



Valves, Automation & Controls

# *SERIES 66*



*HIGH PURITY TUBE  
3-PIECE BALL VALVE*

**SMITH-COOPER®**  
INTERNATIONAL

# Design & Features

## Tube Full Port Design (TFP)

Tube full port maintains unrestricted flow of media.

## 3-Piece Design

In-line serviceable swing out center section allows easy access to internal valve components without disturbing alignment of tubing.

## Integral Mounting Pad

Permits easy field conversion from manual operation to power actuation.

## Lockable Handle

All Sharpe Series 66 ball valves supplied with lever handles are designed to permit locking the valve in either the open or closed position.

## Stem Design

Live loaded, bottom entry, blowout proof, anti-static stem, features packing that extends valve cycle life over conventional ball valves and is the best choice for actuation.

## Encapsulated Body Bolts

Heavy duty stainless steel bolting is protected from outside environment and is ideal for wash downs.

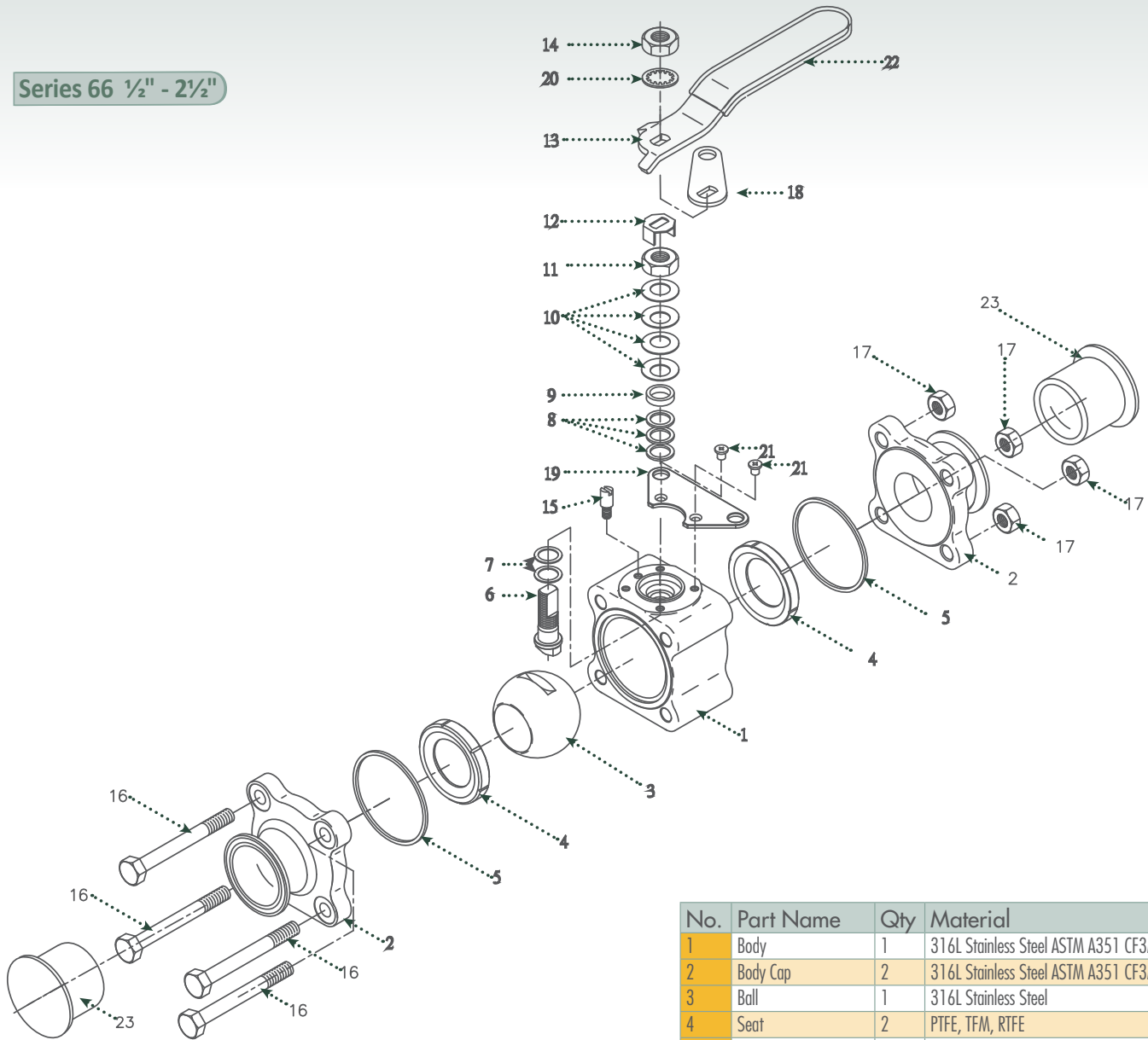
## Material Traceability

Body and end piece castings are marked with heat codes providing traceability to the chemical analysis and material test reports performed at the foundry. CMTR's (Certified Material Test Reports) are available upon request.



# Parts & Materials

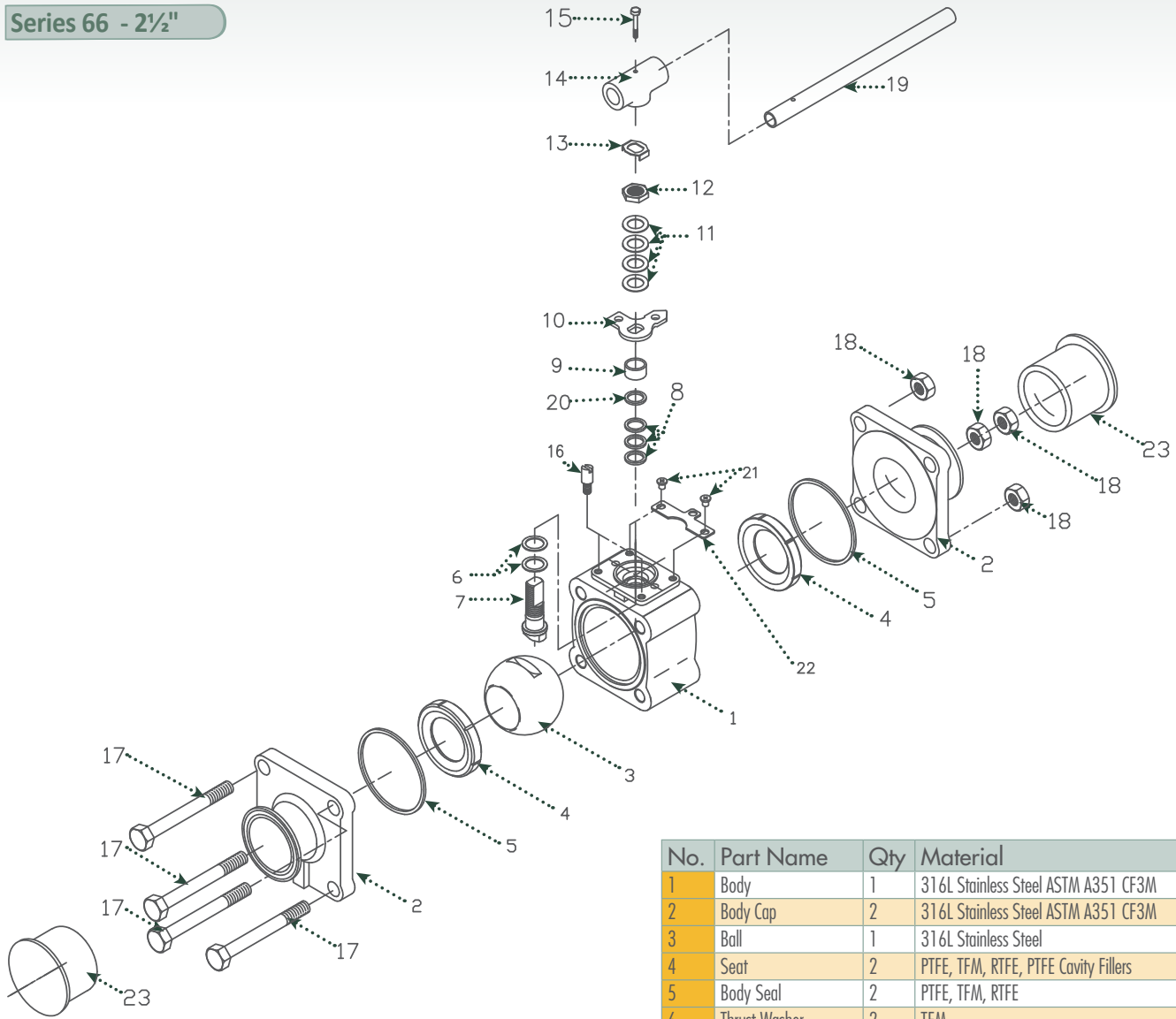
Series 66 1/2" - 2 1/2"



