	2.00 (51)	3.00 (76)	5.62 (143)	11.00 (279)	3.52 (89)	100	27.0 (12.2)
	300	(50)	8.50 (216)	9.12 (232)	1.50 (38)	2.00 (51)	3.25 (83)	5.62 (143)	11.00 (279)	3.52 (89)	100	32.0 (14.5)
	600	(100)	11.50 (292)	11.62 (295)	1.50 (38)	2.00 (51)	3.25 (83)	5.62 (143)	11.00 (279)	3.52 (89)	100	38.0 (17.2)
900/1500 (150/250)	1500	(250)	14.50 (368)	14.62 (371)	1.50 (38)	2.00 (51)	4.25 (108)	5.62 (143)	11.00 (279)	3.52 (89)	100	72.0 (32.6)
2500	(420)	17.75 (451)	17.87 (454)	1.50 (38)	2.00 (51)	4.62 (118)	5.62 (143)	11.00 (279)	3.52 (89)	100	107.5 (48.7)	
	3000	(500)	19.00 (483)	19.12 (486)	1.50 (38)	2.00 (51)	4.87 (124)	5.62 (143)	11.00 (279)	3.52 (89)	100	120.0 (54.4)
3 (80)	150	(20)	8.00 (203)	8.50 (216)	2.00 (51)	3.00 (76)	3.75 (95)	6.96 (177)	11.88 (302)	4.83 (123)	420	50.0 (22.6)
	300	(50)	11.12 (282)	11.75 (299)	2.00 (51)	3.00 (76)	4.12 (105)	6.96 (177)	11.88 (302)	4.83 (123)	420	63.2 (28.6)
	600	(100)	14.00 (356)	14.12 (359)	2.00 (51)	3.00 (76)	4.12 (105)	6.96 (177)	11.88 (302)	4.83 (123)	420	76.0 (34.4)
900	(150)	15.00 (381)	15.12 (384)	2.00 (51)	3.00 (76)	4.75 (121)	6.96 (177)	11.88 (302)	4.83 (123)	420	97.0 (43.9)	
	1500	(250)	18.50 (470)	18.62 (473)	2.00 (51)	3.00 (76)	5.25 (133)	6.96 (177)	11.88 (302)	4.83 (123)	420	134.0 (60.7)
2500	(420)	22.75 (578)	23.00 (584)	2.00 (51)	3.00 (76)	6.00 (152)	7.77 (197)	23.89 (607)	4.83 (123)	420	223.0 (101.1)	
4 (100)	150	(20)	9.00 (229)	9.50 (241)	3.00 (76)	4.00 (102)	4.50 (114)	8.26 (210)	23.89 (607)	5.37 (137)	770	72.5 (32.8)
	300	(50)	12.00 (305)	12.63 (321)	3.00 (76)	4.00 (102)	5.00 (127)	8.26 (210)	23.89 (607)	5.37 (137)	770	99.0 (44.9)

NOTE: " A " dimension to be within ± 0.062 in. (1.5 mm).

FORGED STEEL FLOATING BALL VALVES STANDARD FEATURES

MODEL B3

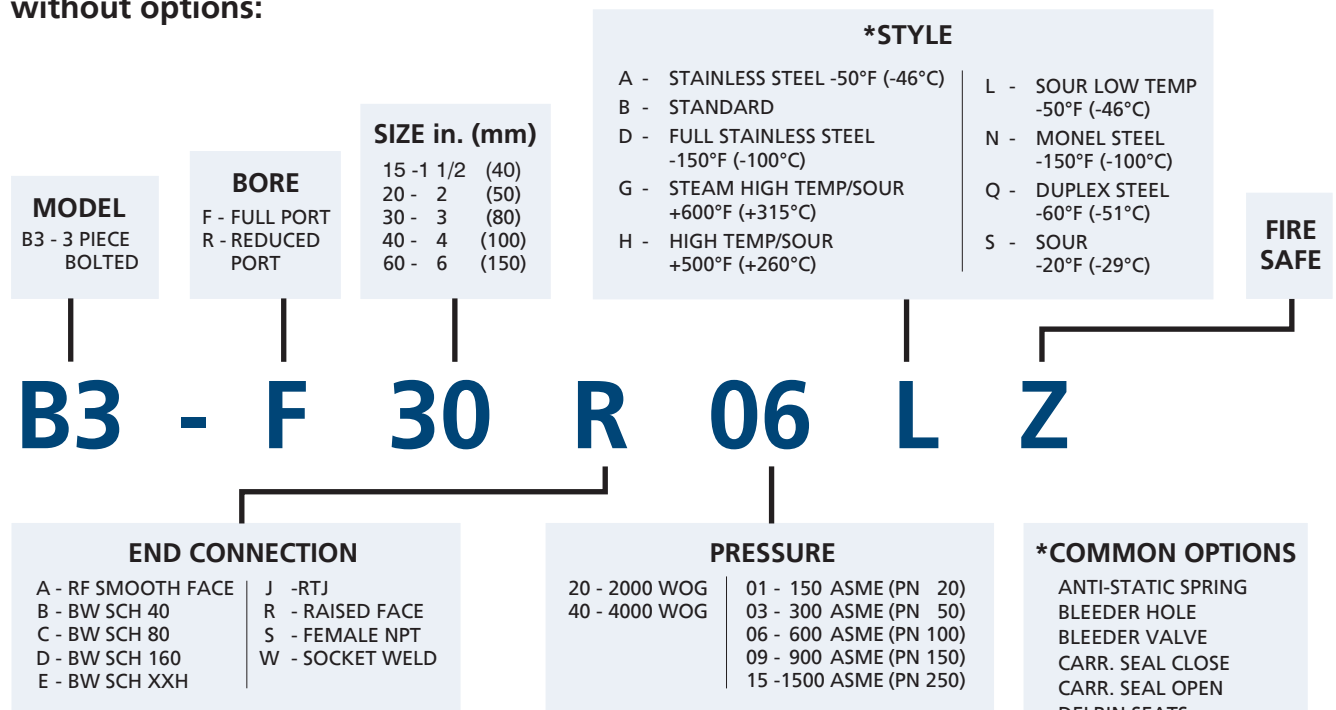


FORGED STEEL FLOATING BALL VALVES MODEL B3 SIZES AVAILABLE

ASME CLASS (PN)		150 (20)	300 (50)	600 (100)	900 (150)	1500 (250)
Full Port	in. (mm)	2 thru 4 (50 thru 100)	2 thru 4 (50 thru 100)	1 1/2 thru 3 (40 thru 80)	1 1/2 thru 3 (40 thru 80)	1 1/2 thru 3 (40 thru 80)
Reduced Port		3 thru 6 (80 thru 150)	3 thru 6 (80 thru 150)	2 thru 4 (50 thru 100)	2 thru 4 (50 thru 100)	2 thru 4 (50 thru 100)
WOG (psi)				2000		4000
Full Port	in. (mm)			3 (80)		3 (80)
Reduced Port				4 (100)		

