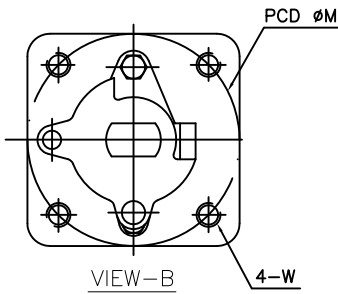
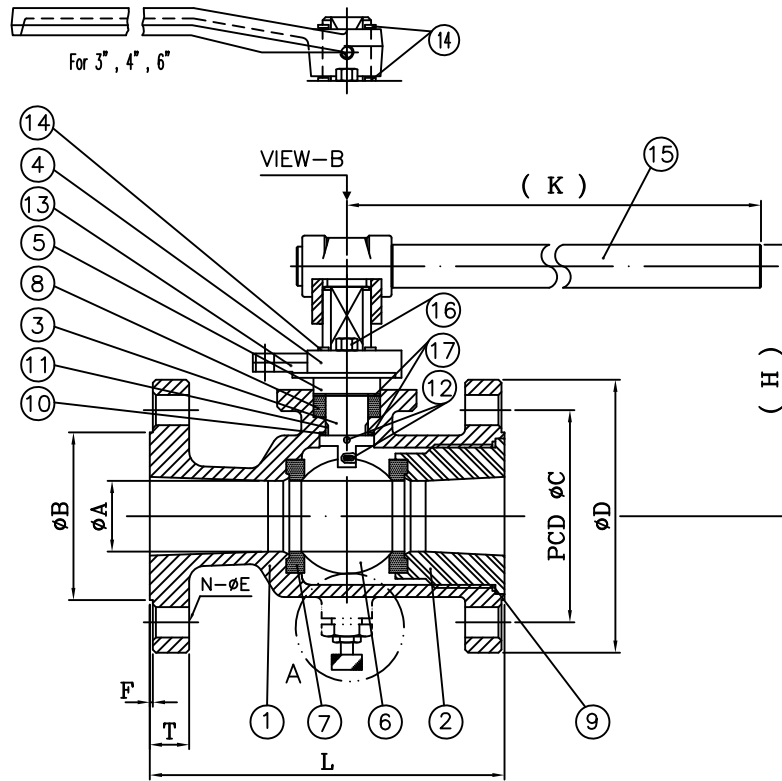


# Wm. E. Williams No. W16F-66RT-1pc Class 150 RF Reduced Port Ball Valve ASTM A351 CF8M NACE

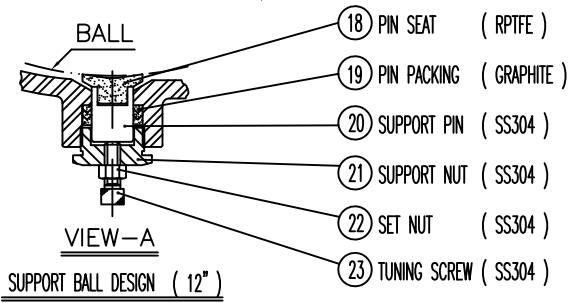
SIZE	M	W
3"	70	5/16-18UNC
4"	102	3/8-16UNC
6"	102	3/8-16UNC
8"	125	1/2-13UNC
10"	125	1/2-13UNC
12"	140	5/8-11UNC



NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	A351-CF8M
2	CAP	1	A351-CF8M
3	STEM	1	SS-316
4	GLAND	1	A351-CF8
5	SLEEVE	1	SS-304
6	BALL	1	A351-CF8M
7	SEAT	2	RPTFE
8	STEM PACKING	1	GRAPHITE
9	JOINT GASKET	1	RPTFE
10	THRUST WASHER	1	RPTFE
11	STEM BEARING	1	RPTFE
12	ANTI-STATIC	2	SS-316
13	TRAVEL STOPPER	1	SS-304
14	SNAP RING	1~2	NICKEL PLATED CARBON STEEL
15	HANDLE	1	DUCTILE IRON (FCD) / PIPE GRIP(S15C)
16	GLAND BOLT	2	SS-304
17	PACKING / WASHER	2	50% PTFE + 50% 316

- NOTES:
1. OTHER VALVE SIZES AVAILABLE.
  2. OTHER BODY MATERIAL AVAILABLE.
  3. BILL OF MATERIAL AND DESIGN MAY DIFFER DEPENDING ON VALVE SIZE.

NOTE: AVAILABLE IN 2-PC DESIGN.



SIZE UNIT VALVE SIZE	3"		4"		6"		8"		10"		12"	
	M	IN	M	IN	M	IN	M	IN	M	IN	M	IN
NOMINAL	80	3X2 1/2	100	4X3	150	6X4	200	8X6	250	10X8	300	12X10
A	65	2.56	76	3	100	4	152	6	200	8	242	9.52
B	127	5	157	6.18	216	8.5	270	10.62	324	12.76	381	15
C	152.5	6	190.5	7.5	241.5	9.51	298.5	11.75	362	14.25	432	17
D	190	7.48	229	9.02	279	10.98	343	13.5	406	16	483	19.02
E	19	0.75	19	0.75	22	0.87	22	0.87	25	0.98	25	0.98
F	1.6	0.06	1.6	0.06	1.6	0.06	1.6	0.06	1.6	0.06	1.6	0.06
T	23.9	0.94	23.9	0.94	25.4	1	28.6	1.13	30.2	1.19	31.8	1.25
N	4	4	8	8	8	8	8	8	12	12	12	12
H	158	6.22	166	6.54	193	7.6	285	11.22	294	11.58	372	14.65
K	390	15.35	390	15.35	390	15.35	650	25.59	950	37.4	1100	43.3
L	203	7.99	229	9.02	267	10.51	292	11.5	330	13	356	14.02

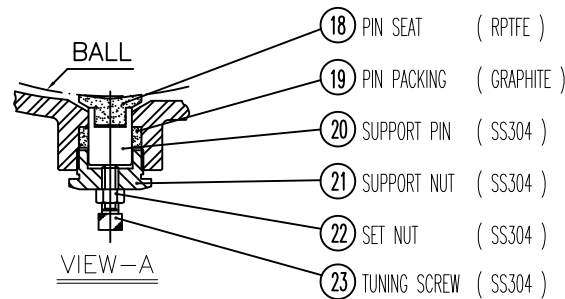
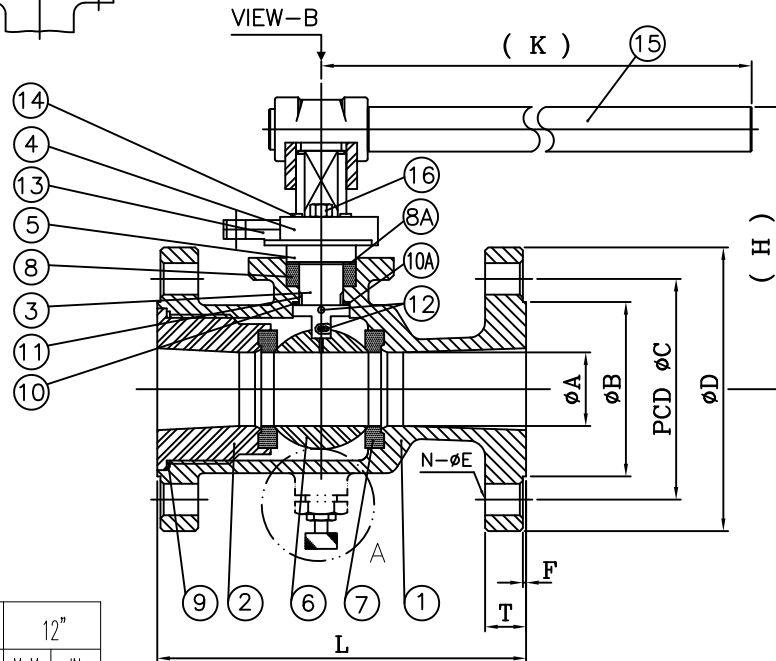
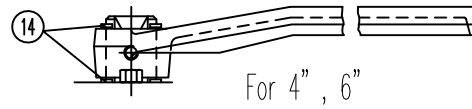
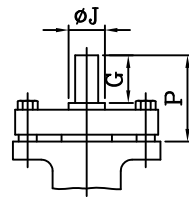
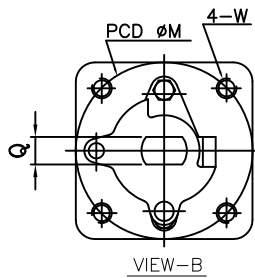
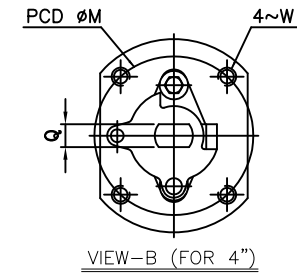
NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 598	MATERIAL: A351 CF8M	UNITS: Inch, mm
						DIM. OF FLANGE	ASME B16.5	SHELL	HYDRO 425PSI	SCALE: N.T.S.
						FACE TO FACE	API 608	SEAT	AIR 80PSI	FIG. No.: W16F-66RT-1pc
						FIRE SAFE	API 607	HPC SEAT	HYDRO 325PSI	DRAWN BY: F.J.
						DESIGNED	API 608	NACE MR 0175		CHK'D & APR'D BY: R.P.
										REV: 1

WILLIAM E. WILLIAMS VALVE CORPORATION  
 38-52 REVIEW AVENUE LONG ISLAND CITY, NY 11101  
 TEL: 718-392-1660 FAX: 718-729-5106

TITLE: CAST STAINLESS STEEL FLOATING BALL VALVE CLASS 150 - REDUCED PORT - 1 PIECE DESIGN

# Wm. E. Williams No. W36F-66RT-1pc Class 300 RF Reduced Port Ball Valve ASTM A351 CF8M NACE

SIZE	M	W
4"	102	3/8-16UNC
6"	102	3/8-16UNC
10"	125	1/2-13UNC
12	140	5/8-11UNC



SUPPORT BALL DESIGN (12")

BILL OF MATERIAL			
NO.	PART NAME	MATERIAL	QTY
1	BODY	A351-CF8M	1
2	CAP	A351-CF8M	1
3	STEM	SS-316	1
4	GLAND	A351-CF8	1
5	SLEEVE	SS-304	1
6	BALL	A351-CF8M	1
7	SEAT	RPTFE	2
8	PACKING(1)	GRAPHITE	1
8A	PACKING(2)	50% PTFE + 50% 316	1
9	JOINT GASKET	GRAPHITE	1
10	THRUST WASHER(2)	RPTFE	1
10A	THRUST WASHER(1)	50% PTFE + 50% 316	1
11	STEM BEARING	RPTFE	1
12	ANTI-STATIC	SS-316	2
13	TRAVEL STOPPER	SS-304	1
14	SNAP RING	NICKEL PLATED CARBON STEEL	2
15	HANDLE	FCD	1
16	GLAND BOLT	SS-304	2

NOTE: AVAILABLE IN 2-PC DESIGN.

NOMINAL	SIZE		4"		6"		10"		12"	
	UNIT	VALVE SIZE	M M	IN	M M	IN	M M	IN	M M	IN
A			76	3	100	4	200	8	242	9.52
B			157	6.18	216	8.5	324	12.76	381	15
C			200	7.87	270	10.63	387	15.24	451	17.76
D			254	10	318	12.52	444	17.48	521	20.51
E			22	0.87	22	0.87	29	1.14	32	1.26
F			1.6	0.06	1.6	0.06	1.6	0.06	1.6	0.06
T			31.8	1.25	36.6	1.44	47.7	1.88	50.8	2
N			8	8	12	12	16	16	16	16
H			195	7.68	193	7.6	294	11.58	372	14.65
K			390	15.35	390	15.35	950	37.4	1100	43.3
L			305	12	403	15.87	457	18	502	19.76
J			28	1.1	28	1.1	43.5	1.71	50	1.97
Q			17	0.67	17	0.67	26	1.02	35	1.38
G			44.5	1.75	44.5	1.75	42	1.65	54	2.13
P			78	3.07	78	3.07	91	3.58	98	3.86

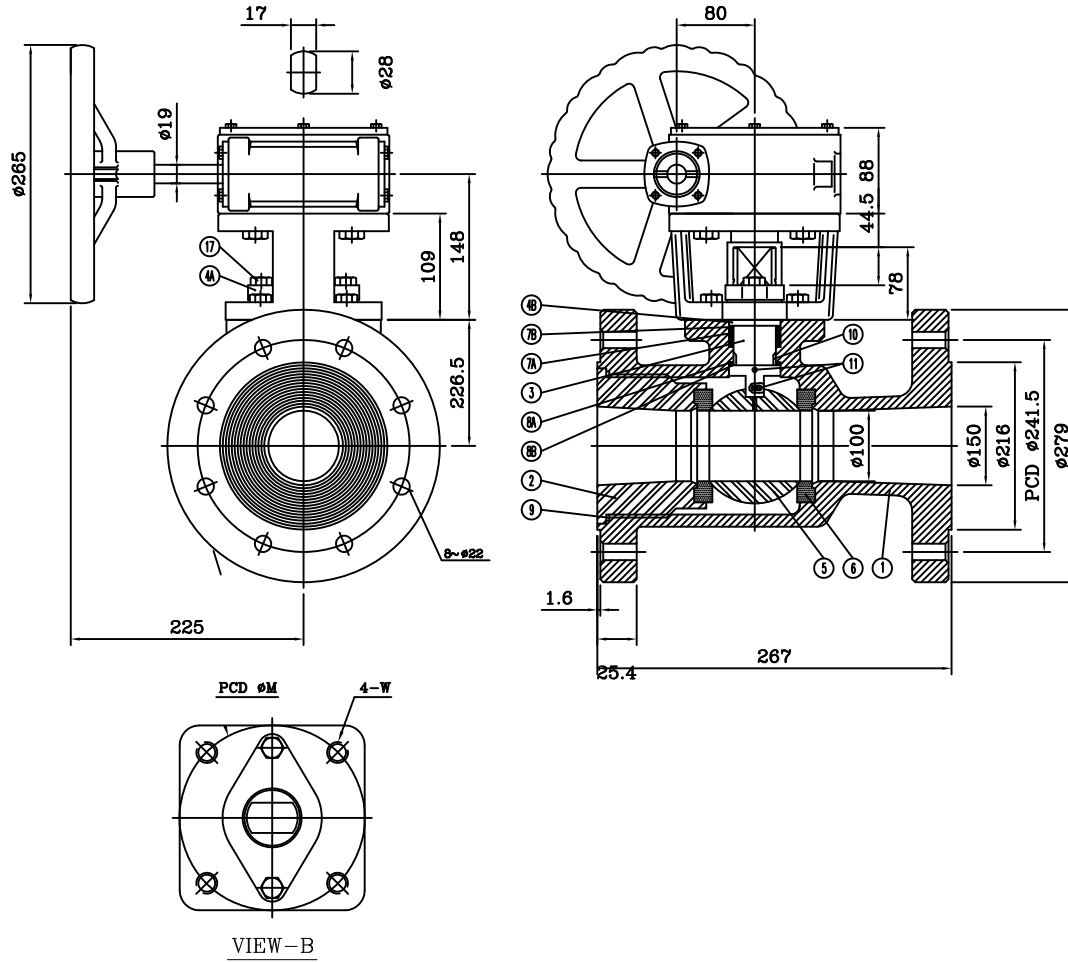
NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 598	MATERIAL: A351 CF8M	UNITS: Inch, mm
						FACE TO FACE	API 608	SEAT AIR	HYDRO 80PSI	SCALE: N.T.S.
						FIRE SAFE	API 607	HPC SEAT	HYDRO 825PSI	FIG. No.: W36F-66RT-1pc
						DESIGNED	API 608	NACE MR 0175		DRAWN BY: F.J.
										CHK'D & APR'D BY: R.P. REV: 1 DWG No.: 17BA120018-412-SW

WILLIAM E. WILLIAMS VALVE CORPORATION  
 38-52 REVIEW AVENUE LONG ISLAND CITY, NY 11101  
 TEL: 718-392-1660 FAX: 718-729-5106

TITLE: CAST STAINLESS STEEL FLOATING BALL VALVE CLASS 300 - REDUCED PORT - 1 PIECE DESIGN

# Wm. E. Williams No. W16F-6RT GO Class 150 Reduced Port Ball Valve ASTM A216 Gr. WCB NACE

NOTE: VALVE AVAILABLE IN CLASS 300, SMALLER SIZES AND LEVER OPERATOR.



