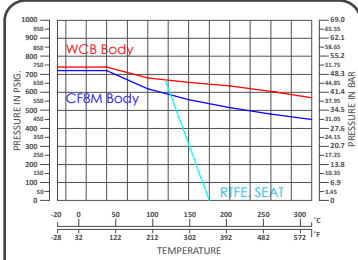




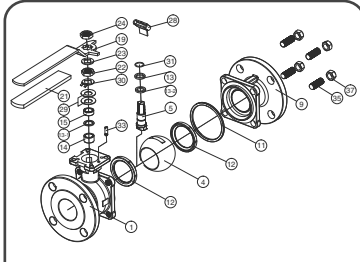
# MD-28FS

# Fire Safe Ball Valve

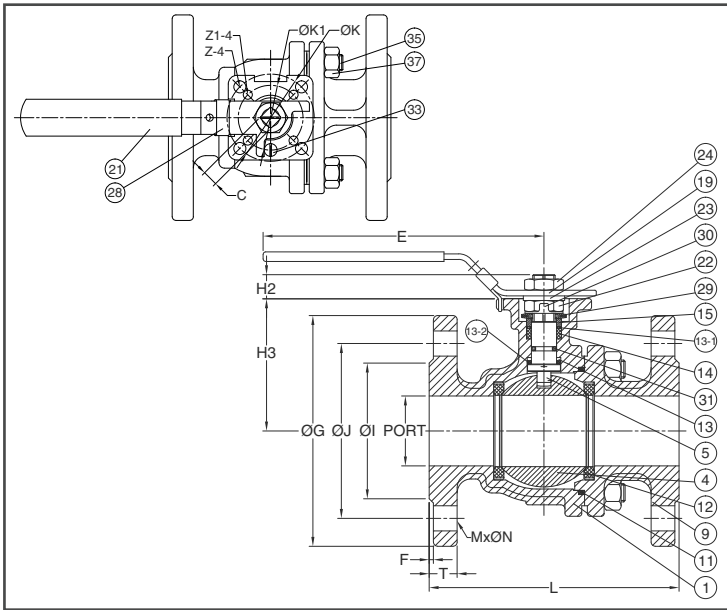
ANSI Class 300 / Full Bore  
API 607 Fire Safe  
1/2" ~ 6"



ANSI Class 300 P-T Chart



Explosion Drawing



## FEATURES

- Investment Cast Body Construction
- 2 Pieces Body Design
- ISO 5211 Direct Mounting Flange
- Blow-Out-Proof Stem Design
- Anti-Static Device
- Available for Pneumatic or Electric Actuator
- NACE MR0175 is available upon request
- Super Alloy materials for highly corrosive medium are available upon request

**AUTOMATION AVAILABLE**

## SPECIFICATIONS

- Size Range: 1/2" ~ 6" (DN15 ~ DN150)
- End Connection: Flanged End, RF
- Working Pressure: CF8M - 720 PSI (CWP)  
WCB - 740 PSI (CWP)
- Steam Pressure: 150 PSIG. Saturated Steam for RTFE.
- Temperature Range: -4 to 356 °F (-20 to 180 °C) for RTFE.

## STANDARDS

- Design: ASME/ANSI B16.34 / API 608
- Mounting Flange: ISO 5211
- Face to Face: ASME/ANSI B16.10 Class 300
- Flange Dimension: ASME/ANSI B16.5 Class 300 RF
- Material: ASTM
- Pressure Testing: API 598

## CERTIFICATE

- Fire Safe: API 607 6th Edition / ISO 10497
- Fugitive Emission **OPTION**: ISO 15848-1 / TA-LUFT
- Quality Assurance: ISO 9001
- Material Certificate: EN 10204-3.1 MTR
- CE Approval: PED 97/23/EC Module H
- Canadian Certificate: CRN