ORDERING INFORMATION

How to develop typical figure numbers without options:



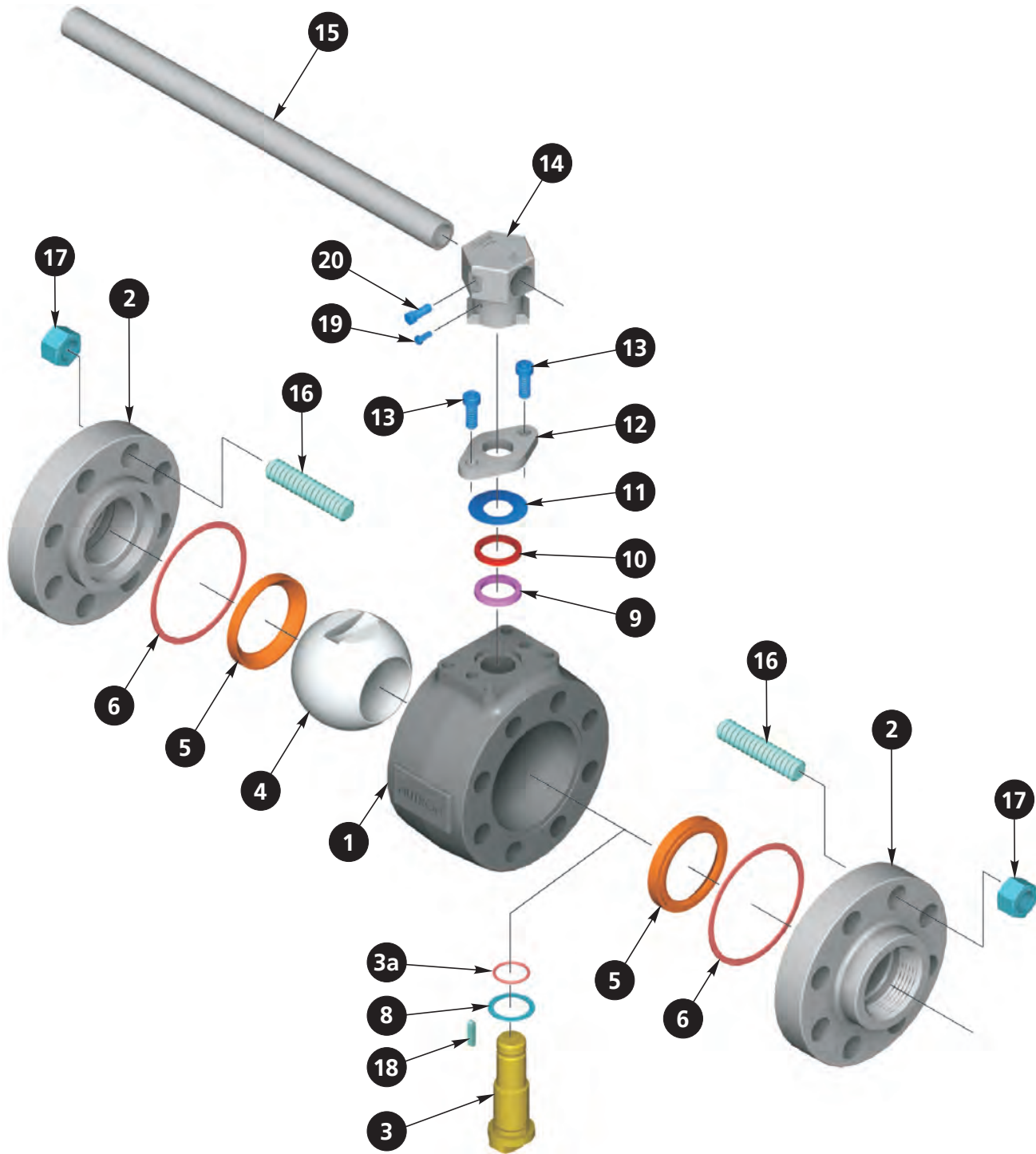
Examples:

B3-F30R06LZ = Model B3, Full Port, 3 in. (80 mm), Raised Face Flanges, 600 ASME (PN 100), Sour Low Temp Valve, Fire Safe.








* Consult Cameron, Valves & Measurement Sales Department for detailed valve style descriptions, full range of options, materials, actuation packages or for a particular special valve service application.








Cameron reserves the right to substitute materials listed on the following pages with alternate materials for the designated service.