SIZE	M	W
6	102	3/8-16UNC

NO.	PART NAME	Q'TY	MATERIAL
			CARBON STEEL
1	BODY	1	A216-WCB
2	CAP	1	A216-WCB
3	STEM	1	SS316
4A	GLAND	1	A216-WCB
4B	SLEEVE	1	SS304
5	BALL	1	A351-CF8M
6	SEAT	2	RPTFE
7A	STEM PACKING(1)	1	GRAPHITE
7B	PACKING PROTECTOR(2)	1	50%PTFE+50%316
8A	THRUST WASHER(2)	1	RPTFE
8B	WASHER PROTECTOR(1)	1	50%PTFE+50%316
9	GASKET	1	GRAPHITE
10	STEM BEARING	1	RPTFE
11	ANTI-STATIC	2	SS316
17	GLAND BOLT	2	CARBON STEEL

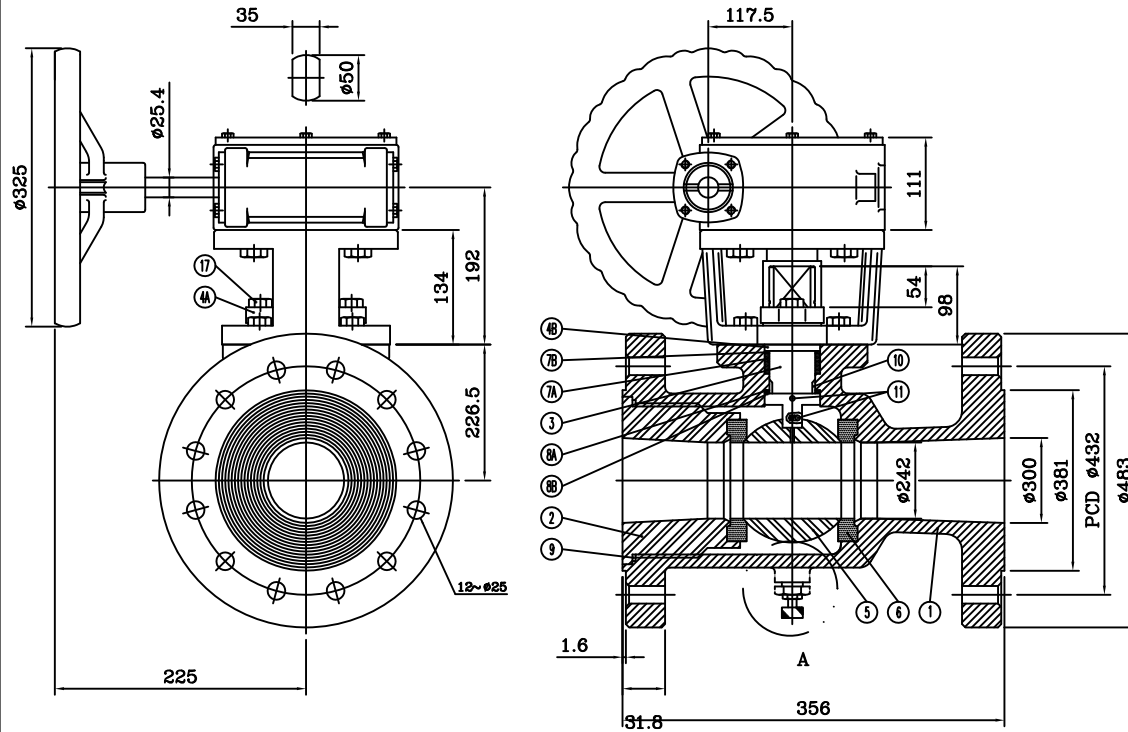


TITLE: CAST STEEL FLOATING BALL VALVE  
REDUCE PORT - CLASS 150 - GEAR OPERATED

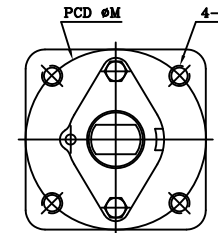
					MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 598			MATERIAL: A216 WCB		UNITS: Inch, mm
					DIM. OF FLANGE	ANSI B16.5	SHELL	HYDRO	450PSI	PRESSURE: 150	DATE: 01/31/18	SCALE: N.T.S.
					FACE TO FACE	ANSI 608	SEAT	AIR	80PSI	SIZE: 6"		FIG. No.: W16F-6RT GO
					FIRE SAFE	API 607	BACKSEAT	HYDRO	N/A	DRAWN BY: F.J.		
					DESIGNED	API 608	NACE MR 0175			CHK'D & APR'D BY: R.P.	REV: 1	DWG No.: 17BA120002-6-W
Δ	1/31/18	RELEASED	F.J.	R.P.	R.P.							
NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGNED						

# Wm. E. Williams No. W16F-6RT GO Class 150 Reduced Port Ball Valve ASTM A216 Gr. WCB NACE

NOTE: VALVE AVAILABLE IN CLASS 300, SMALLER SIZES AND LEVER OPERATOR.

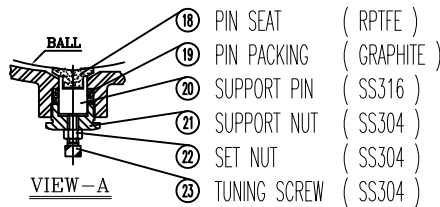


NO.	PART NAME	Q'TY	MATERIAL	
				CARBON STEEL
1	BODY	1	A216-WCB	
2	CAP	1	A216-WCB	
3	STEM	1	SS316	
4A	GLAND	1	A216-WCB	
4B	SLEEVE	1	SS304	
5	BALL	1	A351-CF8M	
6	SEAT	2	RPTFE	
7A	STEM PACKING(1)	1	GRAPHITE	
7B	PACKING PROTECTOR(2)	1	50%PTFE+50%316	
8A	THRUST WASHER(2)	1	RPTFE	
8B	WASHER PROTECTOR(1)	1	50%PTFE+50%316	
9	GASKET	1	GRAPHITE	
10	STEM BEARING	1	RPTFE	
11	ANTI-STATIC	2	SS316	
17	GLAND BOLT	2	CARBON STEEL	



VIEW - B

SIZE	M	W
12	140	5/8-11UNC



VIEW - A

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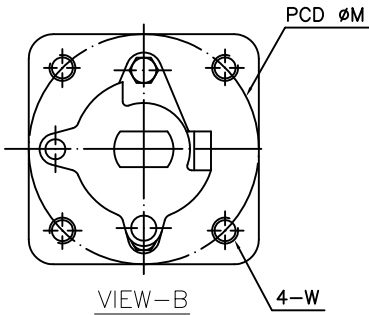
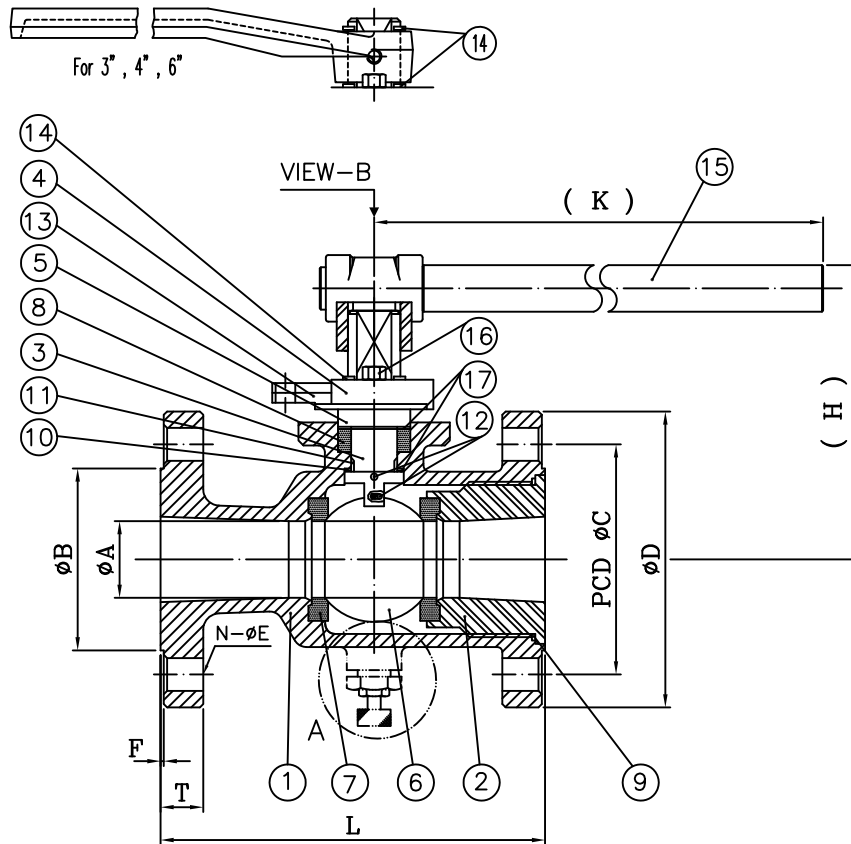
TITLE: CAST STEEL FLOATING BALL VALVE  
 REDUCE PORT - CLASS 150 - GEAR OPERATED

					MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 598	MATERIAL: A216 WCB	UNITS: Inch, mm
					DIM.OF FLANGE	ANSI B16.5	SHELL HYDRO 450PSI	PRESSURE: 150	DATE: 05/04/17
					FACE TO FACE	ANSI 608	SEAT AIR 80PSI	SIZE: 12"	SCALE: N.T.S.
					FIRE SAFE	API 607	BACKSEAT HYDRO N/A		FIG. No.: W16F-6RT GO
					DESIGNED	API 608	NACE MR 0175	DRAWN BY: F.J.	
NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D			CHK'D & APR'D BY: R.P.	REV: 1

DWG No.: 17BA120002-12-W

# Wm. E. Williams No. W16F-6RT-1pc Class 150 RF Reduced Port Ball Valve ASTM A216 Gr. WCB NACE

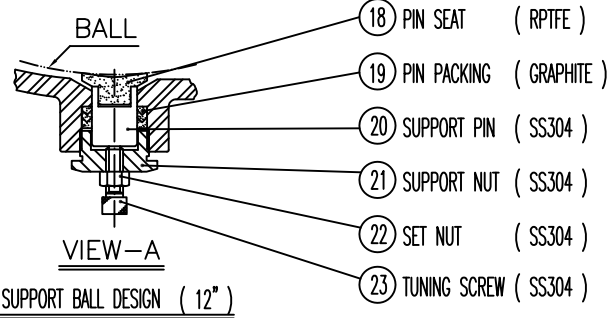
SIZE	M	W
3"	70	5/16-18UNC
4"	102	3/8-16UNC
6"	102	3/8-16UNC
8"	125	1/2-13UNC
10"	125	1/2-13UNC
12"	140	5/8-11UNC



NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	A216-WCB
2	CAP	1	A216-WCB
3	STEM	1	SS-316
4	GLAND	1	A216-WCB
5	SLEEVE	1	SS-304
6	BALL	1	A351-CF8M
7	SEAT	2	RPTFE
8	STEM PACKING	1	GRAPHITE
9	JOINT GASKET	1	RPTFE
10	THRUST WASHER	1	RPTFE
11	STEM BEARING	1	RPTFE
12	ANTI-STATIC	2	SS-316
13	TRAVEL STOPPER	1	CARBON STEEL
14	SNAP RING	1~2	NICKEL PLATED CARBON STEEL
15	HANDLE	1	DUCTILE IRON (FCD)/PIPE GRIP(S15C)
16	GLAND BOLT	2	CARBON STEEL
17	PACKING / WASHER	2	50% PTFE + 50% 316

**NOTES:**

- OTHER VALVE SIZES AVAILABLE.
- OTHER BODY MATERIAL AVAILABLE.
- BILL OF MATERIAL AND DESIGN MAY DIFFER DEPENDING ON VALVE SIZE.



