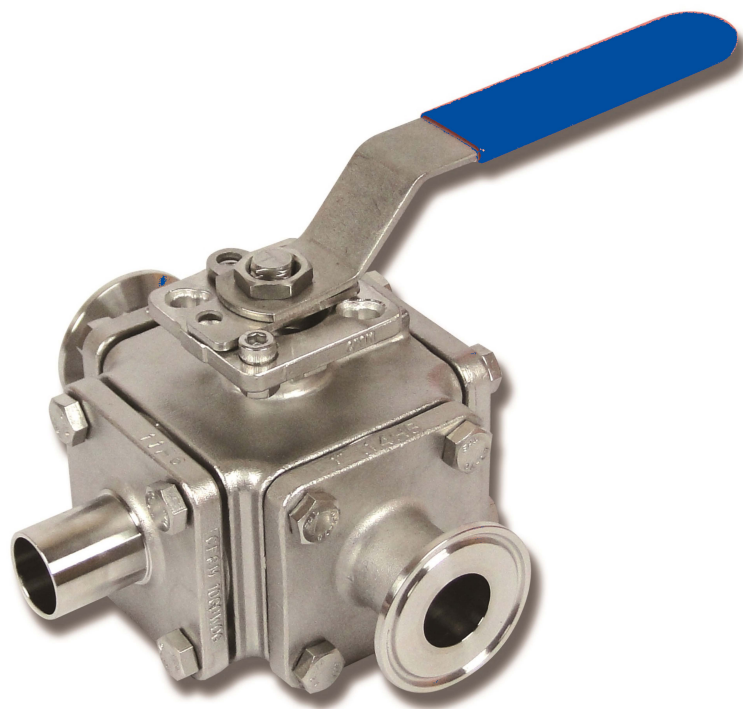


Vtek

Controls™

SERIES 3CF

Cavity Filled 3 Way Ball Valve



Design Specifications

- Full Port Sizes : 1/2" – 4"
- Body Materials: CF8M / CF3M
- Seats: PTFE / TFM1600 / UHMWPE
- ISO 5211 Direct Mounting
- Pressure rating : 1/2" to 1" 1000 PSIG
1-1/2" to 4" 800 WOG
- End Caps: Tri-Clamp, Tube OD Butt Weld
- Trunnion Design
- Blow-out Proof Stem
- Food & Sanitary Applications

Standards

- EU: 10/2011, EC No. 1935/2004, SMS 3008 ASME / BPE Standard for SS316L
- Quality Assurance: ISO 9001, 5209
- Ra Finish: 8-12; Internal Surfaces
- API 598 Tested
- FDA Compliant

