



Howell Multi-Port Flanged Ball Valve

1-888-469-3557 · sales@howellpipe.com

HS2B Series

SPECIFICATION:

- ◆ Stainless Steel Body
- ◆ Available in 3-Way and 4-Way
- ◆ Full Port, 4 Seat Design
- ◆ Flanged, Class 150 and Class 300
- ◆ Blowout Proof Stem for Safety
- ◆ ISO 5211 Direct Mounting Pad
- ◆ Anti-Static Device Option
- ◆ Available in L-Port, T-Port, and X-Port Flow Patterns
- ◆ Live Loaded Stem Design for High Cycle Life
- ◆ Silicone Free
- ◆ Material Traceability
- ◆ Size Range: ½" to 8"



Valve Standards:

ASME – B16.34
NACE – MR0175
EN1024 – DIN 50-049-3.1B
Approved for Europe
Valve Testing – API 598, MSS SP 61

How to Order:

Series	Pattern	Body	Ends	Seat	Size
HS2B	3L	SS	F1	R - RPTFE *	
	3T		F3	T - PTFE	
	4L			M - TFM (Modified TFE)	
	4T				
	4X			* RPTFE Seats Standard	

Sample Description and Part# :

HS2B-3L-SS-F1-R-112

HS2B SS 150# FLG 3-WAY RPTFE L-PORT BALL 1-1/2"

Flow Patterns

POSITION	1	2	3	4
L-PORT 3-WAY				
T-PORT 3-WAY				
L-PORT 4-WAY				
T-PORT 4-WAY				
X-PORT 4-WAY				

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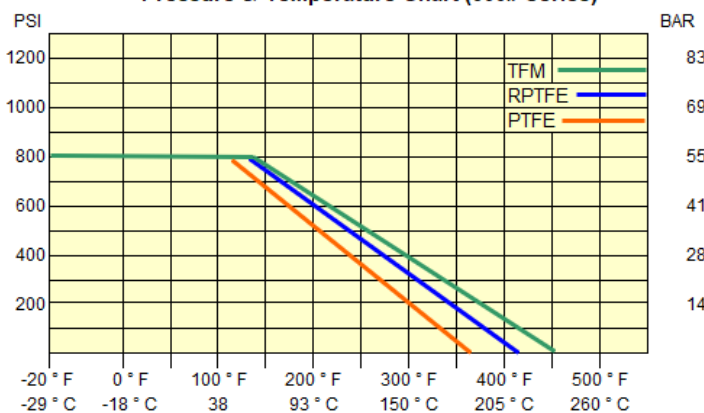
Weights

Size	Weight 150# 3-Way		Weight 150# 4-Way		Weight 300# 3-Way		Weight 300# 4-Way	
	(LBS)	(KG)	(LBS)	(KG)	(LBS)	(KG)	(LBS)	(KG)
1/2"	7.6	3.5	8.7	3.9	9.5	4.3	11.2	5.1
3/4"	9.0	4.1	10.2	4.6	13.2	6.0	16.0	7.3
1"	13.2	6.0	14.7	6.7	18.5	8.4	21.7	9.8
1-1/4"	18.7	8.5	20.5	9.3	24.8	11.2	28.9	13.1
1-1/2"	27.5	12.5	30.0	13.6	36.8	16.7	42.7	19.4
2"	47.1	21.4	50.9	23.1	54.2	24.6	60.6	27.5
2-1/2"	63.4	28.8	69.2	31.4	76.0	34.5	85.5	38.8
3"	78.4	35.6	87.1	39.5	95.5	43.3	107.0	48.5
4"	141.1	64.0	158.5	71.9	168.7	76.5	182.2	82.7
6"	204.3	92.7	281.6	127.7	421.7	191.3	447.3	202.9
8"	275.3	124.9	516.3	234.2	-	-	-	-

