

MP-3W SERIES STANDARD PORT 3-WAY BRASS BALL VALVES

BILL OF MATERIALS

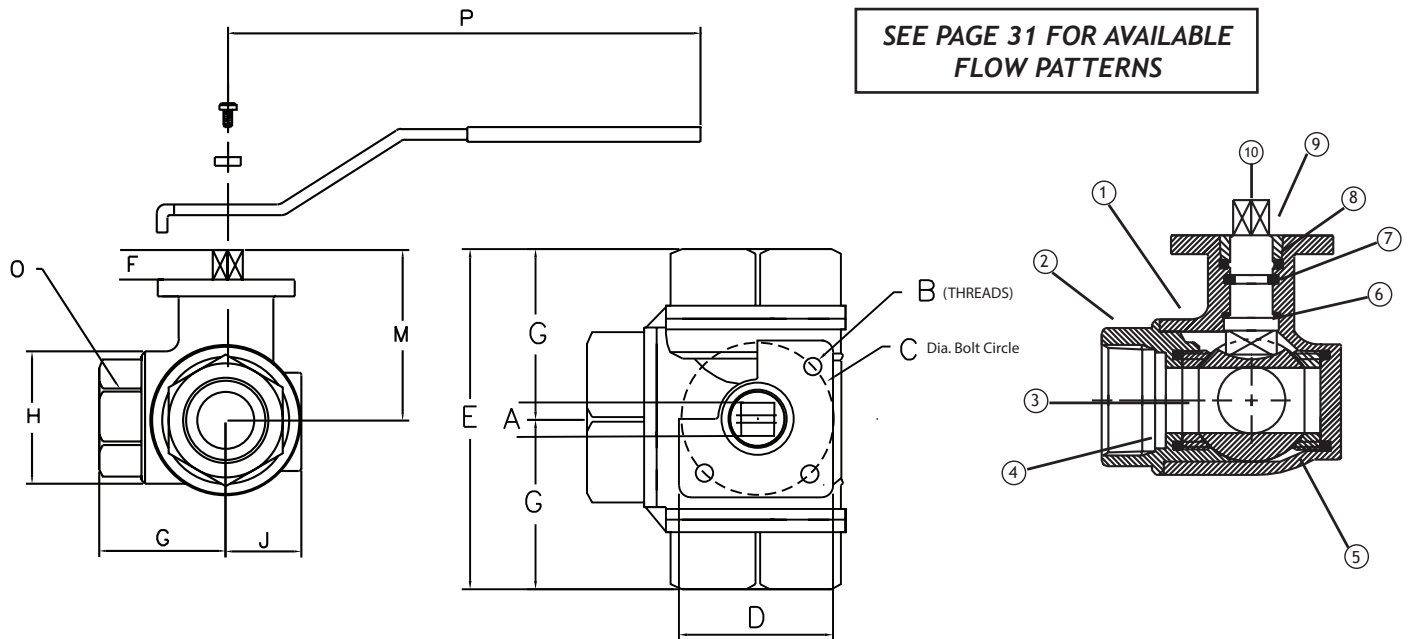
PART #	NAME	MATERIAL	QTY
1	BODY	BRASS UNI 5705-65	1
2	ENDS	BRASS UNI 5705-65	3
3	BALL	BRASS UNI 5705-65 CHROME PLATED	1
4	SEAT	TFE	4
5	BODY SEAL	VITON	4
6	STEM SEAL	TFE	1
7	BODY O-RING	VITON	1
8	STEM O-RING	VITON	1
9	STEM NUT	BRASS UNI 5705-65	1
10	STEM	BRASS UNI 5705-65	1

VALVE FEATURES

- Standard port brass valve
- 1/4" through 2"
- Multiple flow configurations
- TFE® seats and seals
- Viton® body o-rings
- ISO mounting pad
- Blowout proof stem
- 4-seat design

PRESSURE RATING
600 WOG
TEMPERATURE RATING
+297° F Maximum

NOTE: MAXIMUM TEMPERATURE RATING FOR STANDARD ACTUATORS IS 150° F (ELECTRIC) AND 180° (PNEUMATIC). SPECIAL SEALS OR HEAT EXTENSIONS ARE AVAILABLE FOR HIGH TEMPERATURE SERVICE.



SEE PAGE 31 FOR AVAILABLE FLOW PATTERNS

DIMENSIONAL DATA

SIZE	ISO 5211	A	B	C	D	E	F	G	H	J	M	O	P	CV	WT.
1/4"	F03	0.35	0.23	1.41	0.39	2.64	0.35	1.32	1.34	0.77	1.55	0.86	4.72	3.26	1.22
3/8"	F03	0.35	0.23	1.41	0.43	2.64	0.35	1.32	1.34	0.77	1.55	0.86	4.72	3.50	1.16
1/2"	F03	0.35	0.23	1.41	0.43	2.87	0.35	1.44	1.34	0.77	1.55	1.06	4.72	4.20	1.21
3/4"	F03	0.35	0.23	1.41	0.59	3.19	0.35	1.60	1.53	0.87	1.64	1.25	4.72	7.00	1.44
1"	F05	0.43	0.27	1.96	0.78	3.74	0.43	1.87	1.89	1.00	2.06	1.61	6.69	12.83	2.64
1-1/4"	F05	0.43	0.27	1.96	0.98	4.39	0.43	2.20	2.36	1.22	2.28	1.96	6.69	18.67	4.15
1-1/2"	F05	0.43	0.27	1.96	1.26	4.86	0.43	2.43	2.83	1.79	2.77	2.16	6.69	29.75	6.02
2"	F07	0.55	0.35	2.76	1.57	5.73	0.59	2.87	3.38	1.75	3.49	2.75	9.05	43.76	9.08
2-1/2"	F07	0.55	0.35	2.76	1.95	6.93	0.59	3.47	4.37	2.20	3.94	3.34	9.05	70.00	16.33
3"	F07	0.55	0.35	2.76	1.95	7.08	0.59	3.54	4.45	2.20	3.94	4.13	9.05	110	19.55

THE MANUAL VERSION OF THIS MODEL STARTS WITH AN "M"

ALL VALVES ARE 100% ELECTRONICALLY TESTED AT 80 PSI IN BOTH THE OPEN AND CLOSED POSITIONS

MS-2P SERIES 2-PC STAINLESS STEEL BALL VALVES

BILL OF MATERIALS

PART #	NAME	MATERIAL	QTY
1	BODY	ASTM A351 GR CF8M	1
2	ENDS	ASTM A351 GR CF8M	2
3	BALL	316SS	1
4	SEAT	RTFE	2
5	BODY SEAL	PTFE	1
6	STEM	316SS	1
7	THRUST WASHER	PTFE	1
8	STEM PACKING	PTFE	1
9	GLAND NUT	304SS	1
10	BELLEVILLE WASHER	304SS	2
11	PACKING NUT	304SS	1
12	LOCK WASHER	304SS	1

