



Valves, Automation & Controls

SERIES 86



***INSTRUMENTATION
TUBE FULL PORT
BALL VALVE***

SMITH-COOPER[®]
INTERNATIONAL

Design & Features

Body Material

316L Stainless Steel

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.

Floating Ball Design

Precision engineered and machined solid stainless steel ball with relief hole in the stem slot prevents build-up of cavity pressure while the valve is open.

Stem Design

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

Stem seals are live-loaded using Belleville springs to provide consistent sealing forces, reducing or eliminating the need for frequent seal adjustment.

ISO 5211 Integral Mounting Pad

Ideal for actuation.

Centering lip feature assures precise alignment of bracket, stem and coupler.

Actuators may be retrofitted on existing Sharpe® Series 86 without disruption of line integrity.

Allows for secondary containment unit to be added when necessary.

Tongue and Groove Design

Fully encapsulated body seals, allowing ends to be welded in-line, without time consuming and labor intensive disassembly.

Design compensates for bolt expansion and reduces the chance of external leakage.

Helps prevent seal ruptures in high pressure, cryogenic or steam applications.

Encapsulated Body Bolts

Heavy duty stainless steel bolting is protected from outside environment assuring valve integrity.

Ideal for wash-downs.

Lockable Handle

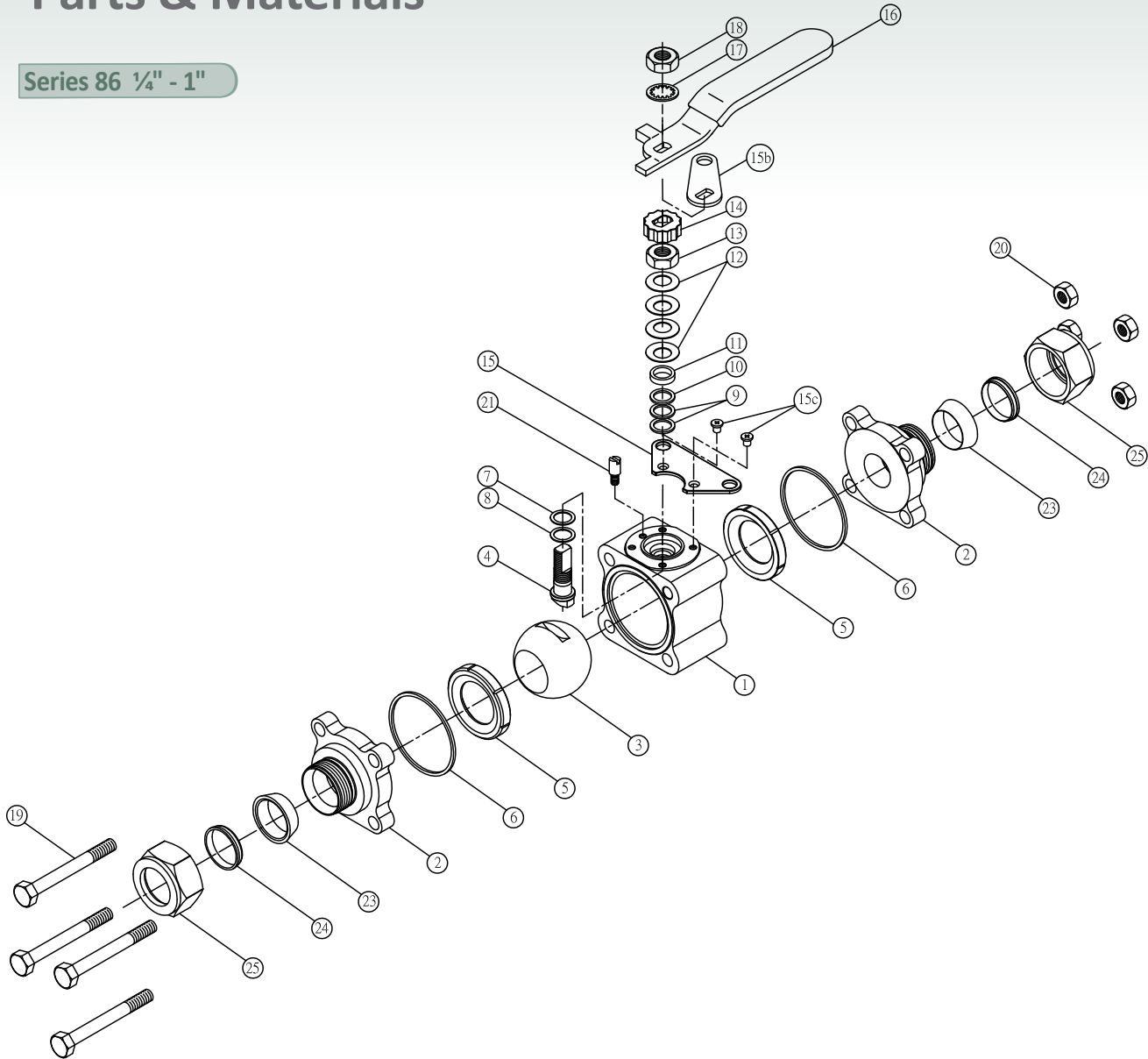
All Sharpe® Series 86 valves are supplied with lever handles and are designed to permit locking the valve in either the open or closed position.

