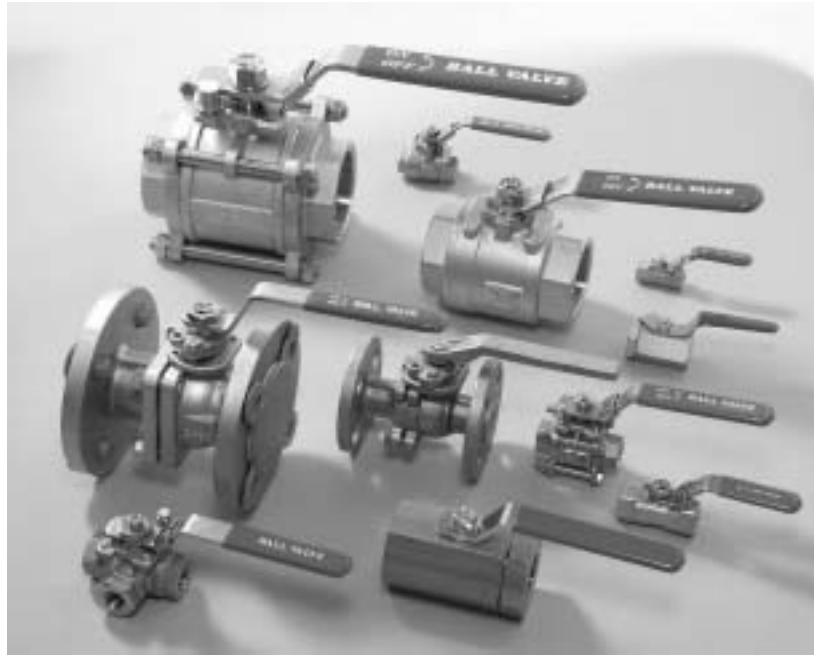
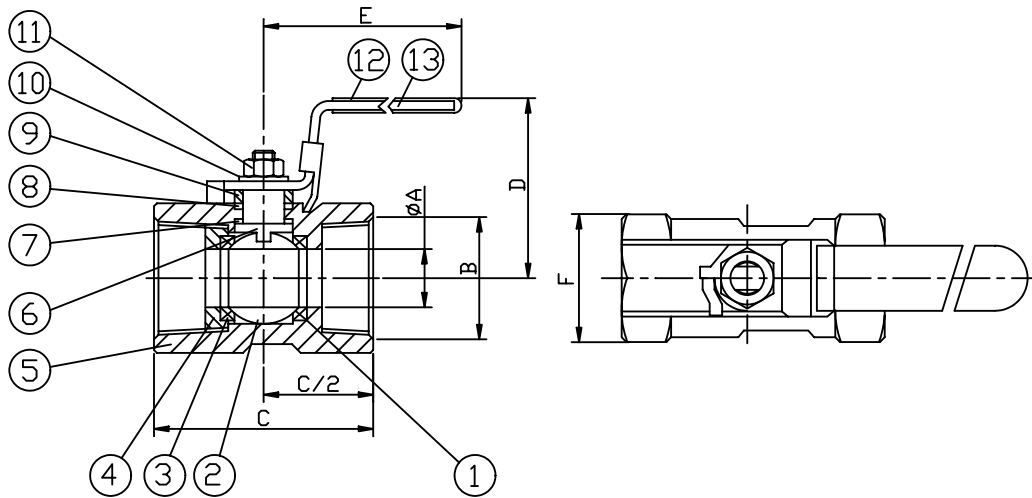


BALL VALVES**PRODUCT INFORMATION**

- * 316 stainless steel
- * BSPP threaded as standard
- * Butt weld & socket weld ends available
- * Larger sizes available
- * Dimensions in mm
- * 1 piece, 2 piece & 3 piece design
- * NPT and BSPT threads available
- * Pressures to 200 bar (3000 psi)
- * Higher pressures available
- * Weights in Kg each.

INDEX

DESCRIPTION	PAGE	DESCRIPTION	PAGE
1 pc reduced bore	6.2	2 pc 150LB flanged full bore	6.7
1 pc M/F reduced bore	6.3	2 pc PN16 flanged full bore	6.8
2 pc full bore	6.4	3 way L & T-port reduced bore	6.9
3 pc full bore	6.5	2 piece 3000LB full bore	6.10
3 pc hygienic full bore	6.6	Deadman handle ball valve	6.11

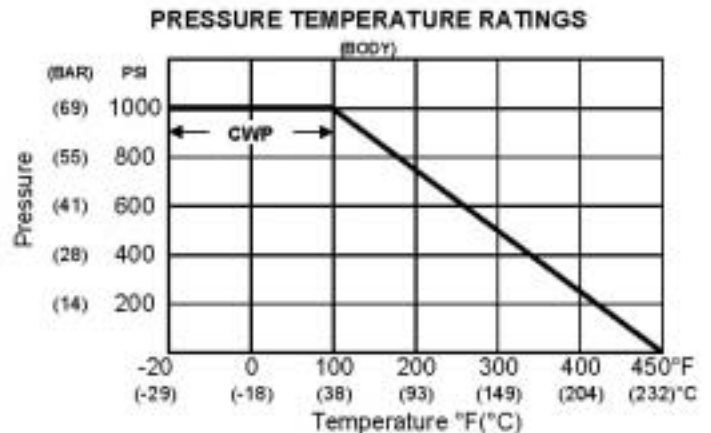


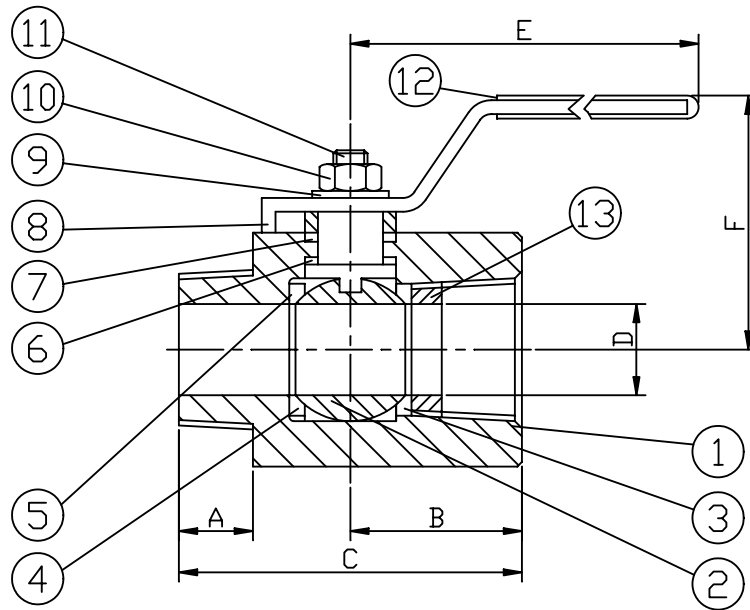
Specifications:

