

Howell MULTI-PORT Flanged Ball Valve

Easy to Actuate

SPECIFICATIONS:

- 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”



STANDARDS:





















ASME – B16.34
 NACE – MR0175
 EN1024 – DIN 50-049-3.1B
 CE 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	

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				

Sample Description and Part# :

HS2B-3L-SS-F1-R-112
 HS2B SS 150# FLG 3-WAY RPTFE L-PORT BALL 1-1/2"



HS2B SERIES

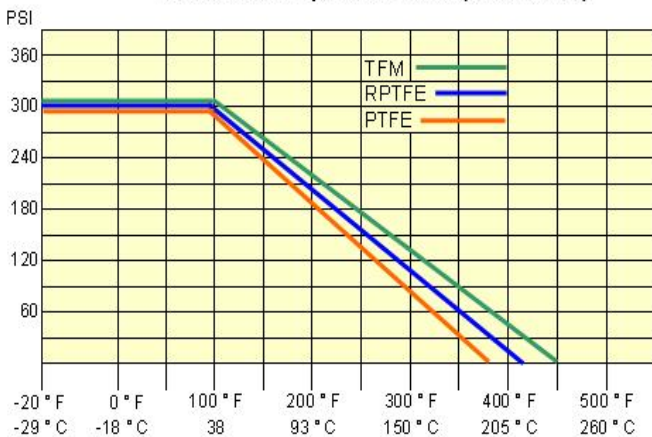
WEIGHTS

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"	8	3	9	4	10	4	11	5
3/4"	9	4	10	5	13	6	16	7
1"	13	6	15	7	18	8	22	10
1-1/4"	19	9	21	9	25	11	29	13
1-1/2"	28	12	30	14	37	17	43	19
2"	47	21	51	23	54	25	61	28
2-1/2"	63	29	69	31	76	34	85	39
3"	78	36	87	40	95	43	107	49
4"	141	64	158	72	169	77	182	83
6"	204	93	-	-	-	-	-	-
8"	275	125	282	128	-	-	-	-