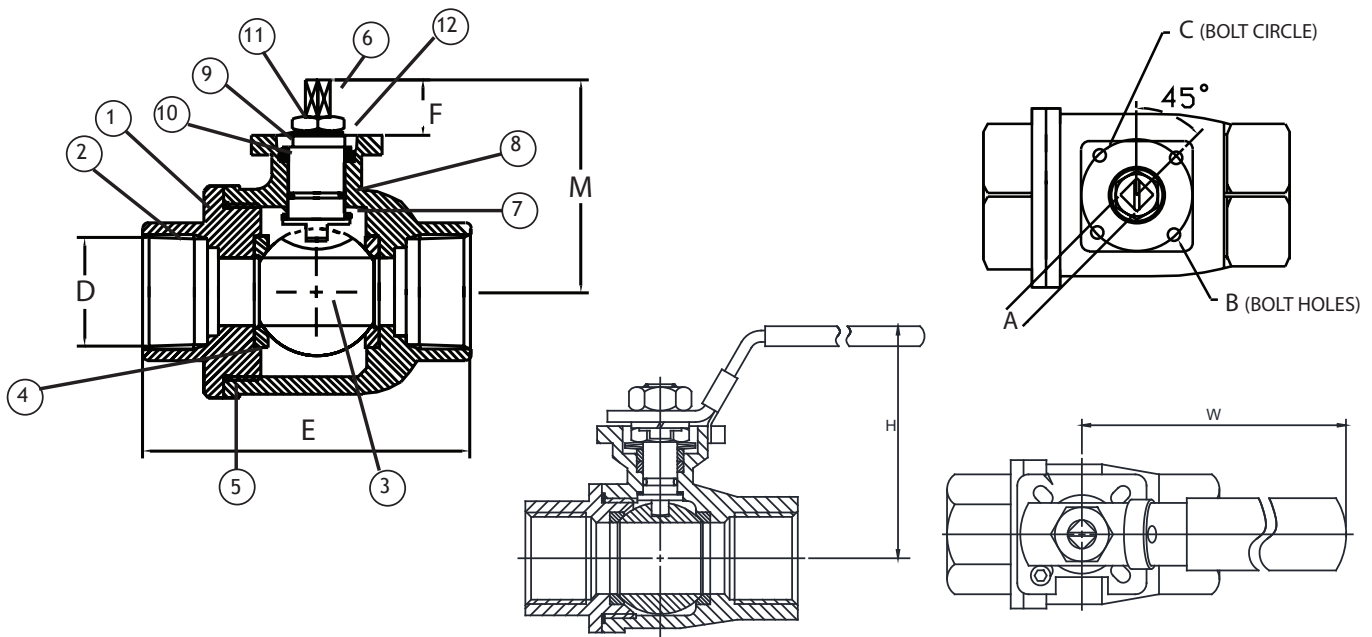
VALVE FEATURES

- Full port stainless steel valve
- 1/4" through 3" size range
- RTFE® seats and TFE seals
- ISO mounting pad
- Blowout proof stem
- Low-torque design
- Spring loaded belleville washers

PRESSURE RATING
1000 WOG

TEMPERATURE RATING
+450 °F Maximum
-40 °F Minimum
+366 °F Maximum

NOTE: MAXIMUM TEMPERATURE RATING FOR STANDARD ACTUATORS IS 150 °F (ELECTRIC) AND 180 °F (PNEUMATIC). SPECIAL SEALS OR HEAT EXTENSIONS ARE AVAILABLE FOR HIGH TEMPERATURE SERVICE.



DIMENSIONAL DATA

SIZE	ISO 5211	A	B	C	D	E	F	H	M	W	CV	WT.
1/4"	F03-F04	0.35	0.28	1.42/1.65	0.43	2.36	0.39	2.83	1.77	5.31	8	0.88
3/8"	F03-F04	0.35	0.28	1.42/1.65	0.59	2.36	0.39	2.83	1.77	5.31	10	0.88
1/2"	F03-F04	0.35	0.28	1.42/1.65	0.59	2.72	0.39	2.83	1.77	5.31	13	1.05
3/4"	F03-F04	0.35	0.28	1.42/1.65	0.79	3.15	0.39	2.99	1.93	5.31	50	1.23
1"	F04-F05	0.43	0.28	1.65/1.97	1.00	3.54	0.55	3.23	2.32	6.50	93	1.65
1-1/4"	F04-F05	0.43	0.28	1.65/1.97	1.26	4.17	0.55	3.46	2.54	6.50	170	3.25
1-1/2"	F05-F07	0.55	0.28/0.35	1.97/2.76	1.50	4.72	0.77	4.09	3.39	7.68	250	5.10
2"	F05-F07	0.55	0.28/0.35	1.97/2.76	1.97	5.51	0.77	5.67	3.76	7.68	450	8.36
2-1/2"	F07-F10	0.67	0.35	2.76/4.02	2.56	6.61	0.83	6.38	4.96	11.81	750	17.60
3"	F07-F10	0.67	0.35	2.76/4.02	3.15	7.48	0.83	6.81	5.39	11.81	1300	25.30

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ALL VALVES ARE 100% ELECTRONICALLY TESTED AT 80 PSI IN BOTH THE OPEN AND CLOSED POSITIONS

MS-3P SERIES 3-PC STAINLESS STEEL BALL VALVES

BILL OF MATERIALS

PART #	NAME	MATERIAL	QTY
1	ENDS	ASTM A351 GR CF8M	2
2	BODY SEAL	PTFE	1
3	BALL	316SS	1
4	BODY	ASTM A351 GR CF8M	1
5	SEAT	RTFE	2
6	WASHER	304SS	4
7	NUT	304SS	4
8	STEM SEAL	PTFE	1
9	O-RING	VITON	1
10	STEM PACKING	PTFE	1
11	BELLEVILLE WASHER	304SS	2
12	STEM NUT	304SS	1
13	STEM	316SS	1
14	BODY BOLT	304SS	4

VALVE FEATURES

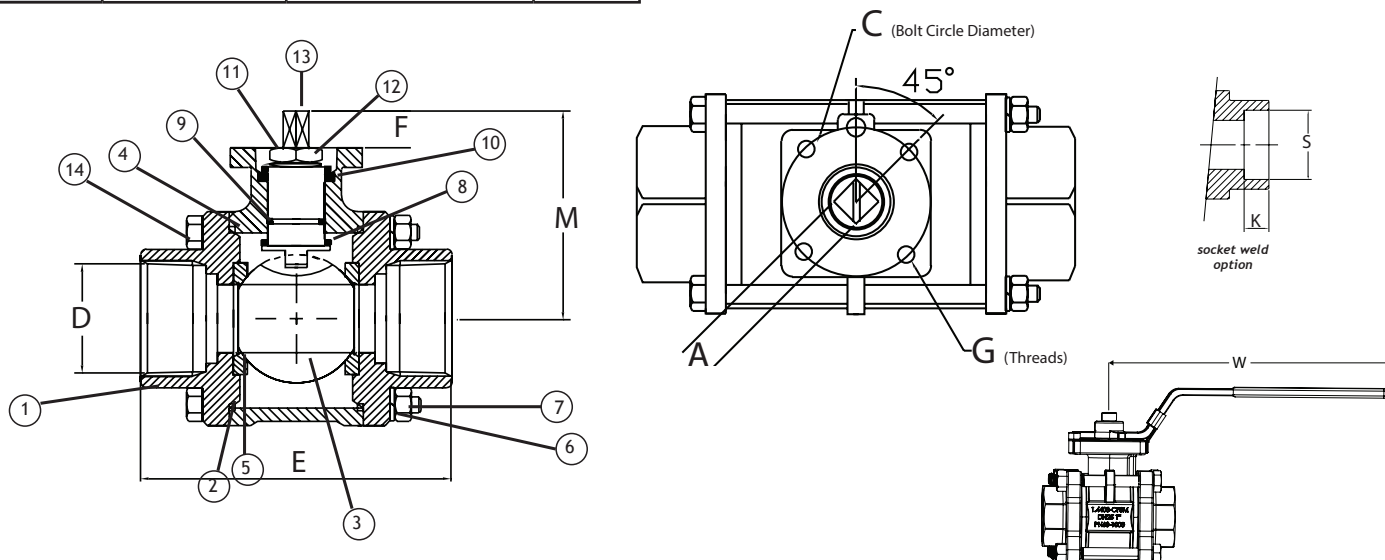
- Full port stainless steel valve
- 1/4" through 4" size range
- NPT, socket weld ends
- RTFE® seats/TFE seals
- Swing out design for easy maintenance
- ISO mounting pad

