

Howell MULTI-PORT SANITARY Ball Valve


 Easy to Actuate

SPECIFICATIONS:

- Multi-Port, 3-Way and 4-Way
- Available in L-Port, T-Port, & X-Port
- Stainless Steel Body
- Full Port Design, 800 PSI
- Four Piece Seat Design
- Tri Clamp or Tube OD Ends
- Blowout Proof Stem for Safety
- ISO 5211 Direct Mounting Pad
- Anti-Static Device Option
- Live Loaded Stem Design for High Cycle Life
- Complete with PTFE Cavity Filler
- Silicone Free
- Material Traceability
- Size Range: ½” to 4”



STANDARDS:

ASME – B16.34

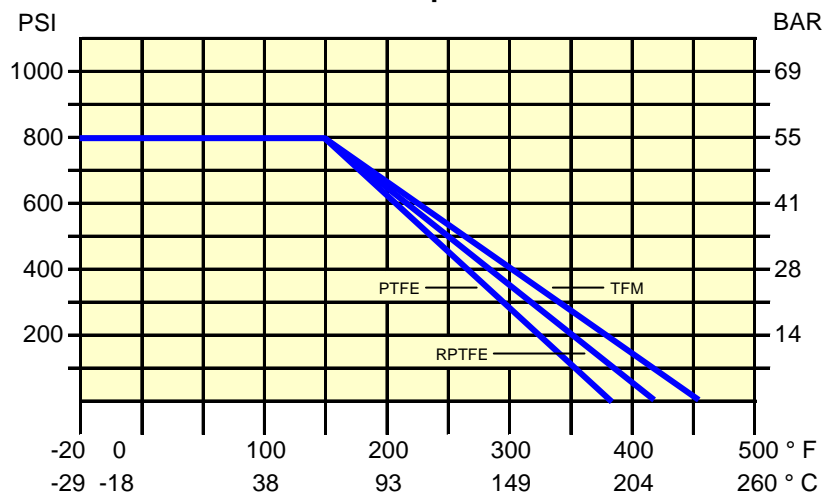
NACE – MR0175

EN1024 – DIN 50-049-3.1B

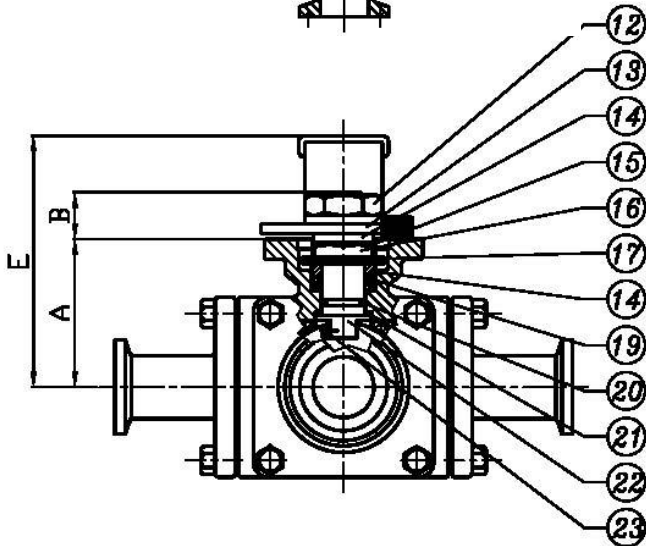
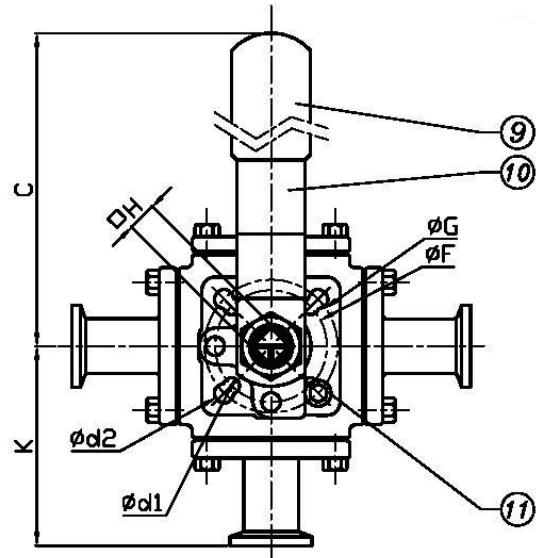
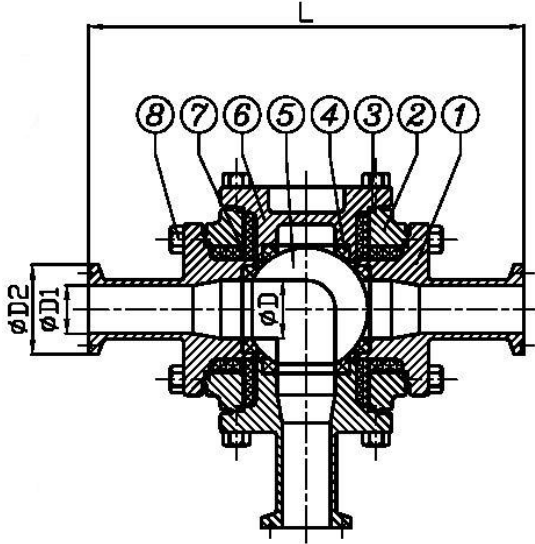
CE Approved for Europe