No.	Part Name	Qty	Material
1	Body	1	316L Stainless Steel ASTM A351 CF3M
2	Body Cap	2	316L Stainless Steel ASTM A351 CF3M
3	Ball	1	316L Stainless Steel
4	Seat	2	PTFE, TFM, RTFE
5	Body Seal	2	PTFE, TFM
6	Stem	1	316L Stainless Steel
7	Thrust Washer	2	TFM, Polyill, Peek
8	Stem Seal	3	TFM, Polyill, Peek
9	Gland	1	300 Series Stainless Steel
10	Belleville Washer	4	300 Series Stainless Steel
11	Packing Nut	1	300 Series Stainless Steel
12	Lock Tab	1	300 Series Stainless Steel
13	Handle	1	300 Series Stainless Steel
14	Handle Nut	1	300 Series Stainless Steel
15	Stop Screw	1	300 Series Stainless Steel
16	Body Bolts	4	304 Stainless Steel
17	Body Nuts	4	316 Stainless Steel
18	Upper Stopper	1	300 Series Stainless Steel
19	Lower Stopper	1	300 Series Stainless Steel
20	Teeth Washer	1	300 Series Stainless Steel
21	Screw	2	300 Series Stainless Steel
22	Handle Cover	1	PVC
23	Protection Cover	2	PVC