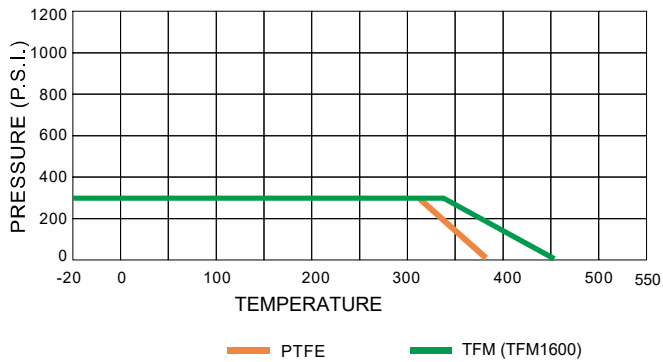


Series 3CF - Cavity Filled 3 Way

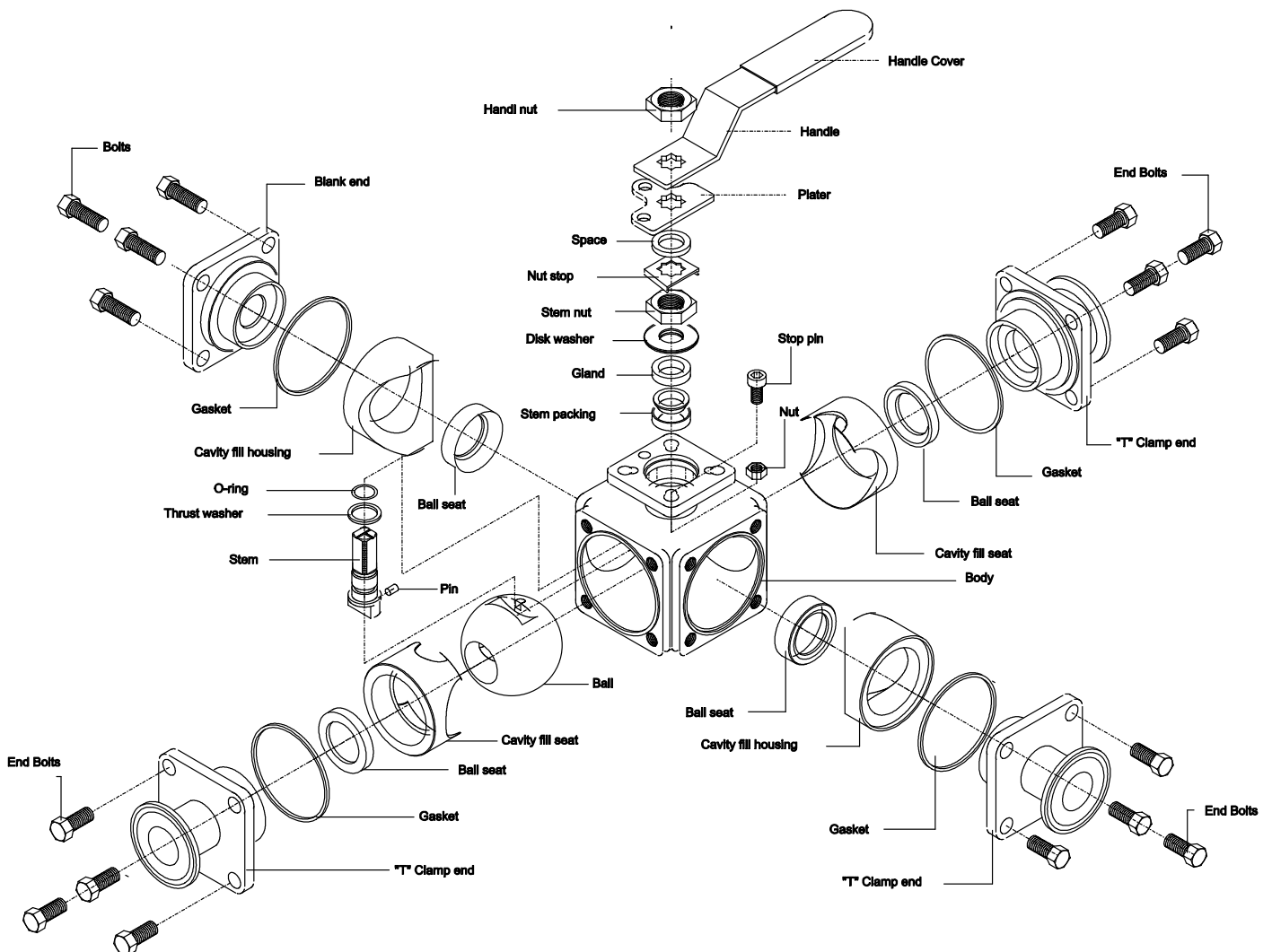
Data:

Pressure Vs. Temperature Chart

PRESSURE/ TEMPERATURE ANSI 150

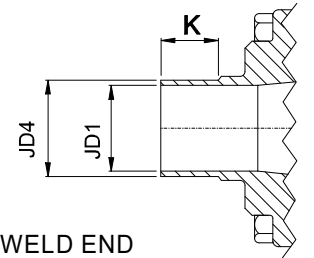
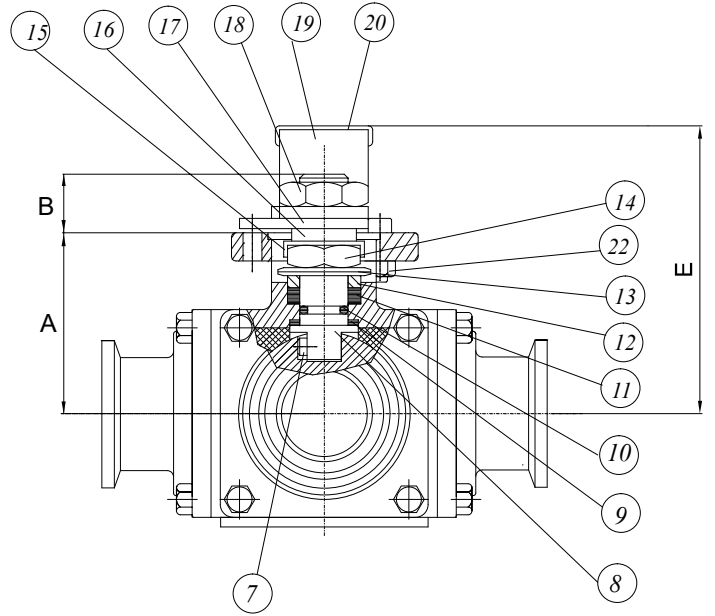