NOTE: NOT RECOMMENDED FOR USE IN OZONE SERVICE; PLEASE CONSULT FACTORY FOR RECOMMENDED VALVES

PRESSURE RATING
1000 WOG

TEMPERATURE RATING
+450 °F Maximum
-40 °F Minimum
+366 °F Maximum

NOTE: MAXIMUM TEMPERATURE RATING FOR STANDARD ACTUATORS IS 150 °F (ELECTRIC) AND 180 °F (PNEUMATIC). SPECIAL SEALS OR HEAT EXTENSIONS ARE AVAILABLE FOR HIGH TEMPERATURE SERVICE.



DIMENSIONAL DATA

SIZE	ISO 5211	A	C	D	E	F	G	K	M	S	W	CV	WT.
1/4"	F03-F04	0.35	1.42/1.65	0.45	2.56	0.27	0.22/0.28	0.40	1.96	0.56	5.25	4	1.27
3/8"	F03-F04	0.35	1.42/1.65	0.50	2.56	0.27	0.22/0.28	0.40	1.96	0.70	5.25	10	1.27
1/2"	F03-F04	0.35	1.42/1.65	0.59	2.95	0.27	0.22/0.28	0.50	1.96	0.87	5.25	24	1.45
3/4"	F03-F04	0.35	1.42/1.65	0.79	3.15	0.31	0.22/0.28	0.62	2.08	1.08	5.25	47	1.75
1"	F04-F05	0.43	1.65/1.97	0.98	3.54	0.43	0.28/0.35	0.69	2.52	1.35	7.50	81	3.10
1-1/4"	F04-F05	0.43	1.65/1.97	1.26	4.33	0.43	0.28/0.35	0.75	2.67	1.69	7.50	132	4.35
1-1/2"	F05-F07	0.55	1.97/2.76	1.50	4.72	0.55	0.28/0.35	0.88	3.23	1.93	8.25	202	6.65
2"	F05-F07	0.55	1.97/2.76	1.97	5.51	0.55	0.28/0.35	0.88	3.58	2.42	8.25	376	10.00
2-1/2"	F07-F10	0.67	2.76/4.02	2.50	7.28	0.67	0.28/0.35	0.88	4.57	3.04	12.00	642	21.30
3"	F07-F10	0.67	2.76/4.02	3.15	8.07	0.67	0.28/0.35	1.00	5.04	3.54	12.00	901	30.00
4"	F10-F12	0.87	4.02/4.92	3.82	9.45	0.87	0.35/0.50	1.26	6.30	4.54	N/A	1588	51.50

THE MANUAL VERSION OF THIS MODEL STARTS WITH AN "M"

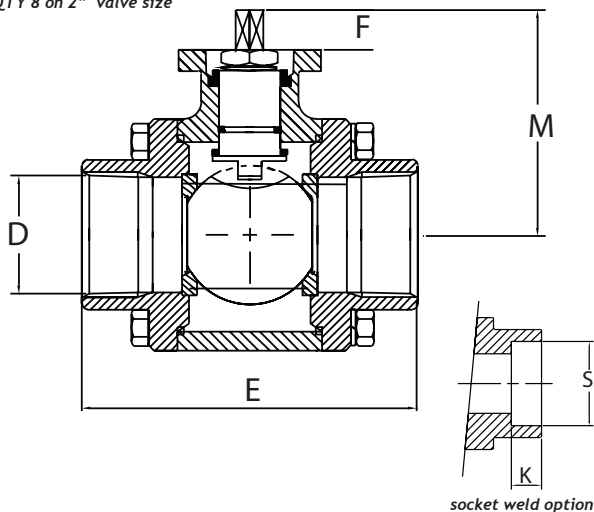
ALL VALVES ARE 100% ELECTRONICALLY TESTED AT 80 PSI IN BOTH THE OPEN AND CLOSED POSITIONS

FS/FW SERIES 3-PC FIRE SAFE BALL VALVES

BILL OF MATERIALS

PART #	NAME	MATERIAL	QTY
1	BODY	WCB or CF8M	1
2	END CAP	WCB OR CF8M	2
3	BALL	CF8M	1
4	SEAT	RTFE	2
5	BODY SEAL	GRAPHITE	2
6	THRUST WASHER	GRAPHITE	1
7	STEM PACKING	GRAPHITE	1
8	GLAND	304SS	1
9	BELLEVILLE SPRING WASHER	301SS	2
10	STEM	316SS	1
11	NUT	304 SS	1
12	SPRING WASHER	304 SS	1
13	NUT	304 SS	1
14	BOLT	304 SS	4*
15	HANDLE	304 SS	1
16	HANDLE SLEEVE	VINYL	1
17	SADDLE WASHER	304 SS	1
18	O-RING	VITON	1
19	STOP PIN	304 SS	1
20	ANTI-STATIC DEVICE	304 SS	1

* QTY 8 on 2" valve size

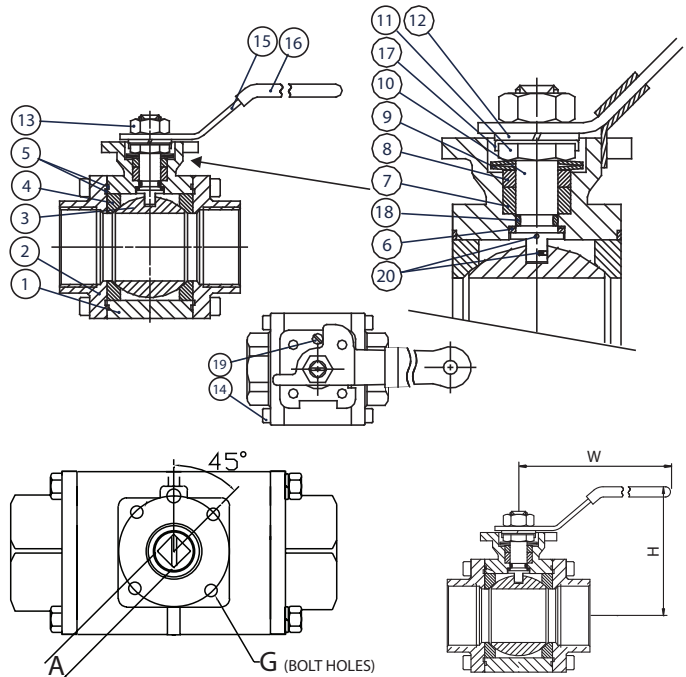


VALVE FEATURES

- Full port 3-pc SS(FS) or WCB(FW) valve
- 1/4" through 2" size range
- NPT, socket weld ends
- RTFE® seats with graphoil seals
- Enclosed body bolts for extreme service
- ISO mounting pad
- API 607 4th editon fire safe

PRESSURE RATING
2000 PSI WOG
TEMPERATURE RATING
+350° F Maximum
-4° F Minimum

NOTE: MAXIMUM TEMPERATURE RATING FOR STANDARD ACTUATORS IS 150° F (ELECTRIC) AND 180° (PNEUMATIC). SPECIAL SEALS OR HEAT EXTENSIONS ARE AVAILABLE FOR HIGH TEMPERATURE SERVICE.