**FORGED STEEL FLOATING BALL VALVES
MODEL B3 THREADED END CONNECTIONS**




FORGED STEEL FLOATING BALL VALVES MODEL B3 MATERIALS LIST - THREADED END CONNECTIONS

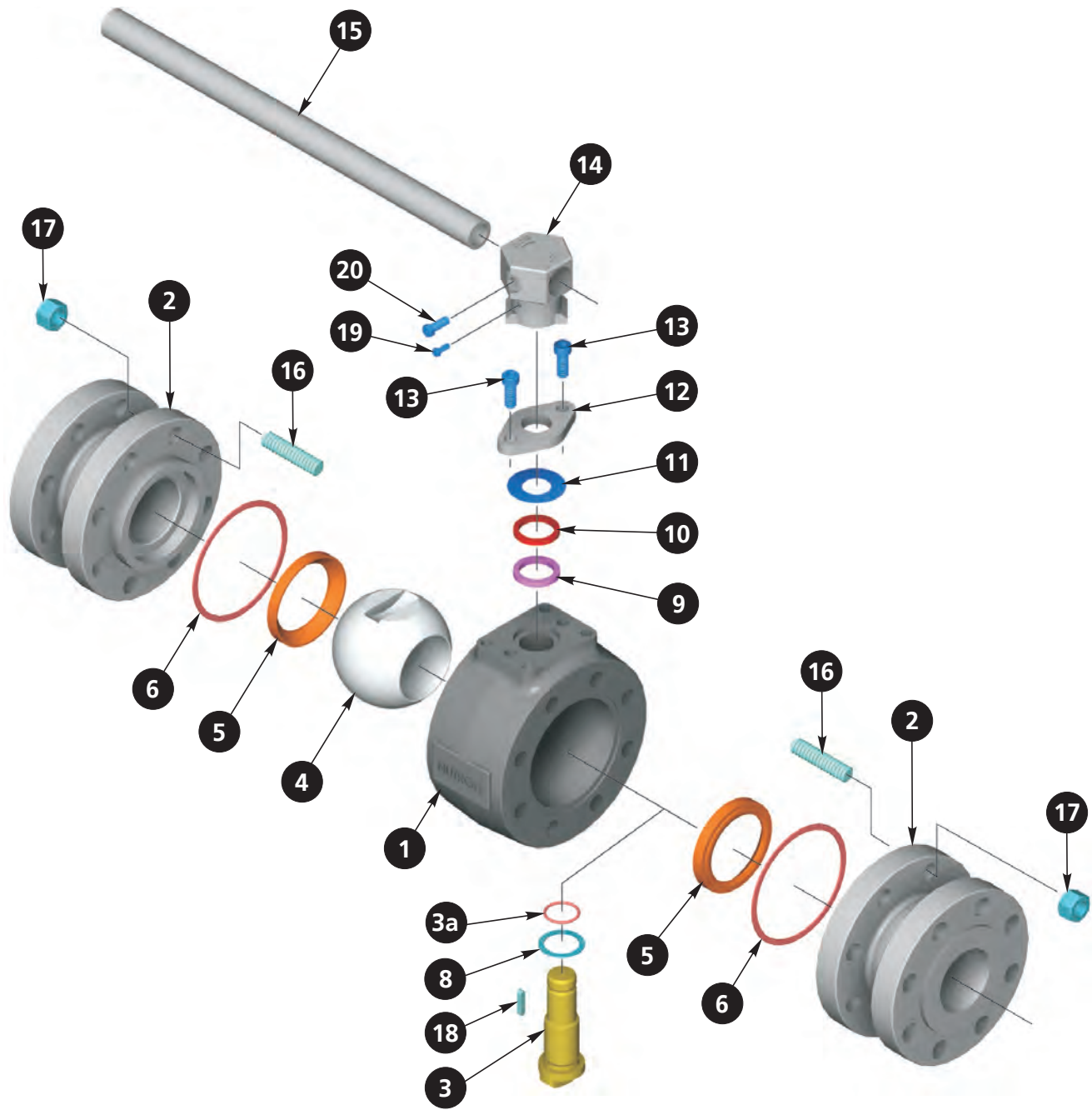
ITEM	PART	WORKING PRESSURE	STANDARD -20°F (-29°C)	SOUR -20°F (-29°C)
1	Body	All	ASTM A105	ASTM A105
2	End Caps	All	ASTM A350 LF2	ASTM A350 LF2
 3	Stem	All	ASTM A322 Gr. 4130, Plated	ASTM A564 17-4PH
 3a	Stem O-Ring	All	HSN	HSN
 4	Ball	All	Carbon Steel, Chrome Plated	ASTM A351 Gr. CF8M
 5	Seats	2000 4000	Teflon Delrin	Teflon Delrin
 6	Body Seals	All	Spiral Wound Gasket	Spiral Wound Gasket
 8	Thrust Washer	2000 4000	Teflon Delrin	Teflon Delrin
 9	Packing	2000/4000	Graphite/Teflon	Graphite/Teflon
10	Packing Follower	All	Carbon Steel, Plated	Stainless Steel
11	Belleville Washer	All	Carbon Steel	Stainless Steel
12	Gland Flange	All	Carbon Steel, Plated	Carbon Steel, Plated
13	Cap Screws	All	Carbon Steel	Stainless Steel
14	Handle Nut	All	Carbon Steel	Carbon Steel
15	Pipe	All	Carbon Steel	Carbon Steel
16	Studs	All	ASTM A193 B7	ASTM A193 B7M
17	Nuts	All	ASTM A194 2H	ASTM A194 2HM
18	Key	All	Carbon Steel	Carbon Steel
19	Screw	All	Carbon Steel, Plated	Carbon Steel, Plated
20	Screw	All	Carbon Steel, Plated	Carbon Steel, Plated

ITEM	PART	WORKING PRESSURE	SOUR & LOW TEMP -50°F (-46°C)	STAINLESS STEEL -50°F (-46°C)
1	Body	All	ASTM A350 LF2	ASTM A479 TYPE 316
2	End Caps	All	ASTM A350 LF2	ASTM A479 TYPE 316
 3	Stem	All	ASTM A564 17-4PH	ASTM A564 17-4PH with Nitriding
 3a	Stem O-Ring	All	HSN	HSN
 4	Ball	All	ASTM A351 Gr. CF8M	ASTM A351 Gr. CF8M
 5	Seats	2000 4000	Teflon Delrin	Teflon PEEK
 6	Body Seals	All	Spiral Wound Gasket	Spiral Wound Gasket
 8	Thrust Washer	2000 4000	Teflon Delrin	Teflon PEEK
 9	Packing	2000/4000	Graphite/Teflon	Graphite/Teflon
10	Packing Follower	All	Stainless Steel	Stainless Steel
11	Belleville Washer	All	Stainless Steel	Stainless Steel
12	Gland Flange	All	Carbon Steel, Plated	Carbon Steel, Plated
13	Cap Screws	All	Stainless Steel	Stainless Steel
14	Handle Nut	All	Carbon Steel	Carbon Steel
15	Pipe	All	Carbon Steel	Carbon Steel
16	Studs	All	ASTM A320 L7M	ASTM A320 L7M, Coated
17	Nuts	All	ASTM A194 L7M	ASTM A194 L7M, Coated
18	Key	All	Carbon Steel	Carbon Steel
19	Screw	All	Carbon Steel, Plated	Carbon Steel, Plated
20	Screw	All	Carbon Steel, Plated	Carbon Steel, Plated

 Major repair kit.








 Minor repair kit.








**FORGED STEEL FLOATING BALL VALVES
MODEL B3 FLANGED END CONNECTIONS
3 in. (80 mm) FULL PORT & 4 in. (100 mm) REDUCED PORT
ASME CLASS 600, 900 & 1500 (PN 100, 150 & 250)**





FORGED STEEL FLOATING BALL VALVES MODEL B3 MATERIALS LIST - FLANGED END CONNECTIONS

3 in. (80 mm) FULL PORT & 4 in. (100 mm) REDUCED PORT, ASME CLASS 600, 900 & 1500 (PN 100, 150 & 250)

ITEM	PART	ASME CLASS	STANDARD -20°F (-29°C)	SOUR -20°F (-29°C)
1	Body	All	ASTM A105	ASTM A105
2	End Caps	600, 900 & 1500	ASTM A105	ASTM A105
 3	Stem	All	ASTM A322 Gr. 4130, Plated	ASTM A564 17-4PH
 3a	Stem O-Ring	All	HSN	HSN
 4	Ball	All	ASTM A675 CHR. PL.	ASTM A351 Gr. CF8M
 5	Seats	600 900 & 1500	Teflon Delrin	Teflon Delrin
 6	Body Seals	All	Spiral Wound Gasket	Spiral Wound Gasket
 8	Thrust Washer	600 900 & 1500	Teflon Delrin	Teflon Delrin
 9	Packing	All	Graphite	Graphite
10	Packing Follower	All	Carbon Steel, Plated	Stainless Steel
11	Belleville Washer	All	Carbon Steel	Stainless Steel
12	Gland Flange	All	Carbon Steel, Plated	Carbon Steel, Plated
13	Cap Screws	All	Carbon Steel	Stainless Steel
14	Handle Nut	All	Carbon Steel	Carbon Steel
15	Pipe	All	Carbon Steel	Carbon Steel
16	Studs	All	ASTM A193 B7	ASTM A193 B7M
17	Nuts	All	ASTM A194 2H	ASTM A194 2HM
18	Key	All	Carbon Steel	Carbon Steel
19	Screw	All	Carbon Steel, Plated	Carbon Steel, Plated
20	Screw	All	Carbon Steel, Plated	Carbon Steel, Plated