- * 1/4" - 2" (DN8 - DN50)
- * 1000 psi (69 BAR) pressure
- * Temperature: -20F to 450F (-29C to 232C)
- * Blow-out-proof stem design
- * 100% tested air under water at 100 psi in open and closed positions.
- * BSPP threaded. (NPT, BSPT available)
- * 316 stainless steel
- * For chemical and industrial applications
- * Lockable handle

SIZE B	PART No	A	C	D	E	F	Cv Fact.	Torque Nm	Kg/each
1/4	RBV04	5.0	39	35	66	17	3.8	5.1	0.07
3/8	RBV06	7.0	44	36	74	21	4.0	5.1	0.10
1/2	RBV08	9.2	56.5	41	89	25	4.5	5.1	0.16
3/4	RBV12	12.5	59	44	89	32	9.0	7.9	0.25
1	RBV16	16.0	71	51	105	38	16.0	12.4	0.41
1-1/4	RBV20	20.0	78	56	105	48	24.0	17.0	0.67
1-1/2	RBV24	24.5	83	64	130	53	37.0	26.0	0.84
2	RBV32	32.0	100	71	130	65	68.0	36.2	1.38

No	PART	MATERIAL	QTY
1	SEAT	PTFE	2
2	BALL	SS316	1
3	JOINT GASKET	15% R-PTFE	1
4	CAP	SS316	1
5	BODY	SS316/CF8M	1
6	STEM	SS316	1
7	THRUST WASHER	15% R-PTFE	1
8	STEM PACKING	15% R-PTFE	1
9	GLAND NUT	SS304	1
10	STEM WASHER	SS304	1
11	STEM NUT	SS304	1
12	HANDLE COVE	PLASTIC	1
13	HANDLE	SS304	1



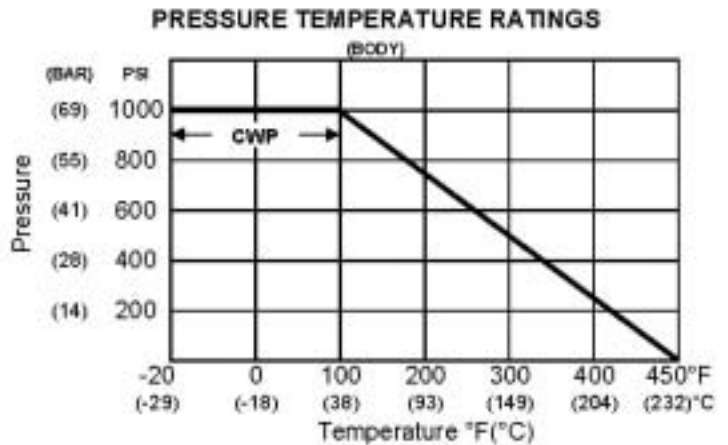


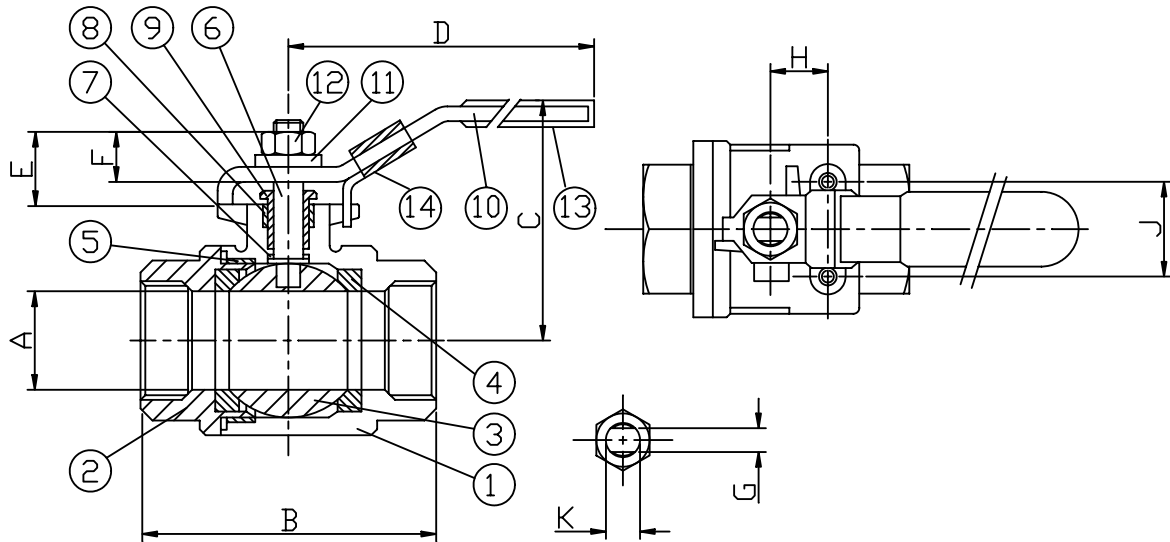
Specifications:

- * 1/4" - 3/4" (DN8 - DN50)
- * 1000 psi (69 BAR) pressure
- * Temperature: -20F to 450F (-29C to 232C)
- * Blow-out-proof stem design
- * 100% tested air under water at 100 psi, in open and closed positions.
- * BSPP female x BSPT male
- * 316 stainless steel
- * For chemical and industrial applications
- * Lockable handle

SIZE	PART No	A	B	C	D	E	F	Cv Fact.	Torque Nm	Kg/each
1/4	MFRBV04	11	20	46.0	5.0	70	27.0	3.8	5.1	0.08
3/8	MFRBV06	12	24	51.0	7.2	81	28.5	4.0	5.1	0.13
1/2	MFRBV08	15	29	59.0	9.2	96	44.5	4.5	5.1	0.21
3/4	MFRBV12	17	33	62.5	12.5	96	46.0	9.0	7.9	0.40

No	PART	MATERIAL	QTY
1	BODY	SS316/CF8M	1
2	BALL	SS316	1
3	SEAT	15% R-PTFE	1
4	SEAT	15% R-PTFE	1
5	THRUST WASHER	15% R-PTFE	1
6	STEM PACKING	15% R-PTFE	1
7	GLAND BUSH	SS304	1
8	HANDLE	SS304	1
9	STEM WASHER	SS304	1
10	STEM NUT	SS304	1
11	STEM	SS316	1
12	HANDLE COVER	PLASTIC	1
13	BODY INSERT	SS316	1