DIMENSIONAL DATA

SIZE	ISO 5211	A	D	E	F	G	H	K	M	S	W	CV	WT.
1/4"	F04	0.35	0.45	2.56	0.27	0.28	2.75	0.39	1.96	0.56	5.51	6.30	2.42
3/8"	F04	0.35	0.50	2.56	0.27	0.28	2.75	0.39	1.96	0.70	5.51	6.20	2.42
1/2"	F04	0.35	0.59	2.95	0.27	0.28	2.75	0.51	1.96	0.87	5.51	20.90	2.42
3/4"	F04-F05	0.43	0.79	3.15	0.31	0.28/0.35	3.54	0.59	2.2	1.08	7.08	49.40	3.55
1"	F04-F05	0.43	0.98	3.54	0.43	0.28/0.35	3.93	0.59	2.52	1.35	7.08	81.00	4.85
1-1/4"	F07	0.55	1.26	4.33	0.43	0.45	4.40	0.59	2.79	1.69	8.46	127.9	7.36
1-1/2"	F07	0.55	1.50	4.72	0.55	0.45	4.52	0.63	3.23	1.93	8.46	191.50	10.13
2"	F07	0.55	1.97	5.51	0.55	0.45	5.23	0.67	3.03	2.42	8.46	376	16.10

ALL VALVES ARE 100% ELECTRONICALLY TESTED AT 80 PSI IN BOTH THE OPEN AND CLOSED POSITIONS

MS-2PF SERIES STAINLESS STEEL FLANGED BALL VALVES

BILL OF MATERIALS

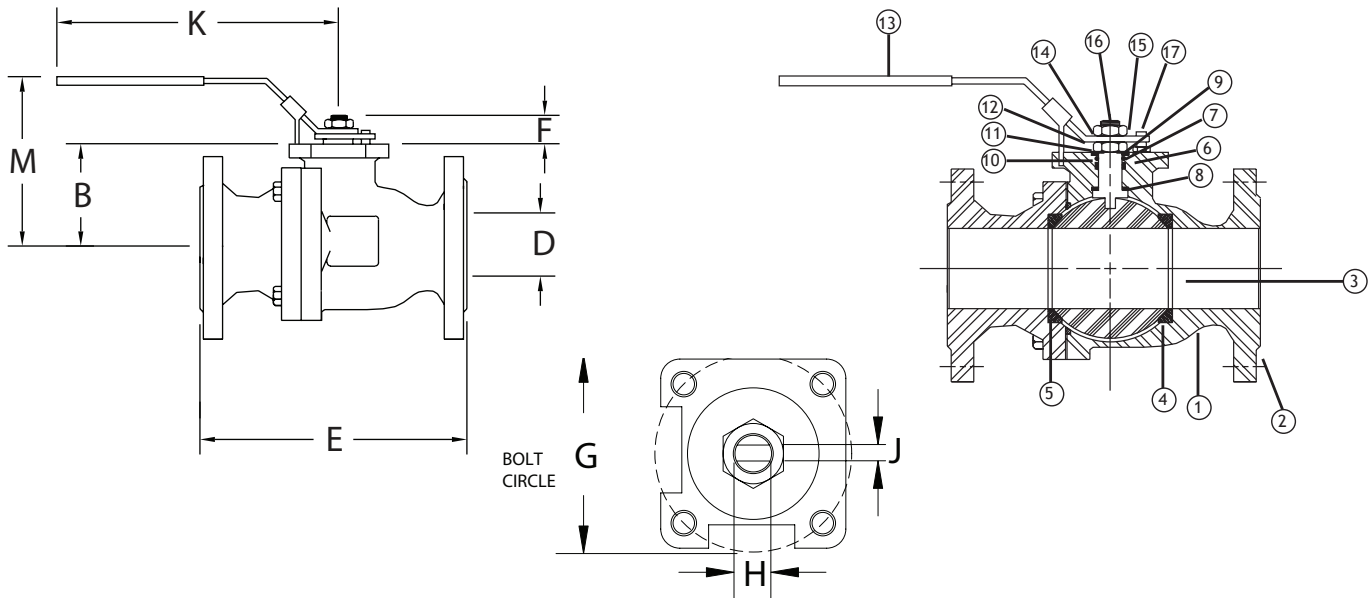
PART #	NAME	MATERIAL	QTY
1	BODY	ASTM A351 GR CF8M	1
2	ENDS	ASTM A351 GR CF8M	2
3	BALL	ASTM A351 GR CF8M	1
4	SEAT	RTFE	2
5	BODY SEAL	RTFE	2
6	STEM SEAL	RTFE	1
7	STEM PACKING	RTFE	1
8	THRUST WASHER	50% PTFE + 50% SS POWDER	1
9	O-RING	VITON	1
10	BELLEVILLE WASHER	304SS	2
11	LOCK WASHER	304SS	1
12	STEM NUT	304SS	1
13	HANDLE	304SS	1

VALVE FEATURES

- Full port stainless steel ball valve
- 1/2" through 4"
- Class 150# flanged ends
- Designed to ANSI B16.34 standards
- RTFE® seats
- Optional fire safe design (w/graphoil seals)
- ISO mounting pad
- Vacuum to 29 inHg

PRESSURE RATING
ANSI Class 150
TEMPERATURE RATING
+400° F Maximum
+366° F Maximum

NOTE: MAXIMUM TEMPERATURE RATING FOR STANDARD ACTUATORS IS 150° F (ELECTRIC) AND 180° (PNEUMATIC). SPECIAL SEALS OR HEAT EXTENSIONS ARE AVAILABLE FOR HIGH TEMPERATURE SERVICE.



DIMENSIONAL DATA

SIZE	ISO 5211	B	D	E	F	G	H	J	K	M	CV	WT.
1/2"	F04	1.52	0.59	4.25	0.69	1.42	0.47	0.25	5.91	3.54	30	4
3/4"	F04	1.63	0.79	4.63	0.72	1.42	0.47	0.25	5.91	3.88	50	6
1"	F05	2.05	0.98	5.00	0.85	1.97	0.51	0.31	7.09	4.25	100	8
1-1/4"	F05	2.35	1.26	5.50	0.81	1.97	0.51	0.31	7.09	4.62	180	12
1-1/2"	F07	2.62	1.57	6.50	1.14	2.76	0.53	0.37	8.27	5.00	250	16
2"	F07	2.95	1.97	7.00	1.16	2.76	0.53	0.37	8.27	6.00	480	21
2-1/2"	F07	3.52	2.56	7.50	1.52	2.76	1.14	0.67	10.24	7.00	750	38
3"	F10	4.23	3.15	8.00	1.85	4.02	1.14	0.67	10.24	7.50	1300	46
4"	F10	4.84	3.94	9.00	1.85	4.02	1.14	0.67	12.20	9.00	2400	73

THE MANUAL VERSION OF THIS MODEL STARTS WITH AN "M"

