



Valves, Automation & Controls

SERIES D84



DIVERTER BALL VALVE

SMITH-COOPER®
INTERNATIONAL

Design & Features

Body Material

316 Stainless Steel & Carbon Steel

3-Piece Diverter Design

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

Stem Design

Live-loaded, bottom entry, blowout proof, anti-static 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.

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.

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 D84 without disruption of line integrity.

Allows for secondary containment unit to be added when necessary.

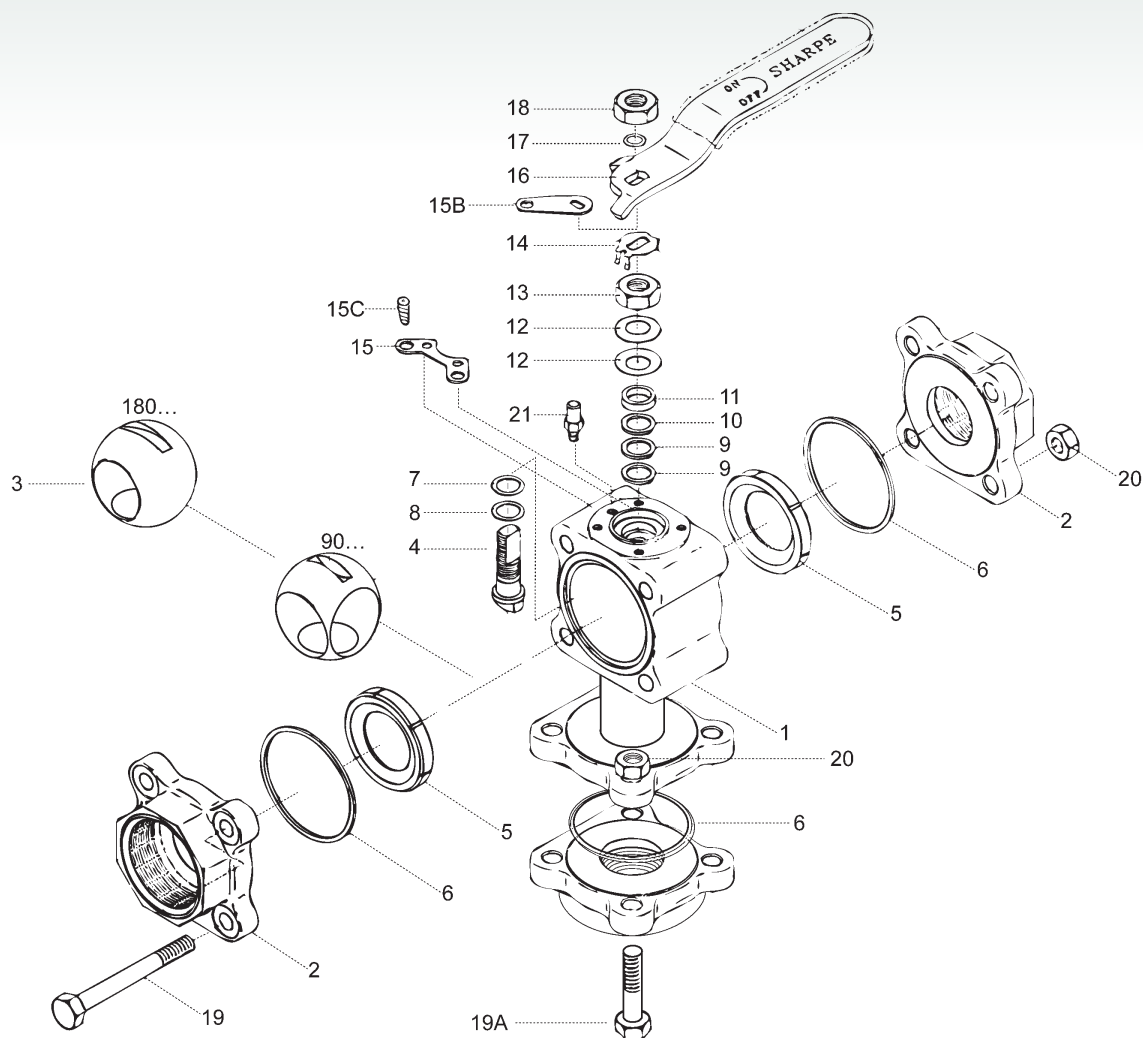
Lockable Handle

All Sharpe® Series D84 valves are supplied with lockable lever or pipe handles.