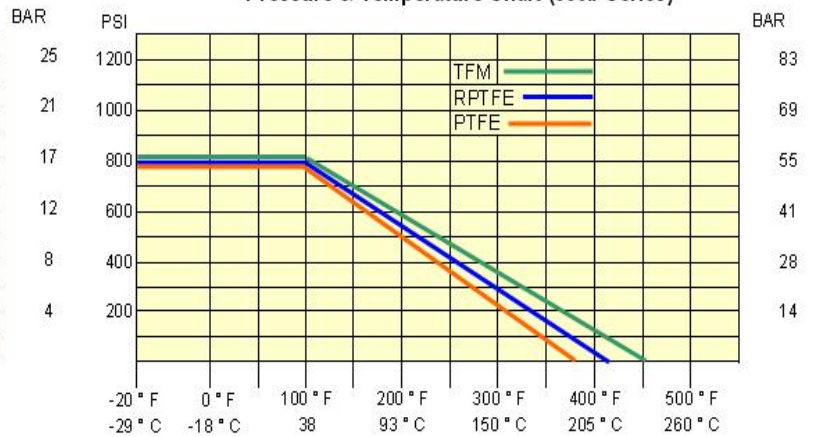
CV & TORQUE VALUES

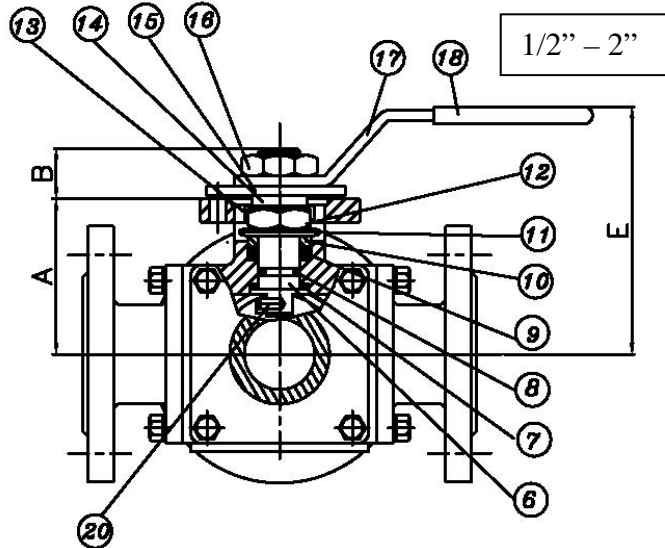
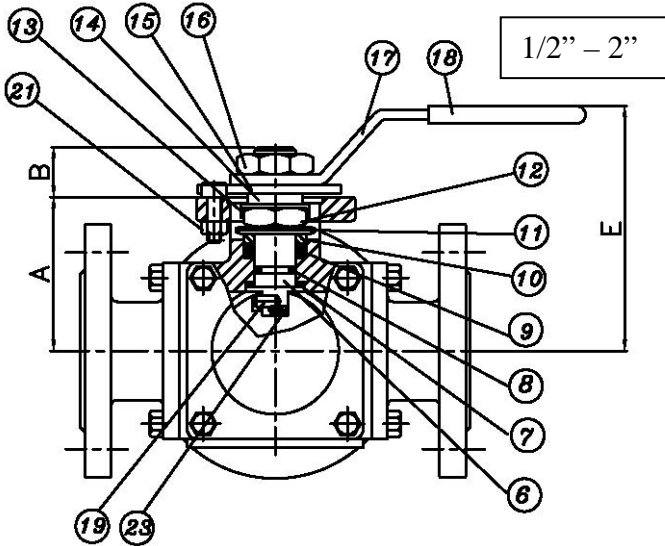
Size	150# Torque	300# Torque	L-Port, CV	T-Port, CV (Through)	T-Port, CV (Branch)
	(IN/LBS)	(IN/LBS)			
1/2"	143	201	11	13	8
3/4"	173	242	20	25	17
1"	285	476	30	34	22
1-1/4"	366	512	47	54	41
1-1/2"	561	786	70	84	54
2"	851	1192	133	158	97
2-1/2"	2027	2838	162	188	122
3"	2284	3200	252	275	216
4"	3779	5297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

Pressure & Temperature Chart (150# Series)



Pressure & Temperature Chart (300# Series)





MATERIALS LIST