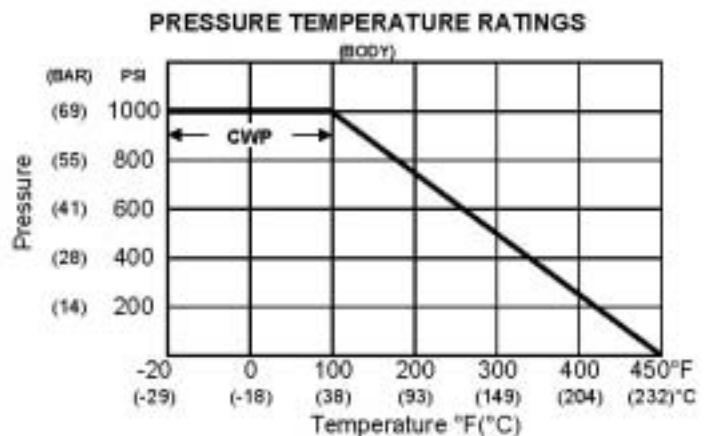
THESE VALVES CAN BE ACTUATED. SEE ACTUATOR SECTION

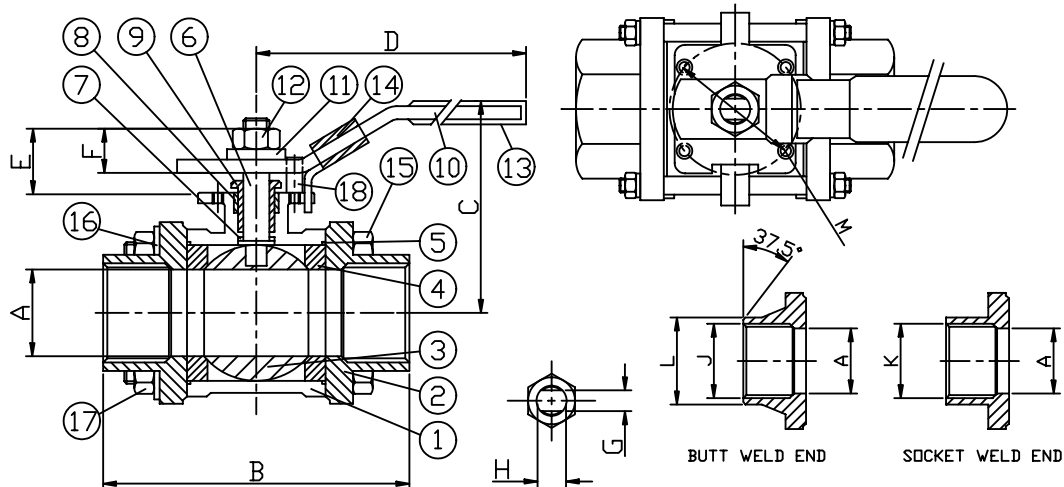
Specifications:

- * 1/4" - 3" (DN8 - DN80)
- * 1000 psi (69 BAR) pressure
- * 100% tested air under water at 100 psi in open and closed positions.
- * Lockable handle
- * BSPP threaded. (NPT, BSPT available)
- * Blow-out-proof stem design
- * Temperature: -20F to 450F (-29C to 232C)
- * For chemical, food and industrial applications
- * Designed for easy actuator mounting
- * Hydrostatic test pressure: 1500 psi (103 BAR)
- * 316 stainless steel

SIZE	PART No	A	B	C	D	E	F	G	H	J	K	Cv Fact.	Torque Nm	Kg Each
1/4	FBV04	11.6	52.0	48	103	16.5	10.2	5.0	12.5	25.0	7.94	6	4.5	0.27
3/8	FBV06	12.7	52.0	48	103	16.5	10.2	5.0	12.5	28.5	7.94	7	4.5	0.27
1/2	FBV08	15.0	63.0	54	103	16.5	10.2	5.0	12.5	28.5	7.94	10	7.0	0.32
3/4	FBV12	20.0	74.0	61	130	20.0	13.5	6.5	21.0	34.8	9.53	25	13.5	0.50
1	FBV16	25.0	87.0	71	155	23.5	16.0	8.0	22.5	34.8	11.11	35	15.0	0.82
1-1/4	FBV20	32.0	102.0	76	155	23.5	16.0	8.0	23.5	38.1	11.11	46	16.0	1.25
1-1/2	FBV24	38.0	110.0	91	190	25.5	17.0	9.0	23.5	38.1	12.70	80	20.0	1.93
2	FBV32	50.0	125.0	100	190	25.5	17.0	9.0	23.5	38.1	12.70	110	40.5	3.10
2-1/2	FBV40	65.0	166.0	142	260	41.0	29.5	12.0	35.0	56.0	19.05	310	98.0	6.47
3	FBV48	80.0	176.0	142	260	41.0	29.5	12.0	35.0	56.0	19.05	360	113.0	10.75

No	PART	MATERIAL	QTY
1	BODY	SS316/CF8M	1
2	END CAP	SS316/CF8M	1
3	BALL	SS316/CF8M	1
4	SEAT	15% R-PTFE	2
5	JOINT GASKET	15% R-PTFE	1
6	STEM	SS316	1
7	THRUST WASHER	15% R-PTFE	1
8	STEM PACKING	15% R-PTFE	2
9	GLAND NUT	SS304	1
10	HANDLE	SS304	1
11	STEM WASHER	SS304	1
12	STEM NUT	SS304	1
13	HANDLE COVER	PLASTIC	1
14	LOCK DEVICE	SS304	1





THESE VALVES CAN BE ACTUATED. SEE ACTUATOR SECTION.

