

### FEATURES

- Investment Cast Body Construction
- 2 Pieces Body Design
- ISO 5211 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 - 275 PSI ( CWP )  
WCB - 285 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 150
- Flange Dimension ASME/ANSI B16.5 Class 150 RF
- Material ASTM
- Pressure Testing API 598

### CERTIFICATE

- Fire Safe API 607 6<sup>th</sup> Edition / ISO 10497
- Fugitive Emission 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+SS316 SPIRAL WOUND WIRE	
12	SEAT	RTFE.(15%G.F.)	
13	THRUST WASHER	GRAPHITE	
13-1	THRUST WASHER	RTFE.(15%G.F.)	
14	STEM PACKING	GRAPHITE	
14-1	STEM PACKING	RTFE.(15%G.F.)	
15	GLAND BUSH	SS304	
19	HANDLE	STEEL	
21	HANDLE COVER	PLASTIC	
22	STEM NUT	SS304	
24	HANDLE NUT	SS304	
28	LOCKING DEVICE	SS304	
29	BELLEVILLE WASHER	SS301	
30	TAB WASHER	SS304	
33	STOP PIN SET	SS304	
35	BODY BOLT	ASTM A193 Gr.B8	ASTM A193 Gr.B7
37	BOLT NUT	ASTM A194 Gr.8	ASTM A193 Gr.2H

### DIMENSION

															unit : mm	
SIZE	PORT	L	E	H	H4	C	ØG	ØJ	ØI	T	F	MxØN	ØK	Z		
DN15	1/2"	15.0	108.0	132	80.0	38.5	9	90.0	60.5	35.0	11.6	2.0	4xØ16	42/F04	M5x0.8P	
DN20	3/4"	20.0	117.0	132	84.5	42.5	9	98.6	70.0	43.0	13.2	2.0	4xØ16	42/F04	M5x0.8P	
DN25	1"	25.0	127.0	166	102.0	52.0	11	108.0	79.2	51.0	14.7	2.0	4xØ16	50/F05	M6x1.0P	
DN32	1-1/4"	32.0	140.0	166	105.0	56.0	11	117.5	88.9	63.5	16.6	2.0	4xØ16	50/F05	M6x1.0P	
DN40	1-1/2"	38.0	165.0	203	125.0	65.25	14	127.0	98.6	73.2	17.9	2.0	4xØ16	70/F07	M8x1.25P	
DN50	2"	50.0	178.0	203	132.0	73.75	14	152.5	120.7	92.0	19.1	1.6	4xØ19	70/F07	M8x1.25P	

### DIMENSION

															unit : inch	
SIZE	PORT	L	E	H	H4	C	ØG	ØJ	ØI	T	F	MxØN	ØK	Z		
DN15	1/2"	0.59	4.25	5.20	3.15	1.52	0.35	3.54	2.38	1.38	0.46	0.08	4xØ0.63	1.65/F04	M5x0.8P	
DN20	3/4"	0.79	4.61	5.20	3.33	1.67	0.35	3.88	2.76	1.69	0.52	0.08	4xØ0.63	1.65/F04	M5x0.8P	
DN25	1"	0.98	5.00	6.54	4.02	2.05	0.43	4.25	3.12	2.01	0.58	0.08	4xØ0.63	1.97/F05	M6x1.0P	
DN32	1-1/4"	1.26	5.51	6.54	4.13	2.20	0.43	4.63	3.50	2.50	0.65	0.08	4xØ0.63	1.97/F05	M6x1.0P	
DN40	1-1/2"	1.50	6.50	7.99	4.92	2.57	0.55	5.00	3.88	2.88	0.70	0.08	4xØ0.63	2.76/F07	M8x1.25P	
DN50	2"	1.97	7.01	7.99	5.20	2.90	0.55	6.00	4.75	3.62	0.75	0.06	4xØ0.75	2.76/F07	M8x1.25P	



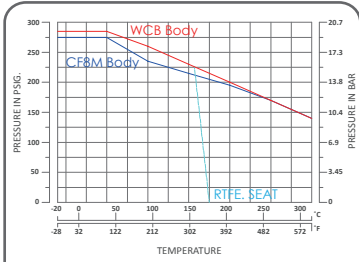
# MD-32

## Two Pieces Flanged Ball Valve

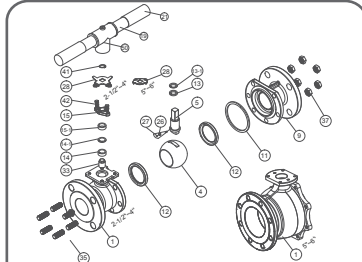
API 607 6<sup>th</sup> Edition / ISO 10497 Certified