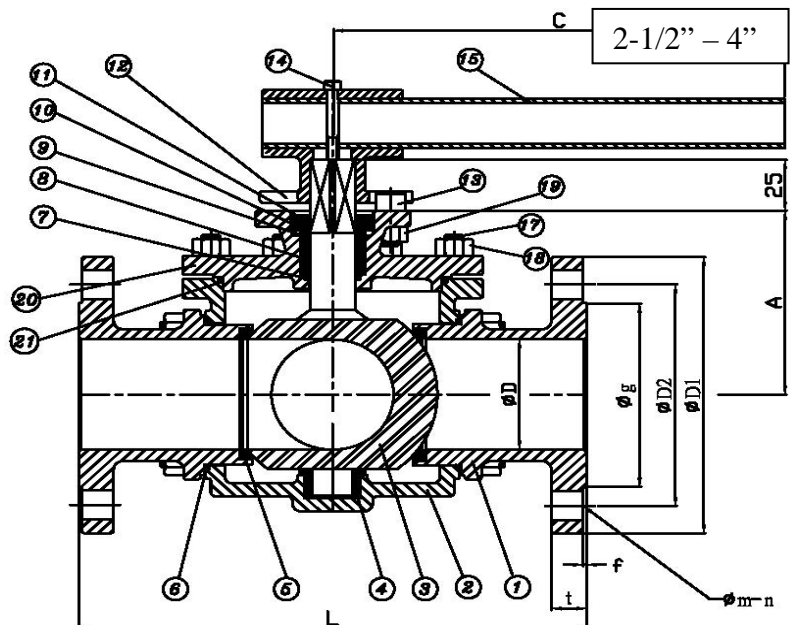
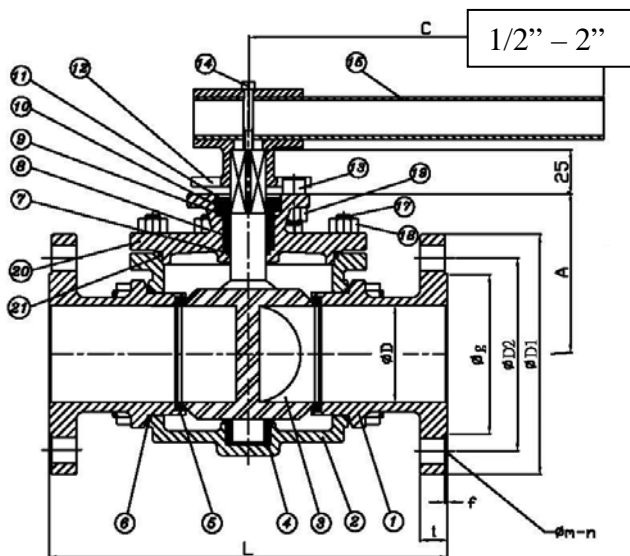
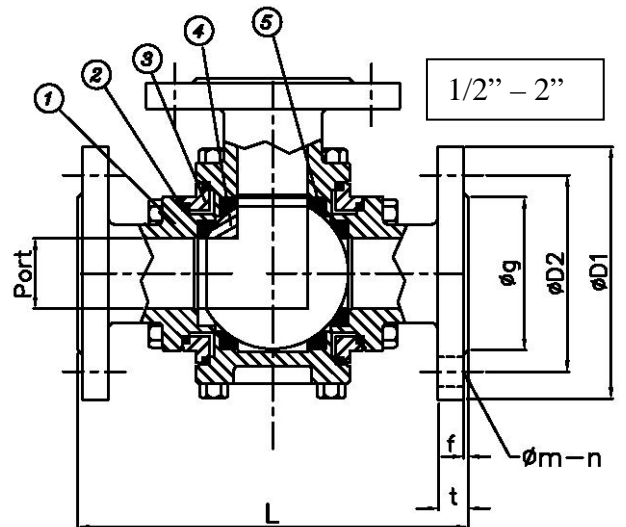
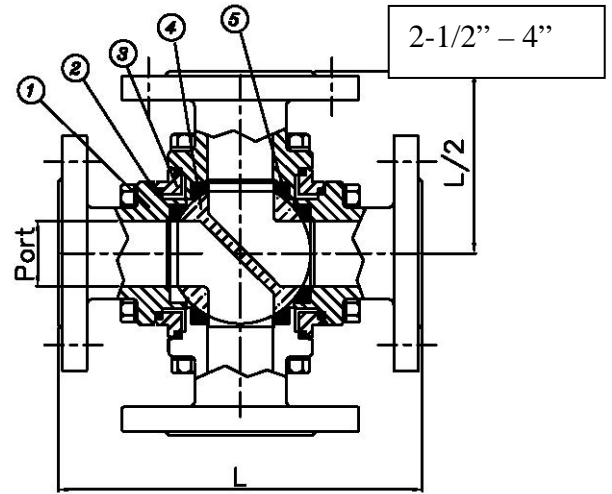
Items 4-Way	Items 3-Way	Part	For 1/2" - 2-1/2"
6	6	Stem	316 SS
7	7	Thrust Washer	RPTFE (15% G.F.)
8	8	O-Ring	VITON
9	9	Stem Packing	PTFE
10	10	Gland Bushing	304 SS
11	11	Disk Washer	301 SS
12	12	Stem Nut	304 SS
13	13	Nut Stop	304 SS
14	14	Space Washer	304 SS
15	15	Plater	304 SS
16	16	Handle Nut	304 SS
17	17	Handle	304 SS
18	18	Cover	PLASTIC
19	20	Stop Pin	304 SS
20	19	Insert Pin	316 SS
-	21	Stop Pin Nut	304 SS
-	23	Anti Static Device	OPTION