## MATERIAL LIST

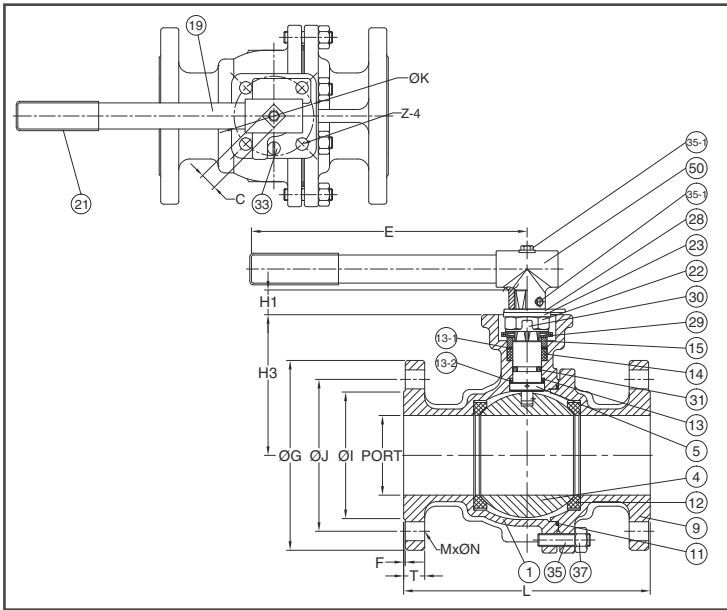
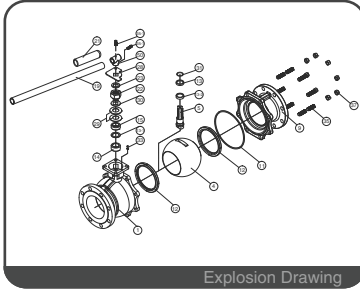
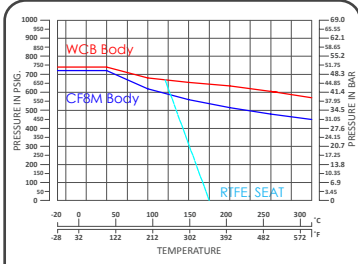
NO.	PART NAME	MATERIAL ( more options available )
1	BODY	ASTM A351 Gr.CF8M   ASTM A216 Gr.WCB
4	BALL	ASTM A351 Gr.CF8M
5	STEM	ASTM A276 Gr.SS316
9	END CAP	ASTM A351 Gr.CF8M   ASTM A216 Gr.WCB
11	BODY SEAL	GRAPHITE
12	SEAT	RTFE.(15%G.F.)
13	THRUST WASHER	PTFE.
13-1	THRUST WASHER	RTFE.(15%G.F.)
13-2	THRUST WASHER	GRAPHITE
14	STEM PACKING	GRAPHITE
15	GLAND BUSH	SS304
19	HANDLE	SS304
21	HANDLE COVER	PLASTIC
22	STEM NUT	SS304
23	HANDLE WASHER	SS304
24	HANDLE NUT	SS304
28	LOCKING PAD	SS304
29	BELLEVILLE WASHER	SS304
30	TAB WASHER	SS304
31	O-RING	VITON®
33	STOP PIN	SS304
35	STUD	ASTM A193 Gr.B8
37	BOLT NUT	ASTM A194 Gr.8

## DIMENSION

																	unit : mm			
SIZE	PORT	L	E	H2	H3	C	ØG	ØJ	ØI	T	F	M	ØN	ØK	ØK1	Z	Z1			
DN15	1/2"	15.0	140	112	8.5	48.0	9	95.3	66.5	35.0	11.2	1.6	4	16.0	50	F05	36	F03	7.0	6.0
DN20	3/4"	20.0	152	112	8.5	62.0	9	117.4	82.6	43.0	12.7	1.6	4	19.1	50	F05	36	F03	7.0	6.0
DN25	1"	25.0	165	136	11.4	64.0	9	124.0	88.9	51.0	14.3	1.6	4	19.1	50	F05	36	F03	7.0	6.0
DN32	1-1/4"	32.0	178	185	11.4	71.0	9	133.4	98.6	63.5	15.9	1.6	4	19.1	50	F05	36	F03	7.0	6.0
DN40	1-1/2"	38.0	190	198	14.0	76.0	14	155.5	114.3	73.2	17.5	1.6	4	22.3	70	F07	50	F05	9.0	7.0
DN50	2"	50.0	216	198	13.7	84.5	14	165.1	127.0	92.0	19.1	1.6	8	19.1	70	F07	50	F05	9.0	7.0
DN65	2-1/2"	63.0	241	265	18.0	106.8	17	190.5	149.4	104.7	23.3	1.6	8	22.3	102	F10	70	F07	11.0	9.0
DN80	3"	80.0	283	265	18.0	116.0	17	209.6	168.1	127.0	23.9	1.6	8	22.3	102	F10	70	F07	11.0	9.0
DN100	4"	98.0	305	325	18.0	154.5	17	264.0	200.2	157.2	23.9	1.6	8	22.3	102	F10	70	F07	11.0	9.0