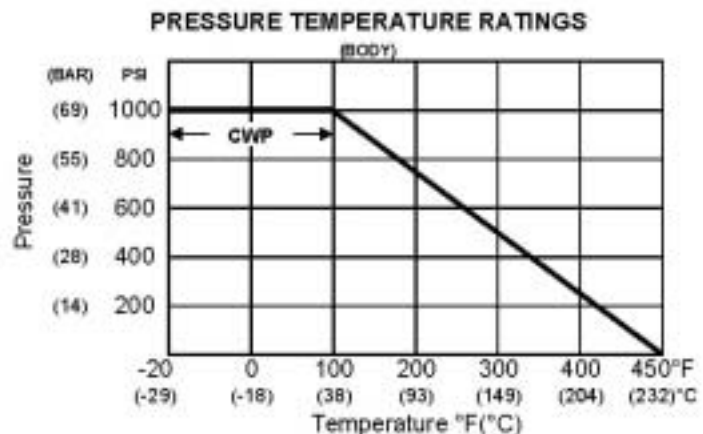
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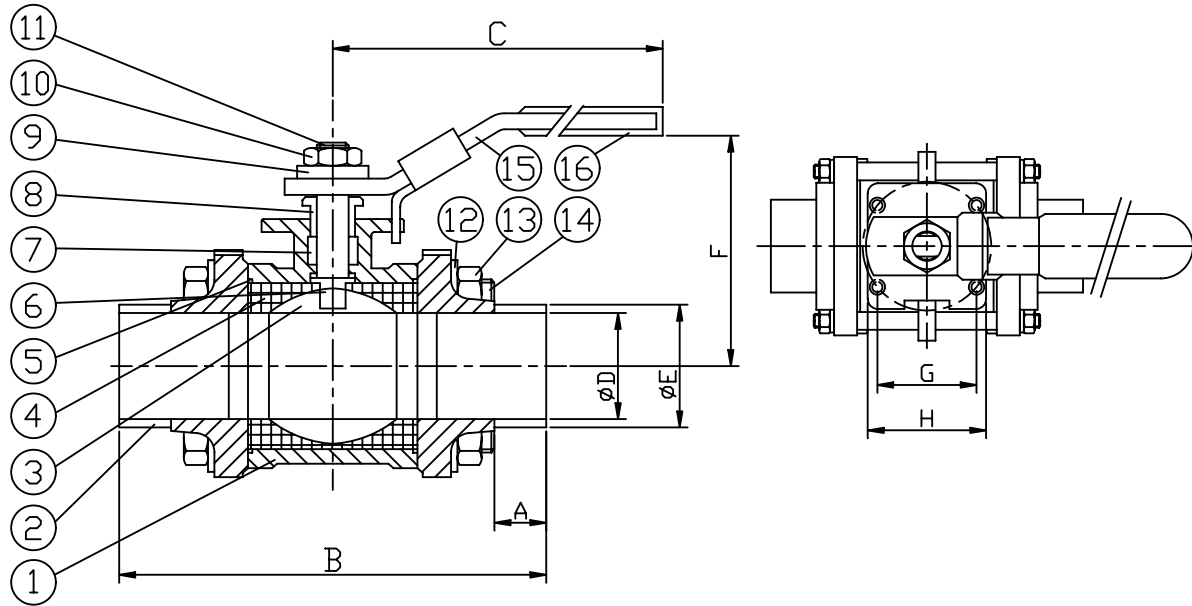
- * 1/4" - 4" (DN8 - DN100)
- * 1000 psi (69 BAR) pressure
- * 316 stainless steel
- * Temperature: -20F to 450F (-29C to 232C)
- * Blow-out-proof stem design
- * BSPP threaded (NPT, BSPT available)
- * 100% tested air under water at 100 psi, open/closed
- * Lockable handle
- * For chemical, food and industrial applications
- * Designed for easy actuator mounting
- * Hydrostatic test pressure: 1500 psi (103 BAR)

SIZE	PART No **	A	B	C	D	E	F	G	H	J	K	L	M	ISO 5211	Cv Fact.	Torque Nm	Kg Each
1/4	FBVX04	12	65	51	105	17	10	5.0	7.94	12.0	14.1	18.0	36	F03	6	6.0	0.44
3/8	FBVX06	13	65	51	105	17	10	5.0	7.94	14.0	17.6	18.0	36	F03	7	6.0	0.43
1/2	FBVX08	15	66	55	125	19	13	6.5	9.53	17.1	21.7	22.0	36	F03	10	9.0	0.67
3/4	FBVX12	20	81	60	125	20	14	6.5	9.53	22.5	27.1	27.5	36	F03	25	11.5	0.88
1	FBVX16	25	95	74	160	24	16	8.0	11.11	28.0	33.8	33.5	42	F04	35	15.0	1.26
1-1/4	FBVX20	32	109	80	160	24	16	8.0	11.11	33.5	42.6	44.0	50	F04	46	19.5	2.04
1-1/2	FBVX24	38	129	92	190	26	17	9.0	12.70	43.0	48.7	50.0	50	F05	80	25.0	2.80
2	FBVX32	50	150	101	190	26	17	9.0	12.70	53.0	61.1	61.5	70	F05	110	45.5	4.29
2-1/2	FBVX40	65	180	130	245	41	30	12.0	19.05	65.0	76.9	76.0	70	F07	310	73.0	8.58
3	FBVX48	80	206	142	245	41	30	12.0	19.05	80.0	89.8	92.0	102	F07	360	128.0	14.15
4	FBVX64	100	261	174	325	48	37	16.0	25.40	100.0	115.4	115.0	102	F10	820	165.0	25.18

** Part No. is for BSPP threaded. Suffix BW for butt weld ends or SW for socket weld ends.

No	PART	MATERIAL	QTY
1	BODY	SS316/CF8M	1
2	END CAP	SS316/CF8M	2
3	BALL	SS316/CF8M	1
4	SEAT	15% R- PTFE	2
5	JOINT GASKET	15% R-PTFE	2
6	STEM	S316	1
7	THRUST WASHER	PTFE	1
8	STEM PACKING	PTFE	2
9	GLAND NUT	SS304	1
10	HANDLE	SS304	1
11	STEM WASHER	SS304	1
12	STEM NUT	SS304	1
13	HANDLE COVER	PLASTIC	1
14	LOCK DEVICE	SS304	1
15	BOLT	SS304	4
16	SPRING WASHER	SS304	4
17	HEX NUT	SS304	4
18	STOP PIN	SS304	1





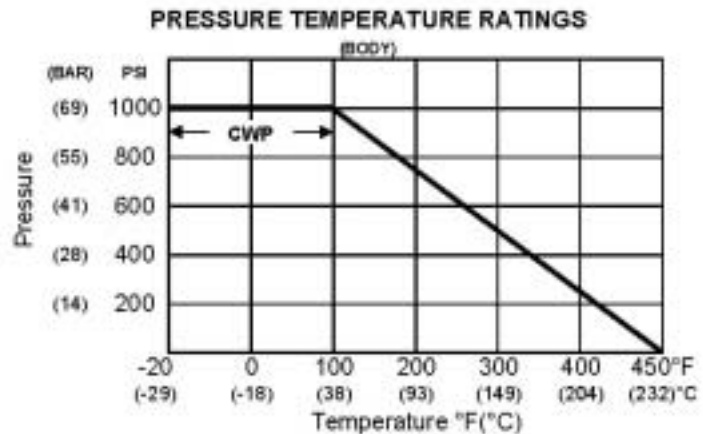
THESE VALVES CAN BE ACTUATED. SEE ACTUATOR SECTION.

