



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.

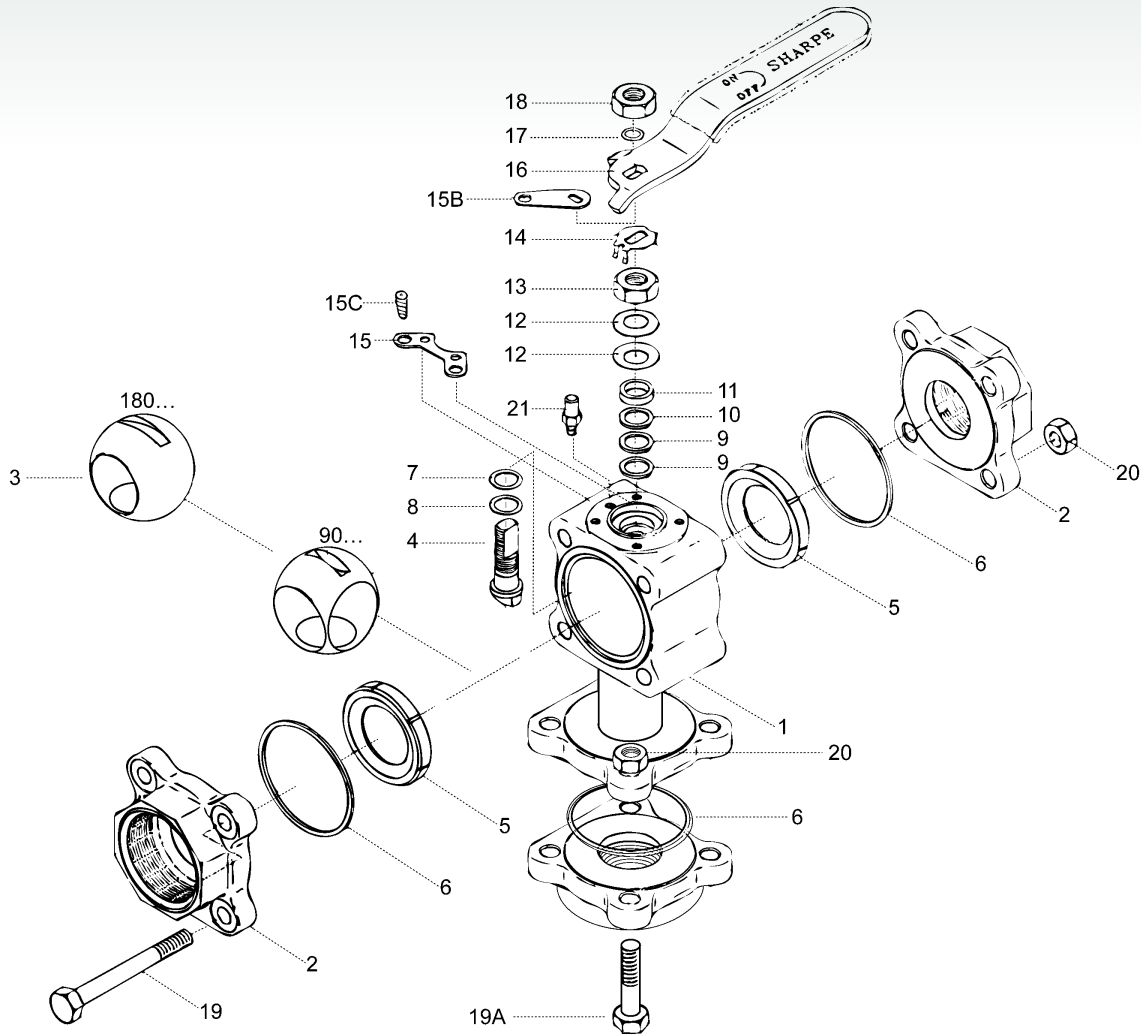
Allows for secondary containment unit to be added when necessary.