SIZE NOMINAL	3"		4"		6"		8"		10"		12"	
	M	IN	M	IN	M	IN	M	IN	M	IN	M	IN
A	65	2.56	76	3	100	4	152	6	200	8	242	9.52
B	127	5	157	6.18	216	8.5	270	10.62	324	12.76	381	15
C	152.5	6	190.5	7.5	241.5	9.51	298.5	11.75	362	14.25	432	17
D	190	7.48	229	9.02	279	10.98	343	13.5	406	16	483	19.02
E	19	0.75	19	0.75	22	0.87	22	0.87	25	0.98	25	0.98
F	1.6	0.06	1.6	0.06	1.6	0.06	1.6	0.06	1.6	0.06	1.6	0.06
T	23.9	0.94	23.9	0.94	25.4	1	28.6	1.13	30.2	1.19	31.8	1.25
N	4	4	8	8	8	8	8	8	12	12	12	12
H	158	6.22	166	6.54	193	7.6	285	11.22	294	11.58	372	14.65
K	390	15.35	390	15.35	390	15.35	650	25.59	950	37.4	1100	43.3
L	203	7.99	229	9.02	267	10.51	292	11.5	330	13	356	14.02

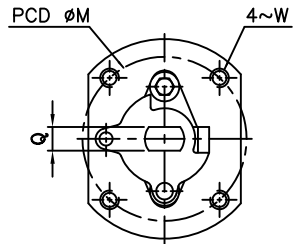
NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 598	MATERIAL: A216 WCB	UNITS: Inch, mm	
						DIM.OF FLANGE	ASME B16.5	SHELL HYDRO 450PSI	PRESSURE: 150	DATE: 07/14/16	SCALE: N.T.S.
						FACE TO FACE	API 608	SEAT AIR 80PSI	SIZE: 3" -12"	FIG. No.: W16F-6RT-1pc	
						FIRE SAFE	API 607	SEAT HYDRO 315PSI	DRAWN BY: F.J.		
						DESIGNED	API 608	NACE MR 0175	CHK'D & APR'D BY: R.P.	REV: 1	DWG No.: 17BA120019-W-WEB

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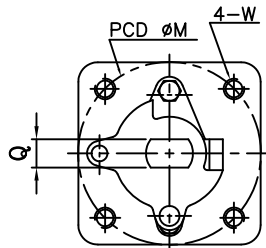
TITLE: CAST STEEL FLOATING BALL VALVE CLASS 150 - REDUCED PORT - 1 PIECE DESIGN

# Wm. E. Williams No. W36F-6RT-1pc Class 300 RF Reduced Port Ball Valve ASTM A216 Gr. WCB NACE

SIZE	M	W
4"	102	3/8-16UNC
6"	102	3/8-16UNC
10"	125	1/2-13UNC
12"	140	5/8-11UNC

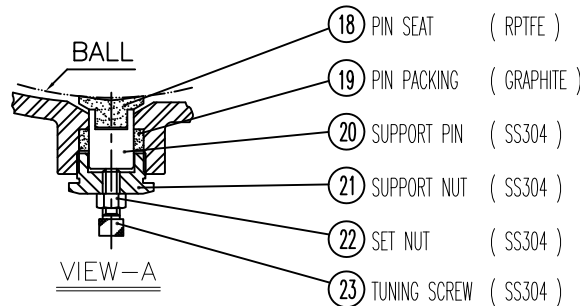
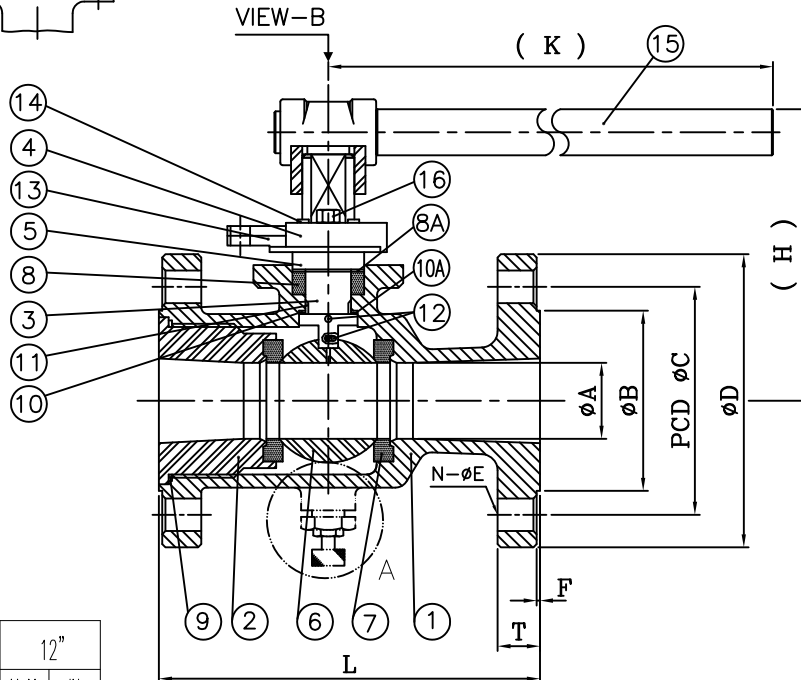
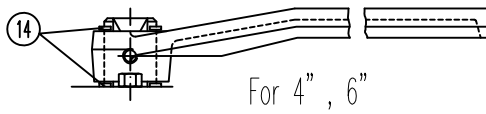
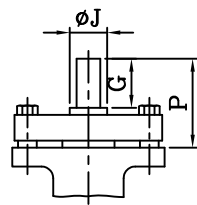


VIEW-B (FOR 4")



VIEW-B

NOMINAL	SIZE		4"		6"		10"		12"	
	UNIT	VALVE SIZE	M	M	M	M	M	M	M	M
A	TOL		100	4X3	150	6X4	250	10X8	300	12X10
A			76	3	100	4	200	8	242	9.52
B			157	6.18	216	8.5	324	12.76	381	15
C			200	7.87	270	10.63	387	15.24	451	17.76
D			254	10	318	12.52	444	17.48	521	20.51
E			22	0.87	22	0.87	29	1.14	32	1.26
F			1.6	0.06	1.6	0.06	1.6	0.06	1.6	0.06
T			31.8	1.25	36.6	1.44	47.7	1.88	50.8	2
N			8	8	12	12	16	16	16	16
H			195	7.68	193	7.6	294	11.58	372	14.65
K			390	15.35	390	15.35	950	37.4	1100	43.3
L			305	12	403	15.87	457	18	502	19.76
J			28	1.1	28	1.1	43.5	1.71	50	1.97
Q			17	0.67	17	0.67	26	1.02	35	1.38
G			44.5	1.75	44.5	1.75	42	1.65	54	2.13
P			78	3.07	78	3.07	91	3.58	98	3.86



SUPPORT BALL DESIGN (12")

## BILL OF MATERIAL

NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	A216-WCB
2	CAP	1	A216-WCB
3	STEM	1	SS-316
4	GLAND	1	A216-WCB
5	SLEEVE	1	SS-304
6	BALL	1	A351-CF8M
7	SEAT	2	RPTFE
8	PACKING(1)	1	GRAPHITE
8A	PACKING(2)	1	50% PTFE + 50% 316
9	JOINT GASKET	1	GRAPHITE
10	THRUST WASHER(2)	1	RPTFE
10A	THRUST WASHER(1)	1	50% PTFE + 50% 316
11	STEM BEARING	1	RPTFE
12	ANTI-STATIC	2	SS-316
13	TRAVEL STOPPER	1	STEEL PLATED
14	SNAP RING	2	NICKEL PLATED CARBON STEEL
15	HANDLE	1	DUCTILE IRON (FCD)/PIPE GRIP(S15C)
16	GLAND BOLT	2	CARBON STEEL

### NOTES:

- OTHER VALVE SIZES AVAILABLE.
- OTHER BODY MATERIAL AVAILABLE.
- BILL OF MATERIAL AND DESIGN MAY DIFFER DEPENDING ON VALVE SIZE.

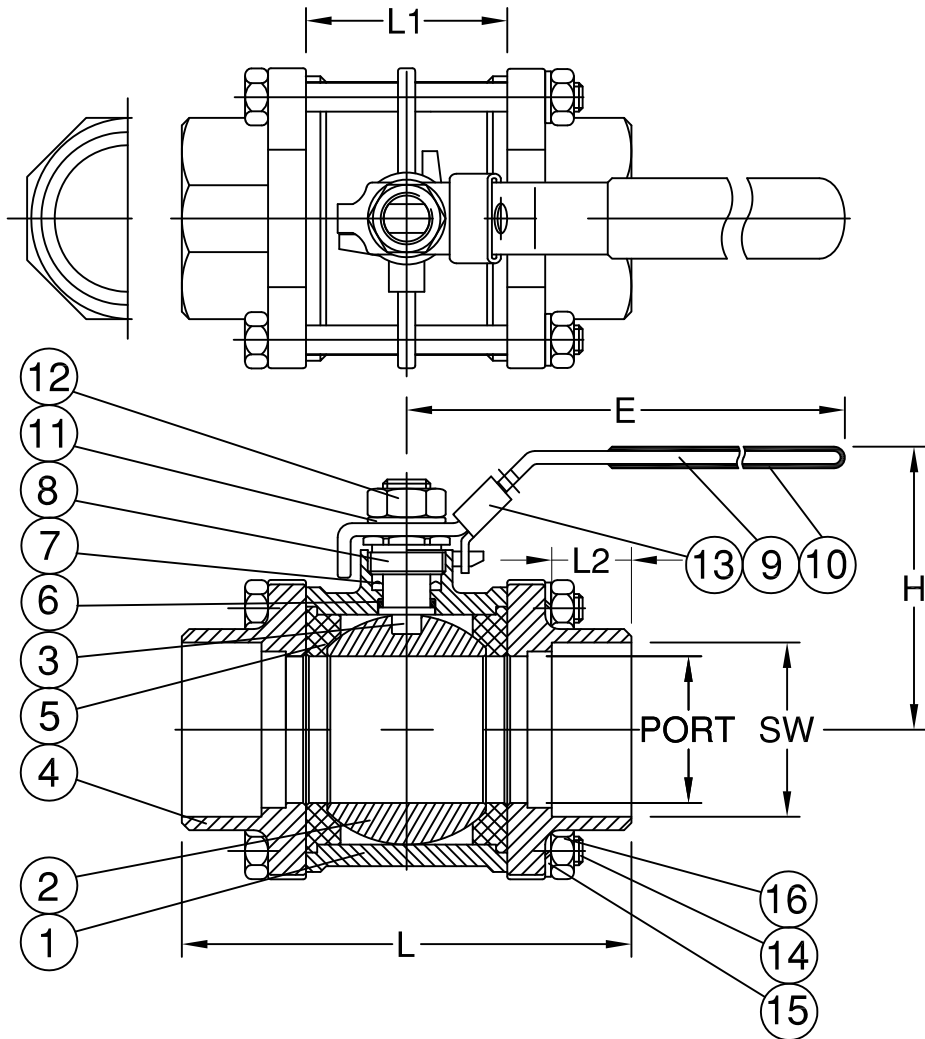
WILLIAM E. WILLIAMS VALVE CORPORATION  
 38-52 REVIEW AVENUE LONG ISLAND CITY, NY 11101  
 TEL: 718-392-1660 FAX: 718-729-5106

TITLE: CAST STEEL FLOATING BALL VALVE CLASS 300 - REDUCED PORT - 1pc Design			
MATERIAL: A216 WCB	UNITS: Inch, mm	DATE: 09/01/16	SCALE: N.T.S.
MARKING SYSTEM: MSS-SP-25	INSPECTION & TEST: API 598	FACE TO FACE: API 608	SEAT: AIR 80PSI
DIM.OF FLANGE: ASME B16.5	SHELL: HYDRO 1125PSI	FACE TO FACE: API 608	SEAT: AIR 80PSI
FACE TO FACE: API 608	SEAT: AIR 80PSI	FIRE SAFE: API 607	SEAT: HYDRO 825PSI
NO. DATE DESCRIPTION PRP'D REV'D APP'D	DESIGNED: API 608	NACE MR 0175	CHKD & APR'D BY: R.P. REV: 1

NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D
Δ	9/1/16	RELEASED	F.J.	R.P.	R.P.

MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 598	MATERIAL: A216 WCB	UNITS: Inch, mm
DIM.OF FLANGE	ASME B16.5	SHELL: HYDRO 1125PSI	PRESSURE: 300	SCALE: N.T.S.
FACE TO FACE	API 608	SEAT: AIR 80PSI	DATE: 09/01/16	FIG. No.: W36F-6RT - 1pc
FIRE SAFE	API 607	SEAT: HYDRO 825PSI	DRAWN BY: F.J.	DWG No.: 17BA120005-W-WEB
DESIGNED	API 608	NACE MR 0175	CHKD & APR'D BY: R.P.	REV: 1

**Wm. E. Williams No. D107S-6RT / D107T-6RT** WOG 1000 Full Port Ball Valve ASTM A216 Gr. WCB



**BILL OF MATERIALS**

NO.	PART NAME	MATERIAL
1	BODY	ASTM A216 Gr.WCB
2	BALL	ASTM A351 Gr.CF8M
3	STEM	SS316
4	END CAP	ASTM A216 Gr.WCB
5	SEAT	PTFE
6	THRUST WASHER	PTFE
7	STEM PACKING	PTFE
8	GLAND NUT	SS304
9	HANDLE	SS304
10	HANDLE COVER	PLASTIC
11	HANDLE WASHER	SS304
12	HANDLE NUT	SS304
13	LOCKING DEVICE	SS304 (OPTION)
14	BODY BOLT	SS304
15	BOLT WASHER	SS304
16	BOLT NUT	SS304