ITEM	PART	ASME CLASS	SOUR & LOW TEMP -50°F (-46°C)	STAINLESS STEEL -50°F (-46°C)
1	Body	All	ASTM A350 LF2	ASTM A479 TYPE 316
2	End Caps	All	ASTM A350 LF2	ASTM A479 TYPE 316
 3	Stem	All	ASTM A564 17-4PH	ASTM A564 17-4PH with Nitriding
 3a	Stem O-Ring	All	HSN	HSN
 4	Ball	All	ASTM A351 Gr. CF8M	ASTM A351 Gr. CF8M
 5	Seats	600 900 & 1500	Teflon Delrin	Teflon PEEK
 6	Body Seals	All	Spiral Wound Gasket	Spiral Wound Gasket
 8	Thrust Washer	600 900 & 1500	Teflon Delrin	Teflon PEEK
 9	Packing	All	Graphite	Graphite
10	Packing Follower	All	Stainless Steel	Stainless Steel
11	Belleville Washer	All	Stainless Steel	Stainless Steel
12	Gland Flange	All	Carbon Steel, Plated	Carbon Steel, Plated
13	Cap Screws	All	Stainless Steel	Stainless Steel
14	Handle Nut	All	Carbon Steel	Carbon Steel
15	Pipe	All	Carbon Steel	Carbon Steel
16	Studs	All	ASTM A320 L7M	ASTM A320 L7M, Coated
17	Nuts	All	ASTM A194 L7M	ASTM A194 L7M, Coated
18	Key	All	Carbon Steel	Carbon Steel
19	Screw	All	Carbon Steel, Plated	Carbon Steel, Plated
20	Screw	All	Carbon Steel, Plated	Carbon Steel, Plated

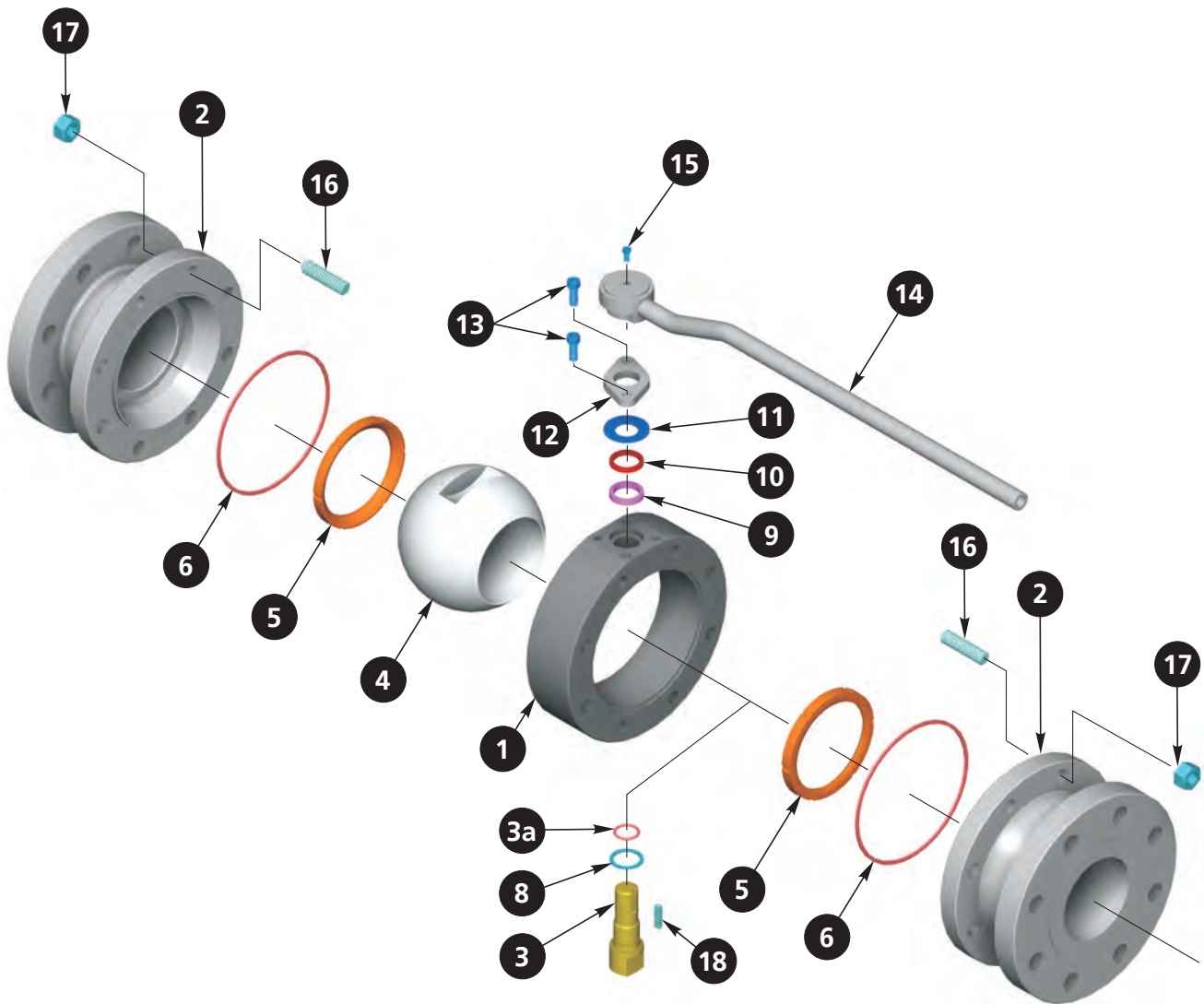
 Major repair kit.
 Minor repair kit.

Note: Fire safe trim offered as standard whenever possible.
 Consult Cameron, Valves & Measurement Sales Department for fire safe trim.