DIMENSIONS (3 Way and 4 Way)

SIZE	A		B		E	
	IN	MM	IN	MM	IN	MM
1/2"	1.6	41.0	0.4	11.0	2.44	62.0
3/4"	1.9	49.0	0.6	14.0	3.23	82.0
1"	2.2	55.0	0.6	14.0	3.50	89.0
1-1/4"	2.5	63.0	0.7	18.0	3.86	98.0
1-1/2"	2.9	74.0	0.7	18.0	4.25	108.0
2"	3.7	93.0	0.9	23.0	5.51	140.0

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





HS2B SERIES

DIMENSIONS (3 Way and 4 Way):

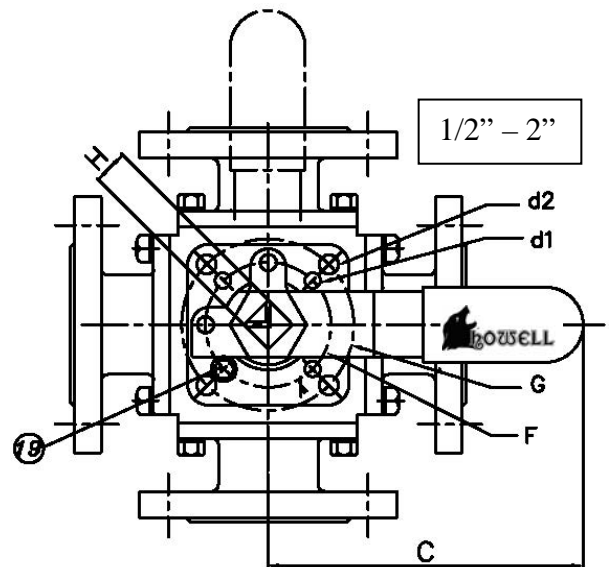
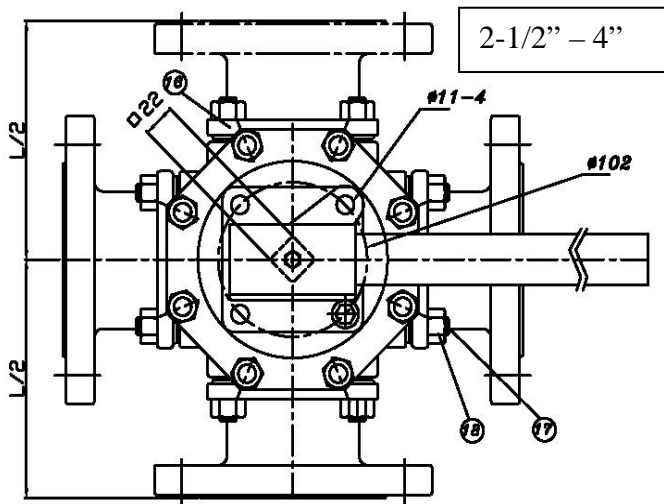
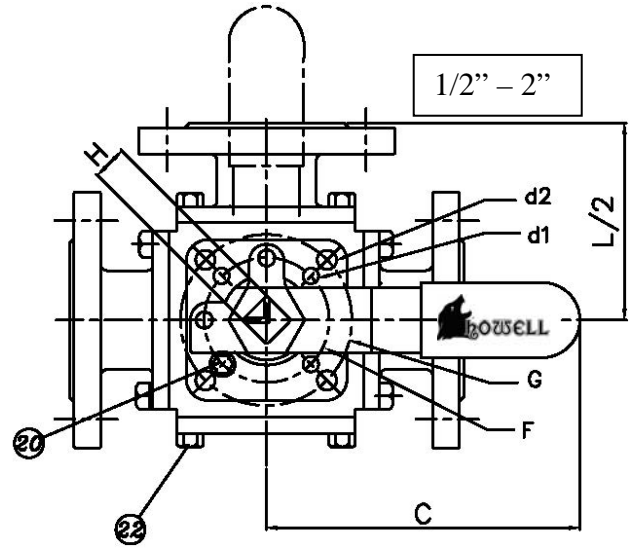
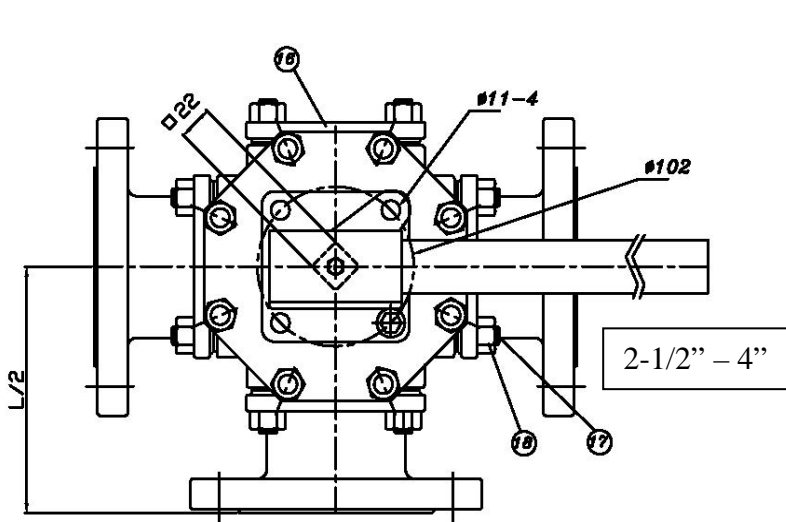
SIZE	A		C		D		L			
	IN	MM	IN	MM	IN	MM	Class 150		Class 300	
IN	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
2-1/2"	4.7	118.5	15.7	400.0	2.4	62.0	11.8	300.0	11.8	300.0
3"	5.4	136.5	19.7	500.0	3.0	76.0	12.0	305.0	13.0	330.4
4"	6.2	156.5	25.6	650.0	3.8	96.0	14.5	368.5	15.5	393.8

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

SIZE	Class 150												n
	D1		D2		g		t		f		m		
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												n
	D1		D2		g		t		f		m		
IN	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





HS2B SERIES

MATERIALS LIST:

Item 3-Way	Item 4-Way	Part	For 3"-4"
16	16	Blank End	ASTM A351 CF8M
17	17	Connection Bolts	B8
18	18	Bolt Nuts	304 SS
20	19	Stop Pin	304 SS
19	20	Insert Pin	316 SS
22	-	Flange End Bolts	B8

DIMENSIONS (3 Way and 4 Way)

SIZE	L			
	Class 150		Class 300	
IN	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	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