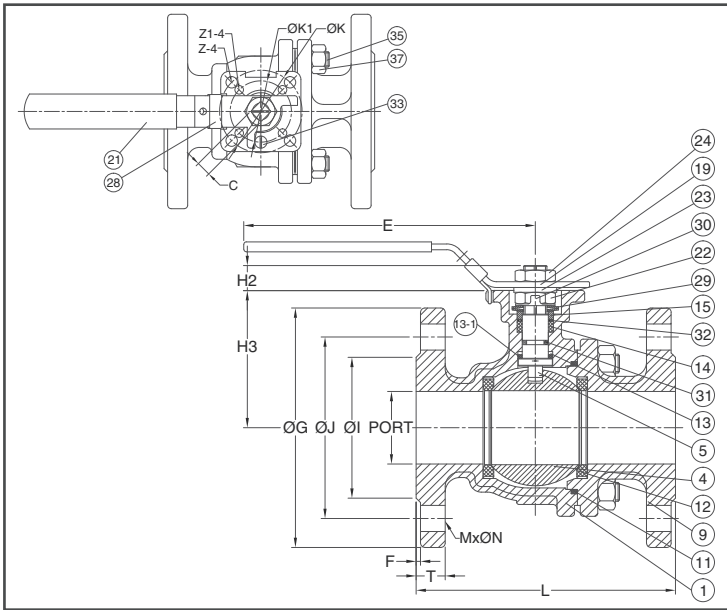
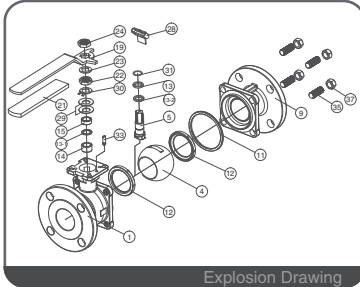
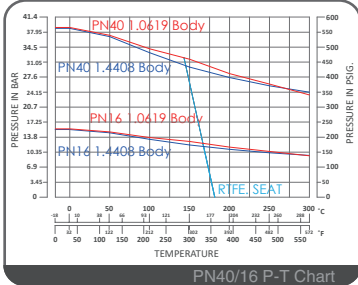




MD-28FS

Fire Safe Ball Valve
API 607 Fire Safe / Full Bore
PN40 for DN15 ~ DN50
PN16 for DN65 ~ DN150



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 DN15~DN150 (1/2" ~ 6")
- End Connection Flanged End, RF
- Working Pressure
 - 1.4408 PN40 - 38.8 Bar at RT
 - 1.0619 PN40 - 39.0 Bar at RT
 - 1.4408 PN16 - 15.5 Bar at RT
 - 1.0619 PN16 - 15.6 Bar at RT
- Steam Pressure 150 PSIG. Saturated Steam for RTFE.
- Temperature Range -4 to 356 °F (-20 to 180 °C) for RTFE.

STANDARDS

- Design EN 12516-1/2 / API 608
- Mounting Flange ISO 5211
- Face to Face
 - DIN 3202 F4 for DN15 ~ DN100
 - DIN 3202 F5 for DN125 ~ DN150
- Flange Dimension
 - PN40 EN1092-1 for DN15 ~ DN50
 - PN16 EN1092-1 for DN65 ~ DN150
- Material EN1503-1
- Pressure Testing EN 12266

CERTIFICATE

- Fire Safe API 607 6th Edition / ISO 10497
- Fugitive Emission ISO 15848-1 / TA-LUFT
- Quality Assurance ISO 9001
- Material Certificate EN 10204-3.1 MTR
- CE Approval PED 2014/68/EU Module H

MATERIAL LIST

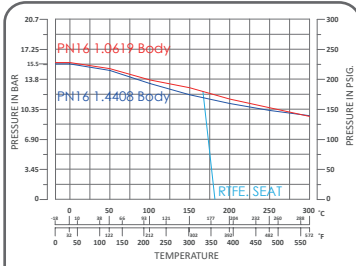
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1	BODY	EN1503-1 1.4408 EN1503-1 1.0619
4	BALL	ASTM A351 Gr.CF8M
5	STEM	ASTM A276 Gr.SS316
9	END CAP	EN1503-1 1.4408 EN1503-1 1.0619
11	BODY SEAL	GRAPHITE
12	SEAT	RTFE.(15%G.F.)
13	THRUST WASHER	PTFE.+25%G.F.
13-1	THRUST WASHER	GRAPHITE
14	STEM PACKING	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	SS301
30	TAB WASHER	SS304
31	O-RING	VITON®
32	THRUST WASHER	PTFE.+25%G.F.
33	STOP PIN	SS304
35	STUD	ASTM A193 Gr.B8
37	BOLT NUT	ASTM A194 Gr.8