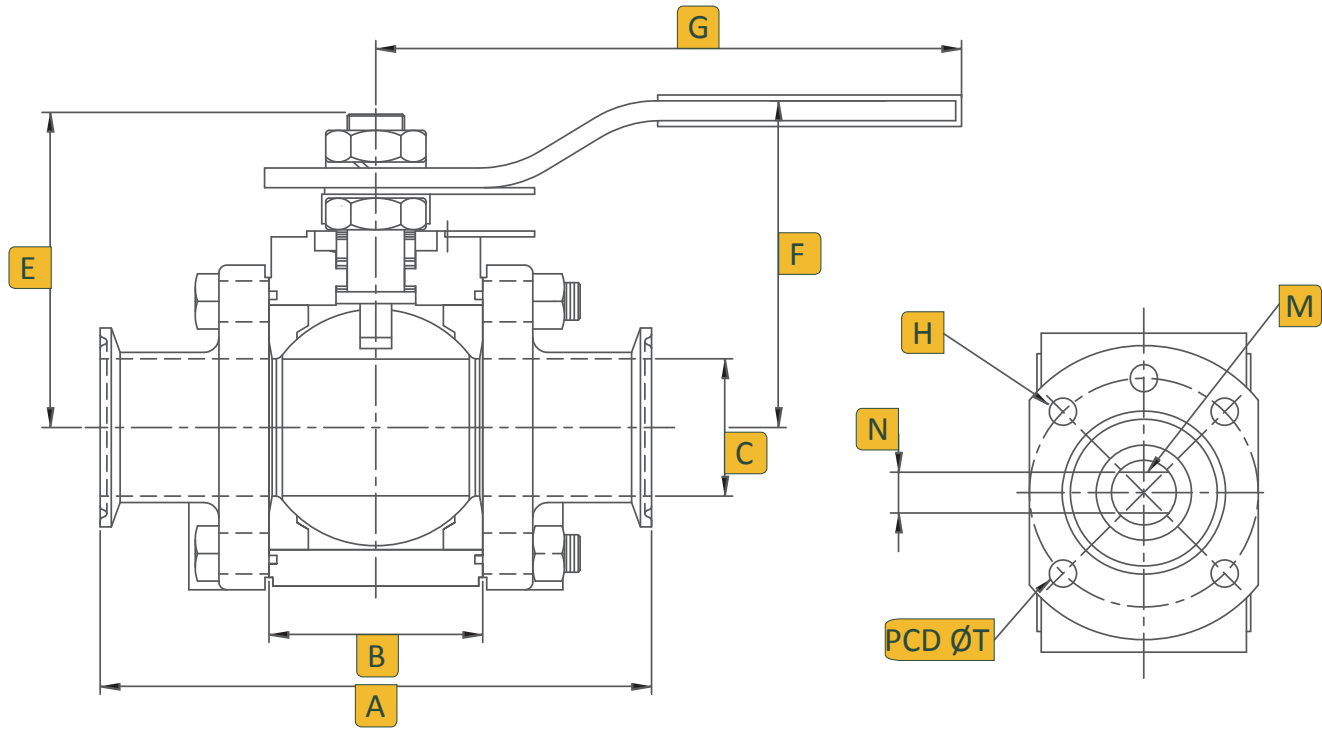
# Parts & Materials

Series 66 - 2½"



No.	Part Name	Qty	Material
1	Body	1	316L Stainless Steel ASTM A351 CF3M
2	Body Cap	2	316L Stainless Steel ASTM A351 CF3M
3	Ball	1	316L Stainless Steel
4	Seat	2	PTFE, TFM, RTFE, PTFE Cavity Fillers
5	Body Seal	2	PTFE, TFM, RTFE
6	Thrust Washer	2	TFM
7	Stem	1	316L Stainless Steel
8	Stem Seal	3	MG1241, TFM, RTFE
9	Gland	1	304 Stainless Steel
10	Stopper	1	304 Stainless Steel
11	Belleville Washer	4	301 Stainless Steel
12	Packing Nut	1	304 Stainless Steel
13	Lock Tab	1	304 Stainless Steel
14	Wrench Block	1	304 Stainless Steel
15	Handle Bolt	1	304 Stainless Steel
16	Stop Pin	1	304 Stainless Steel
17	Body Bolts	4	304 Stainless Steel
18	Body Nuts	4	316 Stainless Steel
19	Handle	1	304 Stainless Steel
20	Gland Washer	1	304 Stainless Steel
21	Screw	2	304 Stainless Steel
22	Lower Stopper	1	304 Stainless Steel
23	Protection Cap	2	PVC

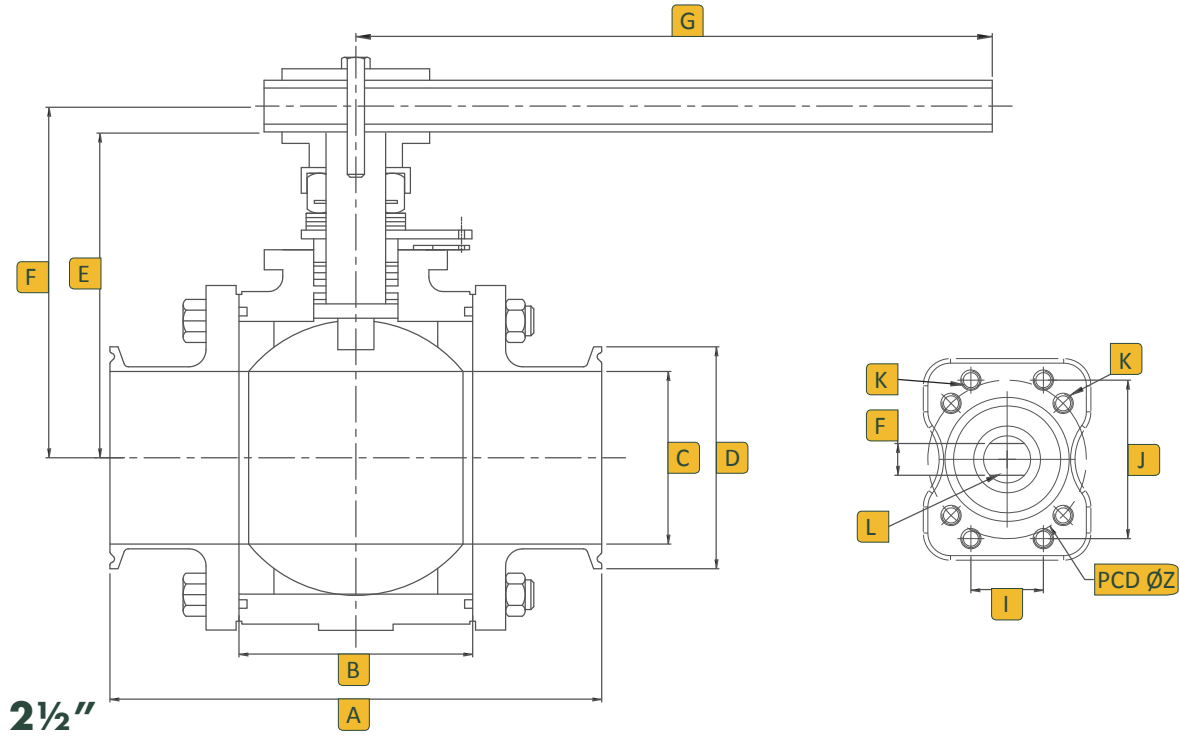
# Dimensions 1/2" - 2"