Unit: Inches

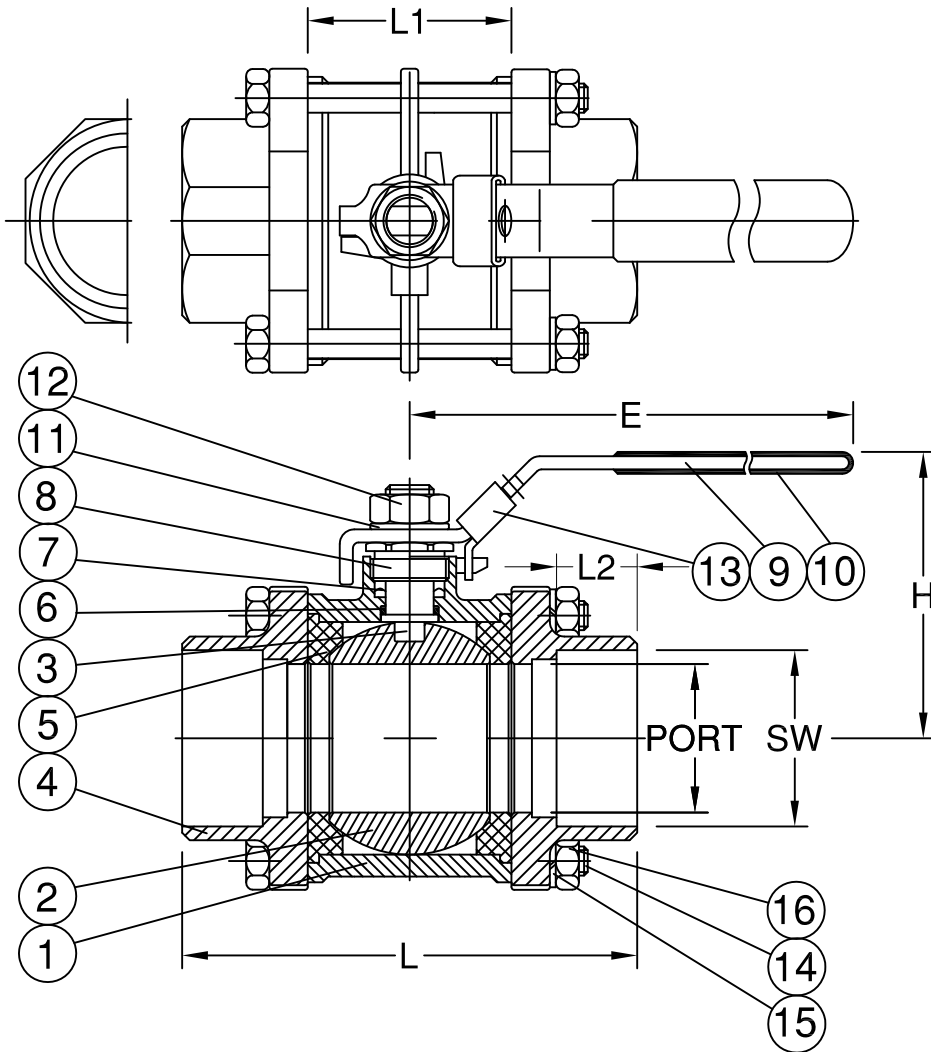
SIZE	PORT	L	L1	L2	E	H	SW	
DN8	1/4"	0.45	2.13	0.75	0.39	3.83	1.93	0.56
DN10	3/8"	0.49	2.13	0.75	0.39	3.83	1.93	0.69
DN15	1/2"	0.59	2.5	0.89	0.39	4.84	2.28	0.86
DN20	3/4"	0.79	2.85	1.08	0.51	4.84	2.4	1.08
DN25	1"	0.98	3.19	1.34	0.51	5.7	2.68	1.34
DN32	1-1/4"	1.26	3.72	1.67	0.51	5.7	2.89	1.68
DN40	1-1/2"	1.5	4.25	2.05	0.51	7.44	3.33	1.93
DN50	2"	1.97	4.78	2.5	0.63	7.44	3.67	2.4
DN65	2-1/2"	2.56	6.2	3.37	0.63	10.05	5.19	3.03
DN80	3"	3.15	7.48	4.02	0.63	10.27	5.51	3.55
DN80	4"	3.94	8.86	5.06	0.87	12.69	6.83	4.54

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 TEL: 718-992-1660 FAX: 718-729-5106  
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TITLE: CAST STEEL FLOATING BALL VALVE  
 3 PIECE - FULL PORT - SW OR NPT ENDS - 316 BALL

NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGN	ANSI B16.34	MARKING SYSTEM	MSS-SP-25	SIZE	WORKING PRESSURE	MATERIAL: ASTM A216 Gr. WCB	UNITS: Inch, mm
										1/4" - 2"	1000PSI	DATE: 10/14/16	SCALE: N.T.S.
										2-1/2" - 4"	800PSI	SIZE: 1/4" - 4"	FIG. No.: D107S-6RT D107T-6RT
	10/14/16	RELEASED	F.J.	R.P.	R.P.	FIRESAFE	API 607					DRAWN BY: F.J.	
												CHK'D & APR'D BY: R.P.	REV: 1 DWG No.: 46BA120012-D

**Wm. E. Williams No. D107T-66RT, D107S-66RT & D107TXS-66RT** WOG 1000 Full Port Ball Valve A351 CF8M



**BILL OF MATERIALS**

NO.	PART NAME	MATERIAL
1	BODY	ASTM A351 Gr.CF8M
2	BALL	ASTM A351 Gr.CF8M
3	STEM	SS316
4	END CAP	ASTM A351 Gr.CF8M
5	SEAT	PTFE
6	THRUST WASHER	PTFE
7	STEM PACKING	PTFE
8	GLAND NUT	SS304
9	HANDLE	SS304
10	HANDLE COVER	PLASTIC
11	HANDLE WASHER	SS304
12	HANDLE NUT	SS304
13	LOCKING DEVICE	SS304 (OPTION)
14	BODY BOLT	SS304
15	BOLT WASHER	SS304
16	BOLT NUT	SS304

Unit: Inches

SIZE	PORT	L	L1	L2	E	H	SW	
DN8	1/4"	0.45	2.13	0.75	0.39	3.83	1.93	0.56
DN10	3/8"	0.49	2.13	0.75	0.39	3.83	1.93	0.69
DN15	1/2"	0.59	2.5	0.89	0.39	4.84	2.28	0.86
DN20	3/4"	0.79	2.85	1.08	0.51	4.84	2.4	1.08
DN25	1"	0.98	3.19	1.34	0.51	5.7	2.68	1.34
DN32	1-1/4"	1.26	3.72	1.67	0.51	5.7	2.89	1.68
DN40	1-1/2"	1.5	4.25	2.05	0.51	7.44	3.33	1.93
DN50	2"	1.97	4.78	2.5	0.63	7.44	3.67	2.4
DN65	2-1/2"	2.56	6.2	3.37	0.63	10.05	5.19	3.03
DN80	3"	3.15	7.48	4.02	0.63	10.27	5.51	3.55
DN80	4"	3.94	8.86	5.06	0.87	12.69	6.83	4.54

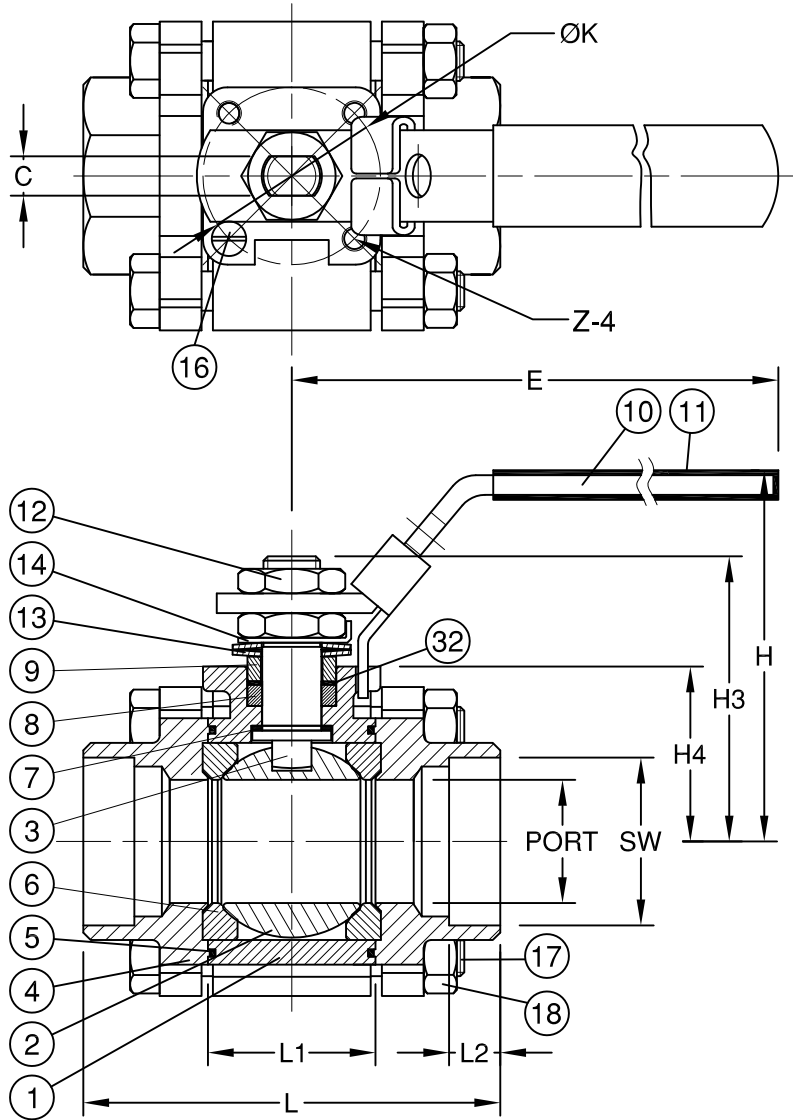
WILLIAM E. WILLIAMS VALVE CORPORATION  
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 TEL: 718-392-1660 FAX: 718-729-5106

TITLE: STAINLESS STEEL 3 PIECE FULL PORT BALL VALVE  
 NPT or SW ENDS - CF8M BODY - 316 BALL

					MARKING SYSTEM	MSS-SP-25	SIZE	WORKING PRESSURE	MATERIAL: CF8M	UNITS: Inch, mm
							1/4" - 2"	1000PSI	PRESSURE: 1000WOG	DATE: 10/14/16
							2-1/2" - 4"	800PSI	FIG. No.:	D107T-66RT D107S-66RT D107TXS-66RT
Δ	10/14/16	RELEASED	F.J.	R.P.	R.P.	FIRESAFE	API 607		DRAWN BY:	F.J.
NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGN	ANSI B16.34		CHK'D & APR'D BY:	R.P.
									REV: 1	DWG No.: 46BA120008-SD



# Wm. E. Williams No. D207S-6RT WOG 2000 Full Port Ball Valve ASTM A216 Gr. WCB



NO.	PART NAME	MATERIAL
1	BODY	ASTM A216 Gr.WCB
2	BALL	ASTM A351 Gr.CF8M
3	STEM	SS316
4	END CAP	ASTM A216 Gr.WCB
5	BODY SEAL	GRAPHITE
6	SEAT	RTFE(15%G.F.)
7	THRUST WASHER	PEEK
8	STEM PACKING	RTFE(15%G.F.)+GRAPHITE
9	GLAND	SS304
10	HANDLE	SS304
11	HANDLE COVER	PLASTIC
12	HANDLE NUT	SS304
13	BELLEVILLE WASHER	SS301
14	TAB WASHER	SS304
15	PACKING FOLLOWER	RTFE(15%G.F.)
16	STOP PIN	SS304
17	BODY BOLT	SS304
18	BOLT NUT	SS304

NOTE: AVAILABE IN NPT ENDS & NPT X SW ENDS.

## DIMENSIONS

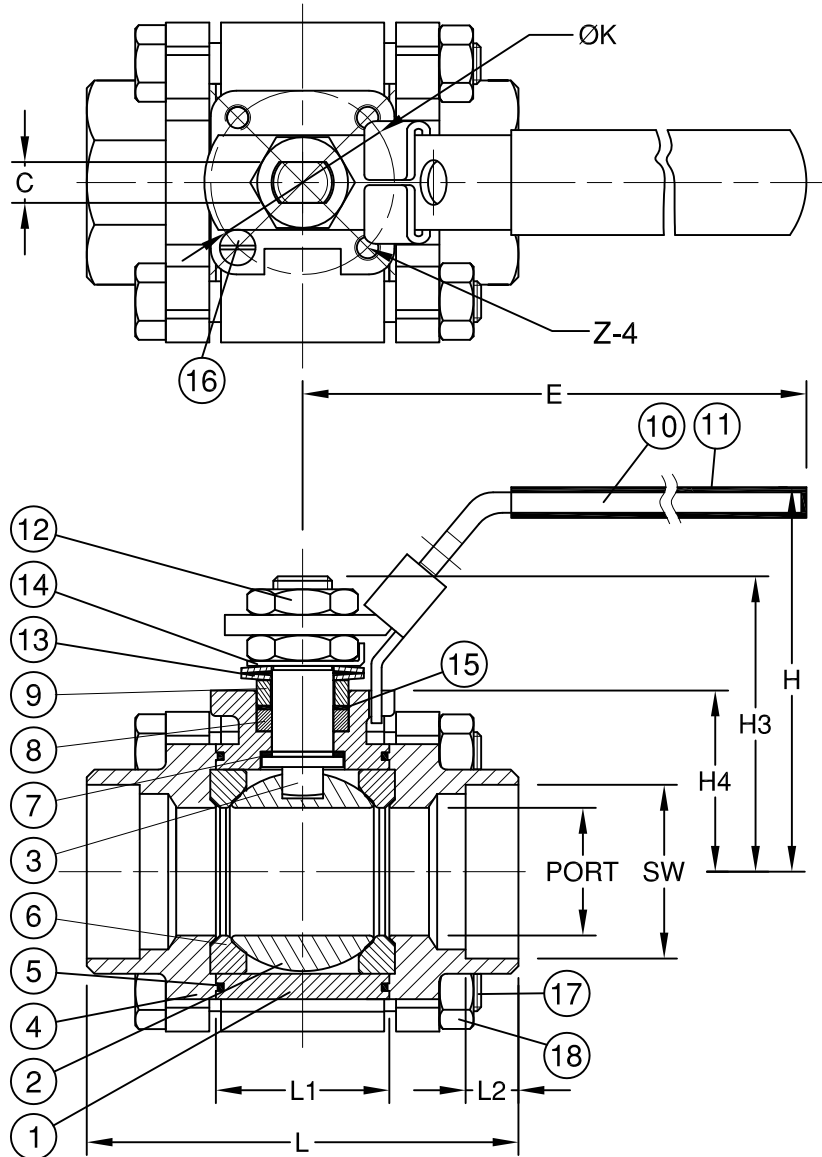
SIZE	PORT	L	L1	L2	E	H	H3	H4	C	ØK	Z	unit:inch	
												SW	SW
DN8	1/4"	0.45	2.2	0.88	0.39	4.01	2.51	1.84	1.24	0.19	1.41	M5xP0.8	0.55
DN10	3/8"	0.49	2.2	0.88	0.39	4.01	2.51	1.84	1.24	0.19	1.41	M5xP0.8	0.68
DN15	1/2"	0.59	2.67	0.88	0.39	4.01	2.51	1.84	1.24	0.19	1.41	M5xP0.8	0.85
DN20	3/4"	0.78	2.99	1.08	0.51	4.01	2.63	1.97	1.33	0.19	1.41	M5xP0.8	1.07
DN25	1"	0.98	3.33	1.33	0.51	5.7	2.99	2.2	1.39	0.31	1.65	M5xP0.8	1.34
DN32	1-1/4"	1.25	3.86	1.67	0.51	5.7	3.14	2.41	1.58	0.31	1.65	M5xP0.8	1.68
DN40	1-1/2"	1.49	4.37	2.04	0.51	6.37	3.62	2.95	1.83	0.39	1.96	M6xP1.0	1.92
DN50	2"	1.96	4.98	2.5	0.62	6.37	3.97	3.26	2.18	0.39	1.96	M6xP1.0	2.4