Lockable Handle

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

Traceability

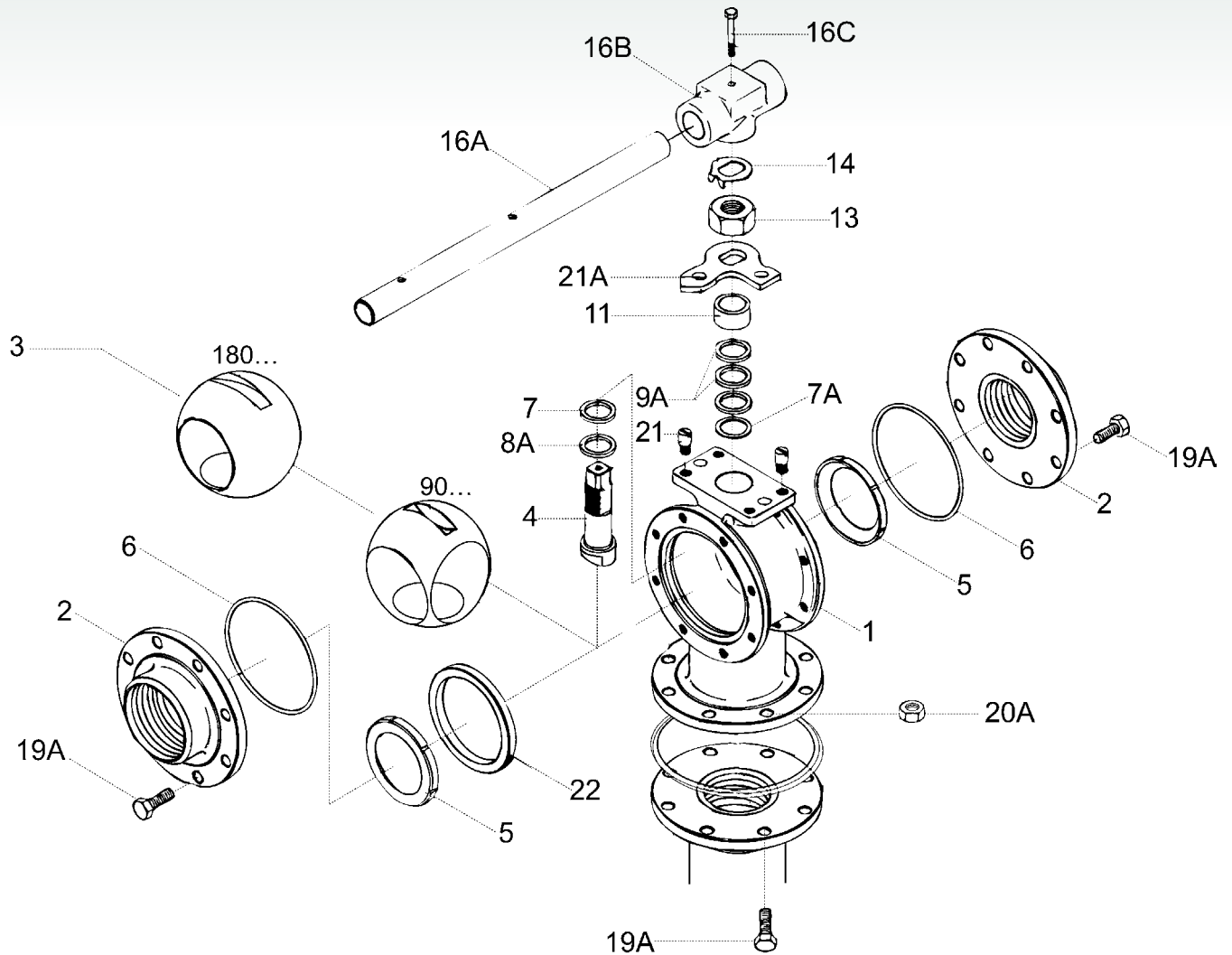
Body and end piece castings are marked with heat codes providing traceability to the chemical analysis and material test reports performed at the foundry. CMTR's (Certified Material Test Reports) are available upon request.