## DIMENSION

																	unit : inch			
SIZE	PORT	L	E	H2	H3	C	ØG	ØJ	ØI	T	F	M	ØN	ØK	ØK1	Z-4	Z1-4			
DN15	1/2"	0.59	5.51	4.41	0.33	1.89	0.35	3.75	2.62	1.38	0.44	0.06	4	0.63	1.97	F05	1.42	F03	0.28	0.24
DN20	3/4"	0.79	5.98	4.41	0.33	2.44	0.35	4.62	3.25	1.69	0.50	0.06	4	0.75	1.97	F05	1.42	F03	0.28	0.24
DN25	1"	0.98	6.50	5.35	0.45	2.52	0.35	4.88	3.50	2.01	0.56	0.06	4	0.75	1.97	F05	1.42	F03	0.28	0.24
DN32	1-1/4"	1.26	7.01	7.28	0.45	2.80	0.35	5.25	3.88	2.50	0.63	0.06	4	0.75	1.97	F05	1.42	F03	0.28	0.24
DN40	1-1/2"	1.50	7.48	7.80	0.55	2.99	0.55	6.12	4.50	2.88	0.69	0.06	4	0.88	2.76	F07	1.97	F05	0.35	0.28
DN50	2"	1.97	8.50	7.80	0.54	3.33	0.55	6.50	5.00	3.62	0.75	0.06	8	0.75	2.76	F07	1.97	F05	0.35	0.28
DN65	2-1/2"	2.48	9.49	10.43	0.71	4.20	0.67	7.50	5.88	4.12	0.92	0.06	8	0.88	4.02	F10	2.76	F07	0.43	0.35
DN80	3"	3.15	11.14	10.43	0.71	4.57	0.67	8.25	6.62	5.00	0.94	0.06	8	0.88	4.02	F10	2.76	F07	0.43	0.35
DN100	4"	3.86	12.01	12.80	0.71	6.08	0.67	10.39	7.88	6.19	0.94	0.06	8	0.88	4.02	F10	2.76	F07	0.43	0.35



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19	HANDLE	WCB
21	HANDLE COVER	PLASTIC
22	STEM NUT	SS304
23	HANDLE WASHER	SS304
28	TRIANGLE STOPPER	SS304
29	BELLEVILLE WASHER	SS304
30	TAB WASHER	SS304
31	STEM O-RING	VITON®
33	STOP PIN	SS304
35	STUD	ASTM A193 Gr.B8
35-1	HANDLE BOLT	SS304
37	BOLT NUT	ASTM A194 Gr.8
60	HANDLE ADAPTER	FCD45

## DIMENSION

		unit : mm															
SIZE	PORT	L	E	H1	H3	C	ØG	ØJ	ØI	T	F	M	ØN	ØK	Z		
DN125	5"	125.0	381	600	30.0	194.0	27	279.4	235.0	186.0	35.0	1.6	8	22.3	125	F12	14.0
DN150	6"	150.0	403	800	30.0	213.0	27	317.5	269.8	216.0	36.6	1.6	8	22.3	125	F12	14.0

## DIMENSION

		unit : inch															
SIZE	PORT	L	E	H1	H3	C	ØG	ØJ	ØI	T	F	M	ØN	ØK	Z		
DN125	5"	4.92	15.00	23.62	1.18	7.64	1.06	11.00	9.25	7.32	1.38	0.06	8	0.88	4.92	F12	0.55
DN150	6"	5.91	15.87	31.50	1.18	8.39	1.06	12.50	10.62	8.50	1.44	0.06	8	0.88	4.92	F12	0.55