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TITLE: CAST STEEL FLOATING BALL VALVE  
 3 PIECE - FULL PORT - SOCKETWELD ENDS - 316 BALL

NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGN	ANSI B16.34	MARKING SYSTEM	MSS-SP-25	SIZE	WORKING PRESSURE	MATERIAL: ASTM A216 Gr. WCB	UNITS: Inch, mm
										1/4" - 1"	2000PSI	DATE: 11/04/16	SCALE: N.T.S.
										1-1/4" - 2"	1500PSI	FIG. No.: D207S-6RT	
												DRAWN BY: F.J.	
												CHK'D & APR'D BY: R.P.	REV: 1 DWG No.: 46BA120026-D

# Wm. E. Williams No. D207S-66RT WOG 2000 Full Port Ball Valve A351 CF8M NACE



NO.	PART NAME	MATERIAL
1	BODY	ASTM A351 Gr.CF8M
2	BALL	ASTM A351 Gr.CF8M
3	STEM	SS316
4	END CAP	ASTM A351 Gr.CF8M
5	BODY SEAL	GRAPHITE
6	SEAT	RTFE(15%G.F.)
7	THRUST WASHER	PEEK
8	STEM PACKING	RTFE(15%G.F.)+GRAPHITE
9	GLAND	SS304
10	HANDLE	SS304
11	HANDLE COVER	PLASTIC
12	HANDLE NUT	SS304
13	BELLEVILLE WASHER	SS301
14	TAB WASHER	SS304
15	PACKING FOLLOWER	RTFE(15%G.F.)
16	STOP PIN	SS304
17	BODY BOLT	SS304
18	BOLT NUT	SS304

## DIMENSIONS

SIZE	PORT	L	L1	L2	E	H	H3	H4	C	ØK	Z	SW	
DN8	1/4"	0.45	2.2	0.88	0.39	4.01	2.51	1.84	1.24	0.19	1.41	M5xP0.8	0.55
DN10	3/8"	0.49	2.2	0.88	0.39	4.01	2.51	1.84	1.24	0.19	1.41	M5xP0.8	0.68
DN15	1/2"	0.59	2.67	0.88	0.39	4.01	2.51	1.84	1.24	0.19	1.41	M5xP0.8	0.85
DN20	3/4"	0.78	2.99	1.08	0.51	4.01	2.63	1.97	1.33	0.19	1.41	M5xP0.8	1.07
DN25	1"	0.98	3.33	1.33	0.51	5.7	2.99	2.2	1.39	0.31	1.65	M5xP0.8	1.34
DN32	1-1/4"	1.25	3.86	1.67	0.51	5.7	3.14	2.41	1.58	0.31	1.65	M5xP0.8	1.68
DN40	1-1/2"	1.49	4.37	2.04	0.51	6.37	3.62	2.95	1.83	0.39	1.96	M6xP1.0	1.92
DN50	2"	1.96	4.98	2.5	0.62	6.37	3.97	3.26	2.18	0.39	1.96	M6xP1.0	2.4

unit:inch

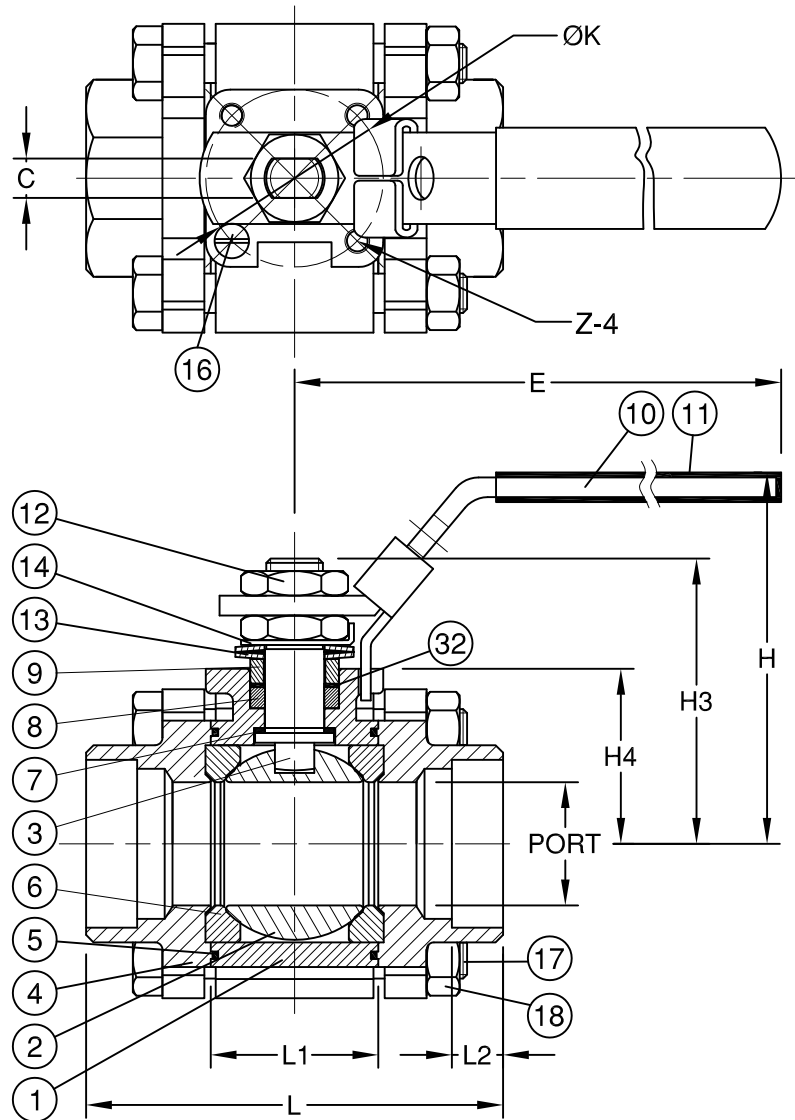
NOTE: AVAILABE IN NPT ENDS.

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 FAX: 718-729-5106

TITLE: STAINLESS STEEL 3 PIECE FULL PORT BALL VALVE  
 SOCKETWELD ENDS - CF8M BODY - 316 BALL

NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGN	ANSI B16.34	MARKING SYSTEM	MSS-SP-25	SIZE	WORKING PRESSURE	MATERIAL: CF8M	UNITS: Inch, mm
										1/4" - 1"	2000PSI	DATE: 11/04/16	SCALE: N.T.S.
										1-1/4" - 2"	1500PSI	FIG. No.: D207S-66RT	
												DRAWN BY: F.J.	
												CHK'D & APR'D BY: R.P.	REV: 1
													DWG No.: 46BA120019-SD

# Wm. E. Williams No. D207T-6RT WOG 2000 Full Port Ball Valve ASTM A216 Gr. WCB



NO.	PART NAME	MATERIAL
1	BODY	ASTM A216 Gr.WCB
2	BALL	ASTM A351 Gr.CF8M
3	STEM	SS316
4	END CAP	ASTM A216 Gr.WCB
5	BODY SEAL	GRAPHITE
6	SEAT	RTFE(15%G.F.)
7	THRUST WASHER	PEEK
8	STEM PACKING	RTFE(15%G.F.)+GRAPHITE
9	GLAND	SS304
10	HANDLE	SS304
11	HANDLE COVER	PLASTIC
12	HANDLE NUT	SS304
13	BELLEVILLE WASHER	SS301
14	TAB WASHER	SS304
15	PACKING FOLLOWER	RTFE(15%G.F.)
16	STOP PIN	SS304
17	BODY BOLT	SS304
18	BOLT NUT	SS304

NOTE: AVAILABE IN SOCKET WELD ENDS & NPT X SW ENDS.

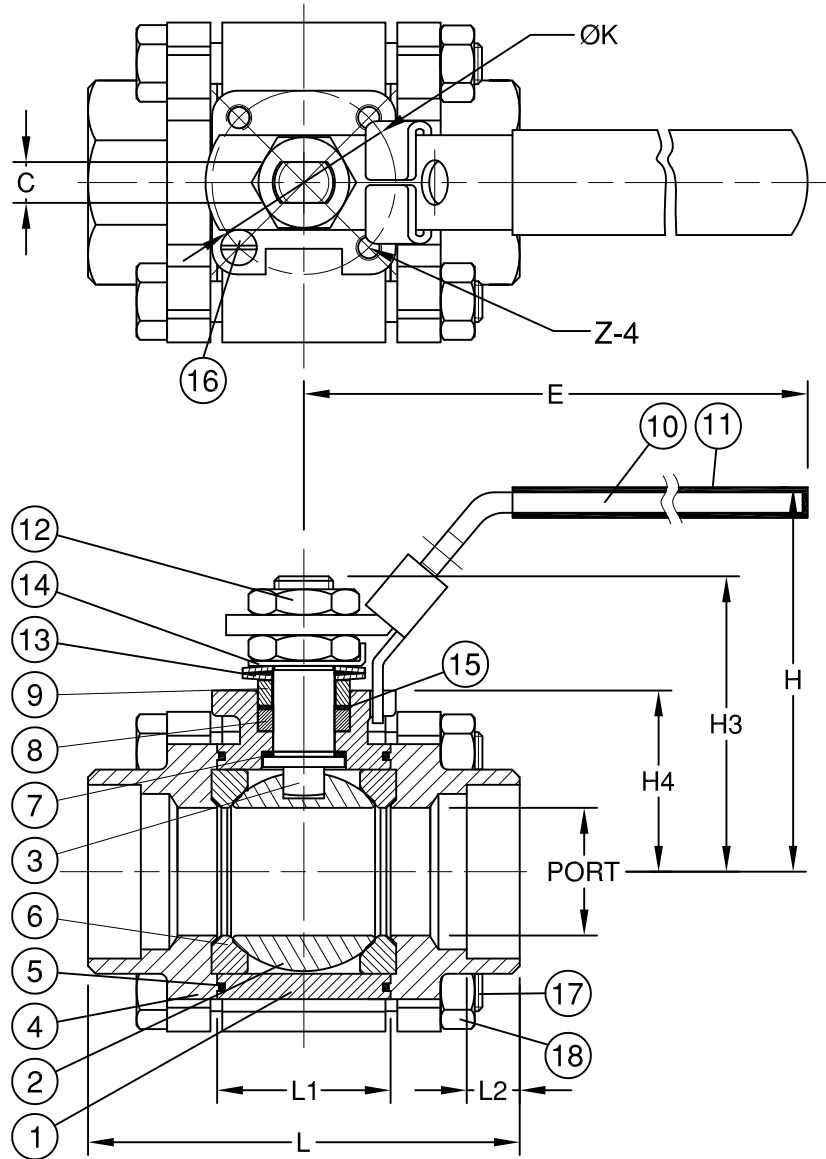
unit:inch												
SIZE	PORT	L	L1	L2	E	H	H3	H4	C	ØK	Z	
DN8	1/4"	0.45	2.2	0.88	0.39	4.01	2.51	1.84	1.24	0.19	1.41	M5xP0.8
DN10	3/8"	0.49	2.2	0.88	0.39	4.01	2.51	1.84	1.24	0.19	1.41	M5xP0.8
DN15	1/2"	0.59	2.67	0.88	0.39	4.01	2.51	1.84	1.24	0.19	1.41	M5xP0.8
DN20	3/4"	0.78	2.99	1.08	0.51	4.01	2.63	1.97	1.33	0.19	1.41	M5xP0.8
DN25	1"	0.98	3.33	1.33	0.51	5.7	2.99	2.2	1.39	0.31	1.65	M5xP0.8
DN32	1-1/4"	1.25	3.86	1.67	0.51	5.7	3.14	2.41	1.58	0.31	1.65	M5xP0.8
DN40	1-1/2"	1.49	4.37	2.04	0.51	6.37	3.62	2.95	1.83	0.39	1.96	M6xP1.0
DN50	2"	1.96	4.98	2.5	0.62	6.37	3.97	3.26	2.18	0.39	1.96	M6xP1.0

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TITLE: CAST STEEL FLOATING BALL VALVE  
 3 PIECE - FULL PORT - THREADED ENDS - 316 BALL

NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGN	ANSI B16.34	MARKING SYSTEM	MSS-SP-25	SIZE	WORKING PRESSURE	MATERIAL: ASTM A216 Gr. WCB	UNITS: Inch, mm
Δ	11/4/16	RELEASED	F.J.	R.P.	R.P.	FIRESAFE	API 607			1/4" - 1"	2000PSI	PRESSURE:2000WOG DATE: 11/04/16	SCALE: N.T.S.
										1-1/4" - 2"	1500PSI	SIZE: 1/4" - 2"	FIG. No.: D207T-6RT
												DRAWN BY: F.J.	
												CHK'D & APR'D BY: R.P.	REV: 1 DWG No.: 46BA120027-D

# Wm. E. Williams No. D207T-66RT WOG 2000 Full Port Ball Valve A351 CF8M NACE



NO.	PART NAME	MATERIAL
1	BODY	ASTM A351 Gr.CF8M
2	BALL	ASTM A351 Gr.CF8M
3	STEM	SS316
4	END CAP	ASTM A351 Gr.CF8M
5	BODY SEAL	GRAPHITE
6	SEAT	RTFE(15%G.F.)
7	THRUST WASHER	PEEK
8	STEM PACKING	RTFE(15%G.F.)+GRAPHITE
9	GLAND	SS304
10	HANDLE	SS304
11	HANDLE COVER	PLASTIC
12	HANDLE NUT	SS304
13	BELLEVILLE WASHER	SS301
14	TAB WASHER	SS304
15	PACKING FOLLOWER	RTFE(15%G.F.)
16	STOP PIN	SS304
17	BODY BOLT	SS304
18	BOLT NUT	SS304

unit:inch

SIZE	PORT	L	L1	L2	E	H	H3	H4	C	ØK	Z	
DN8	1/4"	0.45	2.2	0.88	0.39	4.01	2.51	1.84	1.24	0.19	1.41	M5xP0.8
DN10	3/8"	0.49	2.2	0.88	0.39	4.01	2.51	1.84	1.24	0.19	1.41	M5xP0.8
DN15	1/2"	0.59	2.67	0.88	0.39	4.01	2.51	1.84	1.24	0.19	1.41	M5xP0.8
DN20	3/4"	0.78	2.99	1.08	0.51	4.01	2.63	1.97	1.33	0.19	1.41	M5xP0.8
DN25	1"	0.98	3.33	1.33	0.51	5.7	2.99	2.2	1.39	0.31	1.65	M5xP0.8
DN32	1-1/4"	1.25	3.86	1.67	0.51	5.7	3.14	2.41	1.58	0.31	1.65	M5xP0.8
DN40	1-1/2"	1.49	4.37	2.04	0.51	6.37	3.62	2.95	1.83	0.39	1.96	M6xP1.0
DN50	2"	1.96	4.98	2.5	0.62	6.37	3.97	3.26	2.18	0.39	1.96	M6xP1.0

NOTE: AVAILABE IN SOCKET WELD ENDS.