Exploded View 1/2" to 2":

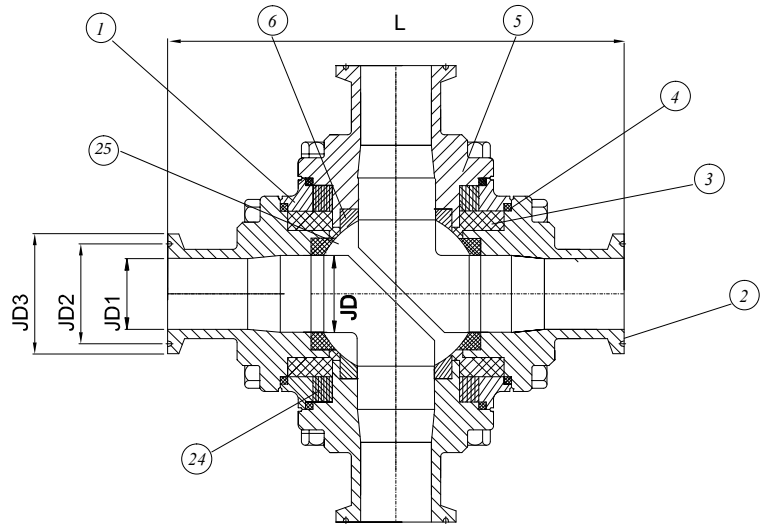
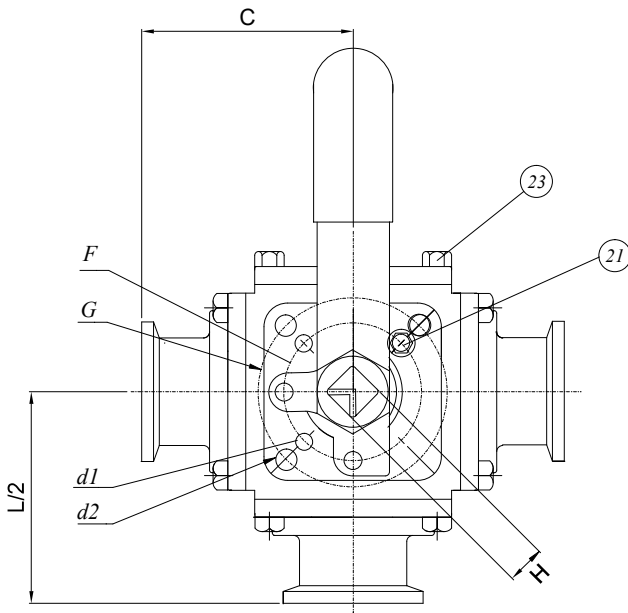


Dimensions 1/2" to 2":

No	PART	MATERIAL	QTY
1	BODY	CF8M / CF3M	1
2	T-CLAMP END	CF8M / CF3M	3
3	CAVITY FILLER	PTFE	1
4	GASKET	PTFE	4
5	BLANK CAP	CF8M / CF3M	1
6	SEAT	PTFE	4
7	INSERT PIN	SS 316	1
8	STEM	SS 316 / SS 316L	1
9	THRUST WASHER	RTFE	1
10	O-RING	VITON (FDA)	1
11	STEM PACKING	PTFE	1
12	PACKING GLAND	SS 304	1
13	DISC (BELLEVILLE) WASHER	SS 301	2
14	STEM NUT	SS 304	1
15	STOP NUT	SS 304	1
16	STEM SPACER	SS 304	2
17	STOPPER PLATE	SS 304	1
18	HANDLE NUT	SS 304	1
19	HANDLE	SS 304	1
20	SLEEVE	PLASTIC	1
21	TRAVEL STOP PIN	SS 304	1
22	TRAVEL STOP PIN NUT	SS 304	1
23	BODY BOLTS	SS 316	16
24	FILLER HOUSING	SS 304	1
25	BALL	SS 316	1