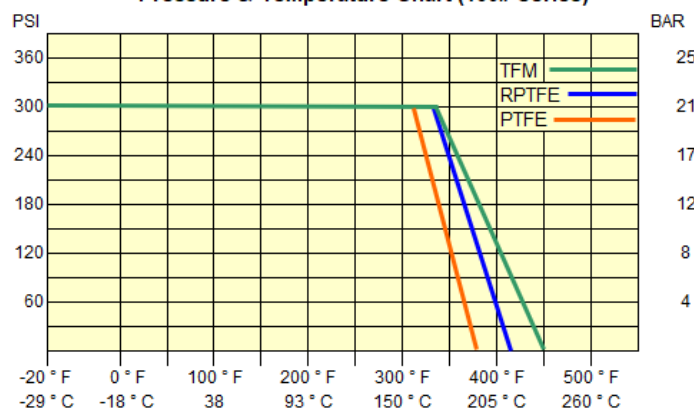
CV & Torque Values

Size	150# Torque (IN/LBS)	300# Torque (IN/LBS)	L-Port, CV	T-Port, CV	T-Port, CV
1/2"	143	201	11	13	8
3/4"	173	242	20	25	17
1"	285	476	30	34	22
1-1/4"	366	512	47	54	41
1-1/2"	561	786	70	84	54
2"	851	1192	133	158	97
2-1/2"	2027	2838	162	188	122
3"	2284	3200	252	275	216
4"	3779	5297	405	441	360
6"	7975	11164	1387	1666	1000
8"	10267	-	1880	-	-

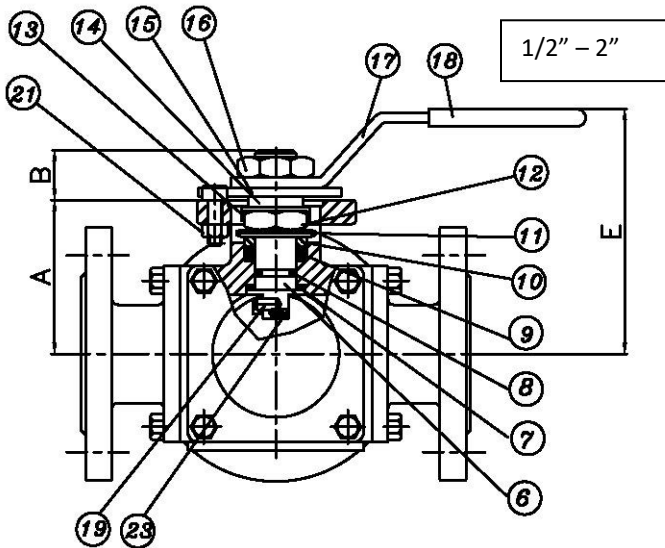
Pressure & Temperature Chart (300# Series)



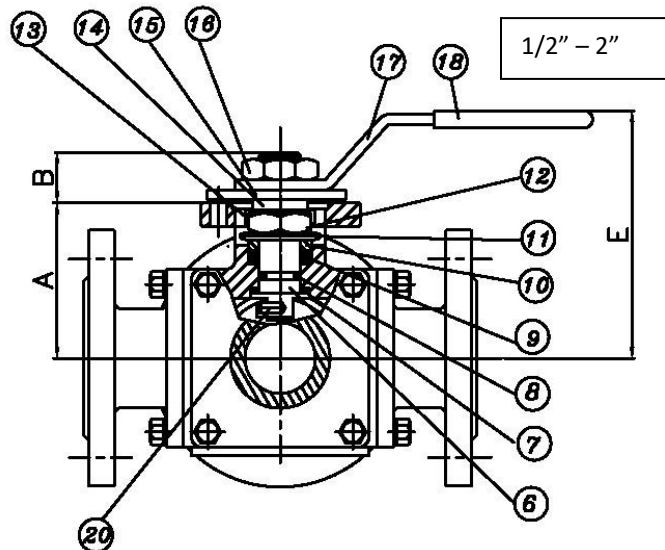
Pressure & Temperature Chart (150# Series)