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.

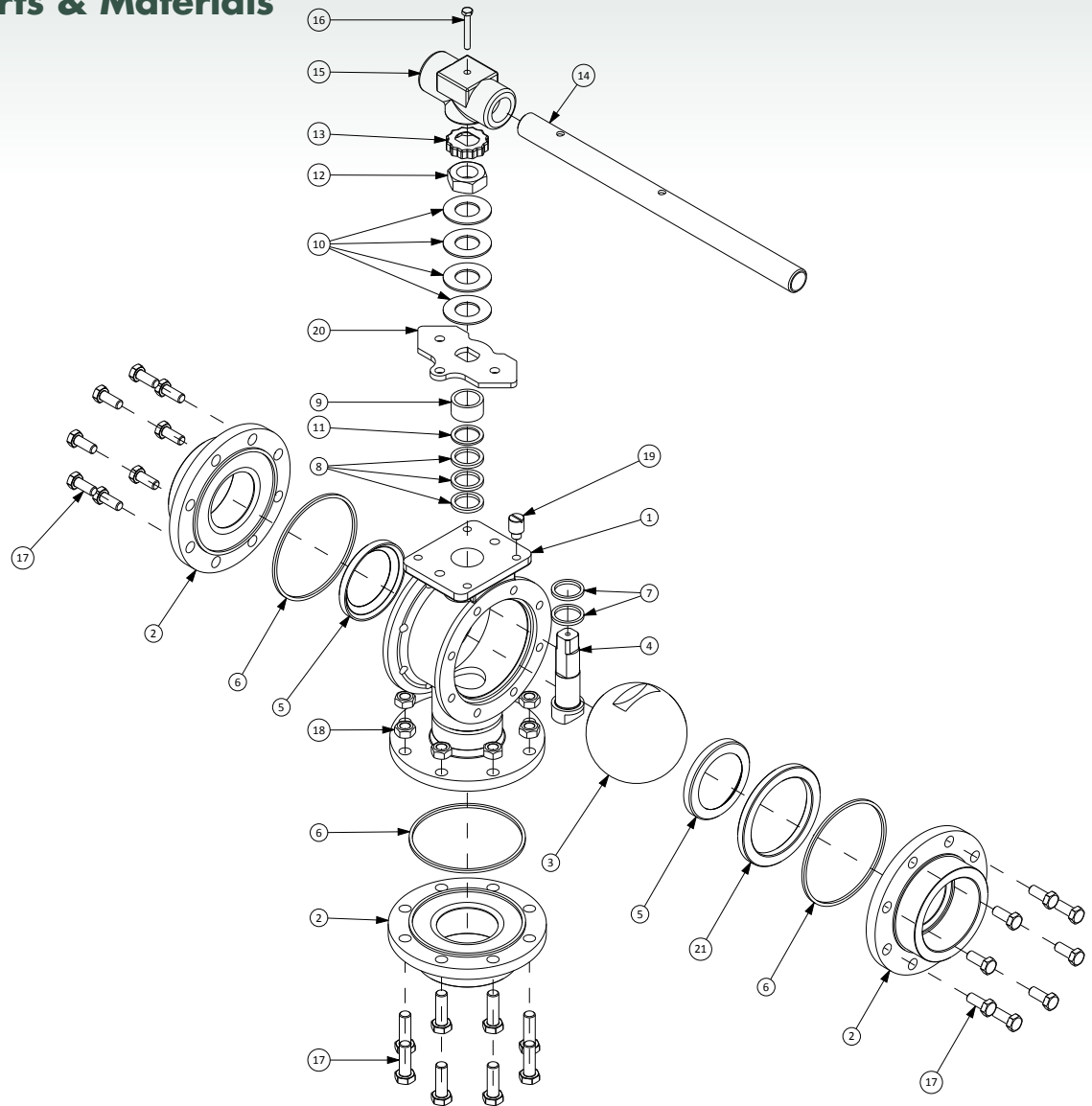
½" - 2½" Parts & Materials



No.	Part Name	Qty	Material
1	Body	1	316 Stainless Steel ASTM A351 CF8M
2	Pipe Ends	3	316 Stainless Steel ASTM A351 CF8M 316L Stainless Steel ASTM A351 CF3M Carbon Steel, ASTM A216 WCB
3	Ball	1	316 Stainless Steel
4	Stem	1	316 Stainless Steel
5	Valve Seat	2	PTFE, TFM®, UHMWPE RTFE, Nova, PEEK, Delrin®
6	Body Seal	3	PTFE, TFM®, Grafoil, Buna, Neoprene UHMWPE, EPR, Viton®
7	Thrust Bearing	1	Nova (UHMWPE with UHMWPE Seats)
8	Thrust Bearing	1	PEEK (UHMWPE with UHMWPE Seats)
9	Stem Packing	2	Nova (UHMWPE with UHMWPE Seats)
10	Seat Protector	1	PEEK
11	Gland	1	300 Series Stainless Steel
12	Belleville Washer	2 Sets	300 Series Stainless Steel

No.	Part Name	Qty	Material
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 (1/4" - 2")	1	300 Series Stainless Steel
17	Lock Washer	1	300 Series Stainless Steel
18	Handle Nut (1/4" - 2")	1	300 Series Stainless Steel
19	Body Bolts	4	300 Series Stainless Steel
19A	Body Connector Bolt	4	300 Series Stainless Steel
20	Nuts	8	300 Series Stainless Steel
21	Stop Pin (1/4" - 1/2")	1	300 Series Stainless Steel
		2	300 Series Stainless Steel