½" - 2½" Parts & Materials


No.	Part Name	Qty	Material
1	Body	1	316StainlessSteelASTMA351CF8M
2	Pipe Ends	3	316StainlessSteelASTMA351CF8M 316LStainlessSteelASTMA351CF3M 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(UHMWPEwithUHMWPESeats)
8	Thrust Bearing	1	PEEK(UHMWPEwithUHMWPESeats)
9	Stem Packing	2	Nova(UHMWPEwithUHMWPESeats)
10	Seat Protector	1	PEEK
11	Gland	1	300 Series Stainless Steel
12	BellevilleWasher	2Sets	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	HandleNut(1/4"-2")	1	300 Series Stainless Steel
19	Body Bolts	4	300 Series Stainless Steel
19A	BodyConnectorBolt	4	300 Series Stainless Steel
20	Nuts	8	300 Series Stainless Steel
21	Stop Pin (1/4" - 1/2")	2	300 Series Stainless Steel

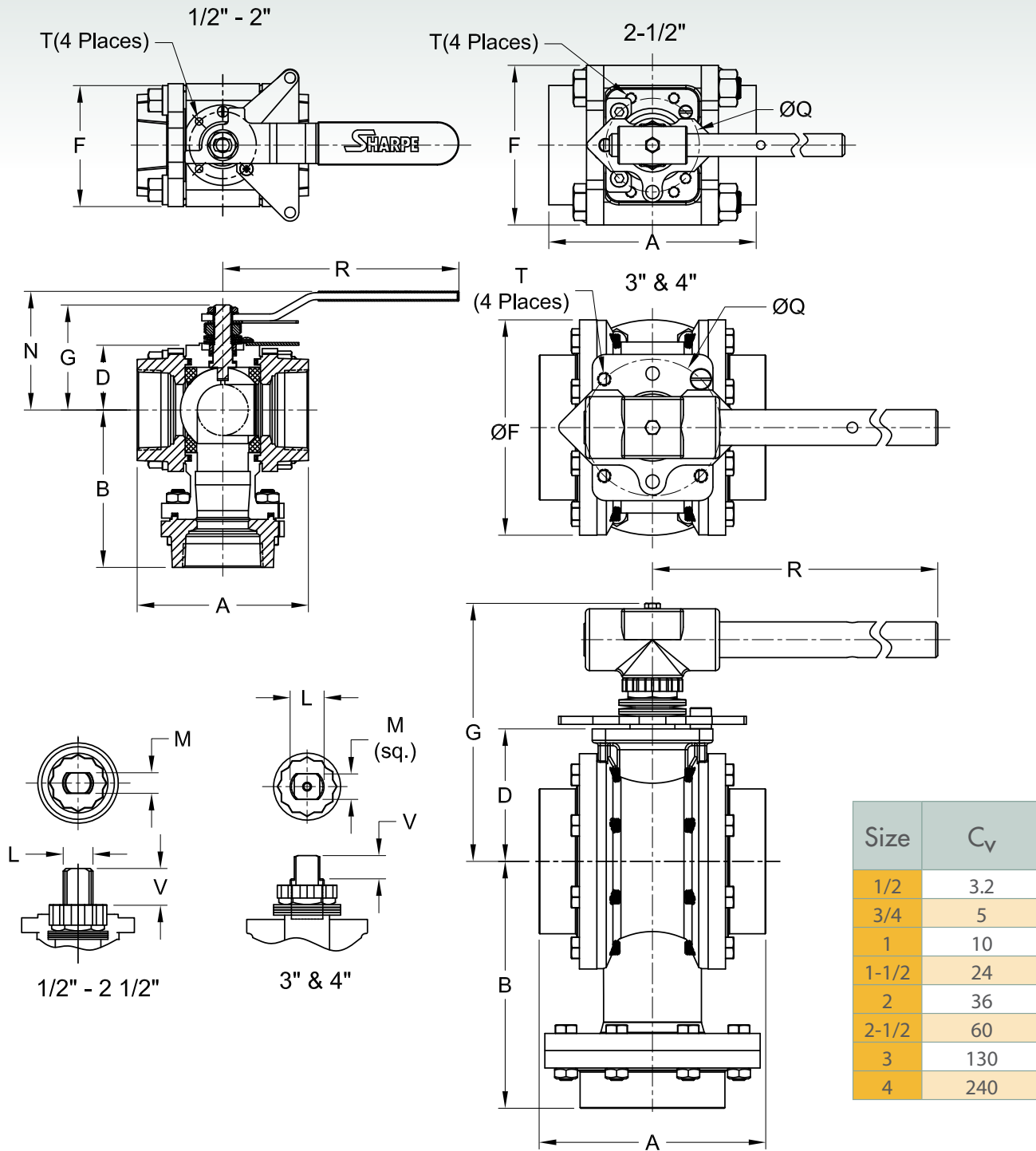
3"- 4" Parts & Materials



No.	Part Name	Qty	Material
1	Body	1	316StainlessSteelASTMA351CF8M