NUTRON®








CT-NUT-T3/B3-01
 02/11-ION-5M




**FORGED STEEL FLOATING BALL VALVES
 MODEL B3 - 4 in. (100 mm) FULL PORT / 6 in. (150 mm) REDUCED PORT
 ASME CLASS 150 & 300 (PN 20 & 50)**




FORGED STEEL FLOATING BALL VALVES MODEL B3 MATERIALS LIST

4 in. (100 mm) FULL PORT & 6 in. (150 mm) REDUCED PORT ASME CLASS 150 & 300 (PN 20 & 50)

ITEM	PART	SOUR -20°F (-29°C)	SOUR & LOW TEMP -20°F (-29°C)
1	Body	ASTM A105	ASTM A350 LF2
2	End Caps	ASTM A350 LF2	ASTM A350 LF2
 3	Stem	ASTM A564 17-4PH	ASTM A564 17-4PH
 3a	Stem O-Ring	HSN	HSN
 4	Ball	ASTM A351 Gr. CF8M	ASTM A351 Gr. CF8M
 5	Seats	Teflon	Teflon
 6	Body O-Rings	Viton	Viton
 8	Thrust Washer	Teflon	Teflon
 9	Packing	Graphite	Graphite
10	Packing Follower	Stainless Steel	Stainless Steel
11	Belleville Washer	Stainless Steel	Stainless Steel
12	Gland Flange	Carbon Steel, Plated	Carbon Steel, Plated
13	Cap Screws	Stainless Steel	Stainless Steel
14	Handle	Carbon Steel	Carbon Steel
15	Cap Screw, Hex Head	Carbon Steel	Carbon Steel
16	Studs	ASTM A193 B7M	ASTM A320 L7M
17	Nuts	ASTM A194 2HM	ASTM A194 L7M
18	Key	Carbon Steel	Carbon Steel

ITEM	PART	STAINLESS STEEL -50°F (-46°C)
1	Body	ASTM A479 TYPE 316
2	End Caps	ASTM A479 TYPE 316
 3	Stem	ASTM A564 17-4PH with Nitriding
 3a	Stem O-Ring	HSN
 4	Ball	ASTM A351 Gr. CF8M
 5	Seats	Teflon
 6	Body O-Rings	Teflon
 8	Thrust Washer	Teflon
 9	Packing	Graphite
10	Packing Follower	Stainless Steel
11	Belleville Washer	Stainless Steel
12	Gland Flange	Carbon Steel, Plated
13	Cap Screws	Stainless Steel
14	Handle	Carbon Steel
15	Cap Screw, Hex Head	Carbon Steel
16	Studs	ASTM A320 L7M, Coated
17	Nuts	ASTM A194 L7M, Coated
18	Key	Carbon Steel

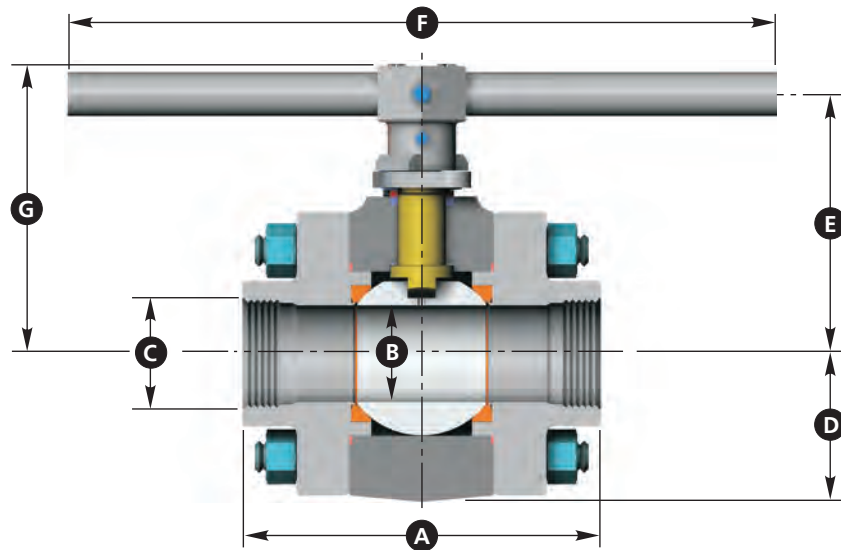
 Major repair kit.

 Minor repair kit.

FORGED STEEL FLOATING BALL VALVES

MODEL B3 THREADED

FULL PORT
3 in. (80 mm)
REDUCED PORT
4 in. (100 mm)



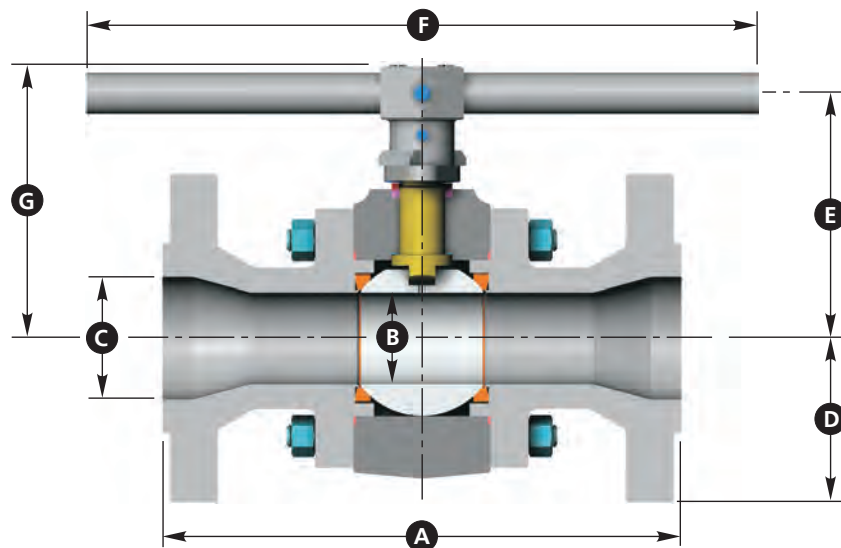
DIMENSIONS

SIZE in. (mm)	WOG	A	B	C	D	E	F	G	C _v	WEIGHT lb. (kg)
3 FP (80 FP)	2000	10.0 (254)	3.0 (76)	3.0 (76)	4.45 (113)	8.00 (203)	22.0 (559)	8.90 (226)	1300	131.0 (59.4)
	4000	10.0 (254)	3.0 (76)	3.0 (76)	4.45 (113)	8.00 (203)	22.0 (559)	8.90 (226)	1300	131.0 (59.4)
4 RP (100 RP)	2000	12.0 (305)	3.0 (76)	4.0 (102)	4.45 (113)	8.00 (203)	22.0 (559)	8.90 (226)	770	145.0 (65.7)

NOTE: " A " dimension to be within ± 0.062 in. (1.5 mm).