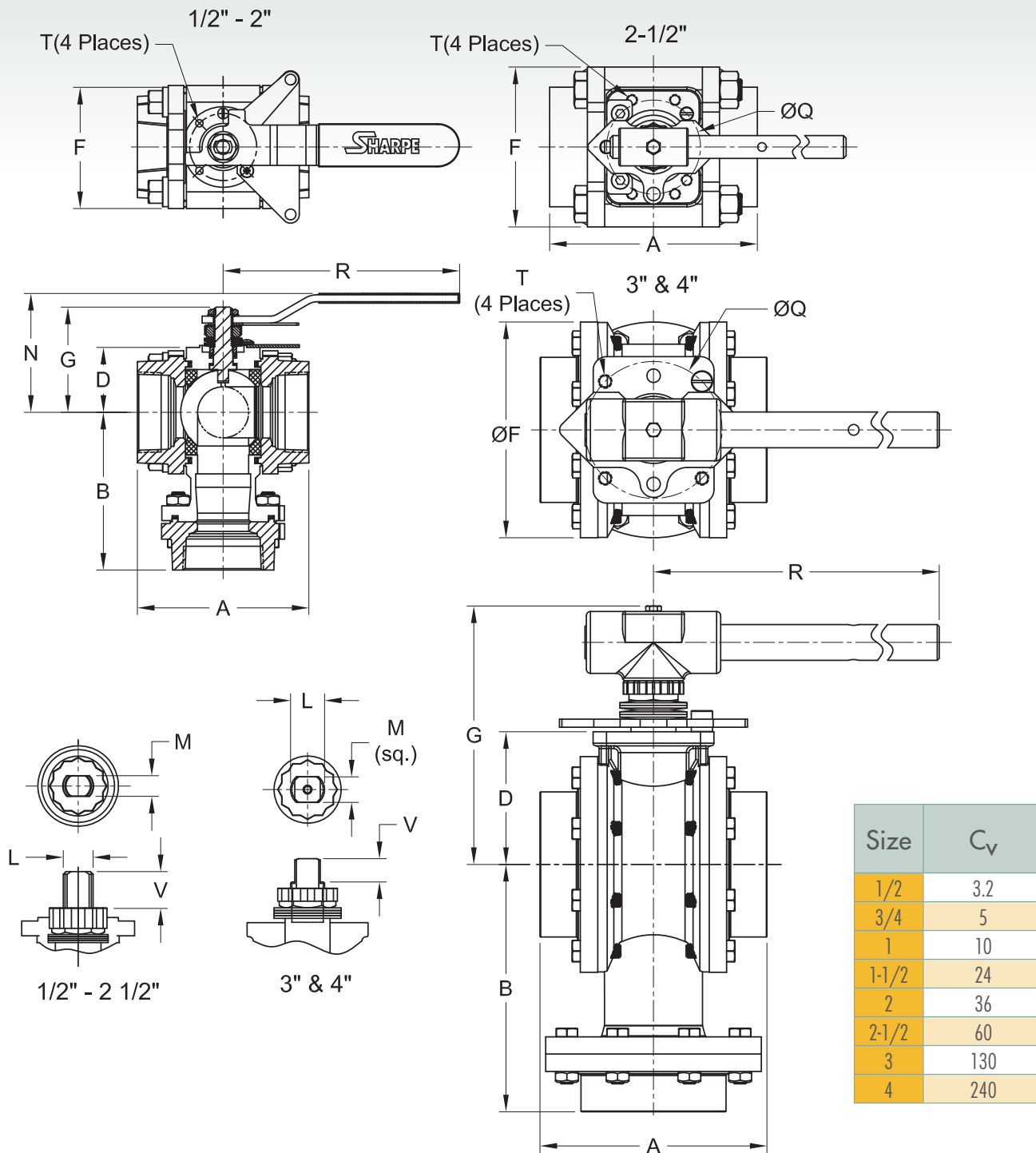
3"- 4" Parts & Materials



No.	Part Name	Qty	Material
1	Body	1	316 Stainless Steel ASTM A351 CF8M
2	Pipe Ends	3	316 Stainless Steel ASTM A351 CF8M 316L Stainless Steel ASTM A351 CF3M Carbon Steel ASTM A216 WCB
3	Ball	1	316 Stainless Steel
4	Stem	1	316 Stainless Steel
5	Valve Seat	2	PTFE, TFM® RTFE, UHMWPE Nova, PEEK, Delrin®
6	Body Seal	3	TFE, TFM®, Grafoil, Buna, Neoprene UHMWPE, EPR, Viton®
7	Thrust Bearing	1	Nova (UHMWPE with UHMWPE Seats)
8	Stem Seal	1	Nova (UHMWPE with UHMWPE Seats)
9	Gland	1	300 Series Stainless Steel
10	Belleville Washer	1	300 Series Stainless Steel

No.	Part Name	Qty	Material
11	Washer	4	300 Series Stainless Steel
12	Stem Nut	1	300 Series Stainless Steel
13	Lock Tab	1	300 Series Stainless Steel
14	Handle	1	Galvanized Steel
15	Wrench Block	1	300 Series Stainless Steel
16	Hex Head Bolt	1	300 Series Stainless Steel
17	Body Bolt	24	300 Series Stainless Steel
18	Nuts	8	300 Series Stainless Steel
19	Stop Pin	1	300 Series Stainless Steel
20	Stopper	1	300 Series Stainless Steel
21	Seat Retainer	1	300 Series Stainless Steel Carbon Steel