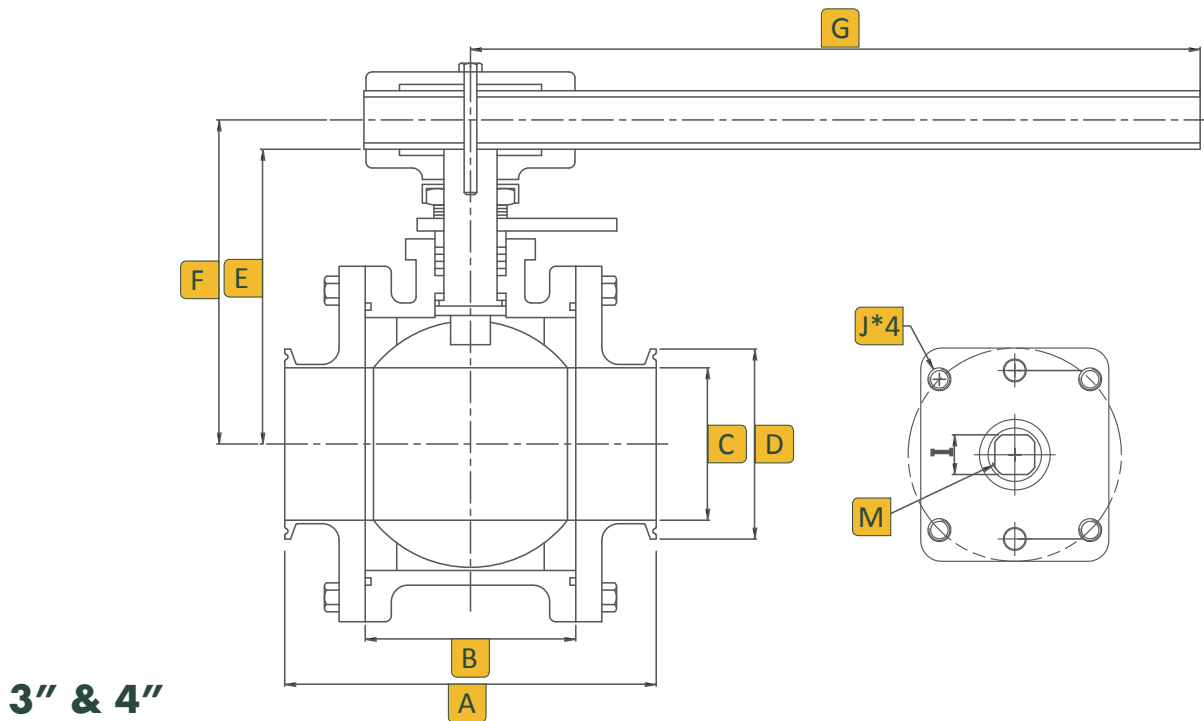
Size	A	B	C	E	F	G	H	T	N	M
1/2	3.50	0.97	0.37	1.64	2.23	4.50	M5	1.42	0.22	3/8-24
3/4	4.00	1.05	0.62	1.69	2.28	4.50	M5	1.42	0.22	3/8-24
1	4.50	1.54	0.87	2.36	2.84	5.79	M5	1.65	0.30	7/16-20
1-1/2	5.50	2.13	1.37	3.06	3.33	6.78	M6	1.97	0.35	9/16-18
2	6.25	2.66	1.87	3.43	3.68	6.78	M6	1.97	0.35	9/16-18