ANSI Class 150 / Full Bore

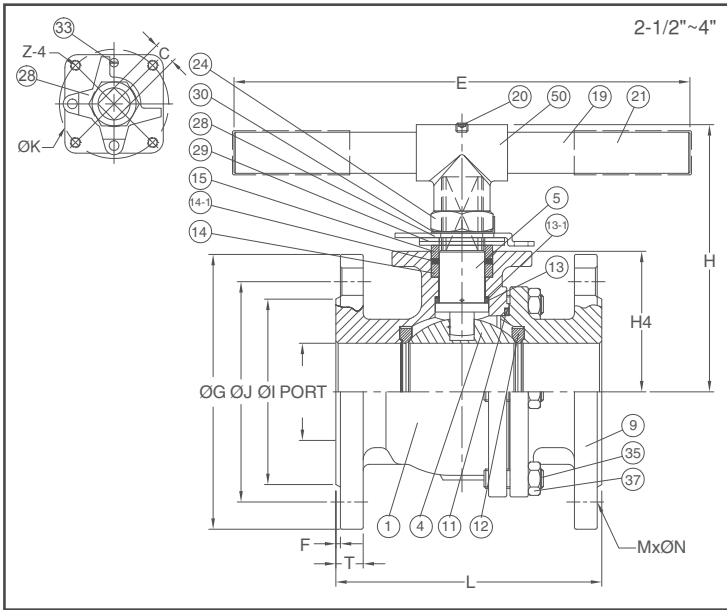
Flanged End / 1/2" ~ 6"



ANSI Class 150 P-T Chart



Explosion Drawing



### FEATURES

- Investment Cast Body Construction
- 2 Pieces Body Design
- ISO 5211 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 - 275 PSI (CWP), WCB - 285 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 150
- Flange Dimension: ASME/ANSI B16.5 Class 150 RF
- Material: ASTM
- Pressure Testing: API 598

### CERTIFICATE

- Fire Safe: API 607 6<sup>th</sup> Edition / ISO 10497
- Fugitive Emission: 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

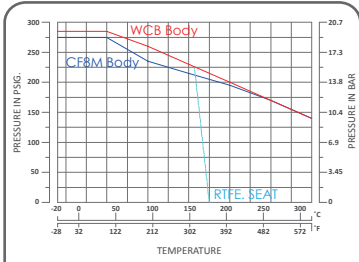
NO.	PART NAME	MATERIAL (more options available)
1	BODY	ASTM A351 Gr.CF8M   ASTM A216 Gr.WCB
4	BALL	ASTM A351 Gr.CF8M
5	STEM	ASTM A276 Gr.316
9	END CAP	ASTM A351 Gr.CF8M   ASTM A216 Gr.WCB
11	BODY SEAL	GRAPHITE+SS316 SPIRAL WOUND WIRE
12	SEAT	RTFE.(15%G.F.)
13	THRUST WASHER	GRAPHITE
13-1	THRUST WASHER	RTFE.(15%G.F.)
14	STEM PACKING	GRAPHITE
14-1	STEM PACKING	RTFE.(15%G.F.)
15	GLAND BUSH	SS304
19	HANDLE	STEEL
20	SET BOLT	SS304
21	HANDLE COVER	PLASTIC
24	HANDLE NUT	SS304
28	STOP PLATE	SS304
29	BELLEVILLE WASHER	SS301
30	TAB WASHER	SS304
33	STOP PIN	SS304
35	BODY BOLT	ASTM A193 Gr.B8   ASTM A193 Gr.B7
37	BOLT NUT	ASTM A194 Gr.8   ASTM A194 Gr.2H
50	HANDLE ADAPTER	ASTM A351 Gr.CF8

### DIMENSION

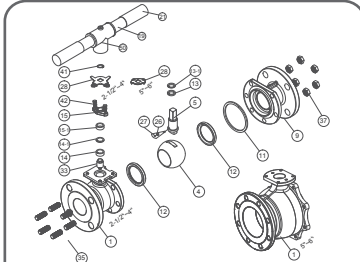
SIZE	PORT	L	E	H1	H4	C	ØG	ØJ	ØI	T	F	MxØN	ØK	Z	
DN65	2-1/2"	64.0	190	300	178.0	92.5	17	180.0	139.7	105.0	22.7	2.0	4xØ19	102/F10	M10x1.5P
DN80	3"	76.0	203	300	188.0	101.65	17	190.0	152.4	127.0	24.3	2.0	4xØ19	102/F10	M10x1.5P
DN100	4"	100.0	229	450	202.0	119.0	17	228.6	190.5	157.2	23.9	1.6	8xØ19	102/F10	M10x1.5P