Valve Testing – API 598, MSS SP 61

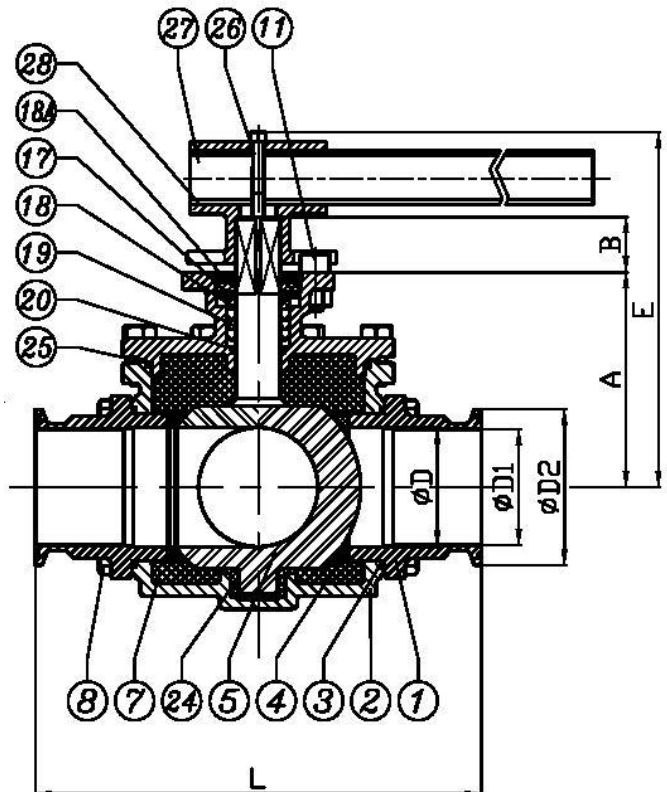
Pressure & Temperature Chart



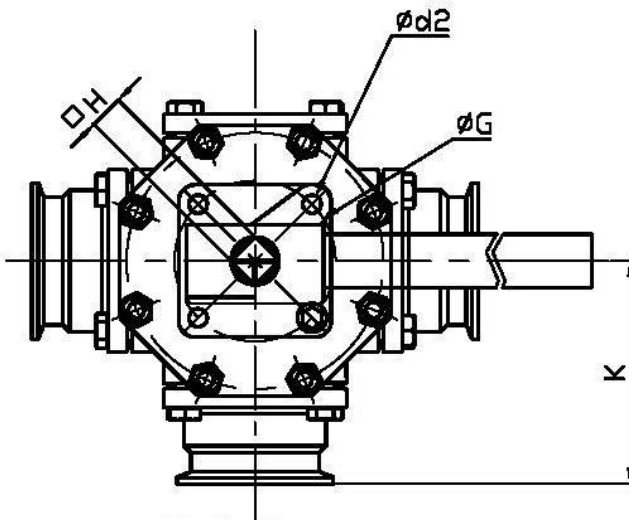
SIZE 1/2" - 2"