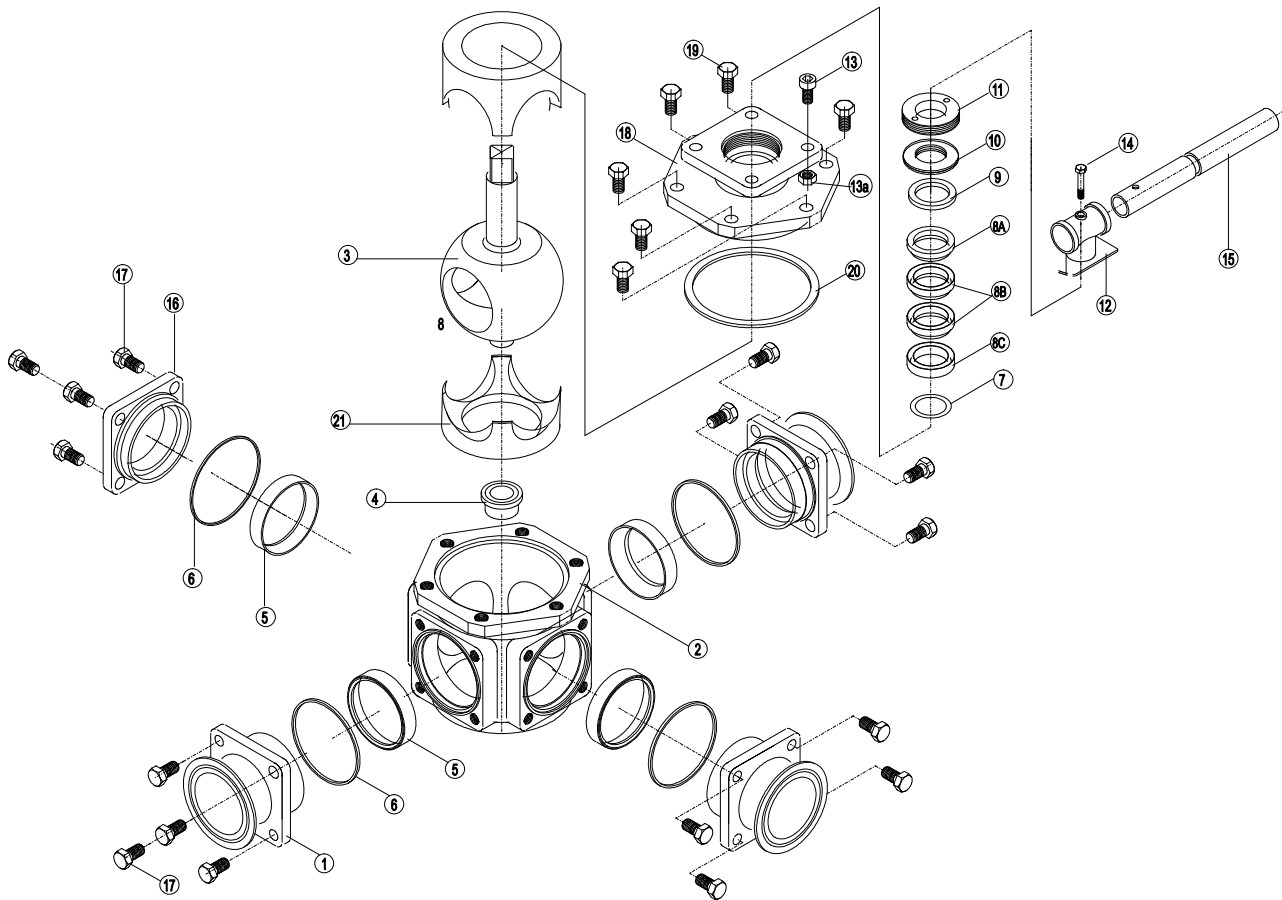
TUBE WELD END



1/2" to 2" (mm)