# Dimensions 2½" - 4"



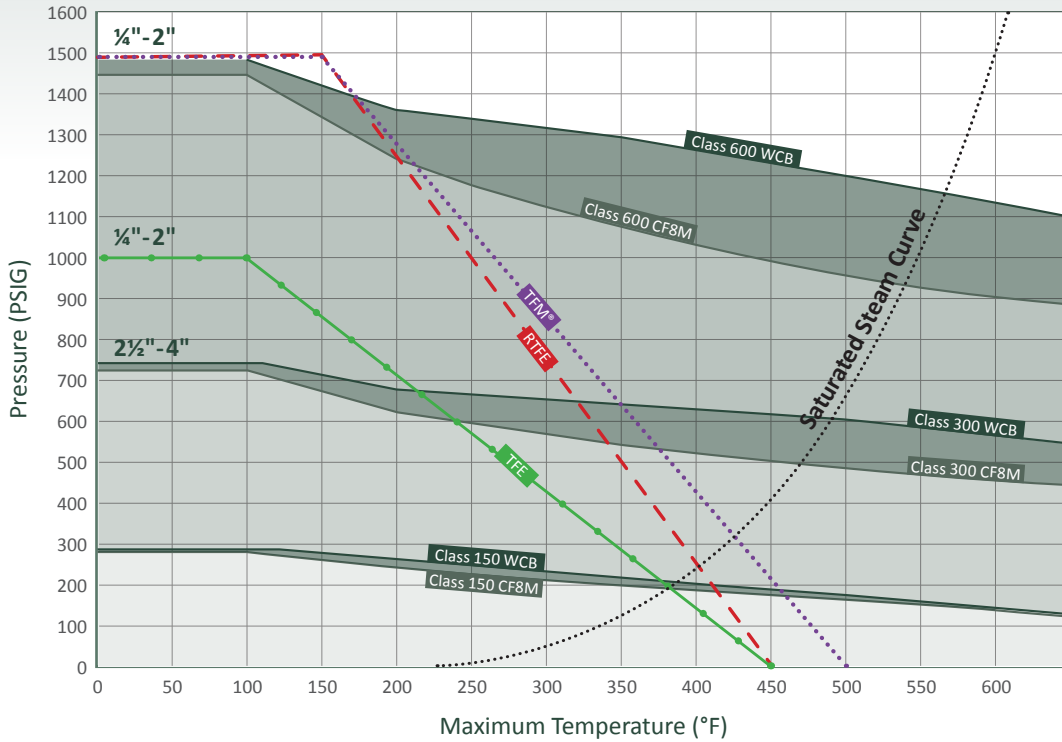
Size	A	B	C	D	E	F	G	I	J	K	Z	L
2-1/2	6.75	3.20	2.37	3.34	4.87	5.98	8.74	1.95	2.76	M8	2.76	M20*P25



Size	A	B	C	D	E	F	G	I	J	M
3	6.75	3.96	2.87	5.50	6.54	6.52	13.80	0.75	M10	1.14
4	8.25	4.73	3.83	6.97	7.13	7.05	13.80	0.75	M10	1.14

# Technical Information

## Pressure - Temperature Chart



Size	C <sub>v</sub>
1/4	1.5
3/8	3.2
1/2	8.1
3/4	28.6
1	67
1-1/4	110
1-1/2	192
2	434
2-1/2	779
3	1123
4	2054

## How to Order

Fig: 2 - 66 - 6 - 6 - R - T - CE

Description: 2" - 66 - Stainless Steel Body Ball & Stem - RTFE Seat - PTFE Seal - Clamp Ends

Size	Series	Body & Ends	Ball & Stem	Seat	Seal	Ends	Options
1/2	66	6	316L Stainless Steel	R	RTFE	T	PTFE
3/4			316L Stainless Steel	T	PTFE	M	TFM <sup>®**</sup>
1				M	TFM <sup>®**</sup>		
1-1/2				C	Cavity Filler		
2						CE	Clamp 180 Grit
2-1/2						BE	Butt-weld Tube, Short 18-24 Ra (180 Grit)
3						BTE	Butt-weld Tube Extended 18-24 Ra (180 Grit)
4							X Oxygen Clean* SF Silicone Free* OH Oval Handle*

\*\*TFM is a registered trademark of Dyleon, LLC

Due to continuous development of our product range, we reserve the right to change the dimensions and information for this product as required.

\*POA