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HS2B Series


Item	Part	For 1/2" to 2"
1	Flange End	ASTM A351 CF8M
2	Gasket	RPTFE
3	Body	ASTM A351 CF8M
4	Ball	ASTM A351 CF8M
5	Seats	RPTFE
6	Stem	316 SS
7	Thrust Washer	RPTFE
8	O-Ring	VITON
9	Stem Packing	PTFE / GRAPHITE
10	Gland Bushing	304 SS
11	Disk Washer	301 SS
12	Stem Nut	304 SS
13	Stop Nut	304 SS
14	Space Washer	304 SS
15	Plate	304 SS
16	Handle Nut	304 SS
17	Handle	304 SS
18	Handle Cover	Vinyl
19	Stop Pin	304 SS
21	Stop Pin Nut	304 SS
23	Anti Static Device	304 SS



Item	Part	For 2-1/2" to 4"
1	Flange End	ASTM A351 CF8M
2	Body	ASTM A351 CF8M
3	Ball & Stem	316 SS
4	Housing	RPTFE + SS
5	Seats	RPTFE
6	Gasket	PTFE
7	O-Ring	VITON
8	Stem Packing	PTFE / GRAPHITE
9	Gland Washer	304 SS
10	Disk Washer	301 SS
11	Gland Bushing	304 SS
12	Handle Head	ASTM A351 CF8M
13	Stop Pin	304 SS
14	Bolt	304 SS
15	Lever Handle	CARBON STEEL
16	Blank End	ASTM A351 CF8M
17	Body Bolts	B8
18	Bolt Nuts	304 SS
19	Stop Pin Nut	304 SS
20	Bonnet	ASTM A351 CF8M
21	Bonnet Gasket	PTFE

DIMENSIONS (3 Way and 4 Way):