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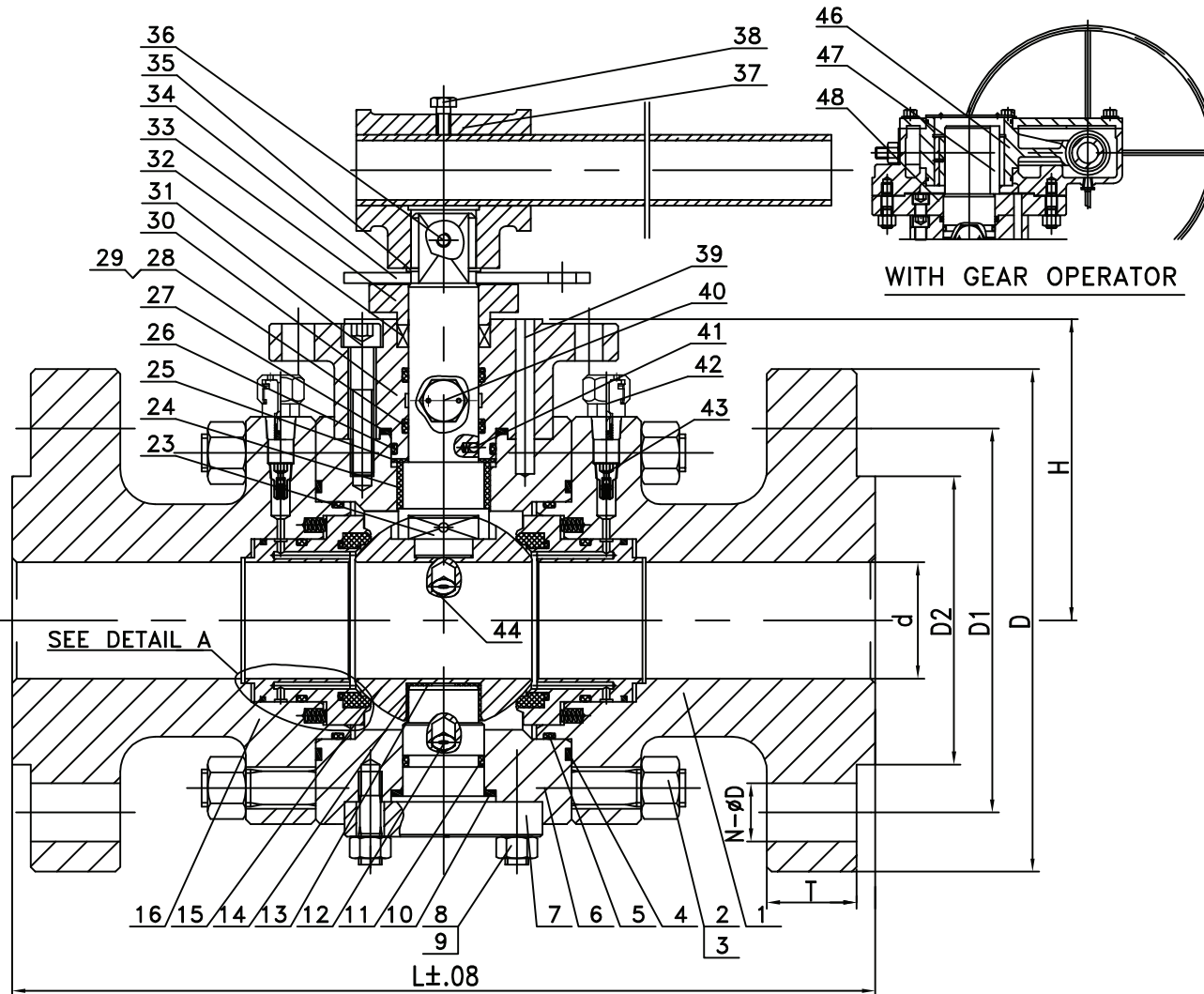
TITLE: STAINLESS STEEL 3 PIECE FULL PORT BALL VALVE  
NPT ENDS - CF8M BODY - 316 BALL

NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGN	ANSI B16.34	MARKING SYSTEM	MSS-SP-25	SIZE	WORKING PRESSURE	MATERIAL: CF8M	UNITS: Inch, mm
										1/4" - 1"	2000PSI	DATE: 11/04/16	SCALE: N.T.S.
										1-1/4" - 2"	1500PSI		FIG. No.: D207T-66RT
Δ	11/4/16	RELEASED	F.J.	R.P.	R.P.	FIRESAFE	API 607					DRAWN BY: F.J.	
											NACE MR 0175	CHK'D & APR'D BY: R.P.	REV: 1 DWG No.: 46BA120020-SD

# Wm. E. Williams No. FP67F1N / FP67F1N GO Class 600 RF Full Port Ball Valve ASTM A105N NACE

**NOTE:**

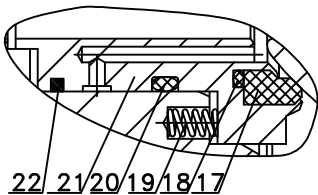
- BILL OF MATERIAL AND DESIGN MAY DIFFER DEPENDING ON VALVE SIZE.
- OTHER BODY MATERIAL AVAILABLE IN WCB, LF2, LCC & 316SS.



**BILL OF MATERIAL**

NO.	PART NAME	MATERIAL
1	Right Body	ASTM A105N
2	Stud	ASTM A193 B7M
3	Nut	ASTM A194 2HM
4	Gasket	Graphite+304
5	"O"-Ring	VITON
6	Body	ASTM A105N
7	Lower Stem	ASTM A105N+ENP
8	Stud	ASTM A193 B7M
9	Nut	ASTM A194 2HM
10	Gasket	Graphite+304
11	"O"-Ring	VITON
12	Drain Valve	ASTM A105N+ZN
13	Thrust Bearing	PTFE
14	Stem Bearing	METAL PACKED PTFE
15	Ball	ASTM A105N+ENP 3MIL
16	Left Body	ASTM A105N
17	Seat	NYLON
18	"O"-Ring (4" or Larger)	VITON
19	Spring	17-7PH
20	"O"-Ring	VITON
21	Seat Retainer	ASTM A105N+ENP 3MIL
22	Packing	Graphite
23	Stem	AISI 410
24	Stem Bearing	METAL PACKED PTFE
25	Thrust Bearing	PTFE
26	"O"-Ring	VITON
27	Gasket	Graphite+304
28	"O"-Ring	VITON
29	Thrust Washer	PTFE
30	Seal Sleeve	ASTM A105+ENP
31	Bolt	ASTM A193 B7M
32	Packing	Graphite
33	Gland	ASTM A216 WCB
34	Stopper	A3 · HZn
35	Snap	65Mn
36	Bolt	ASTM A193 B7M
37	Lever	ASTM A216 WCB
38	Bolt	ASTM A193 B7M
39	Pin	ANSI 1035
40	Sealant Fitting	ASTM A105N+ZN
41	Anti-Static Device	Assembly
42	Sealant Fitting	ASTM A105N+ZN
43	Check Valve	ASTM A105N+ZN
44	Release Valve	ASTM A105N+ZN
45	Bolt (Not Shown)	ASTM A193 B7M
46	Gear Operator	Assembly
47	Key	AISI 1045
48	Connection Plate	ASTM A105

SEE 600LB PRESSURE CLASS TABLE FOR DIMENSIONS



DETAIL A

WILLIAM E. WWW.WILLIAMSVALVE.COM

**WILLIAMS**  
VALVE CORPORATION

38-52 REVIEW AVENUE  
LONG ISLAND CITY, NY 11101  
TEL: 718-392-1660  
FAX: 718-729-5106

TITLE: FORGED STEEL TRUNNION BALL VALVE  
CLASS 600 - RF - FULL PORT - 3 PIECE DESIGN - GEAR OPTION

						MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 6D	MATERIAL: A105N	UNITS: Inch, mm	
						DIM.OF FLANGE	ASME B16.5	SHELL HYDRO 2250PSI	CLASS: 600	DATE: 01/07/13	SCALE: N.T.S.
						FACE TO FACE	API 6D	SEAT AIR 80PSI	SIZE: SEE TABLE		FIG. No.: FP67F-1N
						FIRE SAFE	API 607	BACK SEAT HYDRO N/A	DRAWN BY: F.J.		FP67F-1N GO
NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGNED	API 6D	NACE MR 0175	CHK'D & APP'R'D BY: R.P.	REV: 1	DWG No.: 15BA120001-FP-WEB

Full Port Trunnion Ball Valves Dimension Table

Full Port Trunnion Ball Valves 600lb

Dimensions: inches (millimeters)

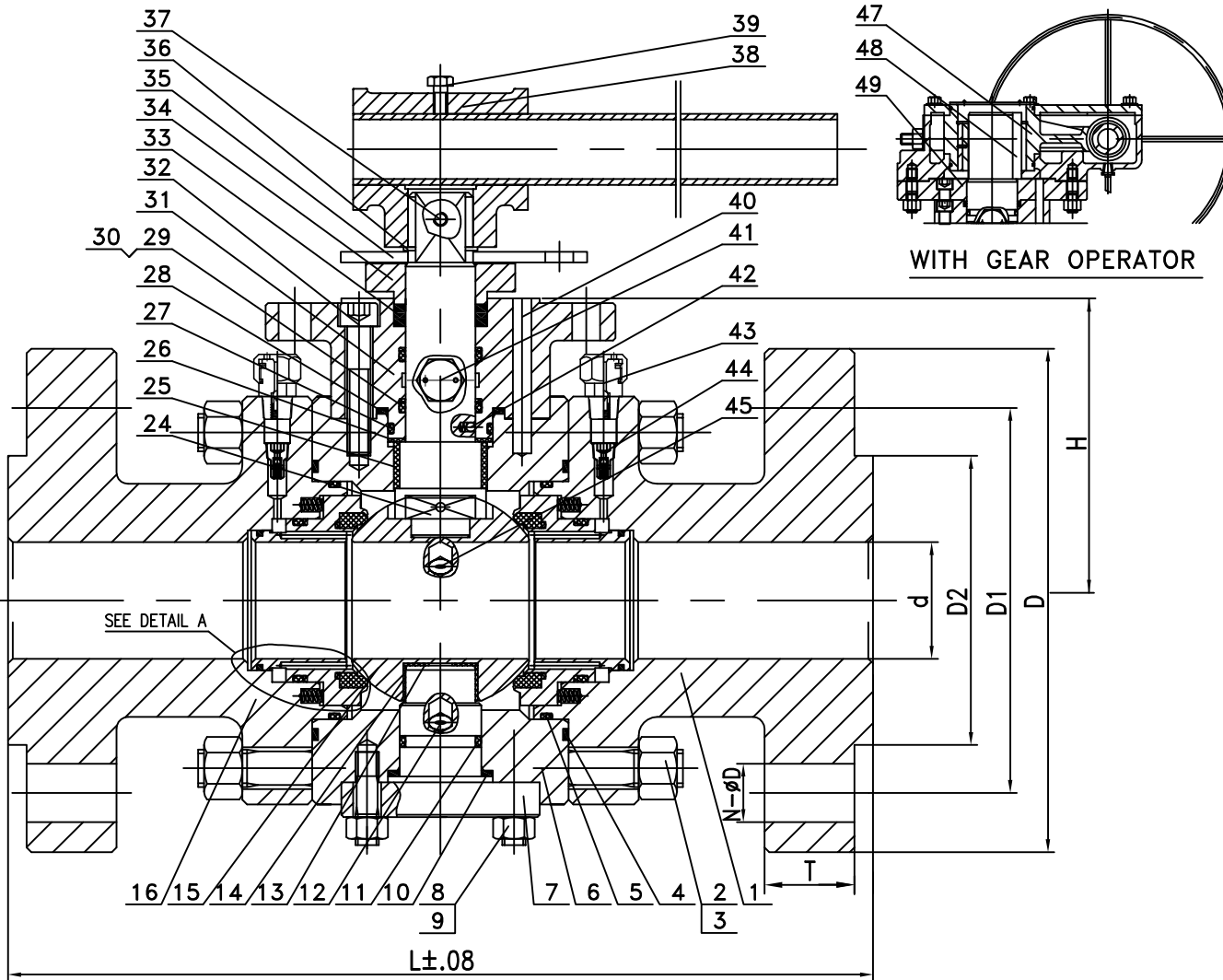
600 LB	SIZES	d	L	D	D1	D2	T	N-ØD	H
		Size	Face to Face	Outside Diameter of Flange	Bolt Circle	Outside Diameter of Raised Face	Flange Thickness	No. of Holes / Hole Diameter	Center to Top
	2"	2 (50)	11-1/2 (292)	6-1/2 (165)	5 (127)	3-5/8 (92)	1 (26)	8-Ø3/4 (19)	4-1/4 (107)
	3"	3 (75)	14 (356)	8-1/4 (210)	6-5/8 (168.5)	5 (127)	1-1/4 (32)	8-Ø7/8 (22)	5-1/2 (140)
	4"	4 (100)	17 (432)	10-27/32 (275)	8-1/2 (216)	6-7/8 (175)	1-1/2 (38.5)	8-Ø1 (25)	6-15/32 (164)
	6"	6 (150)	22 (559)	14 (355)	11-1/2 (292)	8-1/2 (216)	1-7/8 (48)	12-Ø1-9/64 (29)	8-3/4 (222)
	8"	8 (201)	26 (660)	16-1/2 (420)	13-3/4 (349)	10-5/8 (270)	2-3/16 (56)	12-Ø1-1/4 (32)	10-11/16 (271)
	10"	10 (252)	31 (787)	20 (510)	17 (432)	12-3/4 (324)	2-1/2 (64)	16-Ø1-3/8 (35)	12-1/2 (317.5)
	12"	12 (303)	33 (838)	22 (560)	19-1/4 (489)	15 (381)	2-5/8 (67)	20-Ø1-3/8 (35)	14-3/16 (360)
	14"	13-3/4 (334)	35 (889)	23-3/4 (605)	20-3/4 (527)	16-1/4 (413)	2-3/4 (70)	20-Ø1-1/2 (39)	15-3/8 (390)
	16"	15-1/4 (385)	39 (991)	27 (685)	23-3/4 (603)	18-1/2 (470)	3 (77)	20-Ø1-5/8 (41)	17-5/16 (440)
	18"	17-1/4 (436)	43 (1092)	29-1/4 (745)	25-3/4 (654)	21 (533)	3-1/4 (83)	20-Ø7/16 (44)	19-3/32 (485)
	20"	19-1/4 (487)	47 (1194)	32 (815)	28-1/2 (724)	23 (584)	3-1/2 (89)	24-Ø7/16 (44)	21 (533)
	24"	23-1/4 (589)	55 (1397)	37 (940)	33 (838)	27-1/4 (692)	4 (102)	24-Ø2 (51)	24-1/4 (616)
	26"	25 (633)	57 (1448)	40 (1016)	36 (914.5)	29-1/2 (749)	4-1/4 (108)	28-Ø2 (51)	25-11/32 (643.5)
	28"	27 (684)	61 (1549)	42-1/4 (1073)	38 (965)	31-1/2 (800)	4-7/16 (112)	28-Ø2-1/8 (54)	26-3/16 (665)
	30"	29 (735)	65 (1651)	44-15/16 (1130)	40-1/4 (1022)	33-3/4 (857)	4-1/2 (114)	28-Ø2-1/8 (54)	29-21/32 (753)
	32"	30-11/16 (779)	70 (1778)	47 (1194)	42-1/2 (1079.5)	36 (914)	4-5/8 (118)	28-Ø2-1/8 (54)	30-1/4 (768)
	36"	34-7/16 (874)	82 (2083)	51-3/4 (1314)	47 (1194)	40-1/4 (1022)	4-7/8 (124)	28-Ø2-5/8 (67)	33-29/32 (861)