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

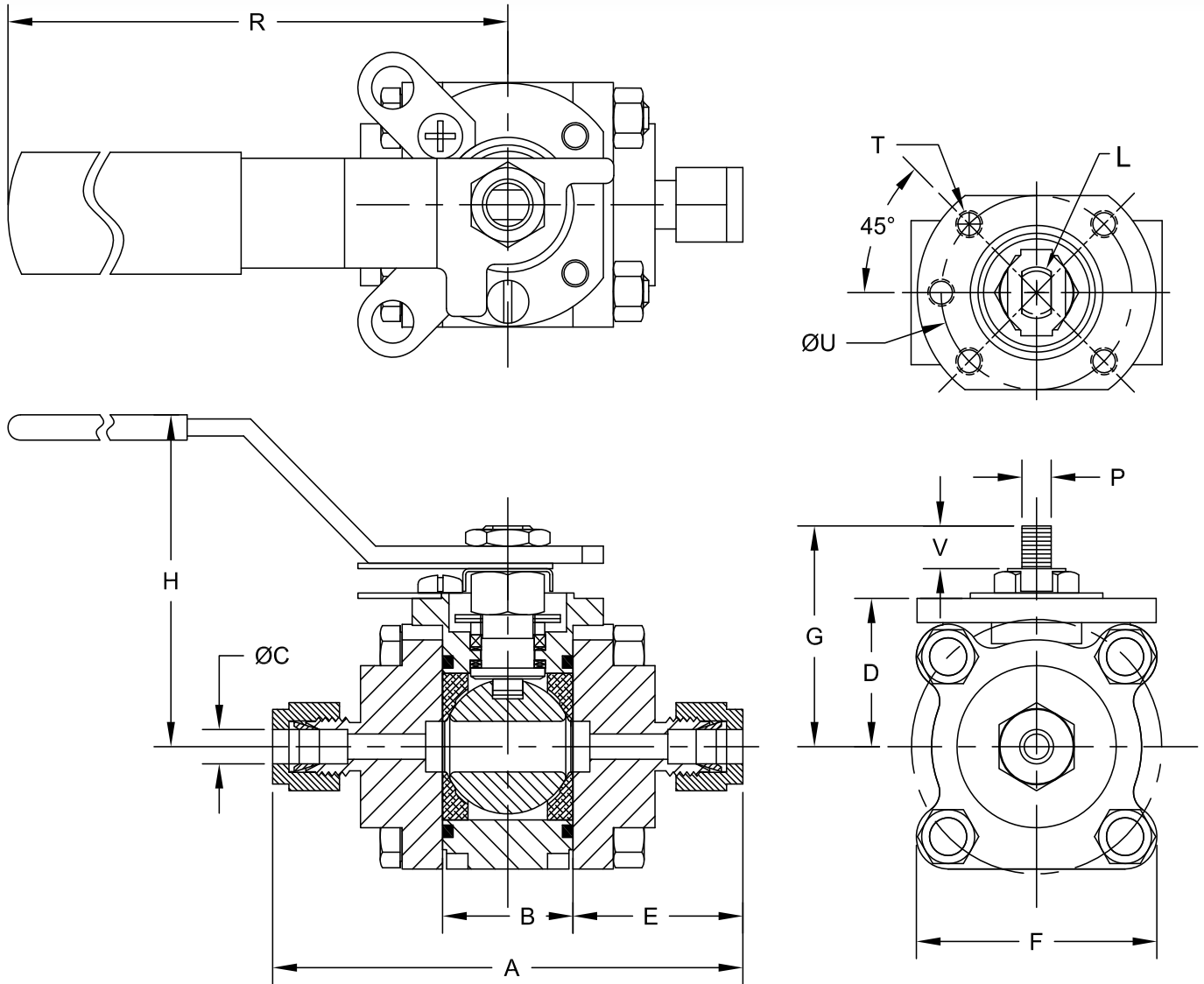
Series 86 1/4" - 1"



