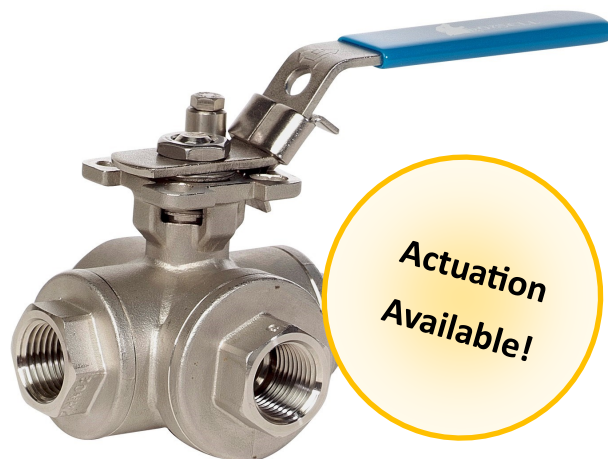


SPECIFICATION:

- ◆ Stainless Steel Body
- ◆ Full Port Design, 1000 PSI
- ◆ Threaded Ends
- ◆ Blowout Proof Stem for Safety
- ◆ ISO 5211 Direct Mounting Pad
- ◆ Anti-Static Device
- ◆ Available in L-Port and T-Port Flow Patterns
- ◆ Live Loaded Stem Design for High Cycle Life
- ◆ 4 Seat Design Provides Control and Shutoff at Each Port
- ◆ Locking Lever Handle
- ◆ Silicone Free
- ◆ Material Traceability
- ◆ Size Range: ¼" to 2"



Valve Standards:

- ◆ CRN Registered
- ◆ Conforms to MSS SP-25 MSS SP-75
- ◆ NACE – MR0175
- ◆ EN1024 – DIN 50-049-3.1B
- ◆ Approved for Europe
- ◆ Valve Testing – API 598, MSS SP 61

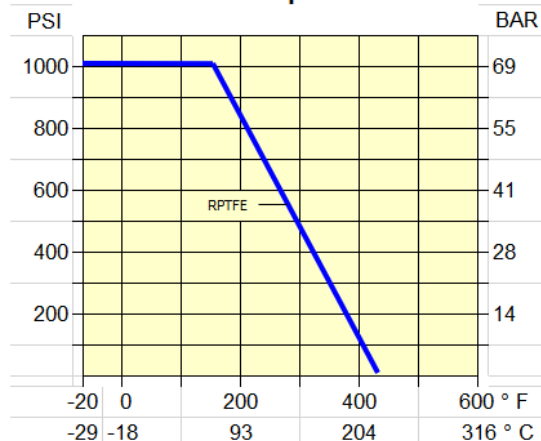
How To Order:

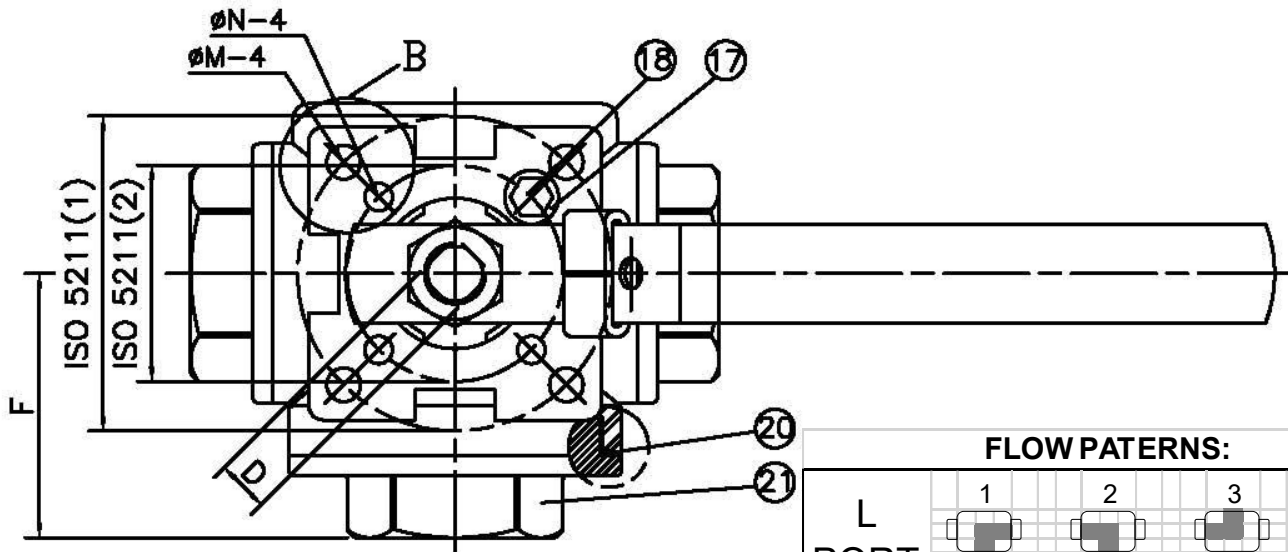
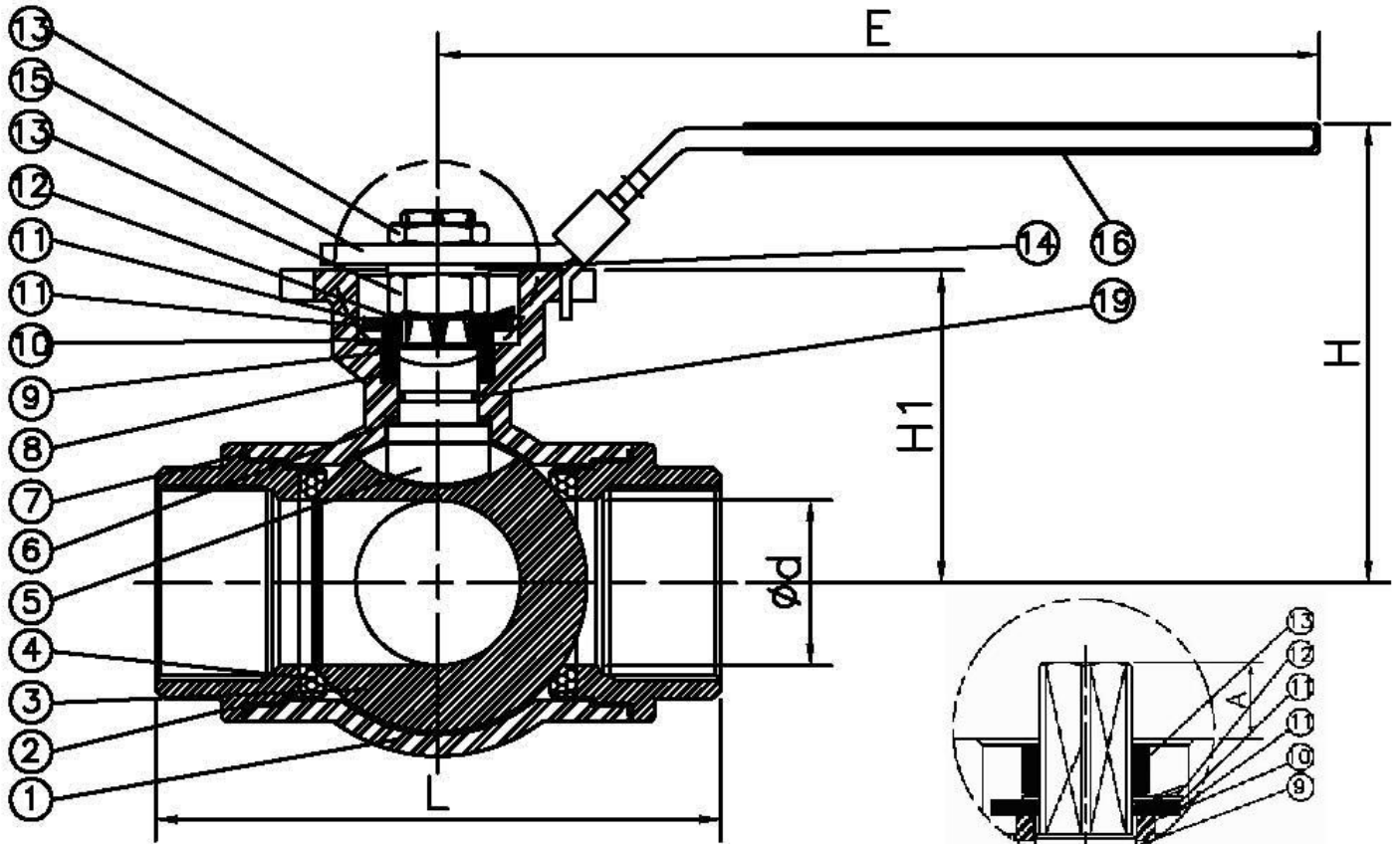
Series - **Port Style** - **Ends** - **Seat** - **Size**
HSP2D 3L IP R - RPTFE *
 3T T - PTFE
 * RPTFE Seats are Standard