Size	A	B	C	d1	d2	E	F	G	H	L/2	L	D	D1	D2	D3	D4	K	Wt. lbs.
1/2"	37.5	9.5	130	6.0	6.0	62	36	42	9	60	120	12	9.6	21.7	25	12.7	15	3
3/4"	42	11	130	6.0	6.0	64	36	42	9	68	120	15	15.8	21.7	25	19.05	20	6
1"	55	14	165	6.0	7.1	89	42	50	11	80	160	25	22.1	43.5	50.4	25.4	20	9.6
1-1/2"	74	16	205	7.1	9.2	108	50	70	14	91	182	38	34.8	43.5	50.4	38.1	20	18.9
2"	93	21	325	9.2	11.4	140	70	102	17	108	216	50	47.5	56.5	63.9	50.8	20	33

Exploded View 2-1/2" to 4":



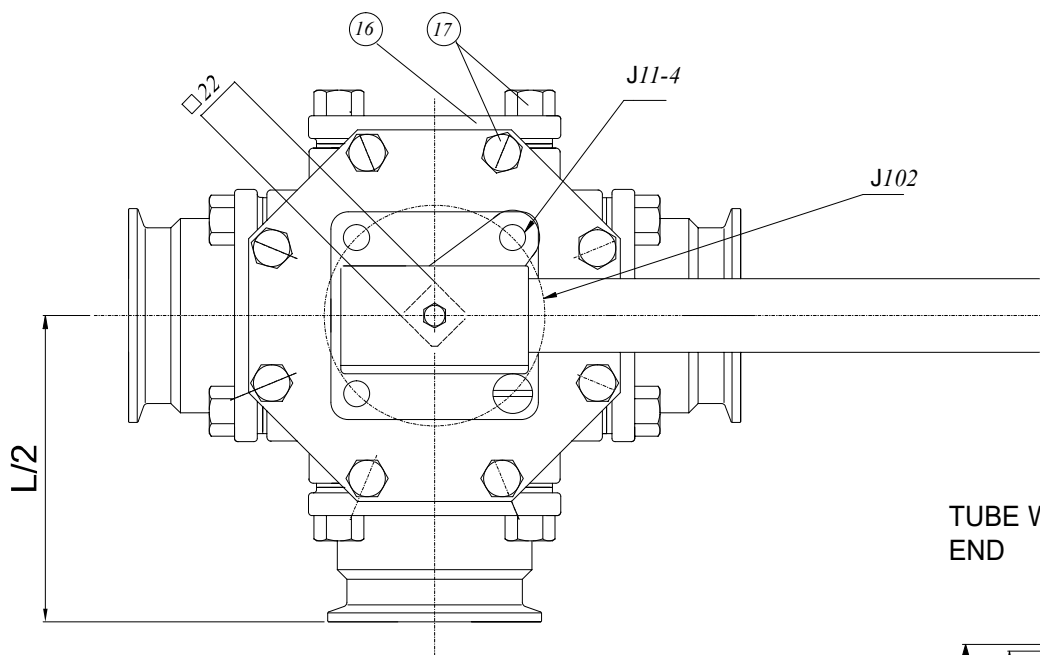
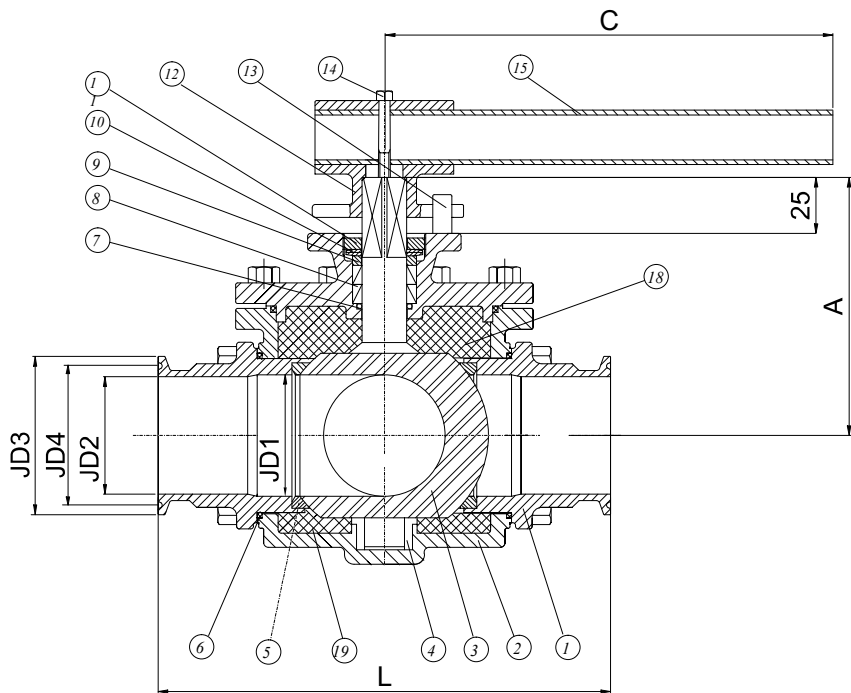
The Vtek Controls 3CF valve is 4 seats design, this will help to keep the ball position stable. Designed with a insert pin between the stem & ball to make sure the ball will not lean after hundreds of cycles.