\*Does not include 1/16" raised face in the 150lb and 300lb standards. Does not include 1/4" raised face in 400lb and heavier standards.

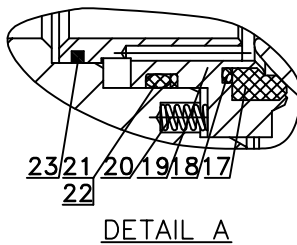
# Wm. E. Williams No. FP97F1N / FP97F1N GO Class 900 RF Full Port Ball Valve ASTM A105N NACE

**NOTE:**

- BILL OF MATERIAL AND DESIGN MAY DIFFER DEPENDING ON VALVE SIZE.
- OTHER BODY MATERIAL AVAILABLE IN WCB, LF2, LCC & 316SS.



BILL OF MATERIAL		
NO.	PART NAME	MATERIAL
1	Right Body	ASTM A105N
2	Stud	ASTM A193 B7M
3	Nut	ASTM A194 2HM
4	Gasket	Graphite+304
5	"O"-Ring	VITON
6	Body	ASTM A105N
7	Lower Stem	ASTM A105N+ENP
8	Stud	ASTM A193 B7M
9	Nut	ASTM A194 2HM
10	Gasket	Graphite+304
11	"O"-Ring	VITON
12	Drain Valve	ASTM A105N+ZN
13	Thrust Bearing	PTFE
14	Stem Bearing	METAL PACKED PTFE
15	Ball	ASTM A105N+ENP 3MIL
16	Left Body	ASTM A105N
17	Seat	NYLON
18	"O"-Ring (4" OR LARGER)	VITON
19	Seat Retainer	ASTM A105N+ENP 3MIL
20	Spring	17-7PH
21	"O"-Ring	VITON
22	Thrust Washer	PTFE
23	Packing	Graphite
24	Stem	AISI 410
25	Stem Bearing	METAL PACKED PTFE
26	Thrust Bearing	PTFE
27	"O"-Ring	VITON
28	Gasket	Graphite+304
29	"O"-Ring	VITON
30	Thrust Washer	PTFE
31	Seal Sleeve	ASTM A105+ENP
32	Bolt	ASTM A193 B7M
33	Packing	Graphite
34	Gland	ASTM A216 WCB
35	Stoper	A3 · HZn
36	Snap	65Mn
37	Bolt	ASTM A193 B7M
38	Lever	ASTM A216 WCB
39	Bolt	ASTM A193 B7M
40	Pin	ANSI 1035
41	Sealant Fitting	ASTM A105N+HZN
42	Anti-Static Device	Assembly
43	Sealant Fitting	ASTM A105N+HZN
44	Check Valve	ASTM A105N+HZN
45	Release Valve	ASTM A105N+HZN
46	Bolt (Not Shown)	ASTM A193 B7M
47	Gear Operator	Assembly
48	Key	AISI 1045
49	Connection Plate	ASTM A105



SEE 900LB PRESSURE CLASS TABLE FOR DIMENSIONS

					MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 6D	MATERIAL: A105N	UNITS: Inch, mm
					DIM.OF FLANGE	ASME B16.5	SHELL HYDRO 3350PSI	CLASS: 900	DATE: 01/07/13
					FACE TO FACE	API 6D	SEAT AIR 80PSI	SIZE: SEE TABLE	SCALE: N.T.S.
					FIRE SAFE	API 607	BACK SEAT HYDRO N/A	DRAWN BY: F.J.	FIG. No.: FP97F-1N FP97F-1N GO
Δ	1/7/13	RELEASED	F.J.	R.P.	DESIGNED	API 6D	NACE MR 0175	CHK'D & APR'D BY: R.P.	REV: 1
NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D				DWG No.: 15BA120005-FP-WEB

WILLIAM E. WILLIAMS VALVE CORPORATION  
 38-52 REVIEW AVENUE LONG ISLAND CITY, NY 11101  
 TEL: 718-392-1660 FAX: 718-729-5166  
 WWW.WILLIAMSVALVE.COM

TITLE: FORGED STEEL TRUNNION BALL VALVE CLASS 900 - RF - FULL PORT - 3 PIECE DESIGN - GEAR OPTION

Full Port Trunnion Ball Valves Dimension Table

Full Port Trunnion Ball Valves 900lb

Dimensions: inches (millimeters)

900 LB	SIZES	d	L	D	D1	D2	T	N-ØD	H
	Size	Face to Face	Outside Diameter of Flange	Bolt Circle	Outside Diameter of Raised Face	Flange Thickness	No. of Holes / Hole Diameter	Center to Top	
	2"	2 (50)	14-1/2 (368)	8-15/32 (215)	6-1/2 (165)	4-7/8 (124)	1-1/2 (38.5)	8-Ø1 (25)	5 (126.5)
	3"	3 (75)	15 (381)	9-7/16 (240)	7-1/2 (190.5)	6-9/64 (156)	1-1/2 (38.5)	8-Ø1 (25)	5-29/32 (150)
	4"	4 (100)	18 (457)	11-7/16 (290)	9-1/4 (235)	7-1/8 (181)	1-3/4 (45)	12-Ø1-1/4 (32)	6-13/16 (172.5)
	6"	6 (150)	24 (610)	15 (380)	12-1/2 (317.5)	9-1/2 (241)	2-1/4 (56)	12-Ø1-1/4 (32)	9-1/16 (230)
	8"	8 (201)	29 (737)	18-1/2 (470)	15-1/2 (393.5)	12-1/8 (308)	2-1/2 (64)	16-Ø1-1/2 (39)	11-1/4 (285)
	10"	10 (252)	33 (838)	21-1/2 (545)	18-1/2 (470)	14-1/4 (362)	2-3/4 (70)	20-Ø1-1/2 (39)	13 (330)
	12"	12 (303)	38 (965)	24 (610)	21 (533.5)	16-1/2 (419)	3-1/8 (79.5)	20-Ø1-1/2 (39)	14-13/32 (366)
	14"	12-11/16 (322)	40-1/2 (1029)	25-3/16 (640)	22 (559)	18-3/8 (467)	3-3/8 (86)	20-Ø1-21/32 (42)	16-11/32 (415)
	16"	14-11/16 (373)	44-1/2 (1130)	27-3/4 (705)	24-1/4 (616)	18-1/2 (524)	3-1/2 (89)	20-Ø1-3/4 (45)	17-13/16 (452)
	18"	16-21/32 (423)	48 (1219)	31 (785)	27 (686)	20-5/8 (594)	4 (102)	20-Ø2 (51)	19-3/4 (501)
	20"	18-9/16 (471)	52 (1321)	33-11/16 (855)	29-1/2 (749.5)	25-1/2 (648)	4-1/4 (108)	20-Ø2-1/8 (54)	21-13/32 (544)
	24"	22-7/16 (570)	61 (1549)	41 (1040)	35-1/2 (901.5)	30-13/32 (772)	5-1/2 (140)	20-Ø2-5/8 (67)	25-7/8 (657)
	26"	24-5/16 (617)	65 (1651)	42-3/4 (1086)	37-1/2 (952.5)	29-1/2 (749)	4-7/8 (124)	20-Ø2-7/8 (73)	27-9/16 (700)
	28"	26-3/16 (665)	69 (1753)	46 (1168)	40-1/4 (1022)	31-1/2 (800)	5-5/8 (143)	20-Ø3 (79)	28-5/8 (727)
	30"	28-1/3 (712)	74 (1880)	48-1/2 (1232)	42-3/4 (1086)	33-3/4 (857)	5-7/8 (149)	20-Ø3 (79)	29-15/16 (760)
	32"	29-15/16 (760)	80 (2032)	51-3/4 (1314)	45-1/2 (1156)	36 (914)	6-1/4 (159)	20-Ø3-3/8 (86)	31-5/16 (795)
	36"	33-21/32 (855)	90 (2286)	57-1/2 (1461)	50-3/4 (1289)	40-1/4 (1022)	6-3/4 (172)	20-Ø3-5/8 (92)	34-7/8 (886)

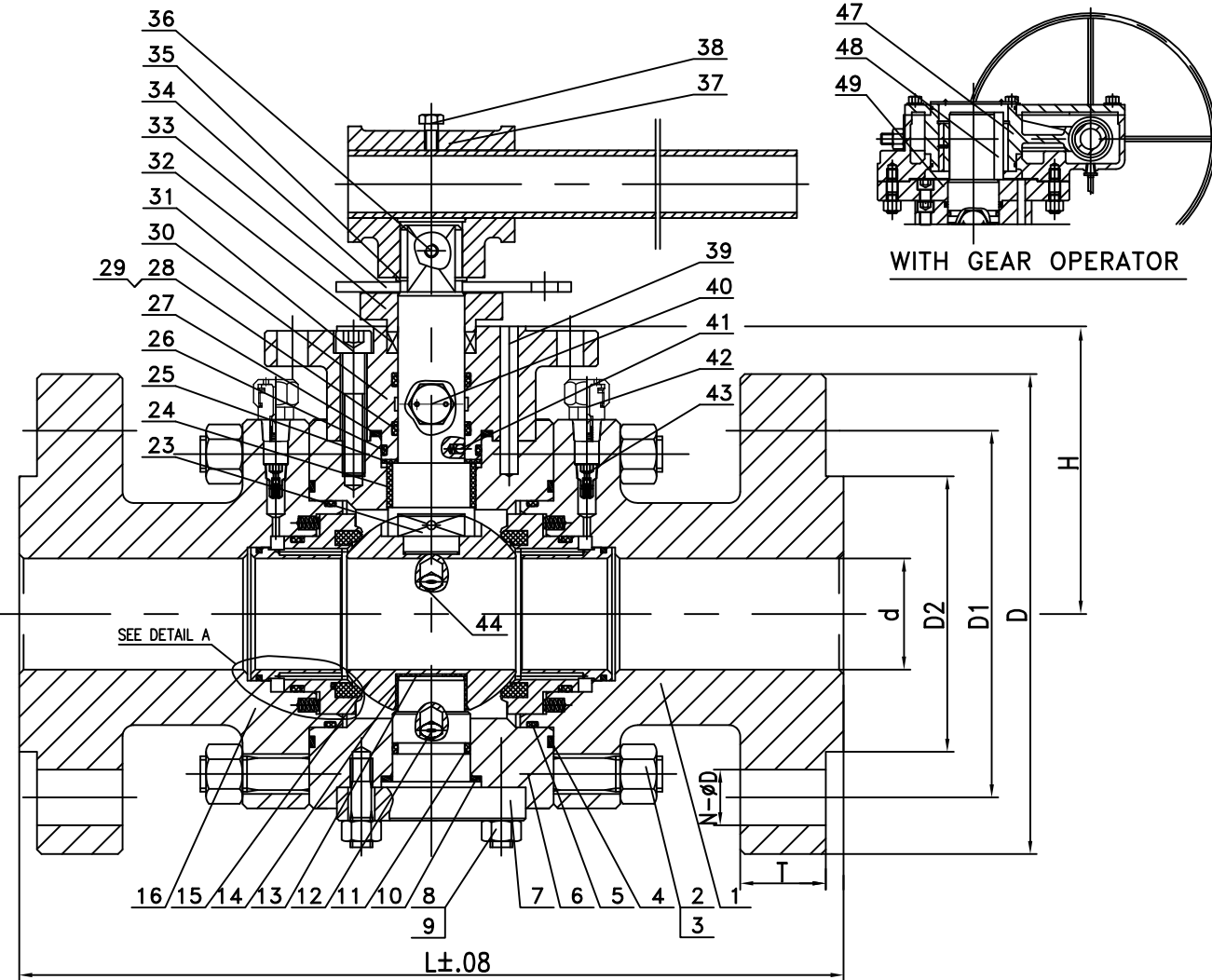
\*Does not include 1/16" raised face in the 150lb and 300lb standards. Does not include 1/4" raised face in 400lb and heavier standards.