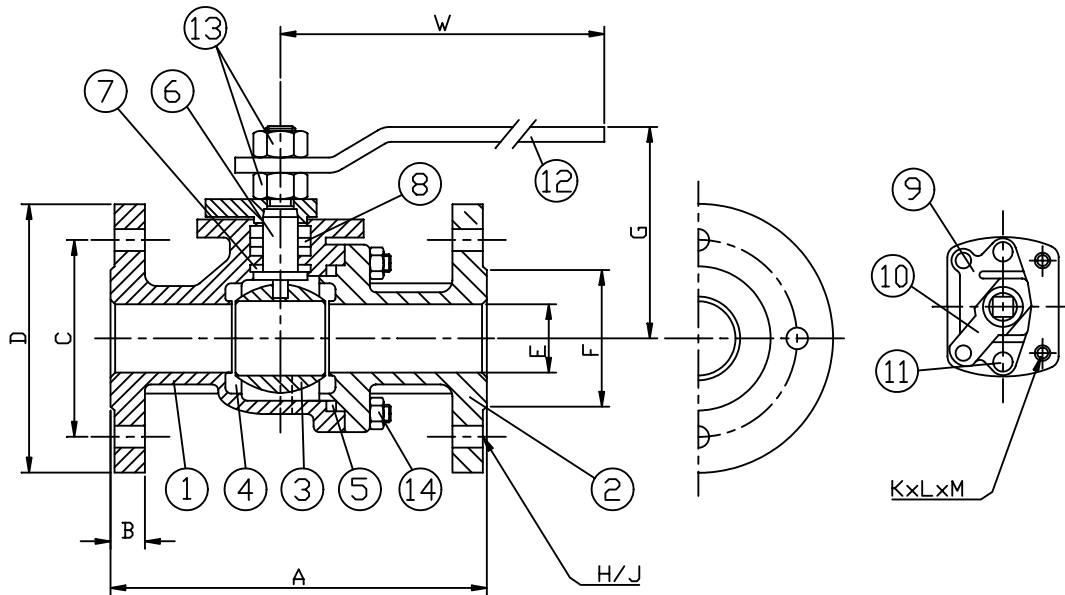
Specifications:

- * 1/2" - 4" (DN8 - DN100)
- * 100% tested air under water at 100 psi, open and closed positions
- * Hydrostatic test pressure: 1500 psi (103 BAR)
- * Temperature: -20F to 450F (-29C to 232C)
- * For chemical, food and industrial applications
- * 1000 psi (69 BAR) pressure
- * Lockable handle
- * 316 stainless steel
- * Blow-out-proof stem design
- * Designed for easy actuator mounting

SIZE D	PART No **	A	B	C	D	E	F	G	H	ISO 5211	Cv Fact.	Torque Nm	Kg Each
1/2	FBVX08HYG	20	89	100	9.5	12.7	52	25.5	37	F03	10	9.0	0.65
3/4	FBVX12HYG	20	101	131	15.9	19.1	57	25.5	37	F03	25	11.5	0.80
1	FBVX16HYG	20	114	131	22.2	25.4	60	29.7	42	F04	35	15.0	1.20
1-1/2	FBVX24HYG	20	140	187	35.0	38.1	90	35.4	50	F05	80	25.0	2.80
2	FBVX32HYG	20	156	187	47.6	50.8	102	35.4	50	F05	110	45.5	4.35
2-1/2	FBVX40HYG	20	197	260	60.2	63.5	140	49.5	72	F07	310	73.0	8.40
3	FBVX48HYG	20	229	260	73.0	76.2	155	49.5	72	F07	360	128.0	14.50
4	FBVX64HYG	20	241	290	97.4	101.6	180	72.1	95	F10	820	165.0	26.50

No	PART	MATERIAL	QTY
1	BODY	SS316/CF8M	1
2	END CAP	SS316/ CF8M	2
3	BALL	SS316/CF8M	1
4	SEAT	15% R-PTFE	2
5	BODY SEAT	15% R-PTFE	1
6	THRUST WASHER	PTFE	2
7	STEM PACKING	PTFE	1
8	GLAND NUT	SS304	1
9	STEM WASHER	SS304	1
10	STEM NUT	SS304	1
11	STEM	SS316	1
12	BOLT WASHER	SS304	4
13	NUT	SS304	4
14	BOLT	SS304	4
15	HANDLE	SS304	1
16	HANDLE COVER	PLASTIC	1





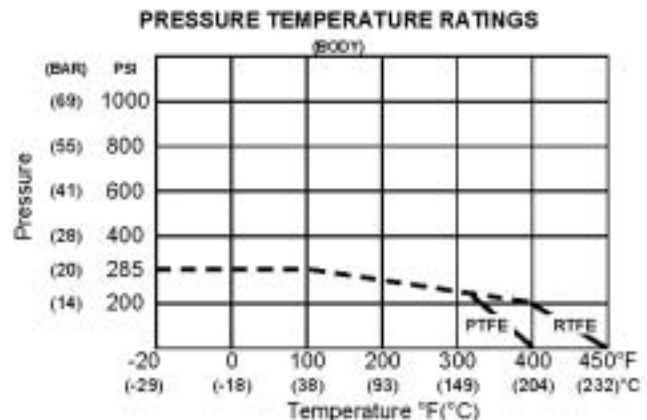
THESE VALVES CAN BE ACTUATED. SEE ACTUATOR SECTION.