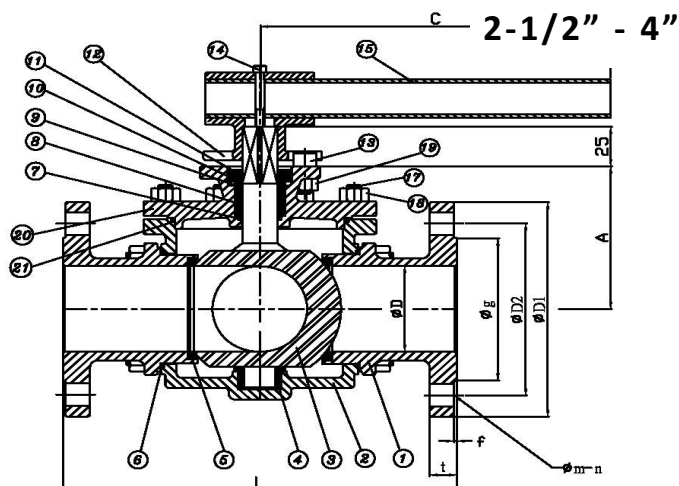
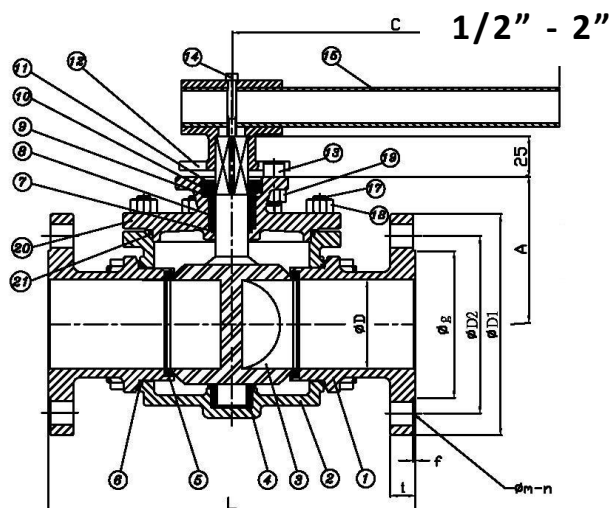
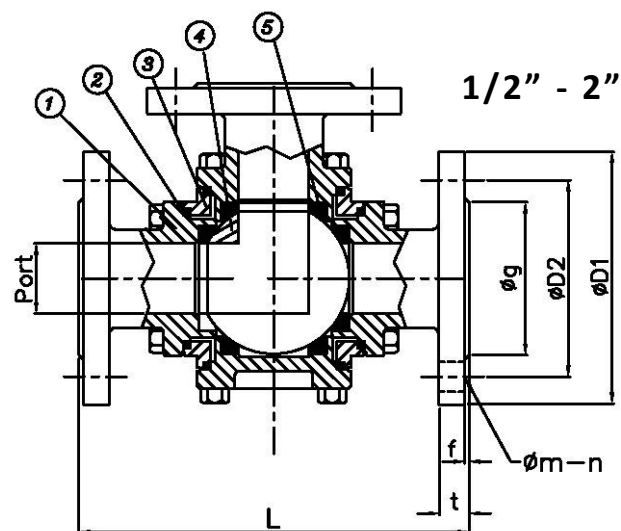
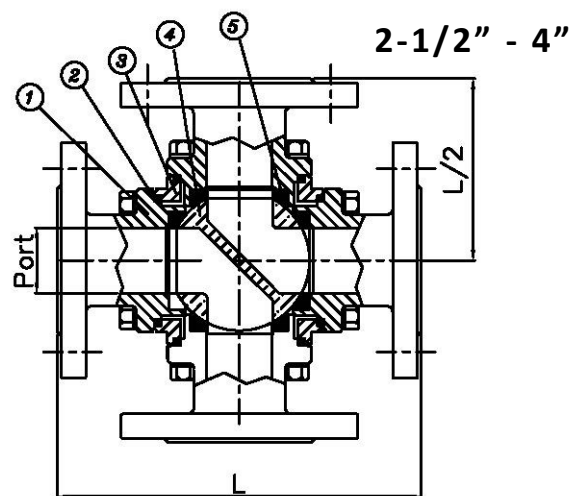
SIZE	A		B		C		d1		d2		E		F		G		H		PORT		L			
	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	Class 150		Class 300	
1/2"	1.6	41.0	0.4	11.0	5.1	130.0	0.24	6.0	0.2	6.0	2.44	62.0	1.42	36.0	1.65	42.0	0.35	9.0	0.6	15.0	6.0	152.0	6.3	160.0
3/4"	1.9	49.0	0.6	14.0	6.5	165.0	0.24	6.0	0.3	7.1	3.23	82.0	1.65	42.0	1.97	50.0	0.43	11.0	0.8	20.0	6.6	167.0	7.0	177.0
1"	2.2	55.0	0.6	14.0	6.5	165.0	0.24	6.0	0.3	7.1	3.50	89.0	1.65	42.0	1.97	50.0	0.43	11.0	1.0	25.0	7.5	190.0	7.9	200.0
1-1/4"	2.5	63.0	0.7	18.0	8.1	205.0	0.28	7.1	0.4	9.2	3.86	98.0	1.97	50.0	2.76	70.0	0.55	14.0	1.3	32.0	8.2	208.0	8.6	218.0
1-1/2"	2.9	74.0	0.7	18.0	8.1	205.0	0.28	7.1	0.4	9.2	4.25	108.0	1.97	50.0	2.76	70.0	0.55	14.0	1.5	38.0	8.7	220.0	9.2	234.0
2"	3.7	93.0	0.9	23.0	12.8	325.0	0.36	9.2	0.4	11.4	5.51	140.0	2.76	70.0	4.02	102.0	0.67	17.0	2.0	50.0	10.0	253.0	10.7	273.0

