

SERIES 36 AND 46 FULL PORT - MULTIPORT - 3 & 4-WAY BALL VALVES

# 36 & 46 Series



Triad Process Equipment, Inc. 4922

Technical Drive Milford MI 48381

248.685.9938

www.triadprocess.com

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#### Full Port Design • Four Seats Standard • All Valves Direct Mount to Actuators

- 100% air tested underwater at 80 psi
- Temperature range -20° to 450° F
- End cap type : Threaded, Socket weld, Butt weld. 150# And 300# flanged versions.
- Available in stainless steel or carbon steel
- Body & end are investment cast
- Self adjusting stem packing
- Available in 3 way & 4 way
- Available in T-port, L-port and X-port design
- Blow-out proof stem design
- Exclusive Pyramidal Stem Seal Design

#### MATERIALS LIST

NO.	PART NAME	MATERIAL	Q'TY
1	End Cap	A351 Gr. CF8M A216 Gr. WCB	3
2	Gasket	PTFE	4
3	Body	A351 Gr. CF8M A216 Gr. WCB	1
4	Ball	SS 316	1
5	Seat	PTFE/RPTFE	4
6	Stem	SS 316	1
7	Stem Sea	RPTFE	1
8	O-Ring	VITON	1
9	Stem Packing	GRAPHITE/PTFE	1
10	Gland	SS 304	1
11	Belleville Washer	SS 301	2
12	Stem Nut	SS 304	1
13	Nut Stop	SS 304	1
14	Space Washer	SS 304	1
15	Lock Saddle	SS 304	1
16	Handle Nut	SS 304	1
17	Handle	SS 304	1
18	Handle Sleeve	leeve Vinyl	
19	Stop Pin	SS 304	1
20	INSERT PIN	SS 316	1

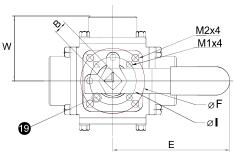
#### Compliance Standards Flanged (Class 150/300)

Threaded / SW & BW Ends Valve Design: ASME B16.34 ASME/ANSI B16.34 Pressure Test: API598 API598 Steel Casting: MSS SP-55 ASTM A351 ISO5211 MSS-SP-55

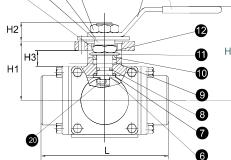
#### **DIMENSIONS** (in)

# Series 36 3-Way L or T Port Series 46 4-Way L, T or X Port

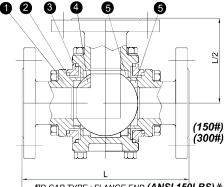
1/4" to 2" 1/4" to 1" 1000 psi 1-1/4" to 2" 800 psi Flanged to 150# and 300#



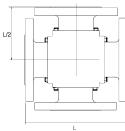




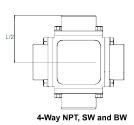




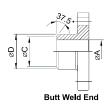
D CAP TYPE : FLANGE END (ANSI 150LBS) \* (ANSI 300LBS)



4-Way 150# and 300# Flanged







#### SIZE ØA в ØC ØD ØD1 Е н H1 H2 H3 L \*L + L M Port M1 M2 w I\$O5211 Weight Thd/Flg. ø øΕ 1/4" .25 .35 .67 .55 5.12 2.44 1,51 .39 .38 1.41 1.65 3.46 .43 .43 .23 .23 1.73 F03/F04 1.5/NA .49 .38 1.41 .43 .23 1.73 3/8" .37 .35 .57 .74 .68 5.12 2 44 1 51 .39 1 65 3.46 .43 .23 F03/F04 1.5/NA 1/2" .35 .84 .85 5.12 2.44 1.61 .39 .39 | 1.41 1.65 4 12 5.98 6.30 .50 .50 .23 .23 2.06 F03/F04 1.8/3.2 .50 68 6.57 3∕4" 6.97 .23 .28 2.20 F04/F05 2.5/6.1 .75 .43 .88 1.08 1.06 6,5 3 23 1 93 .51 .51 1.65 1 97 4.41 .56 .75 1" .43 1.35 1.33 6.5 3 50 2 17 .51 .61 1 97 5 04 7.50 7.88 .62 .23 .28 2.52 F04/F05 5.8/7.9 1.0 1.10 1.65 1.00 2 76 5 51 8 19 8 58 7.9/NA 11/4" 1.25 .55 1.37 1.68 1.67 8.07 3,86 2,48 .66 .68 1.25 .28 .36 2.75 F05/F07 .65 1.97 11/2" 1.50 .55 1.61 1.93 1.91 8.07 4.25 2,91 .66 .68 1.97 2,76 6,30 8.68 9.21 .75 1.50 28 .36 3.15 F05/F07 12/39 2.00 .36 1.02 2.76 4.02 7.56 9.96 10.75 .87 .44 2" 2.00 .67 2.12 2.40 2.40 12.8 5 50 3 66 .86 3.78 F07/F10 21/50 1:300#