MODEL B3 FLANGED

FULL PORT
3 in. (80 mm)
REDUCED PORT
4 in. (100 mm)



DIMENSIONS

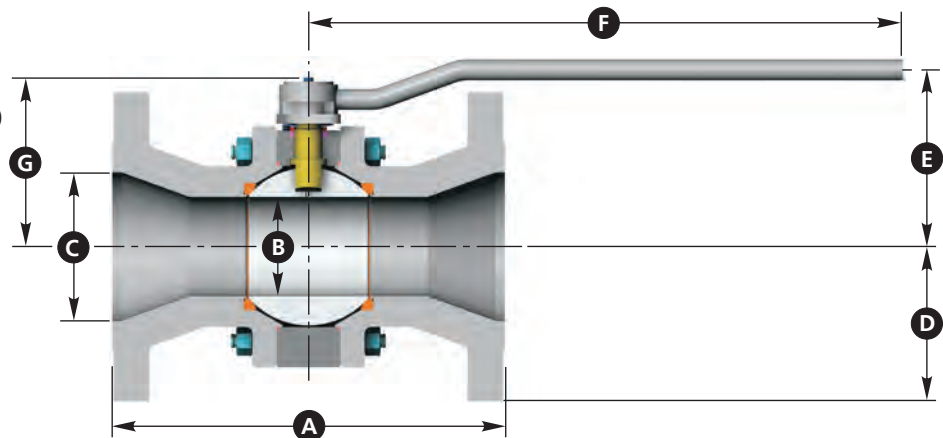
SIZE in. (mm)	ASME CLASS (PN)	A		B	C	D	E	F	G	C _v	WEIGHT lb. (kg)
		RF	RTJ								
3 FP (80 FP)	600 (100)	14.0 (356)	14.12 (359)	3.0 (76)	3.0 (76)	4.12 (105)	8.00 (203)	22.0 (559)	8.90 (226)	1300	161.0 (73.0)
	900 (150)	15.0 (381)	15.12 (384)	3.0 (76)	3.0 (76)	4.75 (121)	8.00 (203)	22.0 (559)	8.90 (226)	1300	191.0 (86.6)
	1500 (250)	18.5 (470)	18.62 (473)	3.0 (76)	3.0 (76)	5.25 (133)	8.00 (203)	22.0 (559)	8.90 (226)	1300	239.0 (108.4)
4 RP (100 RP)	600 (100)	17.0 (432)	17.12 (435)	3.0 (76)	4.0 (102)	5.37 (136)	8.00 (203)	22.0 (559)	8.90 (226)	770	211.0 (95.7)
	900 (150)	18.0 (457)	18.12 (460)	3.0 (76)	4.0 (102)	5.75 (146)	8.00 (203)	22.0 (559)	8.90 (226)	770	242.0 (109.7)
	1500 (250)	21.5 (546)	21.62 (549)	3.0 (76)	4.0 (102)	6.12 (155)	8.00 (203)	22.0 (559)	8.90 (226)	770	292.0 (132.4)

NOTE: " A " dimension to be within ± 0.062 in. (1.5 mm).

FORGED STEEL FLOATING BALL VALVES

MODEL B3 FLANGED

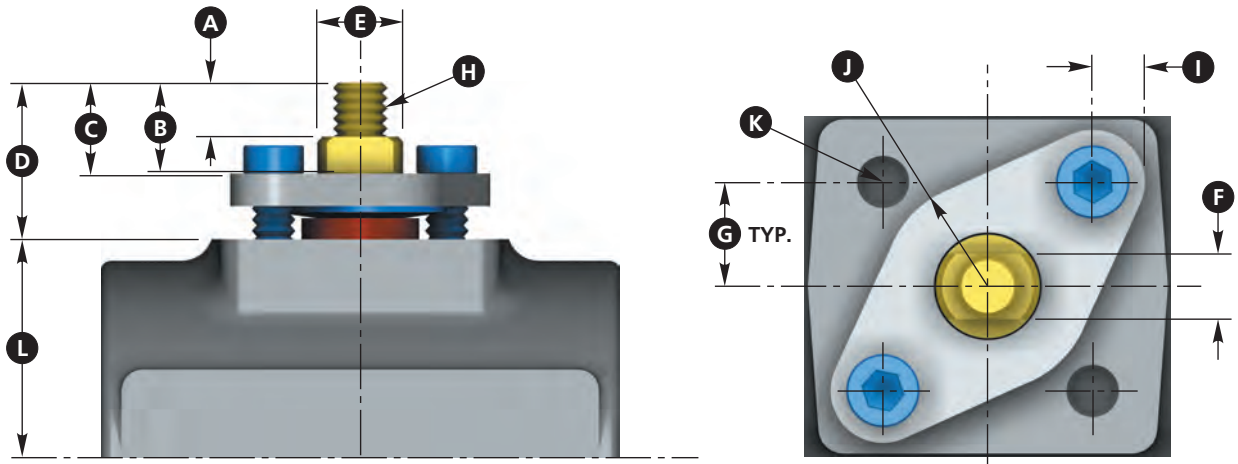
FULL PORT
4 in. (100 mm)
REDUCED PORT
6 in. (150 mm)



DIMENSIONS

SIZE in. (mm)	ASME CLASS (PN)	A	B	C	D	E	F	G	C _v	WEIGHT lb. (kg)
4 FP (100 FP)	150 (20)	9.00 (229)	4.00 (102)	4.00 (102)	4.50 (114)	7.60 (193)	24.00 (610)	6.65 (169)	2300	101 (45.8)
	300 (50)	12.00 (305)	4.00 (102)	4.00 (102)	5.00 (127)	7.60 (193)	24.00 (610)	6.65 (169)	2300	143 (64.8)
6 RP (150 RP)	150 (20)	10.50 (267)	4.00 (102)	6.00 (152)	5.50 (140)	7.60 (193)	24.00 (610)	6.65 (169)	1800	128 (58.0)
	300 (50)	15.88 (403)	4.00 (102)	6.00 (152)	6.25 (160)	7.60 (193)	24.00 (610)	6.65 (169)	1800	143 (64.8)