Sample Description and Part# :

HSP2D-3L-IP-R-112
HSP2D SS IP 3-WAY RPTFE L-PORT FP BALL 1-1/2"

Pressure & Temperature Chart



Howell 3 Way Direct Mount Ball Valve
HSP2D Series


FLOW PATTERNS:

L PORT	1	2	3	4
T PORT	1	2	3	4

Howell 3 Way Direct Mount Ball Valve
HSP2D Series
MATERIALS LIST:

Item	Part	For Stainless Steel Valve	Quantity
1	Body	ASTM A351 CF8M	1
2	End Cap	ASTM A351 CF8M	2
3	Ball	ASTM A351 CF8M	1
*4	Seat	RPTFE	4 / 1 Set
5	Stem	316 SS	1
*6	Thrust Washer	RPTFE	1
*7	End Seals	RPTFE	2 / 1 Set
*8	Stem Packing	RPTFE	1 Set
*9	Thrust Washer	TFM1600	1
10	Gland Bushing	304 SS	1
11	Belleville Washer	SUS304-CSP	2
12	Stop	304 SS	1
13	Handle Nut	304 SS	2
14	Washer	304 SS	1
15	Handle	304 SS	1
16	Handle Sleeve	Vinyl	1
17	Stopper Nut	304 SS	1
18	Screw	304 SS	1
*19	O-Ring	Viton	1
*20	End Seals	RPTFE	1
21	End Cap	ASTM A351 CF8M	1

* included in repair kit with lock saddle

DIMENSIONS:

SIZE	A		ød		D		E		F		H		H1		L		Ø M		Ø N		ISO5211	
IN	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	(1)	(2)
1/4"	0.3	8.2	0.4	11	0.4	9	5.2	132	1.5	38.3	2.6	64.9	1.4	36.8	3.0	75.7	0.2	6	0.2	6	F04	F03
3/8"	0.3	8.2	0.4	11	0.4	9	5.2	132	1.5	38.3	2.6	64.9	1.4	36.8	3.0	75.7	0.2	6	0.2	6	F04	F03
1/2"	0.4	9.0	0.6	16	0.4	9	5.2	132	1.8	44.7	2.8	71.6	1.7	44.1	3.4	86.6	0.2	6	0.2	6	F04	F03
3/4"	0.5	11.5	0.8	20	0.4	11	7.1	180	2.0	50.8	3.7	94.3	2.2	55.1	4.1	103.0	0.3	7	0.2	6	F05	F04
1"	0.5	11.5	1.0	25	0.4	11	7.1	180	2.3	57.7	3.9	100.0	2.4	60.7	4.7	118.2	0.3	7	0.2	6	F05	F04
1-1/4"	0.6	15.1	1.3	32	0.6	14	8.9	225	2.5	62.6	4.6	115.7	3.0	75.2	5.0	125.8	0.4	9	0.3	7	F07	F05
1-1/2"	0.6	15.1	1.5	38	0.6	14	8.9	225	2.9	74.3	4.9	124.9	3.3	84.4	5.9	149.0	0.4	9	0.3	7	F07	F05
2"	0.7	18.0	2.0	50	0.7	17	10.5	267	3.4	85.6	5.5	139.0	3.7	94.6	6.7	171.2	0.4	11	0.4	9	F10	F07

Break Away Torques

Size	(in/lbs)
1/4"	29
3/8"	29
1/2"	44
3/4"	79
1"	148
1-1/4"	191
1-1/2"	330
2"	520

Estimated Cv Values

Size	L PORT	T PORT
1/4"	11	15
3/8"	11	15
1/2"	12	16
3/4"	25	45
1"	26	46
1-1/4"	57	101
1-1/2"	100	180
2"	117	200

Valve Weights

Size	(KG)	(LB)
1/4"	0.8	1.7
3/8"	0.8	1.7
1/2"	1.2	2.6
3/4"	1.8	4.0
1"	2.5	5.5
1-1/4"	3.6	7.9
1-1/2"	5.8	12.8
2"	8.0	17.6

Howell reserves the right to alter design specifications without notice.