SIZE 2 1/2" - 4"



SIZE 2 1/2" - 4"



MATERIALS LIST:

Item	Part	Material
1	T-Clamp	A351 Gr. CF8M
2	Body	A351 Gr. CF8M
3	Gasket	PTFE
4	Seat	PTFE
5	Ball	316 SS
6	Blank Cap	A351 Gr. CF8M
7	Cavity Seat	PTFE
8	Bolts	304 SS
9	Handle Grip	Vinyl
10	Handle	304 SS
11	Stop Pin	304 SS
12	Handle Nut	304 SS
13	Plate Stopper	304 SS
14	Spacer	304 SS
15	Stop Nut	304 SS

Item	Part	Material
16	Stem Nut	304 SS
17	Belleville Washer	304 SS
18	Gland Washer	304 SS
18A	Gland	304 SS
19	Stem Packing	PTFE
20	O-Ring	Viton
21	Thrust Washer	PTFE
22	Stem	316 SS
23	Pin	316 SS
24	Housing	RPTFE + Stainless
25	Bonnet Gasket	PTFE
26	Bolt	SS 304
27	Handle Head	A351 Gr. CF8
28	Lever	Carbon Steel

DIMENSIONS:

SIZE	A		B		C		d1		d2		ISO5211	E		F		G		H	
	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM		IN	MM	IN	MM	IN	MM	IN	MM
1/2"	1.5	38	0.4	10	5.1	130	0.2	6	0.2	6	F03-F04	2.4	62	1.4	36	1.7	42	0.4	9
3/4"	1.7	42	0.4	11	5.1	130	0.2	6	0.2	6	F03-F04	2.5	64	1.4	36	1.7	42	0.4	9
1"	2.2	56	0.6	14	6.5	165	0.2	6	0.3	7	F04-F05	3.5	89	1.7	42	2.0	50	0.4	11
1-1/2"	2.9	74	0.6	16	8.1	205	0.3	7	0.4	9	F05-F07	4.3	108	2.0	50	2.8	70	0.6	14
2"	3.6	93	0.8	21	12.8	325	0.4	9	0.4	11	F07-F10	5.5	140	2.8	70	4.0	102	0.7	17
2-1/2"	4.6	118	1.0	26	15.7	400			0.4	11	F10	7.5	190			4.0	102	0.9	22
3"	5.4	137	1.0	25	19.7	500			0.4	11	F10	8.1	207			4.0	102	0.9	22
4"	6.2	157	1.0	25	25.6	650			0.4	11	F10	8.9	227			4.0	102	0.9	22

SIZE	K		L		D		D1		D2	
	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
1/2"	2.4	60	4.7	120	0.5	12	0.4	10	1.0	25
3/4"	2.7	68	5.4	136	0.6	15	0.6	16	1.0	25
1"	3.1	80	6.3	160	1.0	25	0.9	22	2.0	50
1-1/2"	3.6	91	7.2	182	1.5	38	1.4	35	2.0	50
2"	4.3	108	8.5	216	2.0	50	1.9	48	2.5	64
2-1/2"	4.7	121	9.5	241	2.4	62	2.4	60	3.0	77
3"	5.5	140	11.0	279	3.0	76	2.9	73	3.6	91
4"	6.5	165	13.0	330	3.8	96	3.8	97	4.7	119