### DIMENSION

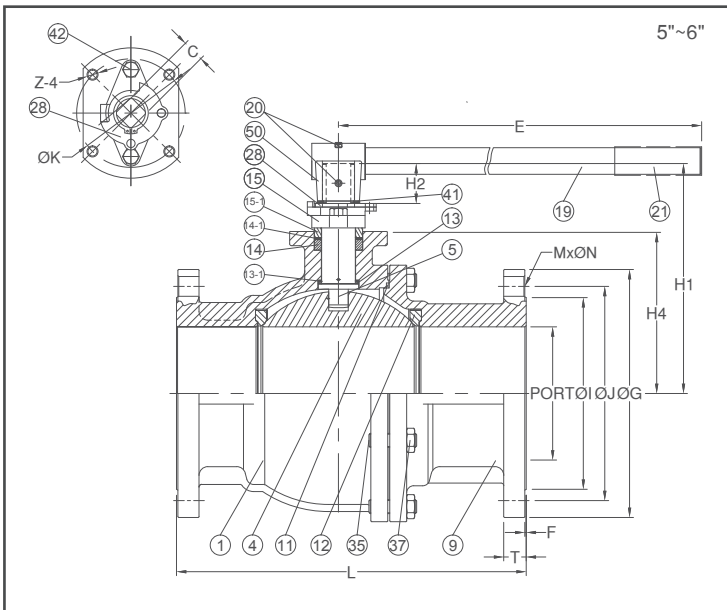
SIZE	PORT	L	E	H1	H4	C	ØG	ØJ	ØI	T	F	MxØN	ØK	Z	
DN65	2-1/2"	2.52	7.48	11.81	7.01	3.64	0.67	7.09	5.50	4.13	0.89	0.08	4xØ0.75	4.02/F10	M10x1.5P
DN80	3"	2.99	7.99	11.81	7.40	4.00	0.67	7.48	6.00	5.00	0.96	0.08	4xØ0.75	4.02/F10	M10x1.5P
DN100	4"	3.94	9.02	17.72	7.95	4.69	0.67	9.00	7.50	6.19	0.94	0.06	8xØ0.75	4.02/F10	M10x1.5P



ANSI Class 150 P-T Chart



Explosion Drawing



### FEATURES

- Investment Cast Body Construction
- 2 Pieces Body Design
- ISO 5211 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 - 275 PSI (CWP)
  - WCB - 285 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 150
- Flange Dimension: ASME/ANSI B16.5 Class 150 RF
- Material: ASTM
- Pressure Testing: API 598

### CERTIFICATE

- Fire Safe: API 607 6<sup>th</sup> Edition / ISO 10497
- Fugitive Emission: 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.316	
9	END CAP	ASTM A351 Gr.CF8M	ASTM A216 Gr.WCB
11	BODY SEAL	GRAPHITE+SS316 SPIRAL WOUND WIRE	
12	SEAT	RTFE.(15%G.F.)	
13	THRUST WASHER	GRAPHITE	
13-1	THRUST WASHER	RTFE.(15%G.F.)	
14	STEM PACKING	GRAPHITE	
14-1	STEM PACKING	RTFE.(15%G.F.)	
15	GLAND FLANGE	ASTM A216 Gr.WCB	
15-1	GLAND BUSH	SS304	
19	HANDLE	STEEL	
20	SET BOLT	SS304	
21	HANDLE COVER	PLASTIC	
28	STOP PLATE	SS304	
35	BODY BOLT	ASTM A193 Gr.B8	ASTM A193 Gr.B7
37	BOLT NUT	ASTM A194 Gr.8	ASTM A194 Gr.2H
41	SNAP RING	SS304	
42	GLAND BOLT	SS304	
50	HANDLE ADAPTER	ASTM A351 Gr.CF8	

### DIMENSION

															unit : mm		
SIZE	PORT	L	E	H1	H4	C	ØG	ØJ	ØI	T	F	MxØN	ØK	Z			
DN125	5"	125.0	356	450	232.4	163.0	27	254.0	216.0	186.0	24.4	2.0	8xØ22.3	125/F12 M12x1.75P			
DN150	6"	150.0	394	800	251.9	182.5	27	279.4	241.3	216.0	25.4	1.6	8xØ22.3	125/F12 M12x1.75P			

### DIMENSION

															unit : inch		
SIZE	PORT	L	E	H1	H4	C	ØG	ØJ	ØI	T	F	MxØN	ØK	Z			
DN125	5"	4.92	14.02	17.72	9.15	6.42	1.06	10.00	8.50	7.32	0.96	0.08	8xØ0.88	4.92/F12 M12x1.75P			
DN150	6"	5.91	15.51	31.50	9.92	7.19	1.06	11.00	9.50	8.50	1.00	0.06	8xØ0.88	4.92/F12 M12x1.75P			