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HS2B Series

MATERIALS LIST

Item	Part	For 3"-4"
1	Flange End	ASTM A351 CF8M
2	Body Seal	ASTM A351 CF8M
3	Ball & Stem	ASTM A351 CF8M
4	Housing	PTFE + SS
5	Seats	RPTFE (15% G.F.)
6	Gasket	PTFE
7	O-Ring	VITON
8	Stem Packing	PTFE
9	Gland Washer	304 SS
10	Disk Washer	301 SS
11	Gland Bushing	304 SS
12	Handle Head	ASTM A351 CF8M
13	Stop Pin	304 SS
14	Bolt	304 SS
15	Lever	CARBON STEEL
16	Blank End	ASTM A351 CF8M
17	Connection Bolts	B8
18	Bolt Nuts	304 SS
19	Stop Pin Nut	304 SS
20	Bonnet	ASTM A351 CF8M
21	Bonnet Gasket	PTFE



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HS2B Series
DIMENSIONS (3 Way and 4 Way):

SIZE	A		C		Ø D		L			
							Class 150		Class 300	
IN	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
2-1/2"	4.7	118.5	15.7	400	2.4	62	11.8	300	11.8	300
3"	5.4	136.5	19.7	500	3.0	76	12.0	305	13.0	330.4
4"	6.2	156.5	25.6	650	3.8	96	14.5	368.5	15.5	393.8

DIMENSION OF FLANGE END (3 Way and 4 Way):