No.	Part Name	Qty	Material
1	Body	1	316L Stainless Steel ASTM ASTM351 CF3M
2	Instrument Ends	2	316L Stainless Steel ASTM ASTM351 CF3M
3	Ball	1	316L Stainless Steel
4	Stem	1	316L Stainless Steel
5	Seat	2	PTFE RTFE TFM® PTFE Cavity Filler
6	Body Seal	2	PTFE TFM®
7	Thrust Bearing	1	TFM®
8	Thrust Bearing	1	TFM®
9	Stem Packing	2	TFM®
10	Seal Protector	1	TFM®

No.	Part Name	Qty	Material
11	Gland	1	300 Series Stainless Steel
12	Belleville Washer	4	300 Series Stainless Steel
13	Packing Nut	1	300 Series Stainless Steel
14	Lock Tab	1	300 Series Stainless Steel
15	Lower Lock Latch	1	300 Series Stainless Steel
15B	Upper Lock Latch	1	300 Series Stainless Steel
15C	Latch Bolt	2	300 Series Stainless Steel
16	Handle	1	300 Series Stainless Steel
17	Lock Washer	1	300 Series Stainless Steel
18	Handle Nut	1	300 Series Stainless Steel
19	Body Bolts	4	304 Stainless Steel
20	Nuts	4	316 Stainless Steel
21	Stop Pin	1	300 Series Stainless Steel
23	Front Ferrule	2	316 Stainless Steel
24	Back Ferrule	2	316 Stainless Steel
25	Companion Nut	2	316 Stainless Steel, Silver Plated