End Cap Type \*L: 150# L: threaded, socket weld, butt weld

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# Series 36 & 46 Multiport 3 and 4-way valves

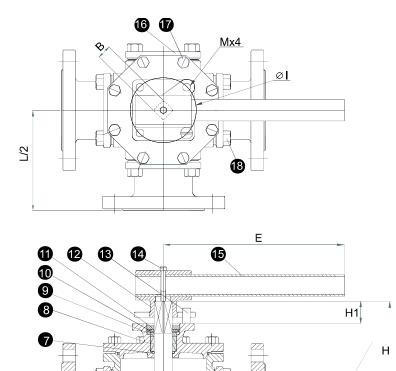
# Full Port, L, T or X option

2-1/2" to 4" Flanged End ANSI Class

### MATERIALS LIST

NO.	PART NAME	MATERIAL	Q'TY
1	Flange End Cap	A351 Gr. CF8M A216 Gr. WCB	3
2	Body	A351 Gr. CF8M A216 Gr. WCB	1
3	Ball & Stem	SS 316	1
4	Housing	RPTFE+STAINLESS	1
5	Seats	RPTFE	4
6	Gasket	PTFE	4
7	O-Ring	VITON	1
8	Stem Packing	GRAPHITE/PTFE	1
9	Gland Washer	SS 304	1
10	Belleville Washer	SS 301	2
11	Gland	SS 304	1
12	Handle Head	A351 Gr. CF8	1
13	Stop Pin	SS 304	1
14	Bolt	SS 304	1
15	Lever	CARBON STEEL	1
16	Blank End	A351 Gr. CF8M	1
17	Connection Bolts	Solts SS 304	
18	Bolt Nuts	SS 304	16

# 2-1/2" to 4"



**3**2

V

L/2

4

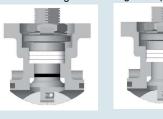
# Dimensions

SIZE	В	С	Е	Н	H1	I	L 150#	- 300#	М	ISO5211	Weight 3W/4W
2 1/2"	.86"	2.44	15.76	5.67	.98	4.00	11.82		.43	F10	80/95
3"	.86"	3.00	19.1	6.38	.98	4.00	12.01	12.75	.43	F10	105/135
4"	.86"	3.78	25.61	7.17	.98	4.00	14.51	15.01	.43	F10	220/290

### I. PYRAMIDAL MACHINED STEM WITH STEM SEAL

All valves come standard with direct mount actuator capabilities and our patented live loaded high cycle pyramidal stem seal design. The wedging action of the stem is far superior to flat stem design when it comes to effective wear compensation. For more information on this design please request Triad's Pyramidal Stem Design data sheet.

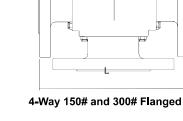
#### Standard Design



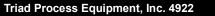
High Temp Design

6

6



ØC

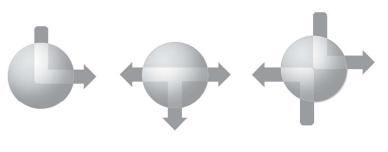


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Cv values	Straight		One Side of
Size	Through	L Port	Cross Port
1/4 and 3/8"	5.2	3.5	2.8
1/2"	15	11	9
3/4"	16	12	10
1"	45	25	20
1-1/4"	46	26	21
1-1/2"	101	57	47
2"	180	100	79
2-1/2"	200	117	83
3"	229	128	90
4"	405	226	180
L			

# **Flow Patterns**

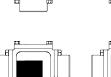
Three Way T Port 36T

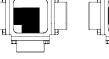


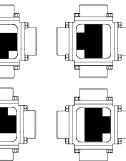


Three Way L Port 36L

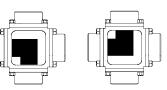




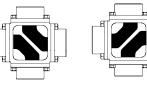




# Four Way L Port 46L



Four Way Cross Port 46X



## Ordering Information Prefix: 36T 3 Way T Port 36L 3 Way L Port 46T 3 Way T Port 46L 4 Way L Port 46X 4 Way Cross Port Suffix 62011 NPT 72011 Socket Weld 82011 Butt Weld 9150-22R 150# Flanged 9300-22R 300# Flanged

All valve stocked 316SS body, stem and ball RPTFE seats and seals Various optional seats available



Triad also offers clamp end 3 ways. See bulletin 30-92061

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