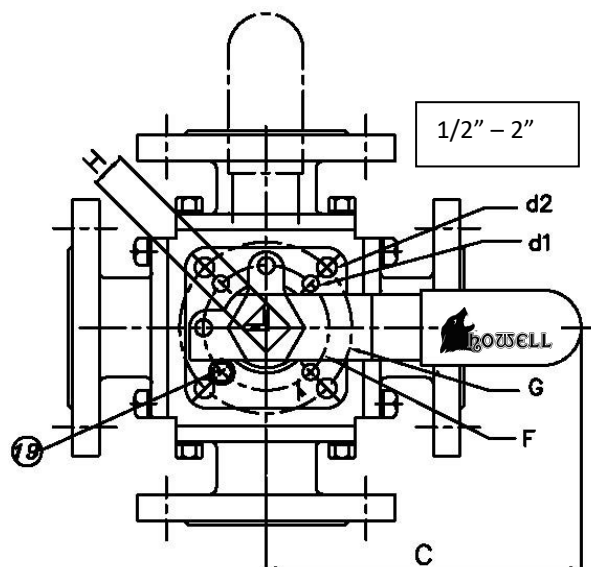
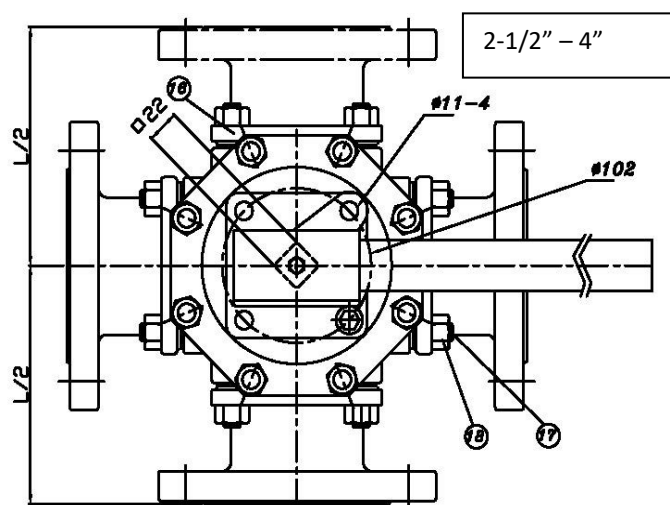
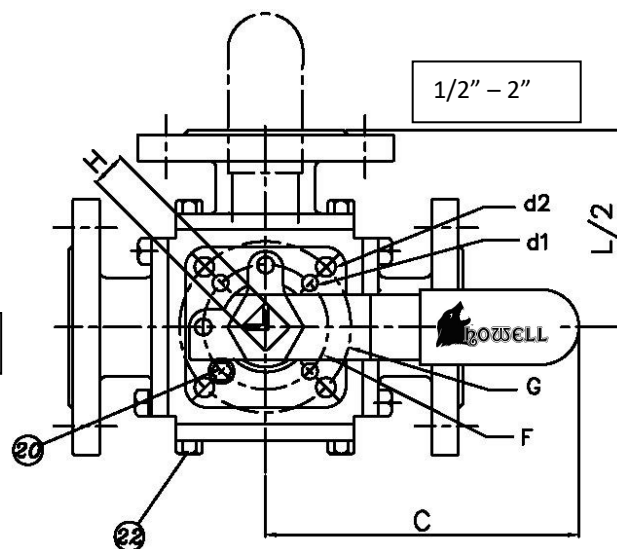
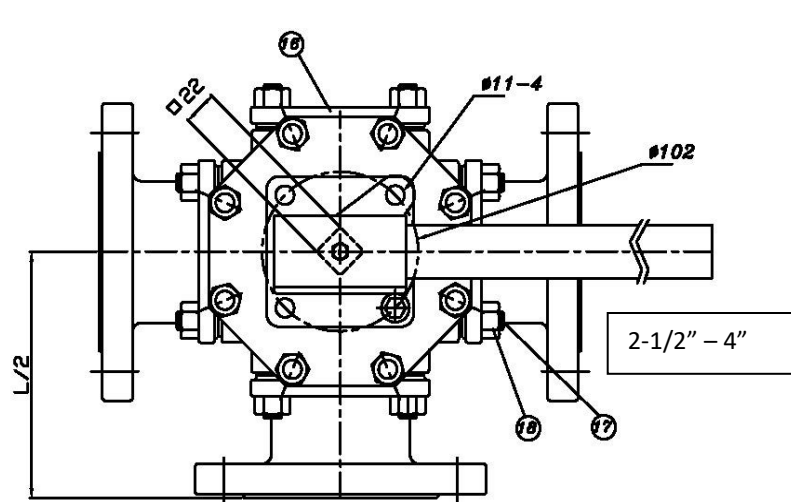
SIZE	Class 150												
	D1		D2		g		t		f		m		n
IN	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	
1/2"	3.5	89.0	2.4	60.5	1.4	35.0	0.4	11.2	0.1	1.6	0.6	16.0	4.0
3/4"	3.9	98.0	2.8	70.0	1.7	43.0	0.4	11.2	0.1	1.6	0.6	16.0	4.0
1"	4.3	108.0	3.1	79.5	2.0	51.0	0.4	11.2	0.1	1.6	0.6	16.0	4.0
1-1/4"	4.6	117.0	3.5	89.0	2.5	64.0	0.5	12.7	0.1	1.6	0.6	16.0	4.0
1-1/2"	5.0	127.0	3.9	98.5	2.9	73.0	0.6	14.3	0.1	1.6	0.6	16.0	4.0
2"	6.0	152.0	4.7	120.5	3.6	92.0	0.6	15.8	0.1	1.6	0.7	19.0	4.0
2-1/2"	7.0	178.0	5.5	139.5	4.1	105.0	0.7	17.8	0.1	1.6	0.7	19.0	4.0
3"	7.5	190.0	6.0	152.5	5.0	127.0	0.8	19.1	0.1	1.6	0.7	19.0	4.0
4"	9.0	229.0	7.5	190.5	6.2	157.0	0.9	24.0	0.1	1.6	0.7	19.0	8.0