MODEL T3 ACTUATOR MOUNTING DIMENSIONS



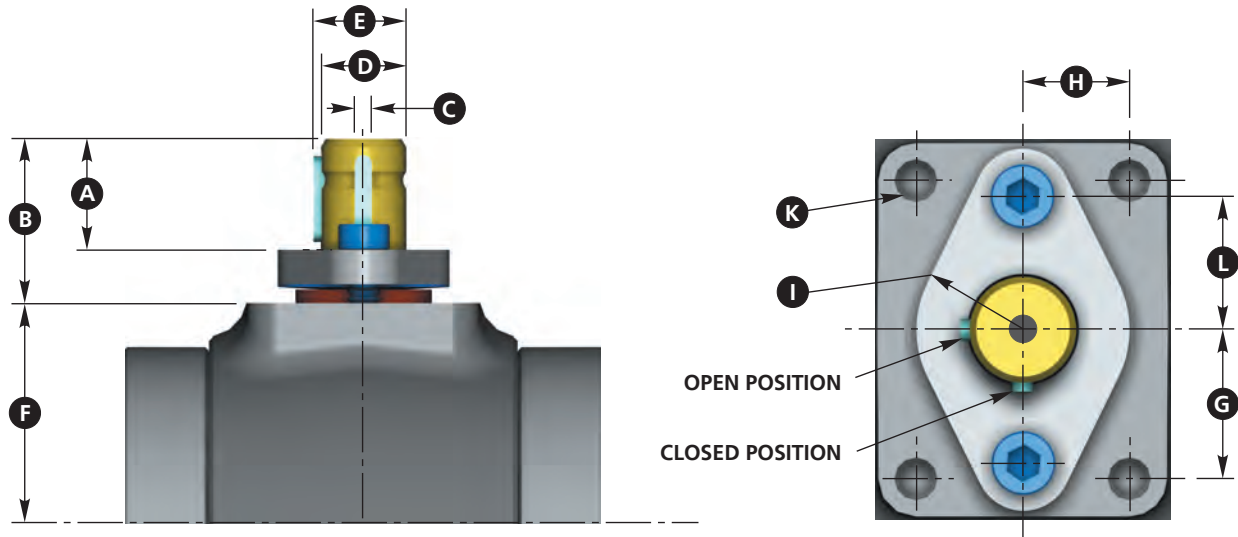
DIMENSIONS

SIZE in. (mm)	A	B	C	D	E	F	G	H	I	J	K	L
1/4 FP (8 FP)	0.300 (7.6)	0.440 (11.1)	0.500 (12.7)	0.725 (18.4)	0.464 (11.8)	0.253 (6.4)	0.468 (11.9)	0.250-20 UNC (6.35-20 UNC)	0.23 (5.8)	0.50 (12.7)	#10-32 UNF-2B x 0.31 DP. (#10-32 UNF-2B x 7.9 DP.)	1.002 (25.5)
3/8 FP (10 FP)	0.300 (7.6)	0.440 (11.1)	0.500 (12.7)	0.725 (18.4)	0.464 (11.8)	0.253 (6.4)	0.468 (11.9)	0.250-20 UNC (6.35-20 UNC)	0.23 (5.8)	0.50 (12.7)	#10-32 UNF-2B x 0.31 DP. (#10-32 UNF-2B x 7.9 DP.)	1.002 (25.5)
1/2 FP / 3/4 RP (15 FP / 20 RP)	0.300 (7.6)	0.440 (11.1)	0.500 (12.7)	0.725 (18.4)	0.464 (11.8)	0.253 (6.4)	0.468 (11.9)	0.250-20 UNC (6.35-20 UNC)	0.23 (5.8)	0.50 (12.7)	#10-32 UNF-2B x 0.31 DP. (#10-32 UNF-2B x 7.9 DP.)	1.002 (25.5)
3/4 FP / 1 RP (20 FP / 25 RP)	0.312 (7.9)	0.515 (13.1)	0.560 (14.2)	0.905 (23.0)	0.496 (12.6)	0.314 (7.9)	0.498 (12.6)	0.312-18 UNC (7.92-18 UNC)	0.25 (6.4)	0.50 (12.7)	0.25-28 UNF-2B x 0.30 DP. (6.35-28 UNF-2B x 7.6 DP.)	1.250 (31.8)
*1 1/2 FP / 2 RP (*40 FP / 50 RP)	0.475 (12.1)	0.826 (21.0)	0.900 (22.9)	1.270 (32.3)	0.749 (19.0)	0.441 (11.2)	0.737 (18.7)	0.438-14 UNC (11.1-14 UNC)	0.40 (10.2)	0.75 (19.1)	0.312-24 UNF-2B x 0.437 DP. (7.92-24 UNF-2B x 11.1 DP.)	2.250 (57.2)
2 FP / 3 RP (50 FP / 80 RP)	0.690 (17.5)	1.180 (30.0)	1.225 (31.1)	1.821 (46.3)	1.000 (25.4)	0.628 (16.0)	0.875 (22.2)	0.625-11 UNC (15.9-11 UNC)	0.41 (10.4)	1.00 (25.4)	0.375-24 UNF-2B x 0.50 DP. (9.53-24 UNF-2B x 12.7 DP.)	3.000 (76.2)
3 FP / 4 RP (80 FP / 100 RP)	0.690 (17.5)	1.180 (30.0)	1.225 (31.1)	1.821 (46.3)	1.000 (25.4)	0.628 (16.0)	0.875 (22.2)	0.625-11 UNC (15.9-11 UNC)	0.41 (10.4)	1.00 (25.4)	0.375-24 UNF-2B x 0.50 DP. (9.53-24 UNF-2B x 12.7 DP.)	3.500 (88.9)

- * Applies to B3 1 1/2 in. (40 mm) full port & 2 in. (50 mm) reduced port ASME Class 600, 900 & 1500 valves.
- ** Applies to B3 2 in. (50 mm) full port & 3 in. (80 mm) reduced port ASME Class 600, 900 & 1500 valves.
- *** Applies to B3 3 in. (80 mm) full port & 4 in. (100 mm) reduced port ASME Class 150 & 300 valves.

FORGED STEEL FLOATING BALL VALVES MODEL B3 ACTUATOR MOUNTING DIMENSIONS*

3 in. (80 mm) FULL PORT
4 in. (100 mm) REDUCED PORT

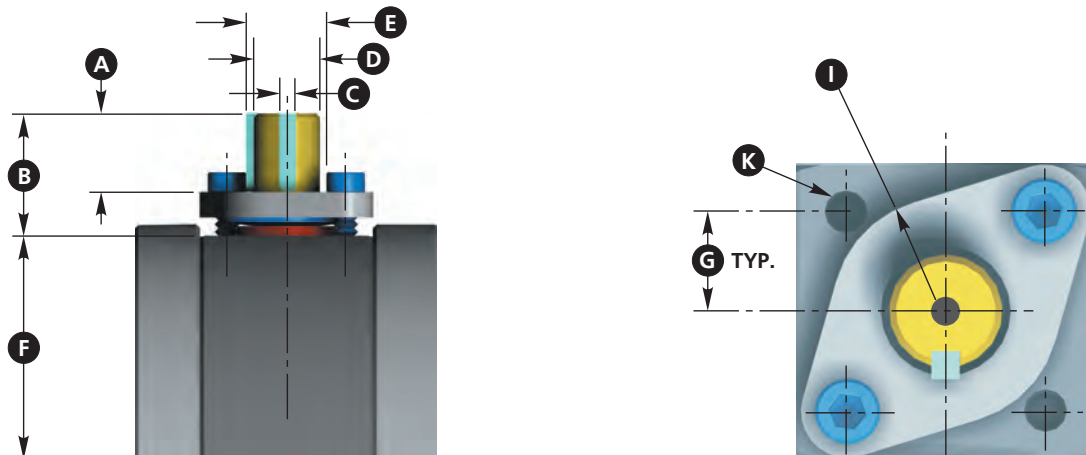


DIMENSIONS

SIZE in. (mm)	A	B	C	D	E	F	G	H	I	K	L
3 FP / 4 RP (80 FP / 100 RP)	1.64 (41.7)	2.395 (60.8)	0.25 (6.4)	1.248 (31.7)	1.362 (34.6)	4.875 (123.8)	1.75 (44.4)	1.25 (31.8)	1.25R (31.8R)	0.5-13UNC-2B x 0.62 DP. (12.7-13UNC-2B x 15.7 DP.)	1.566 (39.8)