DIMENSION

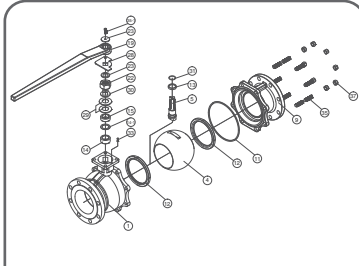
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SIZE	PORT	L	E	H2	H3	C	ØG	ØJ	ØI	T	F	M	ØN	ØK	ØK1	Z-4	Z1-4			
DN15	1/2"	15.0	115	112	8.5	48.0	9	95.0	65.0	45.0	16.0	2.0	4	14.0	50	F05 36	F03 7.0	6.0		
DN20	3/4"	20.0	120	112	8.5	53.5	9	105.0	75.0	58.0	18.0	2.0	4	14.0	50	F05 36	F03 7.0	6.0		
DN25	1"	25.0	125	136	9.5	64.0	9	115.0	85.0	68.0	18.0	2.0	4	14.0	50	F05 36	F03 7.0	6.0		
DN32	1-1/4"	32.0	130	185	9.5	71.0	9	140.0	100.0	78.5	18.0	2.0	4	18.0	50	F05 36	F03 7.0	6.0		
DN40	1-1/2"	38.0	140	198	14.0	76.0	14	150.0	110.0	88.2	18.0	2.0	4	18.0	70	F07 50	F05 9.0	7.0		
DN50	2"	50.0	150	198	13.7	84.5	14	165.0	125.0	102.0	20.0	2.0	4	18.0	70	F07 50	F05 9.0	7.0		
DN65	2-1/2"	64.0	170	265	18.0	108.5	17	185.0	145.0	122.0	18.0	2.0	4	18.0	102	F10 70	F07 12.0	10.0		
DN80	3"	76.0	180	265	18.0	117.5	17	200.0	160.0	138.0	20.0	2.0	4	18.0	102	F10 70	F07 12.0	10.0		
DN100	4"	100.0	190	325	18.0	157.0	17	220.0	180.0	158.0	20.0	2.0	8	18.0	102	F10 70	F07 12.0	10.0		

DIMENSION

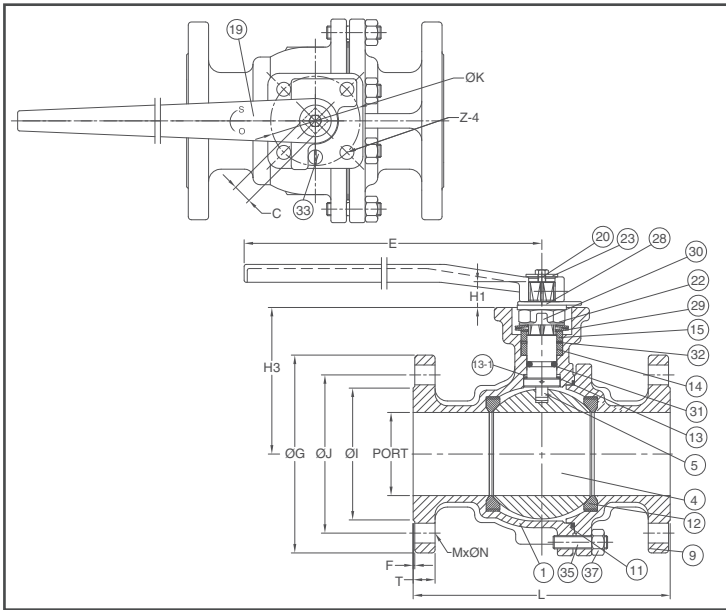
																	unit : inch			
SIZE	PORT	L	E	H2	H3	C	ØG	ØJ	ØI	T	F	M	ØN	ØK	ØK1	Z-4	Z1-4			
DN15	1/2"	0.59	4.53	4.41	0.33	1.89	0.35	3.74	2.56	1.77	0.63	0.08	4	0.55	1.97	F05 1.42	F03 0.28	0.24		
DN20	3/4"	0.79	4.72	4.41	0.33	2.11	0.35	4.13	2.95	2.28	0.71	0.08	4	0.55	1.97	F05 1.42	F03 0.28	0.24		
DN25	1"	0.98	4.92	5.35	0.37	2.52	0.35	4.53	3.35	2.68	0.71	0.08	4	0.55	1.97	F05 1.42	F03 0.28	0.24		
DN32	1-1/4"	1.26	5.11	7.28	0.37	2.80	0.35	5.51	3.94	3.07	0.71	0.08	4	0.71	1.97	F05 1.42	F03 0.28	0.24		
DN40	1-1/2"	1.50	5.51	7.80	0.55	2.99	0.55	5.91	4.33	3.47	0.71	0.08	4	0.71	2.76	F07 1.97	F05 0.35	0.28		
DN50	2"	1.97	5.92	7.80	0.54	3.33	0.55	6.50	4.92	4.02	0.79	0.08	4	0.71	2.76	F07 1.97	F05 0.35	0.28		
DN65	2-1/2"	2.52	6.69	10.43	0.71	4.27	0.67	7.28	5.71	4.80	0.71	0.08	4	0.71	4.02	F10 2.76	F07 0.47	0.39		
DN80	3"	2.99	7.09	10.43	0.71	4.63	0.67	7.87	6.30	5.43	0.79	0.08	8	0.71	4.02	F10 2.76	F07 0.47	0.39		
DN100	4"	3.94	7.48	12.80	0.71	6.18	0.67	8.66	7.09	6.22	0.79	0.08	8	0.71	4.02	F10 2.76	F07 0.47	0.39		