The 3CF series is designed with a cavity filler, this will fill the body cavity for sanitary application to keep the media from remaining in the cavity, and clean easily. Non-cavity filler is another option for your applications use Vtek Controls 3F Series.

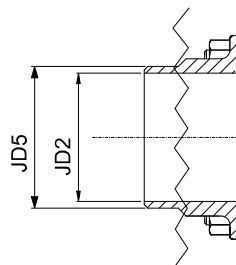
Soft kits, pure PTFE/ TFM1600/ UPE (UHMWPE) and are available for different applications.

Dimensions 2-1/2" to 4":

No	PART	MATERIAL	QTY
1	T-CLAMP END	CF8M / CF3M	3
2	BODY	CF8M / CF3M	1
3	BALL & STEM	SS 316 / SS 316L	1
4	HOUSING	PTFE + STAINLESS	4
5	SEATS	PTFE	4
6	GASKETS	PTFE	4
7	O-RING	VITON (FDA)	1
8	STEM PACKING	PTFE	1
9	GLAND WASHER	SS 304	1
10	DISC (BELLEVILLE) WASHER	SS 301	2
11	GLAND	SS 304	1
12	HANDLE HEAD	A351 CF8	1
13	STOP PIN	SS 304	2
14	STOP BOLT	SS 304	1
15	HANDLE	SS304	1
16	BLANK CAP	CF8M / CF3M	1
17	BOLT	SS 304	1
18	CAVITY FILLER	PTFE	1
19	CAVITY FILLER	PTFE	1



TUBE WELD END

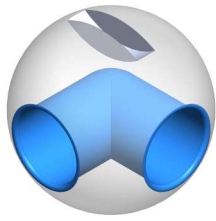


2-1/2" to 4" (mm)

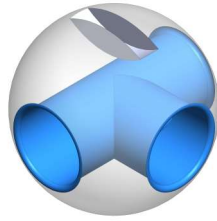
SIZE	A	C	D1	D2	D3	D4	D5	L	L/2	3-Way Wt. Lbs
2-1/2"	144	400	62	60.2	77.4	70.5	63.5	241.3	120.65	44.6
3"	162	500	76	72.9	91	83.2	76.2	279.4	139.7	58.1
4"	182	650	96	97.4	119	110.4	101.6	330.2	165.1	105

Ball Type / Flow Patterns:

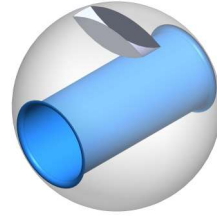
BALL TYPES



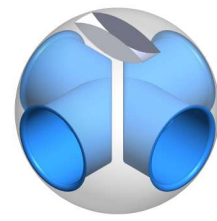
L-Horizontal



T-Horizontal



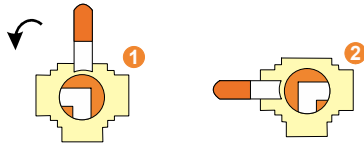
I-Port



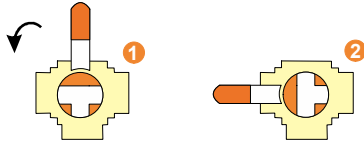
X-Port (Double L)