Break Away Torques

Size	(in/lbs)
1/2"	168
3/4"	177
1"	398
1-1/2"	655
2"	1027
2-1/2"	2319
3"	2664
4"	3407


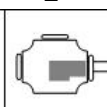
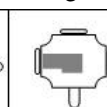
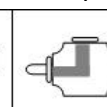

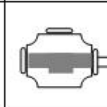
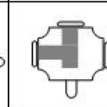
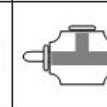
Estimated Cv Values

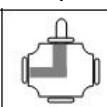
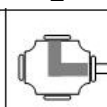
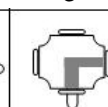
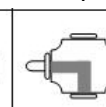

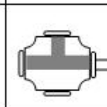
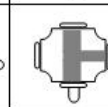
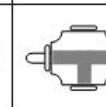
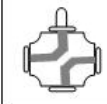
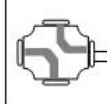
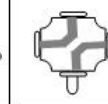
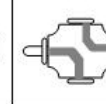
Size	L-Port CV	T-Port CV
1/2"	12	16
3/4"	25	45
1"	26	46
1-1/2"	26	46
2"	57	101
2-1/2"	100	180
3"	117	200
4"	128	230

Valve Weights

Size	(KG)	(LB)
1/2"	1.4	3.0
3/4"	2.7	5.9
1"	4.4	9.6
1-1/2"	8.6	18.9
2"	15.3	33.8
2-1/2"	20.3	44.7
3"	26.4	58.1
4"	47.6	105.0

FLOW PATTERNS

Position	1	2	3	4
L PORT 3-WAY				
T PORT 3-WAY				

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

HOW TO ORDER:

1	SERIES
HSP2BT	Howell Multiport
2	- PORT STYLE
3L	3-Way L-Port
3T	3-Way T-Port
4L	4-Way L-Port
4T	4-Way T-Port
4X	4-Way X-Port
3	- ENDS
TC	Triclamp
BW	Butt Weld - Tube OD
4	- SEAT
F	TFM
R	RPTFE
T	PTFE *
* PTFE Seats are Standard	
5	- SIZE
12	1/2"
34	3/4"
1	1"
112	1-1/2"
2	2"
212	2-1/2"
3	3"
4	4"

6	- ACTUATOR
D3	HDA-65 Pneumatic Double Acting
D4	HDA-80 Pneumatic Double Acting
D5	HDA-100 Pneumatic Double Acting
D6	HDA-125 Pneumatic Double Acting
D7	HDA-140 Pneumatic Double Acting
D8	HDA-160 Pneumatic Double Acting
D9	HDA-210 Pneumatic Double Acting
S3	HSR-65 Pneumatic Spring Return
S4	HSR-80 Pneumatic Spring Return
S5	HSR-100 Pneumatic Spring Return
S6	HSR-125 Pneumatic Spring Return
S7	HSR-140 Pneumatic Spring Return
S8	HSR-160 Pneumatic Spring Return
S9	HSR-210 Pneumatic Spring Return

7	- ACCESSORIES / OPTIONS
4L	Nema 4 Limit Switch
7L	Nema 7 Limit Switch
4S1	Nema 4 Namur Solenoid Valve 120vac
4S2	Nema 4 Namur Solenoid Valve 24vdc
7S1	Nema 7 Namur Solenoid Valve 120vac
7S2	Nema 7 Namur Solenoid Valve 24vdc
4S0	Nema 4 Namur Solenoid Valve special voltage
7S0	Nema 7 Namur Solenoid Valve special voltage

Contact Howell for full actuator and accessory specifications

Sample Part# and Description

Howell Part#
HSP2BT-3L-TC-T-112
HSP2BT-3L-TC-T-112-D4

Description
HSP2BT TRICLAMP 3-WAY L-PORT PTFE BALL 1-1/2"
HSP2BT TRICLAMP 3-WAY L-PORT PTFE BALL 1-1/2" C/W HDA80 ACTUATOR