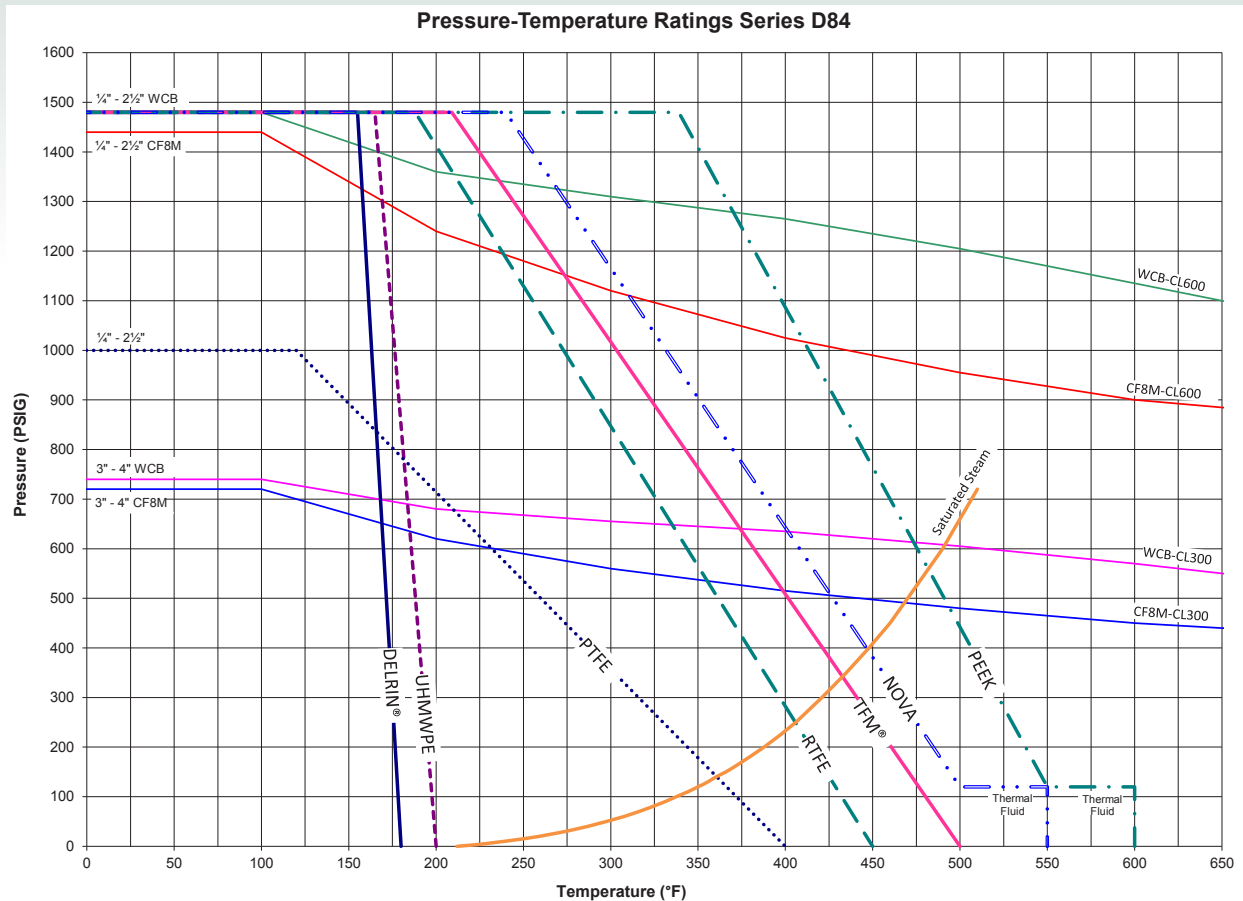
Dimensions



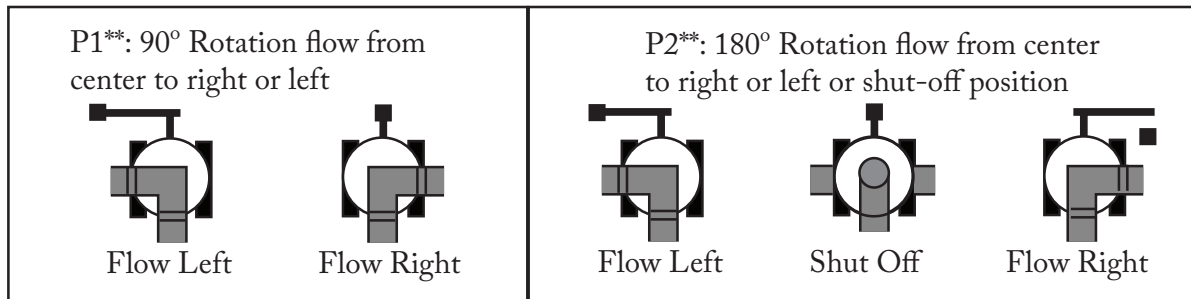
Size	C _v
1/2	3.2
3/4	5
1	10
1-1/2	24
2	36
2-1/2	60
3	130
4	240

Size	A	B	C	D	F	G	L	M	N	Q	R	T	V
1/2	2.59	2.72	0.98	1.06	1.81	1.66	3/8-24	0.220	2.14	1.42 (F03)	4.50	M5x.8	0.26
3/4	2.87	2.87	0.98	1.17	1.95	1.65	3/8-24	0.220	2.24	1.42 (F03)	4.50	M5x.8	0.35
1	2.71	3.49	1.18	1.51	2.38	2.23	7/16-20	0.300	2.69	1.65 (F04)	5.75	M5x.8	0.47
1-1/2	4.57	4.15	1.38	1.73	3.06	2.90	9/16-18	0.350	3.16	1.97 (F05)	6.78	M6x1.0	0.69
2	5.00	4.62	1.38	1.90	3.59	3.09	9/16-18	0.350	3.35	1.97 (F05)	6.78	M6x1.0	0.67
2-1/2	5.86	5.86	2.16	2.93	4.68	4.56	9/16-18	0.550	5.48	2.75 (F07)	8.73	M8x1.25	1.14
3	6.66	7.25	-	3.89	6.46	5.76	M20x2.5	0.748	6.82	4.01 (F10)	13.74	M10x1.5	0.69
4	8.42	8.98	-	4.45	8.11	6.37	1-14	0.748	7.43	4.01 (F10)	13.74	M10x1.5	0.69

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



Standard Port
 Class 600 1/2" - 2 1/2"
 Class 300 3" - 4"



** Not to be used as an isolation valve.

How to Order