DIMENSION OF FLANGE END (3 Way and 4 Way):

SIZE	Class 300												
	D1		D2		g		t		f		m		n
	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	
1/2"	3.7	95.0	2.6	66.5	1.4	35.0	0.6	14.5	0.1	1.6	0.6	16.0	4.0
3/4"	4.6	117.0	3.2	82.5	1.7	43.0	0.6	16.0	0.1	1.6	0.7	19.0	4.0
1"	4.9	124.0	3.5	89.0	2.0	51.0	0.7	17.5	0.1	1.6	0.7	19.0	4.0
1-1/4"	5.3	134.0	3.9	98.5	2.5	64.0	0.8	20.5	0.1	1.6	0.7	19.0	4.0
1-1/2"	6.1	156.0	4.5	114.5	2.9	73.0	0.9	22.5	0.1	1.6	0.9	22.0	4.0
2"	6.5	165.0	5.0	127.0	3.6	92.0	1.0	25.4	0.1	1.6	0.7	19.0	8.0
2-1/2"	7.5	190.0	5.9	149.0	4.1	105.0	1.0	25.4	0.1	1.6	0.9	22.0	8.0
3"	8.3	210.0	6.6	168.0	5.0	127.0	1.1	28.6	0.1	1.6	0.9	22.0	8.0
4"	10.0	254.0	7.9	200.0	6.2	157.0	1.3	32.0	0.1	1.6	0.9	22.0	8.0

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HS2B Series



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HS2B Series

MATERIALS LIST

Item Side	Item Top	Part	For 3"-4"
1	1	Flange End	ASTM A351 CF8M
2	3	Body	ASTM A351 CF8M
3	4	Ball & Stem	ASTM A351 CF8M
4		Housing	PTFE + SS
5	5	Seats	RPTFE (15% G.F.)
6	2	Gasket	PTFE
7		O-Ring	VITON
8		Stem Packing	PTFE
9		Gland Washer	304 SS
10		Disk Washer	301 SS
11		Gland Bushing	304 SS
12		Handle Head	ASTM A351 CF8M
13		Stop Pin	304 SS
14		Bolt	304 SS
15		Lever	CARBON STEEL
17		Connection Bolts	B8
18		Bolt Nuts	304 SS
19		Stop Pin Nut	304 SS
20		Bonnet	ASTM A351 CF8M
21		Bonnet Gasket	PTFE



DIMENSIONS (3 Way and 4 Way)

SIZE	L			
	Class 150		Class 300	
	IN	MM	IN	MM
1/2"	6.0	152.0	6.3	160.0
3/4"	6.6	167.0	7.0	177.0
1"	7.5	190.0	7.9	200.0
1-1/4"	8.2	208.0	8.6	218.0
1-1/2"	8.7	220.0	9.2	234.0
2"	10.0	253.0	10.7	273.0
2-1/2"	11.8	300.0	11.8	300.0
3"	12.0	305.0	13.0	330.4
4"	14.5	368.5	15.5	393.8

DIMENSIONS (3 Way and 4 Way)

SIZE	d1		d2		G		F		C		H	
IN	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
1/2"	0.24	6.0	0.2	6.0	1.65	42.0	1.42	36.0	5.1	130.0	0.35	9.0
3/4"	0.24	6.0	0.3	7.1	1.97	50.0	1.65	42.0	6.5	165.0	0.43	11.0
1"	0.24	6.0	0.3	7.1	1.97	50.0	1.65	42.0	6.5	165.0	0.43	11.0
1-1/4"	0.28	7.1	0.4	9.2	2.76	70.0	1.97	50.0	8.1	205.0	0.55	14.0
1-1/2"	0.28	7.1	0.4	9.2	2.76	70.0	1.97	50.0	8.1	205.0	0.55	14.0
2"	0.36	9.2	0.4	11.4	4.02	102.0	2.76	70.0	12.8	325.0	0.67	17.0