ALL VALVES ARE 100% ELECTRONICALLY TESTED AT 80 PSI IN BOTH THE OPEN AND CLOSED POSITIONS

MS-3TC SERIES SANITARY CLAMP END BALL VALVES

BILL OF MATERIALS

PART #	NAME	MATERIAL	QTY
1	END CAP	ASTM A351/GR CF8M	2
2	BODY SEAL	TFE	2
3	BALL	ASTM A351/316SS	1
4	BODY	ASTM A351/316SS	1
5	BALL SEAT	TFE	2
6	SPRING WASHER	304SS	1
7	GLAND NUT	304SS	1
8	STEM SEAL	TFE	1
9	O-RING	VITON	1
10	STEM PACKING	TFE	1
11	FOLLOWER	304SS	1
12	BELLEVILLE SPRING WASHERS	301SS	4
13	STEM NUT	304SS	1
14	STEM	316SS	1
15	BODY BOLT	304SS	4
16	HANDLE	304SS	1

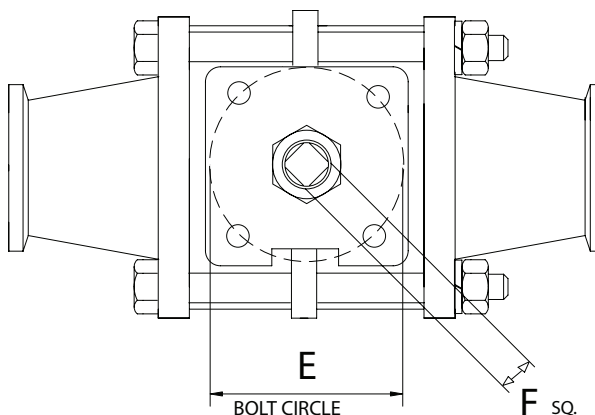
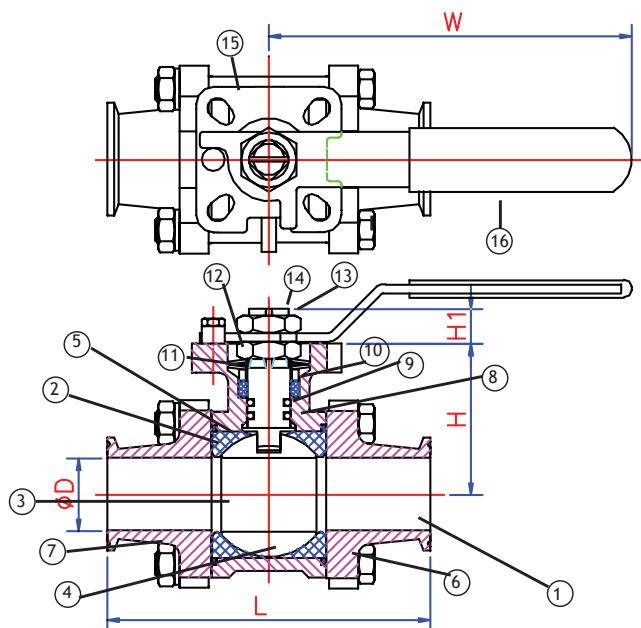
VALVE FEATURES

- Full port sanitary valves
- 1/2" through 4"
- 240 grit bore polish
- Cavity filled TFE® seats to reduce the threat of media entrapment
- Swing out design for easy maintenance
- Polished clamp end to meet BS 4825.3

PRESSURE RATING
1000 WOG

TEMPERATURE RATING
+450° F Maximum
-40° F Minimum
+297° F Steam Maximum

NOTE: MAXIMUM TEMPERATURE RATING FOR STANDARD ACTUATORS IS 150° F (ELECTRIC) AND 180° (PNEUMATIC). SPECIAL SEALS OR HEAT EXTENSIONS ARE AVAILABLE FOR HIGH TEMPERATURE SERVICE.



DIMENSIONAL DATA

SIZE	ISO 5211	D	E	F	H	H1	L	W	CV	WT.
1/2"	F03-F04	0.37	1.42/1.65	0.35	1.69	0.354	3.50	4.57	14	1.40
3/4"	F03-F04	0.63	1.42/1.65	0.35	1.83	0.354	3.98	4.57	45	2.0
1"	F04-F05	0.87	1.65/1.97	0.43	1.98	0.443	4.49	6.14	81	2.90
1-1/2"	F05-F07	1.36	1.97/2.76	0.55	2.66	0.551	5.51	7.13	215	5.70
2"	F05-F07	1.87	1.97/2.76	0.55	2.97	0.551	6.14	7.13	410	9.00
2-1/2"	F07-F10	2.37	2.76/4.02	0.67	3.74	0.669	7.76	10.24	618	19.3
3"	F07-F10	2.87	2.76/4.02	0.67	4.13	0.669	9.02	10.24	940	31.2
4"	F10-F12	3.83	4.02/4.92	0.87	4.96	0.869	9.57	13.19	1840	43.7

THE MANUAL VERSION OF THIS MODEL STARTS WITH AN "M"

ALL VALVES ARE 100% ELECTRONICALLY TESTED AT 80 PSI IN BOTH THE OPEN AND CLOSED POSITIONS

MS-3WTC SERIES SANITARY CLAMP END 3-WAY BALL VALVES

BILL OF MATERIALS

PART #	NAME	MATERIAL	QTY
1	BODY	CF8M	1
2	END CAP	CF8M	2
3	BALL	CF8M	1
4	SEAT	PTFE	2
5	GASKET	PTFE	2
6	THRUST WASHER	PTFE	1
7	O-RING	VITON	1
8	STEM PACKING	PTFE	1
9	PACKING RING	316 SS	1
10	BEVEL WASHER	301 SS	2
11	STEM	316 SS	1

VALVE FEATURES

- 3-Way sanitary valves
- 1/2" through 2" size range
- 240 grit bore polish
- Cavity filled TFE® seats to reduce the threat of media entrapment
- Block body and bolted end piece design for easy maintenance
- Polished clamp end to meet BS 4825.3

NOTE: not suitable for vacuum service

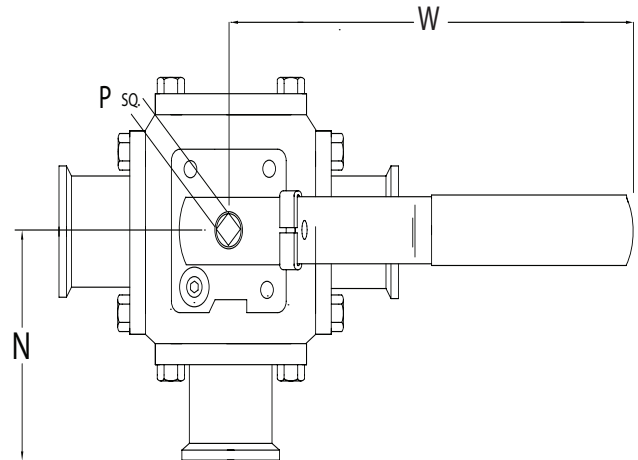
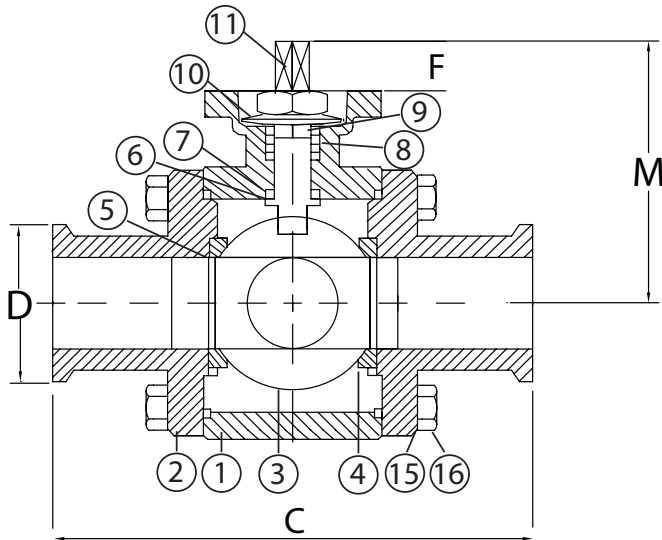
PRESSURE RATING
1000 WOG (valve body)
200 PSI operating

TEMPERATURE RATING
+450° F Maximum
-40° F Minimum

See page 31 for possible pressure limitations due to flow patterns in certain applications with our floating ball valve design.