3-WAY

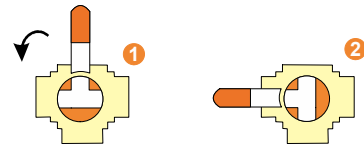
L3-90
STANDARD



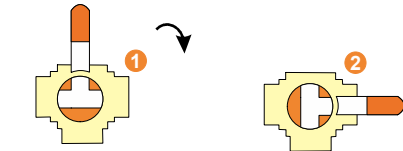
T3-90



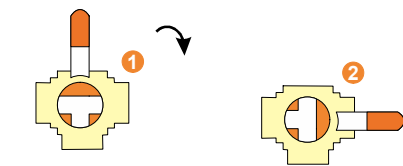
T4-90
STANDARD



T5-90

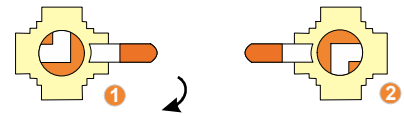


T6-90

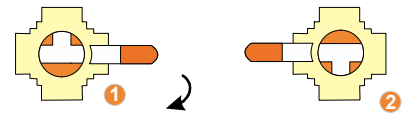


4-WAY

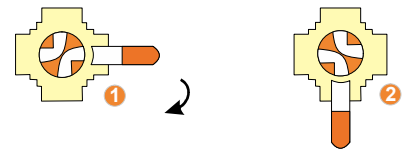
L5-180



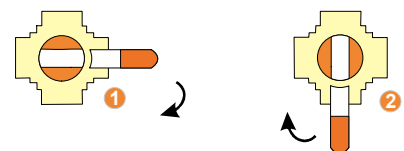
T5-180



X-90



I-90



T-port 90 operation (T3/ T4/ T5/ T6) can be suitable for 4-way valve.

- ① Starting Position
- ② End Position

Cv Value:

Size	3-Way, L-Port, Full Bore	3-Way, T-Port (Through), Full Bore	3-Way, T-Port (Branch), Full Bore	4-Way, X-Port, Full Bore
1/2"	13	25	9	7
3/4"	23	46	20	12
1"	35	70	25	18
1-1/2"	81	162	62	42
2"	153	309	112	80
2-1/2"	186	376	140	97
3"	290	589	248	151
4"	466	941	414	243

Break Torque Value:

Size	1/2"	3/4"	1"	1-1/2"	2"	2-1/2"	3"	4"
Liquids	113	136	221	489	635	1192	1305	2100
Gases	142	170	266	545	851	1133	2214	2838

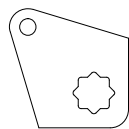
Options:

Options:

Extended Bonnet

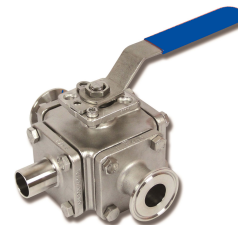


180 Deg Travel Stop



180° stop plate

PTFE/ PFA coating (40-70 um)



Ordering:

Series	Port	Body Material	Ball	Stem	End Connection	Size
CF3 CF4	L - Full Port T - Full Port X - (LL) Full Port I - Full Port	S - Stainless Steel L - 316L Stainless Steel	S - 316 SS L - 316L SS	S - 316 SS L - 316L SS	SC - Tri-clamp BW - Tube Butt Weld	0050 - 1/2" 0075 - 3/4" 0100 - 1" 0150 - 1-1/2" 0200 - 2" 0250 - 2-1/2" 0300 - 3" 0400 - 4"
Seats	Packing	Body Seal	Operator	Options	Stem O-ring	
P - PTFE T - TFM™-1600 U - UHMWPE	P - PTFE T - TFM™-1600 U - UHMWPE	T - TFM™-1600 P - PTFE U - UHMWPE	Blank - Bare Stem L - Locking Handle O - Oval Handle	Blank - No Options F - Fugitive Emissions Bonnet S - PFA Coated	Blank - Viton FDA Standard	

Vtek Controls, LLC reserves the right to make revisions to its products, specifications, literature, and related information without notice. Please visit our Website for the latest information and updates.



Vtek Controls, LLC
 420-H Wards Corner Rd
 Loveland, OH 45140
 Ph 513-928-3630
www.vtekcontrols.com