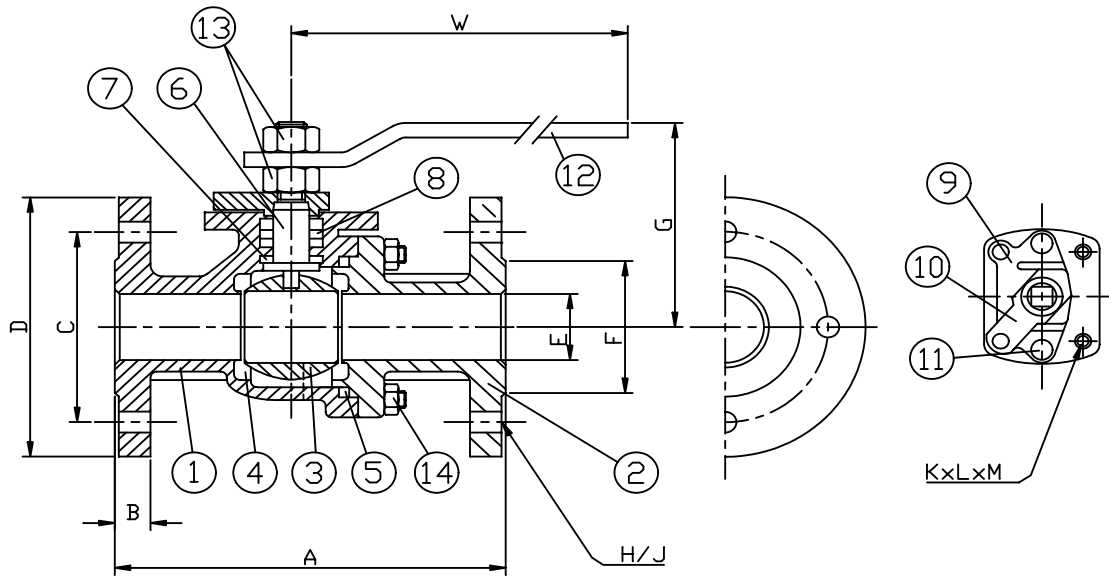
Specifications:

- * 1/2" - 4" (DN15 - DN100)
- * 150LB (20BAR) pressure
- * Temperature: -20F to 450F (-29C to 232C)
- * Blow-out-proof stem design
- * 100% tested air under water at 100 psi in open and closed positions.
- * Face to face to ANSI B16.10
- * Flanged ASA150LB to ANSI B16.5
- * 316 stainless steel
- * Split body for inspection & maintenance
- * Lockable handle
- * Designed for easy actuator mounting
- * Hydrostatic test: shell at 30 bar, seat at 20 bar
- * Anti-static device * Fire safe design

SIZE	PART No	A	B	C	D	E	F	G	H/J	KxLxM	W	Cv Fact.	ISO 5211	Torque Nm	Kg Each
1/2	FLBV15008	108	11.1	60.3	88.9	15	34.9	91	16 x 4	4 X 1/4-20UNC	156	19	F04	17.0	1.8
3/4	FLBV15012	117	12.7	69.8	98.4	20	42.9	96	16 x 4	4 X 1/4-20UNC	156	37	F04	20.0	2.5
1	FLBV15016	127	14.3	79.4	107.9	25	50.8	101	16 x 4	4 X 1/4-20UNC	156	54	F04	22.5	4.0
1-1/4	FLBV15020	140	15.9	88.9	117.5	32	63.5	105	16 x 4	4 X 3/8-16UNC	226	103	F05	24.0	5.7
1-1/2	FLBV15024	165	17.5	98.4	127.0	38	73.0	110	16 x 4	4 X 3/8-16UNC	226	143	F05	54.0	7.5
2	FLBV15032	178	19.0	120.6	152.4	50	92.1	119	19 x 4	4 X 3/8-16UNC	226	360	F07	58.0	10.6
2-1/2	FLBV15040	191	22.2	139.7	177.8	65	104.8	160	19 x 4	4 X 3/8-16UNC	328	440	F07	63.5	13.5
3	FLBV15048	203	23.8	152.4	190.5	80	127.0	170	19 x 4	4 X 3/8-16UNC	328	520	F07	122.0	19.8
4	FLBV15064	229	23.8	190.5	228.6	100	157.2	182	19 x 8	4 X 3/8-16UNC	340	820	F10	178.5	26.0

No	PART	MATERIAL	QTY
1	BODY	SS316/CF8M	1
2	END CAP	SS316/CF8M	1
3	BALL	SS316/CF8M	1
4	BALL SEATS	PTFE	2
5	JOINT GASKET	PTFE	1
6	STEM	SS316	1
7	THRUST WASHER	PTFE	1
8	STEM PACKING	PTFE	1
9	GLAND RING	SS316	1
10	STOPPER	SS304	1
11	STOP BOLT	SS304	1
12	HANDLE	SS304	1
13	HANDLE NUT	SS304	1
14	BOLT & NUT	SS304	1 SET





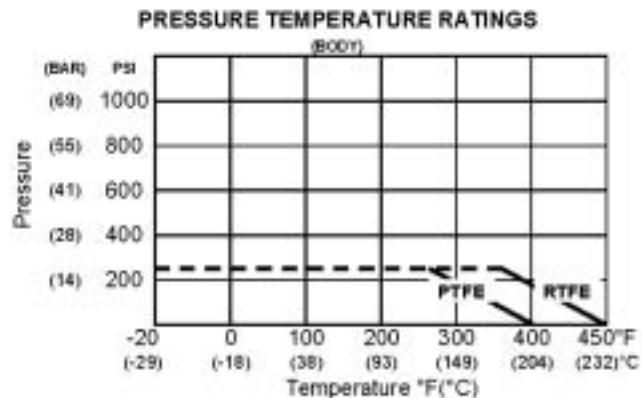
THESE VALVES CAN BE ACTUATED. SEE ACTUATOR SECTION.

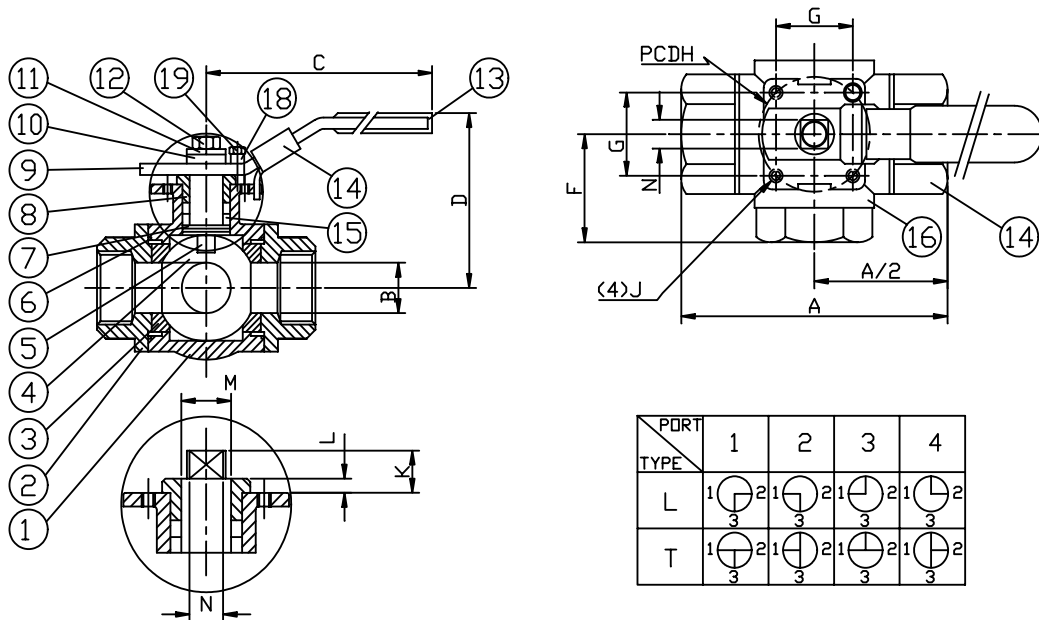
Specifications:

- * 1/2" - 4" (DN15 - DN100)
- * Flanged PN16 to DIN3202 F4
- * Temperature: -20F to 450F (-29C to 232C)
- * Split body for inspection & maintenance
- * 100% tested air under water at 100 psi in open and closed positions.
- * Anti-static device
- * 240 psi (16 BAR) pressure
- * 316 stainless steel
- * Blow-out-proof stem design
- * Lockable handle
- * Designed for easy actuator mounting
- * Hydrostatic test: shell at 30 bar, seat at 20 bar
- * Fire safe design

SIZE	PART No	A (F4)	B	C	D	E	F	G	H/J	KxLxM	W	Cv Fact.	ISO 5211	Torque Nm	Kg Each
1/2	FLBV1608	115	14	65	95	15	40	74	14 x 4	4x42xM5x0.8	170	19	F04	5.5	2.5
3/4	FLBV1612	120	16	75	105	20	50	77	14 x 4	4x42xM5x0.8	170	37	F04	7.5	3.5
1	FLBV1616	125	16	85	115	25	60	83	14 x 4	4x42xM5x0.8	170	54	F04	11.0	4.5
1-1/4	FLBV1620	130	16	100	140	32	70	88	18 x 4	4x50xM6x1.0	170	103	F05	15.0	6.0
1-1/2	FLBV1624	140	16	110	150	38	80	123	18 x 4	4x70xM8x1.25	250	143	F05	20.0	7.0
2	FLBV1632	150	18	125	165	50	102	132	18 x 4	4x102xM10x1.5	250	360	F07	28.5	10.0
2-1/2	FLBV1640	170	18	145	185	65	110	157	18 x 4	4x102xM10x1.5	320	440	F07	49.0	14.5
3	FLBV1648	180	20	160	200	80	128	166	18 x 8	4x102xM10x1.5	365	520	F07	75.5	19.0
4	FLBV1664	190	20	180	220	100	148	182	18 x 8	4x102xM10x1.5	365	820	F10	108.0	32.0

No	PART	MATERIAL	QTY
1	BODY	SS316/CF8M	1
2	END CAP	SS316/CF8M	1
3	BALL	SS316/CF8M	1
4	BALL SEATS	PTFE	2
5	JOINT GASKET	PTFE	1
6	STEM	SS316	1
7	THRUST WASHER	PTFE	1
8	STEM PACKING	PTFE	1
9	GLAND RING	SS316	1
10	STOPPER	SS304	1
11	STOP BOLT	SS304	1
12	HANDLE	SS304	1
13	HANDLE NUT	SS304	1
14	BOLT & NUT	SS304	1 SET





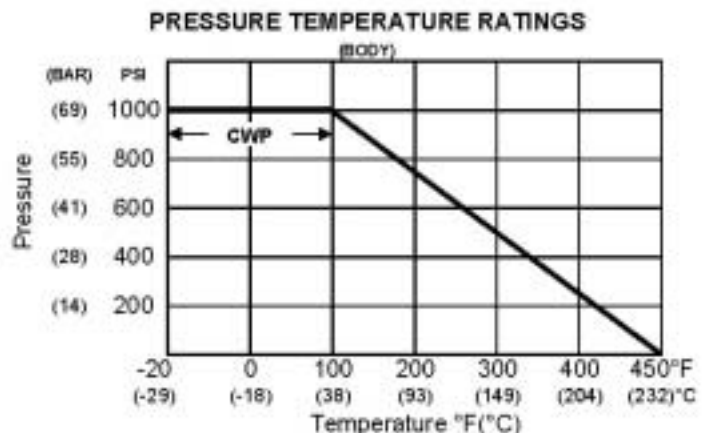
THESE VALVES CAN BE ACTUATED. SEE ACTUATOR SECTION.

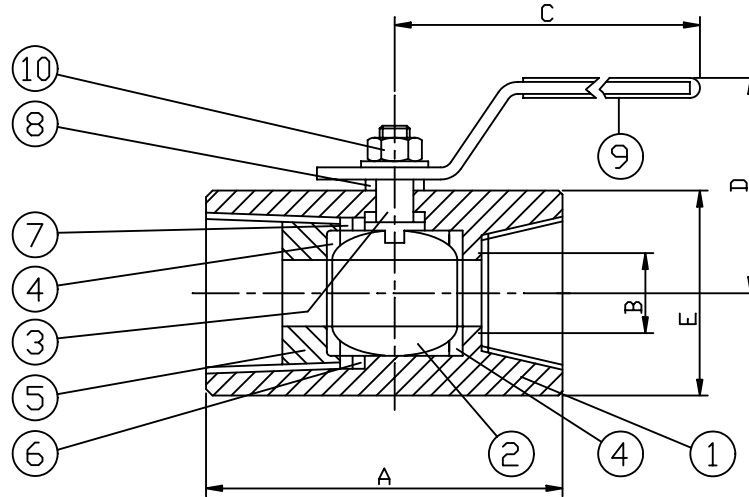
Specifications:

- * 1/4" – 2" (DN8 – DN50)
- * 1000 psi (69 BAR) pressure
- * Temperature: -20F to 450F (-29C to 232C)
- * Blow-out-proof stem design
- * 100% tested air under water at 100 psi in open and closed positions.
- * BSPP threaded. (NPT, BSPT available)
- * 316 stainless steel
- * For chemical and industrial applications
- * Lockable handle
- * L-port and T-port
- * Anti-static device

