



SERIES 39

MADE IN MARS

Direct Mount Design
3-WAY BALL VALVES
Stainless Steel and Carbon Steel
Full Port or Reduced Port
1/4" - 1" 1000 PSI
1 1/4" - 2" 800 PSI

Take a good look, it may be your future

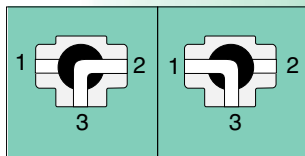
DESIGN FEATURES

- **Dual Pattern ISO 5211 Mounting Pad with Square Stem**
Allows a pneumatic or electric actuator bolted directly to the top of ball valves, No Bracket and Adapter are required, for greater reliability, easy installation and improved cycling life.
- **Four Seats Design**
Prevents leakage in the cavity area and maintains proper alignment of the ball.
- **Live Loaded Stem Design**
Self-compensating stem seal automatically adjusts for wear and fluctuations in pressure and temperature.
- **Blow-Out Proof Stem**
Prevents stem from blowing-out, for maximum safety.
- **O-Ring Stem Seal**
Enhances stem wear and maintains stem alignment, provides extra longer service life.

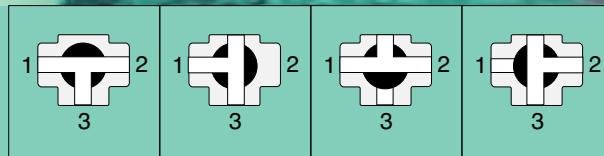


FLOW PATTERNS

L-Port



T-Port



Break Away Torque

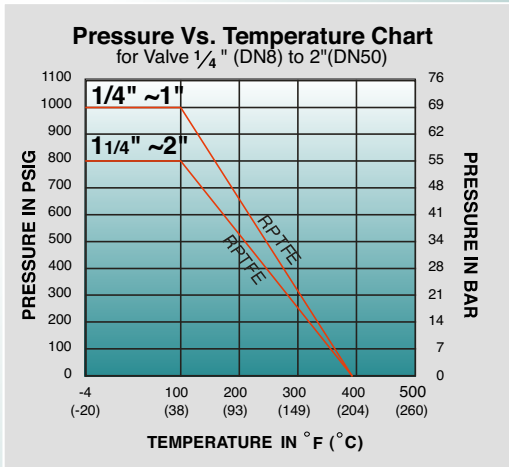
* Standard Mars valves are assembled with silicon-free based in lubricant, torque for dry assembled valves please consult factory.

Full Port	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
Nm	8	8	10	13	23	42	51	59
In-Lbs	75	75	92	115	207	369	449	518
Red Port	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
Nm	8	8	8	10	13	23	42	51
In-Lbs	75	75	75	92	115	207	369	449

Cv Factors

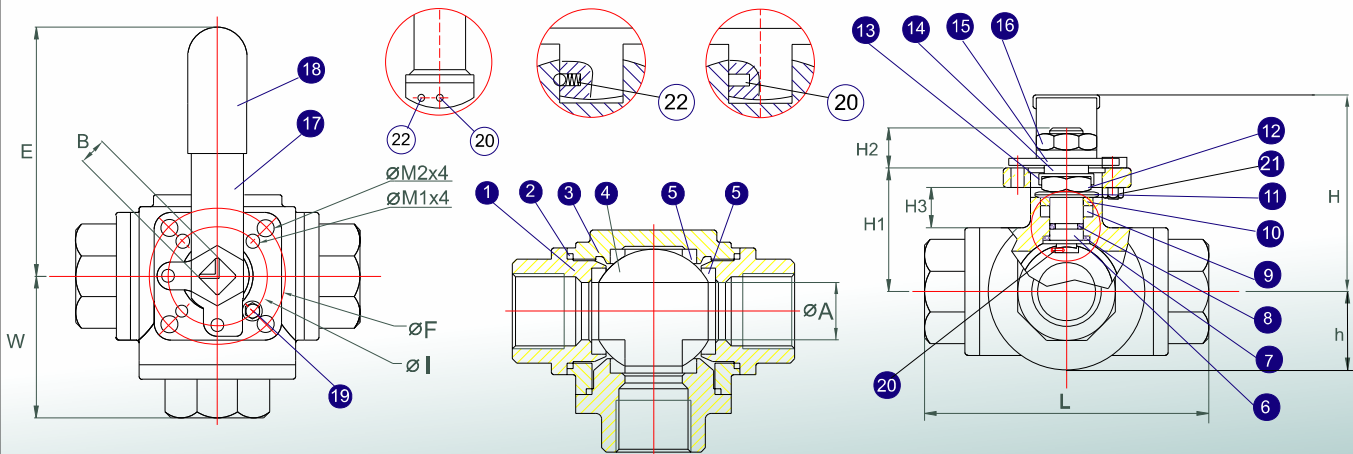
Valve Size	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
L-Port	7	7	11	15	30	47	70	133
T-Port (through)	8	8	13	19	34	54	84	158
T-Port (branch)	6	6	8	11	22	41	54	97

MATERIALS LIST



NO.	PART NAME	MATERIAL	Q'TY
1	End Cap	A351 Gr. CF8M	3
2	Gasket	PTFE	3
3	Body	A351 Gr. CF8M	1
4	Ball	SS316	1
5	Seat	PTFE / RPTFE	4
6	Stem	SS316	1
7	Stem Seal	RPTFE	1
8	O - Ring	VITON	1
9	Stem Packing	GRAPHITE	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	Stem Washer	SS 304	1
15	Lock Saddle	SS 304	1
16	Handle Nut	SS 304	1
17	Handle	SS 304	1
18	Handle Sleeve	Vinyl	1
19	Stop Pin	SS 304	1
20	Insert Pin	SS316	1
21	Pin Nut	SS 304	1
22	Anti - ststic Device	SS316	1

DIMENSIONS (mm)



Full Port	Reduced Port	ϕA	B	E	H	H1	H2	H3	h	ϕI	ϕF	L	$\phi M1$	$\phi M2$	W	Wt.(kg)	ISO 5211
1/4"	--	11	9	130	62	38.5	11	11.8	20	36	42	72	6.0	6.0	36	0.66	F03/F04
3/8"	1/2"	12	9	130	62	38.5	11	11.8	20	36	42	72	6.0	6.0	36	0.64	F03/F04
1/2"	3/4"	15	9	130	64	41	11	13.4	23.2	36	42	83	6.0	6.0	41.5	0.85	F03/F04
3/4"	1"	20	11	165	82	49	14	14.8	28	42	50	99	6.0	7.1	49.5	1.46	F04/F05
1"	1 1/4"	25	11	165	89	55	14	15.0	34	42	50	112	6.0	7.1	56	2.18	F04/F05
1 1/4"	1 1/2"	32	14	205	98	63	18	16.2	39	50	70	125	7.1	9.2	62.5	3.28	F05/F07
1 1/2"	2"	38	14	205	108	74	18	16.5	48	50	70	149	7.1	9.2	74.5	5.24	F05/F07
2"	--	50	17	325	140	93	22	24.2	60	70	102	174	9.2	11.4	87	9.48	F07/F10



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