PN16 P-T Chart for DN125 - DN150



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: DN15~DN150 (1/2" ~ 6")
- End Connection: Flanged End, RF
- Working Pressure:
 - 1.4408 PN40 - 38.8 Bar at RT
 - 1.0619 PN40 - 39.0 Bar at RT
 - 1.4408 PN16 - 15.5 Bar at RT
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- Steam Pressure: 150 PSIG. Saturated Steam for RTFE.
- Temperature Range: -4 to 356 °F (-20 to 180 °C) for RTFE.

STANDARDS

- Design: EN 12516-1/2 / API 608
- Mounting Flange: ISO 5211
- Face to Face:
 - DIN 3202 F4 for DN15 ~ DN100
 - DIN 3202 F5 for DN125 ~ DN150
- Flange Dimension:
 - PN40 EN1092-1 for DN15 ~ DN50
 - PN16 EN1092-1 for DN65 ~ DN150
- Material: EN1503-1
- Pressure Testing: EN 12266

CERTIFICATE

- Fire Safe: API 607 6th Edition / ISO 10497
- Fugitive Emission: ISO 15848-1 / TA-LUFT
- Quality Assurance: ISO 9001
- Material Certificate: EN 10204-3.1 MTR
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5	STEM	ASTM A276 Gr.316
9	END CAP	EN1503-1 1.4408 EN1503-1 1.0619
11	BODY SEAL	GRAPHITE
12	SEAT	PTFE.+50%SS316
13	THRUST WASHER	PTFE.+25%G.F.
13-1	THRUST WASHER	GRAPHITE
14	STEM PACKING	GRAPHITE
15	GLAND BUSH	SS304
19	HANDLE	FCD45
20	HANDLE BOLT	SS304
22	STEM NUT	SS304
23	HANDLE WASHER	SS304
28	TRIANGLE STOPPER	SS304
29	BELLEVILLE WASHER	SS301
30	TAB WASHER	SS304
31	STEM O-RING	VITON®
32	PACKING FOLLOWER	PTFE.+25%G.F.
33	STOP PIN	SS304
35	STUD	ASTM A193 Gr.B8
37	BOLT NUT	ASTM A194 Gr.8

DIMENSION

unit : mm

SIZE	PORT	L	E	H1	H3	C	ØG	ØJ	ØI	T	F	M	ØN	ØK	Z		
DN125	5"	125.0	325	750	30.0	194.0	27	250.0	210.0	188.0	22.0	2.0	8	18.0	125	F12	14.0
DN150	6"	150.0	350	750	30.0	213.0	27	285.0	240.0	212.0	22.0	2.0	8	22.0	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	12.80	29.53	1.18	7.64	1.06	9.84	8.27	7.40	0.87	0.08	8	0.71	4.92	F12	0.55
DN150	6"	5.91	13.78	29.53	1.18	8.39	1.06	11.22	9.45	8.35	0.87	0.08	8	0.87	4.92	F12	0.55