SIZE	PART No L-PORT	PART No T-PORT	A	B	C	D	F	G	H	J	K	L	M	N	ISO 5211	Cv Fact.	Torque Nm	Kg Each
1/4	RBVL04	RBVT04	68	11.0	106	58	34	29.7	42	M5x0.8	11	6	12	9	F04	5.7	5.0	0.82
3/8	RBVL06	RBVT06	68	11.0	106	58	34	29.7	42	M5x0.8	11	6	12	9	F04	5.7	5.0	0.78
1/2	RBVL08	RBVT08	75	12.7	138	61	38	29.7	42	M5x0.8	11	6	12	9	F04	5.7	6.0	0.74
3/4	RBVL12	RBVT12	86	16.0	138	74	43	35.4	50	M6x1.0	13	6	15	11	F05	9.9	10.5	1.18
1	RBVL16	RBVT16	103	20.0	162	81	52	35.4	50	M6x1.0	19	8	15	11	F05	17.1	18.5	1.70
1-1/4	RBVL20	RBVT20	115	25.0	162	88	58	35.4	50	M6x1.0	19	8	15	11	F05	19.9	26.0	2.82
1-1/2	RBVL24	RBVT24	125	32.0	220	104	63	49.5	70	M8x1.25	24	9	15	11	F07	37.0	35.5	3.96
2	RBVL32	RBVT32	146	38.1	220	110	73	49.5	70	M8x1.25	25	9	19	14	F07	62.6	86.0	6.78

No	PART	MATERIAL	QTY
1	BODY	SS316/CF8M	1
2	END CAP	SS316/CF8M	3
3	BALL SEAT	15% R-PTFE	4
4	BALL	SS316	1
5	STEM	SS316	1
6	END SEALS	15% R-PTFE	1
7	THRUST WASHER	15% R-PTFE	1
8	GLAND NUT	SS304	1
9	HANDLE	SS304	1
10	HANDLE WASHER	SS304	1
11	WASHER	SS304	1
12	HANDLE NUT	SS304	1
13	HANDLE COVER	PLASTIC	1
14	END CAP	SS316/CF8M	3
15	STEM PACKING	15% R-PTFE	2
16	END SEALS	15% R-PTFE	3
17	LOCKING DEVICE	SS304	1
18	STOP RING	SS304	1
19	STOP BOLT	SS304	1





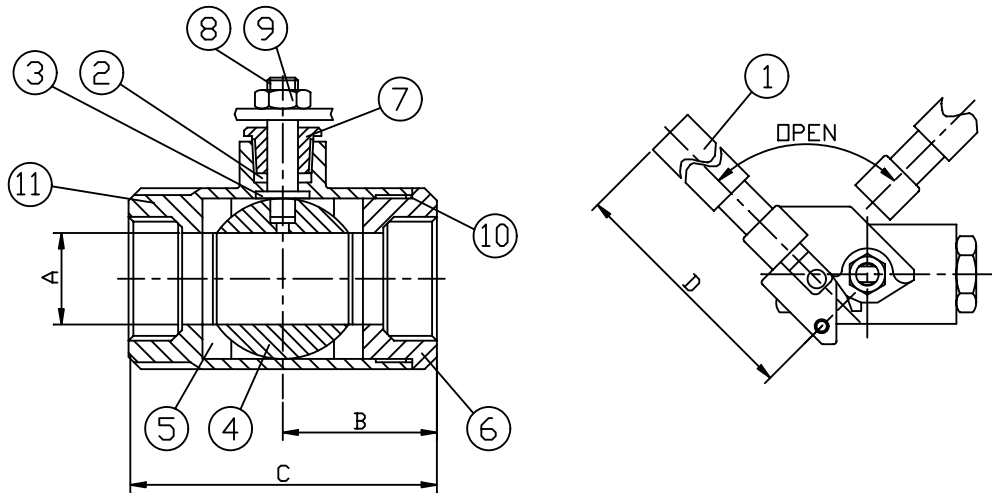
Specifications:

- * 1/4" - 1-1/2" (DN8 - DN40)
- * BSPP threaded. (NPT, BSPT available)
- * Compression ends available
- * Temperature: -20F to 450F (-29C to 232C)
- * For chemical, food and industrial applications
- * Locking devices available
- * 3000 psi (200 BAR) pressure
- * Full material traceability
- * 316 stainless steel
- * Blow-out-proof stem design
- * 100% hydrostatic tested
- * Anti-static device

SIZE	PART No **	A	B	C	D	E	Cv	Kg Each
1/4	3RBV04**	48	8.4	79	35	28	4.0	0.3
3/8	3RBV06**	48	8.4	79	35	28	4.2	0.3
1/2	3RBV08**	54	12.0	79	35	32	5.2	0.3
3/4	3RBV12**	68	16.0	79	40	38	10.2	0.5
1	3RBV16**	83	25.0	143	56	57	19.9	1.1
1-1/4	3RBV20**	94	32.0	143	94	70	42.4	1.6
1-1/2	3RBV24**	94	32.0	143	94	70	42.4	3.0

**** Part No. is for BSPP threaded. Suffix NPT or BSPT if these threads are required. Also available with compression ends, please state the size you require.**

No	PART	MATERIAL	QTY
1	BODY	SS316	1
2	BALL	SS316	1
3	STEM	SS316	1
4	SEAT	PTFE	2
5	INSERT	SS316	1
6	GASKET	PTFE	1
7	STEM SEAL	PTFE	1
8	FOLLOWER	SS304	1
9	HANDLE/SLEEVE	SS304/PLASTIC	1
10	LOCKNUT	SS304	1



Specifications:

- * 1/4" - 1" (DN8-DN25) 2000 psi /140 Bar * 1-1/4" - 2" (DN32-DN50) 1500 psi/105 Bar * 316SS
- * Temperature: -20F to 450F (-29C to 232C) * Reinforced TFE seats * Blow-out proof stem design
- * Spring return to close * Spring return to open (optional) * 150 psi saturated steam
- * Operating torque is approximately three times standard valve torque. * BSPP threaded

SIZE BSPP	PART No	A	B	C	D	Kg Each
1/4	DMFBV04	9.4	26.2	52.3	177.8	0.5
3/8	DMFBV06	9.4	26.2	52.3	177.8	0.5
1/2	DMFBV08	12.7	28.5	57.2	177.8	0.6
3/4	DMFBV12	17.3	38.1	76.2	177.8	0.8
1	DMFBV16	22.1	42.7	85.6	177.8	1.1
1-1/4	DMFBV20	25.4	50.8	101.6	228.6	1.5
1-1/2	DMFBV24	31.8	55.4	111.0	228.6	2.3
2	DMFBV32	38.1	69.9	139.7	228.6	3.6

No	PART	MATERIAL	QTY
1	DEADMAN HANDLE	SS316/VINYL	1
2	STEM PACKING	RTFE	1
3	STEM BEARING	RTFE	1
4	BALL	SS316	1
5	SEAT	RTFE	2
6	RETAINER	SS316/CF8M	1
7	GLAND NUT	SS316	1
8	STEM	SS316	1
9	LEVER NUT	SS304	1
10	BODY SEAL	PTFE	1
11	BODY	SS316/CF8M	1