NOTE: MAXIMUM TEMPERATURE RATING FOR STANDARD ACTUATORS IS 150° F (ELECTRIC) AND 180° (PNEUMATIC). SPECIAL SEALS OR HEAT EXTENSIONS ARE AVAILABLE FOR HIGH TEMPERATURE SERVICE.

SEE PAGE 31 FOR AVAILABLE FLOW PATTERNS



DIMENSIONAL DATA

SIZE	ISO 5211	C	D	F	M	N	P	W	WT.
1/2"	F03-F04	4.65	0.99	0.35	1.75	2.32	0.35	4.76	3.61
3/4"	F03-F04	5.00	0.99	0.35	1.89	2.50	0.35	4.76	4.36
1"	F04-F05	6.00	1.99	0.43	2.32	3.00	0.43	5.39	6.82
1-1/2"	F05-F07	6.89	1.99	0.55	2.83	3.44	0.55	7.17	12.89
2"	F05-F07	7.48	2.52	0.55	3.23	3.74	0.55	7.17	23.06

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MS-3W SERIES 3-WAY BALL VALVES

BILL OF MATERIALS

PART #	NAME	MATERIAL	QTY
1	BODY	316SS	1
2	END CONNECTION	316SS	3
3	BODY SEAL	PTFE	4
4	BALL	316SS	1
5	SEATS	RTFE	4
6	STEM	316SS	1
7	THRUST WASHER	PTFE	1
8	STEM PACKING	PTFE	1
9	GLAND	304SS	1
10	BELLEVILLE WASHER	304SS	2
11	PACKING NUT	304SS	1
12	SPRING WASHER	304SS	1
13	BODY BOLTS	304SS	1
14	BLANK CAP	316SS	1

See page 31 for possible pressure limitations due to flow patterns in certain applications with our floating ball valve design.

VALVE FEATURES

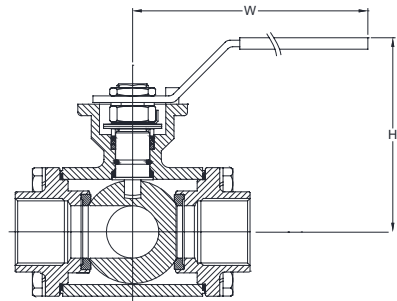
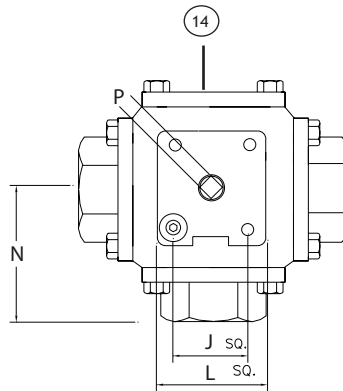
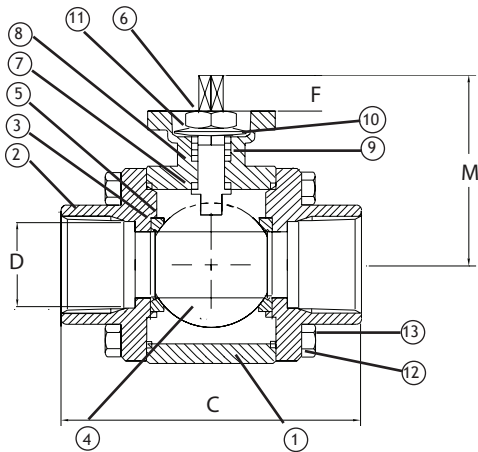
- 3-Way full port stainless steel valves
- 1/2" through 2" size range
- Ideal for mixing, food and chemical applications
- RTFE® seats and seals
- Threaded or socket weld ends
- 4-seat design for high cycle automation
- Self-adjusting stem packing with belleville washers

NOTE: not suitable for vacuum service

PRESSURE RATING
1000 WOG
TEMPERATURE RATING
+400 °F Maximum
-40 °F Minimum

NOTE: MAXIMUM TEMPERATURE RATING FOR STANDARD ACTUATORS IS 150 °F (ELECTRIC) AND 180 ° (PNEUMATIC). SPECIAL SEALS OR HEAT EXTENSIONS ARE AVAILABLE FOR HIGH TEMPERATURE SERVICE.

SEE PAGE 31 FOR AVAILABLE FLOW PATTERNS



DIMENSIONAL DATA

SIZE	ISO 5211	B	C	D	F	J	L	M	N	P	W	H	WT.
1/2"	F03-F04	3.50	3.78	0.63	0.35	1.42	1.65	2.24	1.89	0.35	7.34	3.50	3.90
3/4"	F04-F05	3.86	4.21	0.79	0.43	1.65	1.97	2.72	2.11	0.43	8.58	3.86	5.65
1"	F04-F05	4.02	4.96	0.98	0.45	1.65	1.97	2.97	2.48	0.43	8.58	4.02	8.85
1-1/4"	F05-F07	4.67	5.24	1.26	0.60	1.97	2.76	3.71	2.62	0.55	9.25	4.67	11.90
1-1/2"	F05-F07	5.00	5.94	1.50	0.56	1.97	2.76	4.05	2.97	0.55	9.25	5.00	18.45
2"	F07-F10	5.47	6.54	1.97	0.70	2.76	4.02	4.87	3.27	0.67	9.92	5.47	23.25

THE MANUAL VERSION OF THIS MODEL STARTS WITH AN "M"

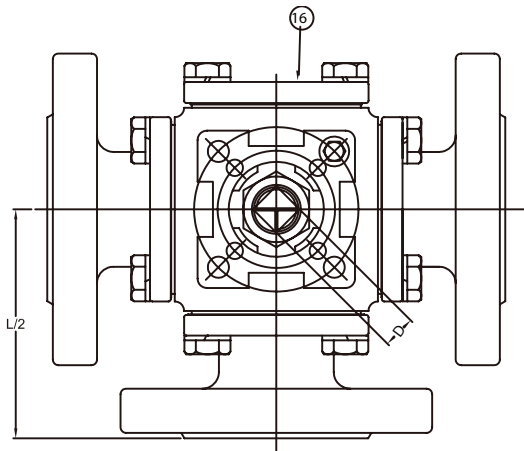
ALL VALVES ARE 100% ELECTRONICALLY TESTED AT 80 PSI IN BOTH THE OPEN AND CLOSED POSITIONS

MS-3WF SERIES FLANGED 3-WAY BALL VALVES

BILL OF MATERIALS

PART #	NAME	MATERIAL	QTY
1	END CAP	CF8M	3
2	BODY	CF8M	1
3	BALL AND STEM	316SS	1
4	BUSHING	TFE	1
5	BALL SEAT	RTFE THRU 2"; TFE 2-1/2" THRU 4"	4
6	BODY SEAL	TFE	4
7	O-RING	VITON	1
8	STEM PACKING	TFE	1
9	PACKING GLAND	304SS	1
10	BELLEVILLE WASHER	301SS	2
11	GLAND NUT	304SS	1
12	HANDLE NUT	304SS	1
13	STOP PIN	304SS	1
14	HANDLE BOLT	304SS	1
15	HANDLE	304SS	1
16	BLIND CAP	CF8M	1
17 - 19	BOLTS AND NUTS	304SS	8
20	BONNET	CF8M	1
21	GASKET	TFE	1

See page 31 for possible pressure limitations due to flow patterns in certain applications with our floating ball valve design.