Size	Series	Body & Ends	Ball & Stem	Seat	Seal	Ends (Side)	Ends (Bottom)	Flow Plan
1/2	D84	4 Carbon Steel (ends only)	6 316 Stainless Steel	T PTFE	T PTFE	TE Threaded	TE Threaded	P1 90° Rotation flow from center to left or right
3/4				R RTFE	M TFM®	SW Socket Weld	SW Socket Weld	
1				M TFM®	G Grafoil	BW5 Schedule 5 Butt-weld*	BW5 Schedule 5 Butt-weld*	P2 180° Rotation flow from center to left or right or shut-off position
1-1/2		6 316 Stainless Steel		D Delrin®	B Buna	BW10 Schedule 10 Butt-weld*	BW10 Schedule 10 Butt-weld*	
2				N Nova	N Neoprene	BW40 Schedule 40 Butt-weld	BW40 Schedule 40 Butt-weld	
2-1/2				P Peek	V Viton®	BW80 Schedule 80 Butt-weld*	BW80 Schedule 80 Butt-weld*	
3				U UHMWPE	U UHMWPE			
4					E Ethylene Propylene Rubber (EPR)			

*POA

Viton® is a registered trademark of E.I. DuPont. | TFM® is a registered trademark of Dyneon, LLC
 Delrin® is a registered trademark of E.I. DuPont.

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