Dimensions



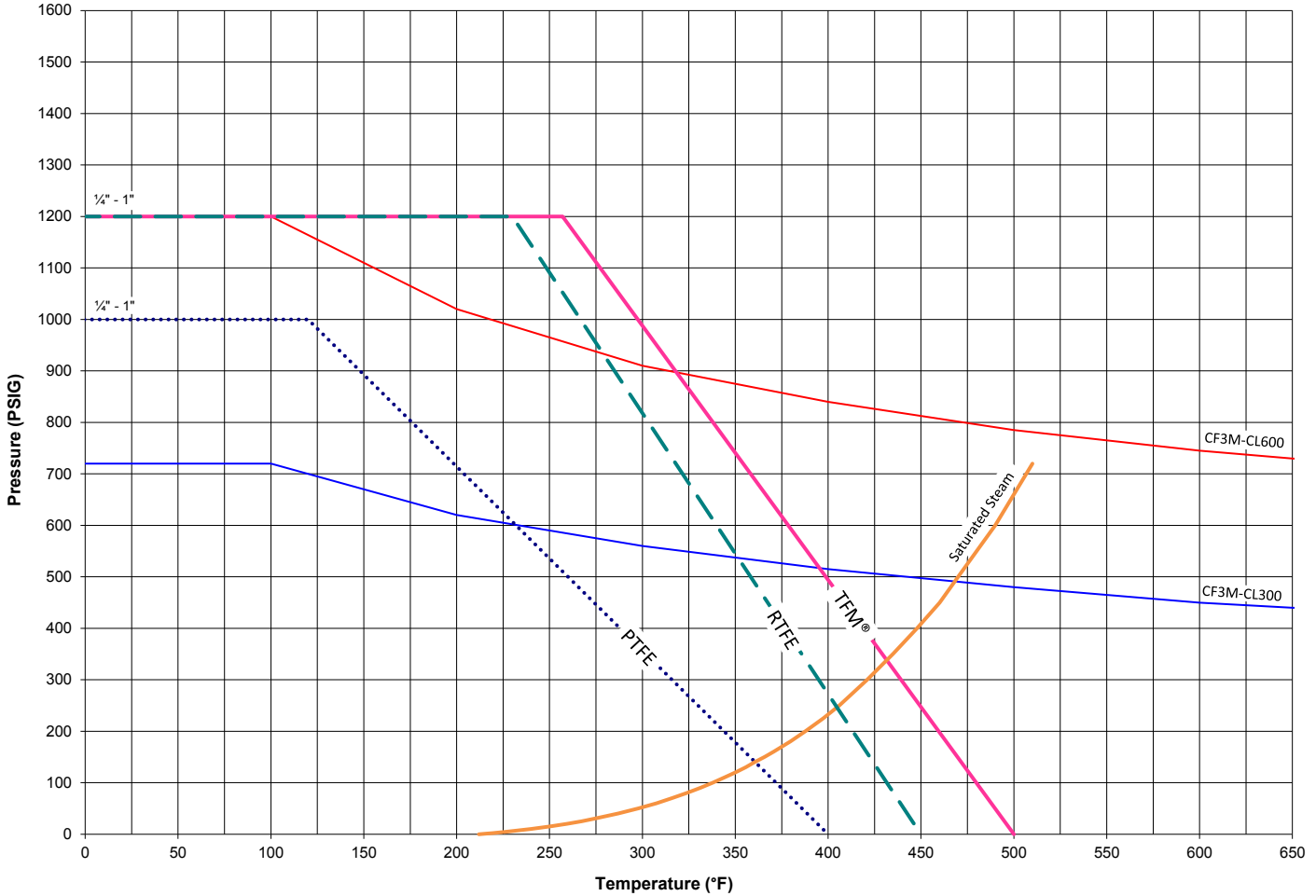
Dimensions (Inches)

Size	A	B	C	D	E	F	G	H	L	P	R	T	U	V
1/4	3.59	0.97	0.254	1.10	1.31	1.75	1.64	2.23	3/8-24	.218/.220	4.50	M5x.8	1.42(F03)	0.45
3/8	3.65	0.97	0.380	1.10	1.37	1.75	1.64	2.23	3/8-24	.218/.220	4.50	M5x.8	1.42(F03)	0.45
1/2	3.91	0.97	0.505	1.10	1.47	1.75	1.64	2.23	3/8-24	.218/.220	4.50	M5x.8	1.42(F03)	0.45
3/4	4.13	1.05	0.755	1.16	1.54	2.05	1.69	2.28	3/8-24	.218/.220	4.50	M5x.8	1.42(F03)	0.39
1	5.12	1.54	0.997	1.62	1.79	2.42	2.36	2.84	7/16-20	.293/.295	5.79	M5x.8	1.65(F04)	0.65

The dimensions above are for informational purpose only. Please refer to Sharpe® Valves if you need dimensions for construction.

Technical Information

Pressure-Temperature Ratings Series 86



* Ratings are for the valve body, specific ends may cause the ratings to change.

How To Order

Fig: 3/4 - 86 - 6 - 6 - R - T - IE

Size	Series	Body	Ball & Stem	Seat	Seal	Ends	Options						
1/4	86	6	316L Stainless Steel	6	316L Stainless Steel	T	PTFE	T	PTFE	IE	Instrumentation End Threaded Ends (NPT)*	OH X SF	Oval Handle Oxygen Clean* (as per Mfg's Standards) Silicone Free*
3/8						M	TFM®	M	TFM®				
1/2						R	RTFE						
3/4						C	PTFE Cavity Fillers						
1													

Due to continuous development of our product range, we reserve the right to change the dimensions and information for this product as required.
TFM® is a registered trademark of Dyneon, LLC.

*POA



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