VALVE FEATURES

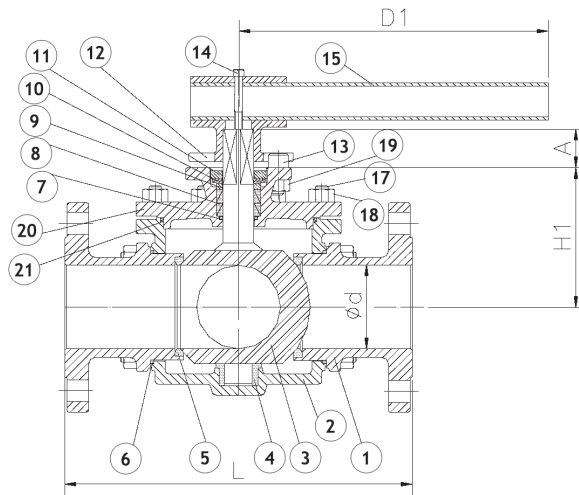
- 3-Way full port stainless steel valves
- 1/2" through 4" size range
- Ideal for mixing, food and chemical applications
- RTFE® seats through 2"; TFE 2-1/2" - 4"
- ANSI 150# Flanged
- 4-seat design for high cycle automation
- Self-adjusting stem packing w/belleville washers

NOTE: not suitable for vacuum service

PRESSURE RATING
ANSI Class 150
TEMPERATURE RATING
+450° F Maximum
-40° F Minimum

NOTE: MAXIMUM TEMPERATURE RATING FOR STANDARD ACTUATORS IS 150° F (ELECTRIC) AND 180° (PNEUMATIC). SPECIAL SEALS OR HEAT EXTENSIONS ARE AVAILABLE FOR HIGH TEMPERATURE SERVICE.

SEE PAGE 31 FOR AVAILABLE FLOW PATTERNS



DIMENSIONAL DATA

SIZE	ISO 5211	d	L	L2	H1	A	D1	D	WT.
1/2"	F03-F04	0.59	5.98	2.99	1.65	0.43	5.12	0.35	8.00
3/4"	F04-F05	0.79	6.57	3.29	1.91	0.55	6.50	0.43	10.0
1"	F04-F05	0.98	7.48	3.74	2.19	0.55	6.50	0.43	15.0
1-1/4"	F05-F07	1.26	8.19	4.09	2.48	0.67	8.07	0.55	22.0
1-1/2"	F05-F07	1.50	8.66	4.33	2.89	0.63	8.07	0.55	29.0
2"	F07-F10	1.97	9.96	4.98	3.64	0.83	12.80	0.67	48.0
2-1/2"	F10	2.44	11.81	5.91	4.69	0.98	15.75	0.87	55.0
3"	F10	2.99	12.01	6.00	5.39	0.98	19.69	0.87	71.0
4"	F10	3.78	14.53	7.26	6.18	0.98	23.62	0.87	118

THE MANUAL VERSION OF THIS MODEL STARTS WITH AN "M"

ALL VALVES ARE 100% ELECTRONICALLY TESTED AT 80 PSI IN BOTH THE OPEN AND CLOSED POSITIONS

MC-3P PVC & MV-3P SERIES CPVC TRUE UNION BALL VALVES

BILL OF MATERIALS

PART #	NAME	MATERIAL	OPTIONAL MATERIAL	QTY
1	INSERT	PVC	CPVC	1
2	HANDLE	PVC	CPVC	1
3	STEM O-RING	EPDM*	VITON	2
4	STEM	PVC	CPVC	1
5	SEAT	PTFE	---	2
6	BALL	PVC	CPVC	1
7	BODY	PVC	CPVC	1
8	SEAT O-RING	EPDM*	VITON	2
9	BODY O-RING	EPDM*	VITON	2
10	SOCKET O-RING	EPDM*	VITON	2
11	CARRIER/STOP RING	PVC	CPVC	1
12	END CONNECTOR	PVC	CPVC	2
13	UNION NUT	PVC	CPVC	2
14	DUAL BLOCK	POM	---	1

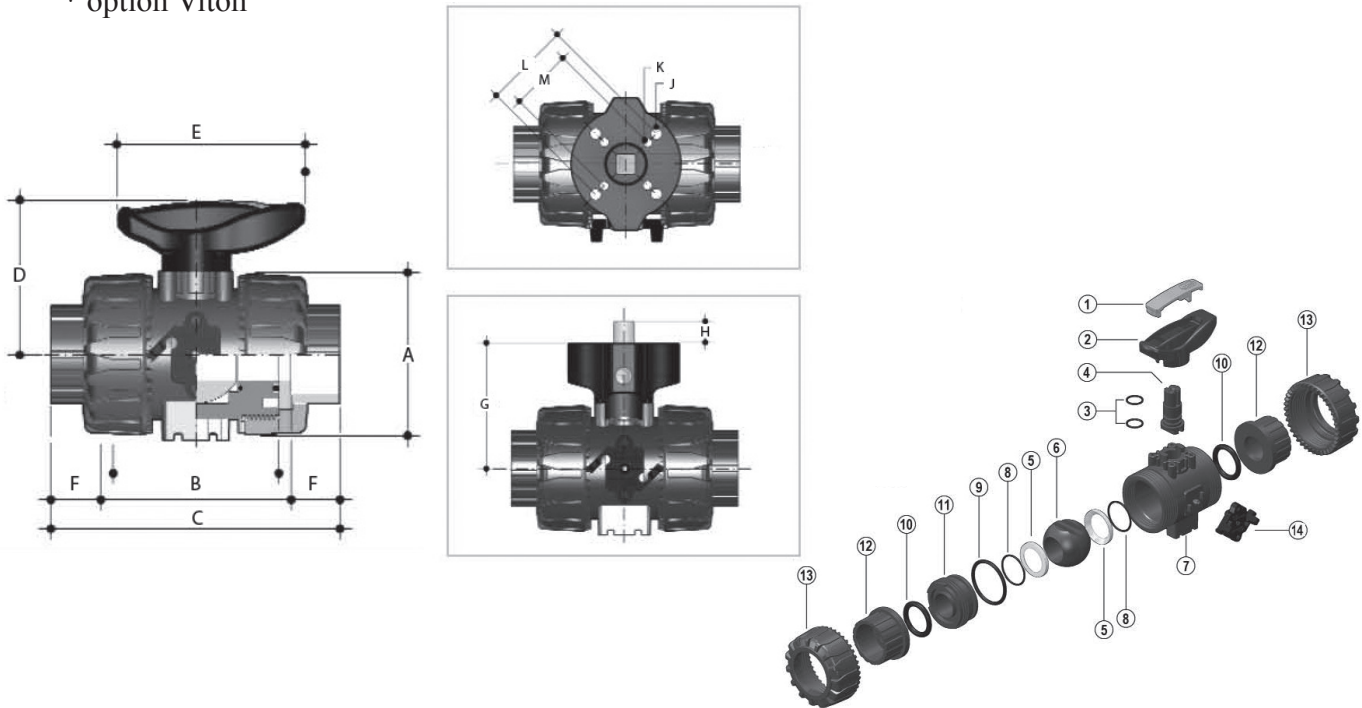
VALVE FEATURES

- 2-Way PVC and CPVC valves
- 1/2" through 4" size range
- TFE® seats
- EPDM, or Viton® body o-rings
- True union style
- Threaded or socket ends
- Patented stem design to help prevent leakage in the event of stem damage

PRESSURE RATING
235 PSI at 73°F to 2"
TEMPERATURE RATING
Varies w/o-ring material

NOTE: MAXIMUM TEMPERATURE RATING FOR STANDARD ACTUATORS IS 150°F (ELECTRIC) AND 180° (PNEUMATIC). SPECIAL SEALS OR HEAT EXTENSIONS ARE AVAILABLE FOR HIGH TEMPERATURE SERVICE.