2	Pipe Ends	3	316StainlessSteelASTMA351CF8M 316LStainlessSteelASTMA351CF3M Carbon Steel ASTM A216WCB
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(UHMWPEwithUHMWPESeats)
7A	Thrust Bearing	1	PEEK(UHMWPEwithUHMWPESeats)
8A	Thrust Bearing	1	Nova(UHMWPEwithUHMWPESeats)
9A	Stem Packing	2	Nova(UHMWPEwithUHMWPESeats) Peek
11	Gland	1	300 Series Stainless Steel
N/S	BellevilleWasher	4	300SeriesStainlessSteel(NotShown)

No.	Part Name	Qty	Material
13	Packing Nut	1	300 Series Stainless Steel
14	Lock Tab	1	300 Series Stainless Steel
16A	Wrench(2½"-4")	1	Cod Plate Carbon Steel
16B	Wrench Block	1	300 Series Stainless Steel
16C	Hex Head Bolt	1	300 Series Stainless Steel
19A	Body Bolt	24	300 Series Stainless Steel
20	Nuts	8	300 Series Stainless Steel
21	Stop Pin	1	300 Series Stainless Steel
21A	Stopper	1	300 Series Stainless Steel
22	Seat Retainer	1	300 Series Stainless Steel Carbon Steel