(ASME 600-1500, WOG 2000-4000)

4 in. (100 mm) FULL PORT
6 in. (150 mm) REDUCED PORT



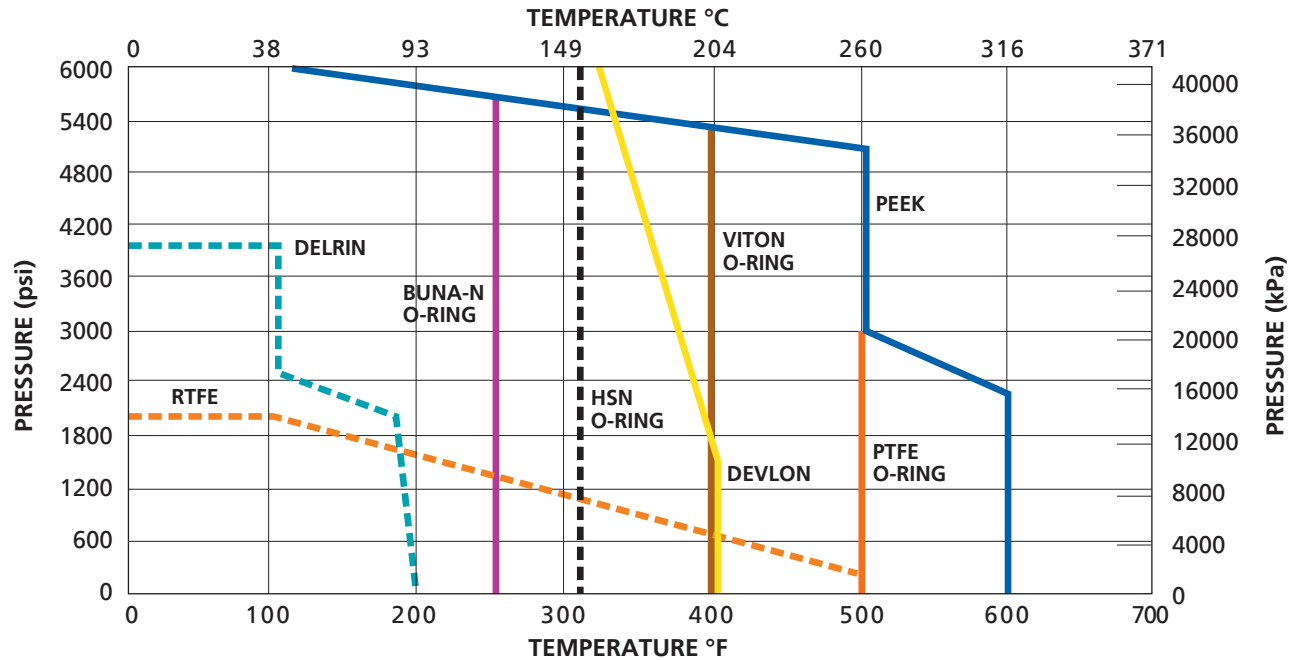
DIMENSIONS

SIZE in. (mm)	A	B	C	D	E	F	G	K	I
4 FP / 6 RP (100 FP / 150 RP)	1.255 (31.9)	1.85 (47.0)	0.25 (6.4)	1.00 (25.4)	1.11 (28.2)	4.688 (119.1)	0.877 (22.3)	0.375-24UNF-2B x 0.5 DEEP (9.5-24UNF-2B x 12.7 DEEP)	1.00 (25.4)

(ASME 150 / 300)

* For B3 1 1/2 in., 2 in., 3 in. & 4 in. (40 mm, 50 mm, 80 mm & 100 mm) valves, see footnote on page 25.

FORGED STEEL FLOATING BALL VALVES MODEL T3 & B3 PRESSURE/TEMPERATURE RATINGS (SEATS AND SEALS)*



* Consult ASME B16.34 for Body and Adapter Material Pressure/Temperature Ratings.

MODEL T3 & B3 BREAKAWAY TORQUE DATA

Torque=inch-pounds

Bore Size in. (DN)	ASME CLASS (PN) Pressure (psi) Seat Material	Pressure (psi)											
		0	150 (20)	300 (50)	1000	600 (100)	900 (150)	1500 (250)	4000	5000	2500 (420)	6000	
1/2 (15)	Peek	72	84	96	108	120	132	144	156	180	192	216	240
	Devlon	72	84	96	108	120	132	144	156	180	192	216	240
	Delrin	60	72	84	96	108	120	132	144	168	180	-	-
	Teflon	60	72	84	96	108	120	-	-	-	-	-	-
7/8 (22)	Peek	276	276	276	276	276	300	324	360	420	444	540	660
	Devlon	96	108	120	132	144	156	168	180	192	204	240	300
	Delrin	96	108	120	132	144	156	168	180	192	204	-	-
	Teflon	96	108	120	132	144	156	-	-	-	-	-	-
1 1/2 (40)	Peek	600	648	696	744	792	840	864	936	1020	1080	1200	1500
	Devlon	360	420	480	576	660	720	792	900	960	1020	1080	1260
	Delrin	336	396	480	576	660	720	792	900	960	1020	-	-
	Teflon	336	360	396	420	456	504	-	-	-	-	-	-
2 (50)	Peek	840	1080	1440	1680	1920	2100	2280	2700	3120	3300	3600	4200
	Devlon	600	720	900	1080	1200	1500	1680	1920	2160	2400	2400	2880
	Delrin	600	720	900	1080	1320	1560	1740	2040	2280	2520	-	-
	Teflon	600	636	816	936	1128	1344	-	-	-	-	-	-
3 (80)	Peek	960	1440	2760	3840	4800	5760	6480	7200	8400	9000	-	-
	Devlon	720	1200	1920	2400	2880	3360	3600	4080	4800	5760	-	-
	Delrin	840	1380	2280	2640	3000	3600	3900	4200	4800	5760	-	-
	Teflon	720	1320	1920	2400	2880	3600	-	-	-	-	-	-
4 (100)	Peek	1440	2400	3840	-	-	-	-	-	-	-	-	-
	Devlon	1200	2040	3120	-	-	-	-	-	-	-	-	-
	Teflon	1080	1944	2820	-	-	-	-	-	-	-	-	-

Torque values shown are to be used as a guide for actuator selection. All above torque values are based upon clean liquid service. Additional factors such as media characteristics, number of cycles and temperature may require an additional safety factor. Please contact the actuator supplier/manufacturer for these factors.

TRADEMARK INFORMATION

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Trademark	Owner
Devlon	Devol Engineering Limited
Impreglon	S.R. Metal Protection Ltd.
Inconel	INCO Nickel Sales, Inc.
Monel	INCO Alloys International, Inc.
Teflon	E.I. DuPont De Nemours & Company
Viton	E.I. DuPont De Nemours & Company

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