* option Viton



DIMENSIONAL DATA

SIZE	A	B	C	D	E	F	G	H	J	K	L	M	CV	WT.
1/2"	2.13	2.97	4.37	2.13	2.64	0.70	2.28	0.47	0.22	0.22	F04	F03	14.0	0.46
3/4"	2.56	3.19	4.61	2.56	3.35	0.71	2.89	0.47	0.26	0.22	F05	F03	27.0	0.74
1"	2.87	3.54	5.31	2.74	3.35	0.89	2.91	0.47	0.26	0.22	F05	F03	53.9	0.99
1-1/4"	3.39	4.05	6.02	3.25	4.25	0.99	3.82	0.63	0.33	0.26	F05	F07	77.0	1.49
1-1/2"	3.86	4.20	6.14	3.50	4.25	0.97	4.09	0.63	0.33	0.26	F05	F07	123	2.11
2"	4.80	4.99	7.32	4.25	5.28	1.17	4.49	0.63	0.33	0.26	F05	F07	238	3.68
2-1/2"	6.46	6.64	9.25	6.46	8.86	1.31	6.46	0.63	0.35	N/A	N/A	F07	368	9.69
3"	7.99	7.83	10.63	6.97	12.87	1.4	6.97	0.63	0.35	N/A	N/A	F07	497	16.00
4"	9.37	9.17	12.13	7.68	15.16	1.48	7.68	0.75	0.35	N/A	N/A	F07	664	24.50

THE MANUAL VERSION OF THIS MODEL STARTS WITH AN "M"

ALL VALVES ARE 100% ELECTRONICALLY TESTED AT 80 PSI IN BOTH THE OPEN AND CLOSED POSITIONS

MC-3W PVC & MV-3W CPVC SERIES 3-WAY BALL VALVES

BILL OF MATERIALS

PART #	NAME	MATERIAL	OPTIONAL MATERIAL	QTY
1	HANDLE	PVC	---	1
2	STEM O-RING	EPDM	VITON	1
3	STEM	PVC	CPVC	1
4	BODY	PVC	CPVC	1
5	BALL	PVC	CPVC	1
6	BODY O-RING	EPDM	VITON	3
7	BALL SEAT SUPPORT	TFE	---	3
8	BALL SEAT	TFE	---	3
9	SOCKET O-RING	EPDM	VITON	3
10	UNION NUT	PVC	CPVC	3
11	END CONNECTOR	PVC	CPVC	3
12	END CONNECTOR O-RING	EPDM	VITON	3

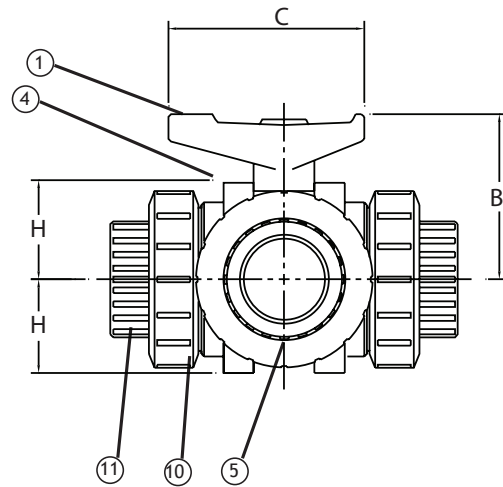
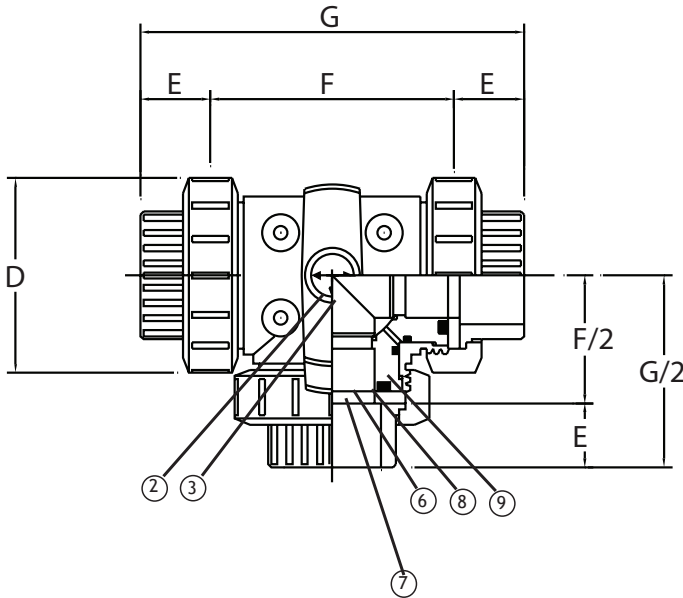
VALVE FEATURES

- 3-Way PVC and CPVC valves
- 1/2" through 2" size range
- TFE® seats
- EPDM or Viton® body o-rings
- True union style
- Threaded or socket ends
- 3-seat design ideal for automation

PRESSURE RATING
235 PSI at 73°F to 2"
TEMPERATURE RATING
Varies w/o-ring material

NOTE: MAXIMUM TEMPERATURE RATING FOR STANDARD ACTUATORS IS 150°F (ELECTRIC) AND 180° (PNEUMATIC). SPECIAL SEALS OR HEAT EXTENSIONS ARE AVAILABLE FOR HIGH TEMPERATURE SERVICE.

SEE PAGE 31 FOR AVAILABLE FLOW PATTERNS



DIMENSIONAL DATA

SIZE	B	C	D	E	F	G	H	J	K	CV*	WT.
1/2"	2.00	2.56	2.13	0.71	3.15	4.96	4.25	0.94	0.94	13.7	0.68
3/4"	2.36	2.99	2.56	0.71	3.94	5.76	5.04	0.98	1.22	26.6	1.21
1"	2.64	3.35	2.87	0.89	4.33	6.56	5.67	1.06	1.57	53.20	1.74
1-1/4"	2.95	3.94	3.39	0.99	5.16	7.71	6.81	1.26	1.61	73.50	2.81
1-1/2"	3.50	4.41	3.86	0.97	5.83	8.32	7.76	1.28	2.09	119	3.66
2"	4.13	5.39	4.80	1.17	7.05	9.99	8.12	1.38	2.28	224	6.17

* STRAIGHT THROUGH PORT

THE MANUAL VERSION OF THIS MODEL STARTS WITH AN "M"

ALL VALVES ARE 100% ELECTRONICALLY TESTED AT 80 PSI IN BOTH THE OPEN AND CLOSED POSITIONS