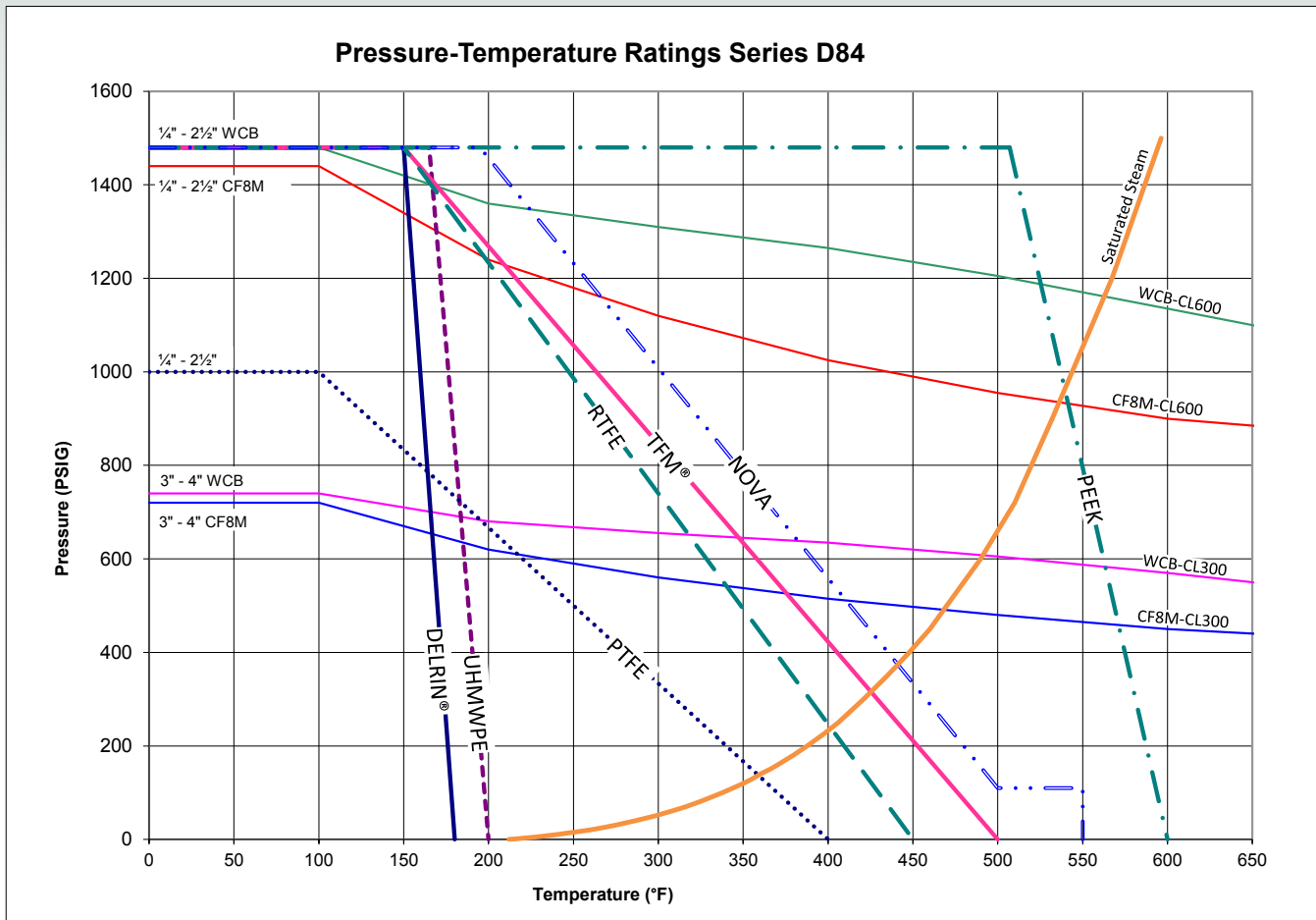
Dimensions



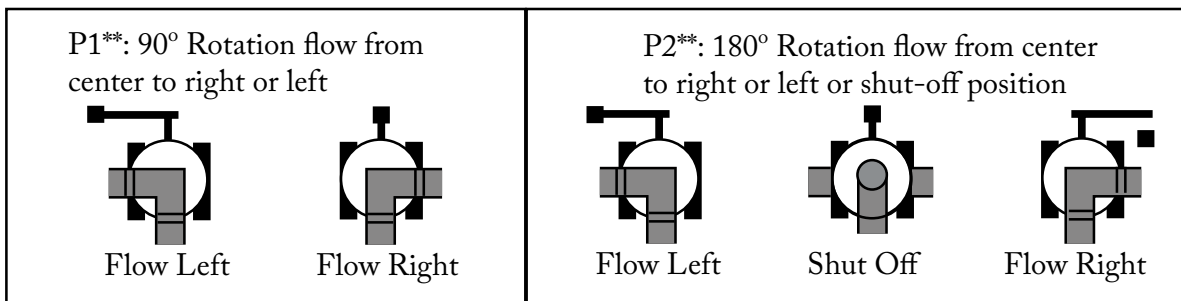
Size	C _v
1/2	3.2
3/4	5
1	10
1-1/2	24
2	36
2-1/2	60
3	130
4	240

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 (end only)	6 316 Stainless Steel	T	PTFE	TE	TE	P1 90° Rotation flow from center to left or right P2 180° Rotation flow from center to left or right or shut-off position
3/4				R	RTFE	M	TFM®	
1		6 316 Stainless Steel	M	TFM®	G	Grafoil		
1-1/2			D	Delrin®	B	Buna		
2			N	Nova	N	Neoprene		
2-1/2			P	Peek	V	Viton®		
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.