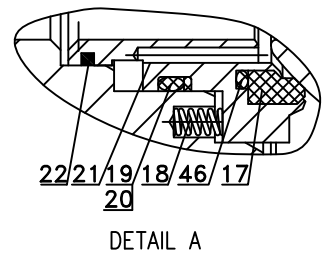
# Wm. E. Williams No. FP157F1N / FP157F1N GO Class 1500 RF Full Port Ball Valve ASTM A105N NACE

**NOTE:**

- BILL OF MATERIAL AND DESIGN MAY DIFFER DEPENDING ON VALVE SIZE.
- OTHER BODY MATERIAL AVAILABLE IN WCB, LF2, LCC & 316SS.



BILL OF MATERIAL		
NO.	PART NAME	MATERIAL
1	Right Body	ASTM A105N
2	Stud	ASTM A193 B7M
3	Nut	ASTM A194 2HM
4	Gasket	Graphite+304
5	"O"-Ring	VITON
6	Body	ASTM A105N
7	Lower Stem	ASTM A105+ENP
8	Stud	ASTM A193 B7M
9	Nut	ASTM A194 2HM
10	Gasket	Graphite+304
11	"O"-Ring	VITON
12	Drain Valve	ASTM A105+HZn
13	Thrust Bearing	PTFE
14	Stem Bearing	METAL PACKED PTFE
15	Ball	ASTM A105+ENP 3MIL
16	Left Body	ASTM A105N
17	Seat	NYLON
18	Spring	17-7PH
19	"O"-Ring	VITON
20	Thrust Washer	PTFE
21	Seat Retainer	ASTM A105+ENP 3MIL
22	Packing	Graphite
23	Stem	ASTM A105
24	Stem Bearing	METAL PACKED PTFE
25	Thrust Bearing	PTFE
26	"O"-Ring	VITON
27	Gasket	Graphite+304
28	"O"-Ring	VITON
29	Thrust Washer	PTFE
30	Seal Sleeve	ASTM A105+ENP
31	Bolt	ASTM A193 B7M
32	Packing	Graphite
33	Gland	ASTM A216 WCB
34	Stoper	A3 · HZn
35	Snap	65Mn
36	Bolt	ASTM A193 B7M
37	Lever	ASTM A216 WCB
38	Bolt	ASTM A193 B7M
39	Pin	ANSI 1035
40	Sealant Fitting	ASTM A105+HZn
41	Anti-Static Device	Assembly
42	Sealant Fitting	ASTM A105+HZn
43	Check Valve	ASTM A105+HZn
44	Release Valve	ASTM A105+HZn
45	Bolt (Not Shown)	ASTM A193 B7M
46	"O"-Ring (4" or Larger)	VITON
47	Gear Operator	Assembly
48	Key	AISI 1045
49	Connection Plate	ASTM A105



SEE 1500LB PRESSURE CLASS TABLE FOR DIMENSIONS

WILLIAM E. WILLIAMS VALVE CORPORATION  
 38-52 REVIEW AVENUE LONG ISLAND CITY, NY 11101  
 TEL: 718-392-1660 FAX: 718-729-5166

TITLE: FORGED STEEL TRUNNION BALL VALVE CLASS 1500 - RF - FULL PORT - 3 PIECE DESIGN - GEAR OPTION

					MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 6D	MATERIAL: A105N	UNITS: Inch, mm		
					DIM.OF FLANGE	ASME B16.5	SHELL HYDRO 5598PSI	CLASS: 1500	DATE: 01/07/13	SCALE: N.T.S.	
					FACE TO FACE	API 6D	SEAT AIR 80PSI	SIZE: SEE TABLE		FIG. No.: FP157F-1N FP157F-1N GO	
Δ	1/7/13	RELEASED	F.J.	R.P.	R.P.	FIRE SAFE	API 607	BACK SEAT HYDRO N/A	DRAWN BY: F.J.		
NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGNED	API 6D	NACE MR 0175	CHK'D & APR'D BY: R.P.	REV: 1	DWG No.: 15BA120009-FP-WEB

Full Port Trunnion Ball Valves Dimension Table

Full Port Trunnion Ball Valves 1500lb

Dimensions: inches (millimeters)

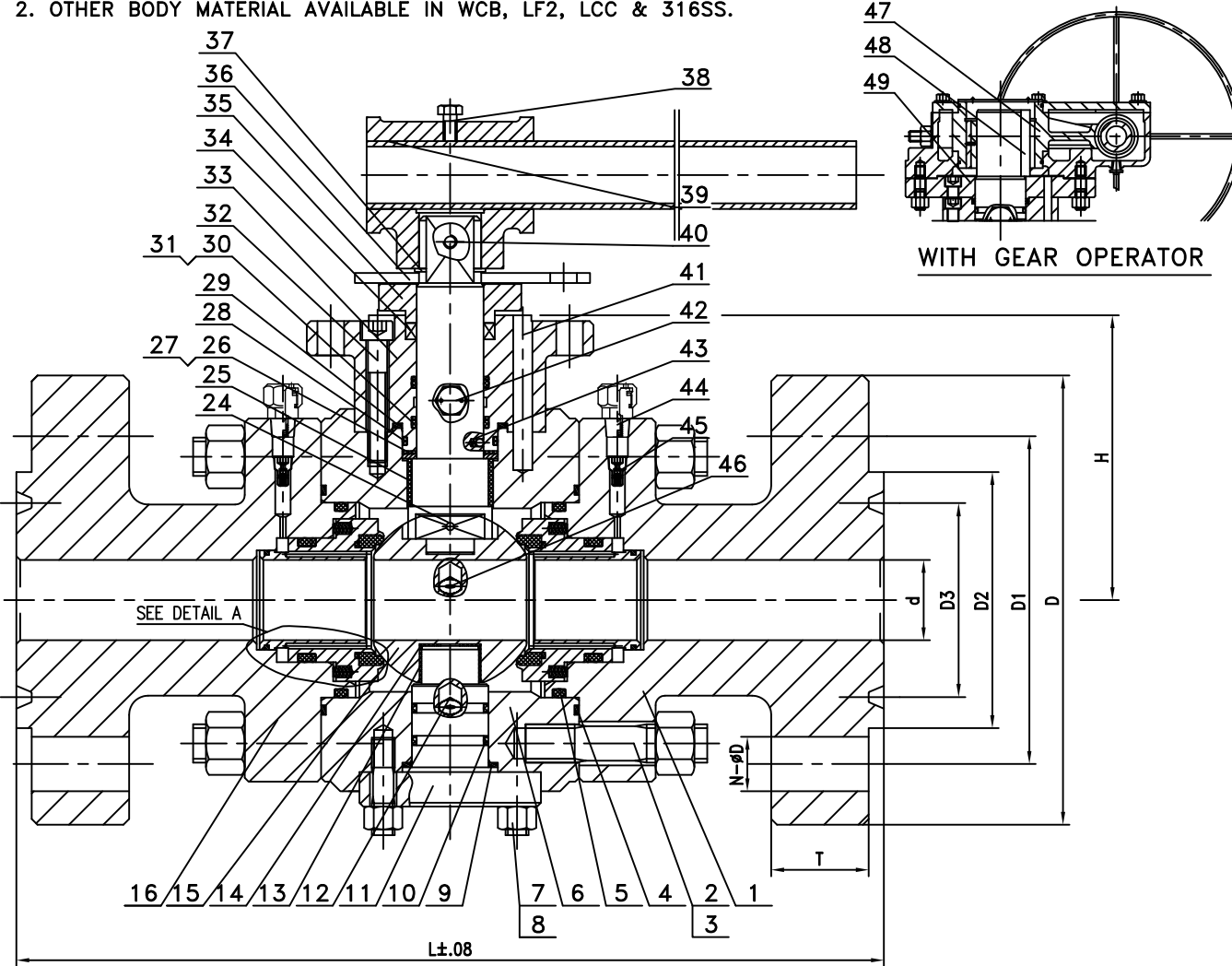
1500 LB	SIZES	d	L	D	D1	D2	T	N-ØD	H
		Size	Face to Face	Outside Diameter of Flange	Bolt Circle	Outside Diameter of Raised Face	Flange Thickness	No. of Holes / Hole Diameter	Center to Top
	2"	2 (50)	14-1/2 (368)	8-15/32 (215)	6-1/2 (165)	4-7/8 (124)	1-1/2 (38.5)	8-Ø1 (25)	5 (126.5)
	3"	3 (75)	18-1/2 (470)	10-7/16 (265)	8 (203.2)	6-5/8 (168)	1-7/8 (48)	8-Ø1-1/4 (32)	6-1/2 (166)
	4"	3-15/16 (100)	21-1/2 (546)	12-13/64 (310)	9-1/2 (241.3)	7-5/8 (194)	2-1/8 (54)	8-Ø1-3/8 (35)	8-5/8 (219)
	6"	5-11/16 (144)	27-3/4 (705)	15-9/16 (395)	12-1/2 (317.5)	9-3/4 (248)	3-1/4 (83)	12-Ø1-1/2 (39)	10-1/2 (268)
	8"	7-1/2 (192)	32-3/4 (832)	19-3/32 (485)	15-1/2 (393.7)	12-1/2 (318)	3-5/8 (92)	12-Ø1-3/4 (45)	11-15/16 (303)
	10"	9-13/32 (239)	39 (991)	23 (585)	19 (482.6)	14-5/8 (371)	4-1/4 (108)	12-Ø2 (51)	14-3/32 (358)
	12"	11-5/16 (287)	44-1/2 (1130)	26-9/16 (675)	22-1/2 (571.5)	17-1/4 (438)	4-7/8 (124)	16-Ø2-1/8 (54)	16-5/16 (414)
	14"	12-13/32 (315)	49-1/2 (1257)	29-1/2 (750)	25 (635)	19-1/4 (489)	5-9/32 (134)	16-Ø2-3/8 (60)	18-1/2 (471)
	16"	14-11/64 (360)	54-1/2 (1384)	32-1/2 (825)	27-3/4 (704.8)	21-1/2 (546)	5-3/4 (146.5)	16-Ø2-5/8 (67)	19-19/32 (498)
	18"	16 (406)	60-1/2 (1537)	36 (915)	30-1/2 (774.7)	24-1/8 (613)	6-3/8 (162)	16-Ø2-7/8 (73)	22-7/16 (570)
	20"	17-7/8 (454)	65-1/2 (1664)	38-25/32 (985)	32-3/4 (831.8)	26-1/2 (673)	7 (178)	16-Ø3 (79)	24 (611)

\*Does not include 1/16" raised face in the 150lb and 300lb standards. Does not include 1/4" raised face in 400lb and heavier standards.

# Wm. E. Williams No. FP257R1P / FP257R1P GO Class 2500 RTJ Full Port Ball Valve ASTM A105N NACE

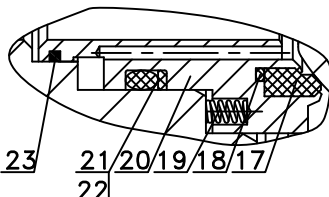
## NOTE:

- BILL OF MATERIAL AND DESIGN MAY DIFFER DEPENDING ON VALVE SIZE.
- OTHER BODY MATERIAL AVAILABLE IN WCB, LF2, LCC & 316SS.



## BILL OF MATERIAL

NO:	PART NAME	MATERIAL
1	Right Body	ASTM A105N
2	Stud	ASTM A193 B7M
3	Nut	ASTM A194 2HM
4	Gasket	Graphite+304
5	"O"-Ring	VITON
6	Body	ASTM A105N
7	Stud	ASTM A193 B7M
8	Nut	ASTM A194 2HM
9	Gasket	Graphite+304
10	"O"-Ring	VITON
11	Lower Stem	ASTM A105N+ENP
12	Drain Valve	ASTM A105N+ZN
13	Stem Bearing	METAL PACKED PTFE
14	Thrust Bearing	PTFE
15	Ball	ASTM A105N+ENP
16	Left Body	ASTM A105N
17	Seat	PEEK
18	"O"-Ring (4" or Larger)	VITON
19	Spring	17-7PH
20	Seat Retainer	ASTM A105N
21	Thrust Washer	PTFE
22	"O"-Ring	VITON
23	Packing	Graphite
24	Stem	ASTM A105N+ENP
25	Stem Bearing	METAL PACKED PTFE
26	Thrust Bearing	ASTM A182 F6a
27	Thrust Washer	PTFE
28	"O"-Ring	VITON
29	Gasket	Graphite+304
30	"O"-Ring	VITON
31	Thrust Washer	PTFE
32	Bolt	ASTM A193 B7M
33	Seal Sleeve	ASTM A105N
34	Packing	Graphite
35	Gland	ASTM A216 WCB
36	Stoper	A3 · HZn
37	Snap Ring	65Mn
38	Bolt	ASTM A193 B7M
39	Lever	ASTM A216 WCB
40	Bolt	ASTM A193 B7M
41	Pin	AISI 1035
42	Sealant Fitting	ASTM A105N+ZN
43	Anti-Static Device	Assembly
44	Sealant Fitting	ASTM A105N+ZN
45	Check Valve	ASTM A105N+ZN
46	Release Valve	ASTM A105N+ZN
47	Gear Operator	Assembly
48	Key	AISI 1045
49	Connection Plate	ASTM A105N+ENP



DETAIL A

SEE 2500LB PRESSURE CLASS TABLE FOR DIMENSIONS

WILLIAM E. WILLIAMS VALVE CORPORATION  
 38-52 REVIEW AVENUE LONG ISLAND CITY, NY 11101  
 TEL: 718-392-1660 FAX: 718-729-5106

TITLE: FORGED STEEL TRUNNION BALL VALVE CLASS 2500 - RTJ - FULL PORT - 3 PIECE DESIGN

NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGNED	MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 6D	MATERIAL: A105N	UNITS: Inch, mm			
							DIM.OF FLANGE	ASME B16.5	SHELL	HYDRO	9275PSI	CLASS: 2500	DATE: 05/29/13	SCALE: N.T.S.
							FACE TO FACE	API 6D	SEAT	AIR	80PSI	SIZE: SEE TABLE		FIG. No.: FP257R-1P
							FIRE SAFE	API 607	BACK SEAT	HYDRO	N/A	DRAWN BY: F.J.		FP257R-1P GO
								API 6D	NACE MR 0175	CHK'D & APR'D BY: R.P.	REV: 1	DWG No.: 15BA120015-FP-WEB		

Full Port Trunnion Ball Valves Dimension Table

Full Port Trunnion Ball Valves 2500lb

Dimensions: inches (millimeters)

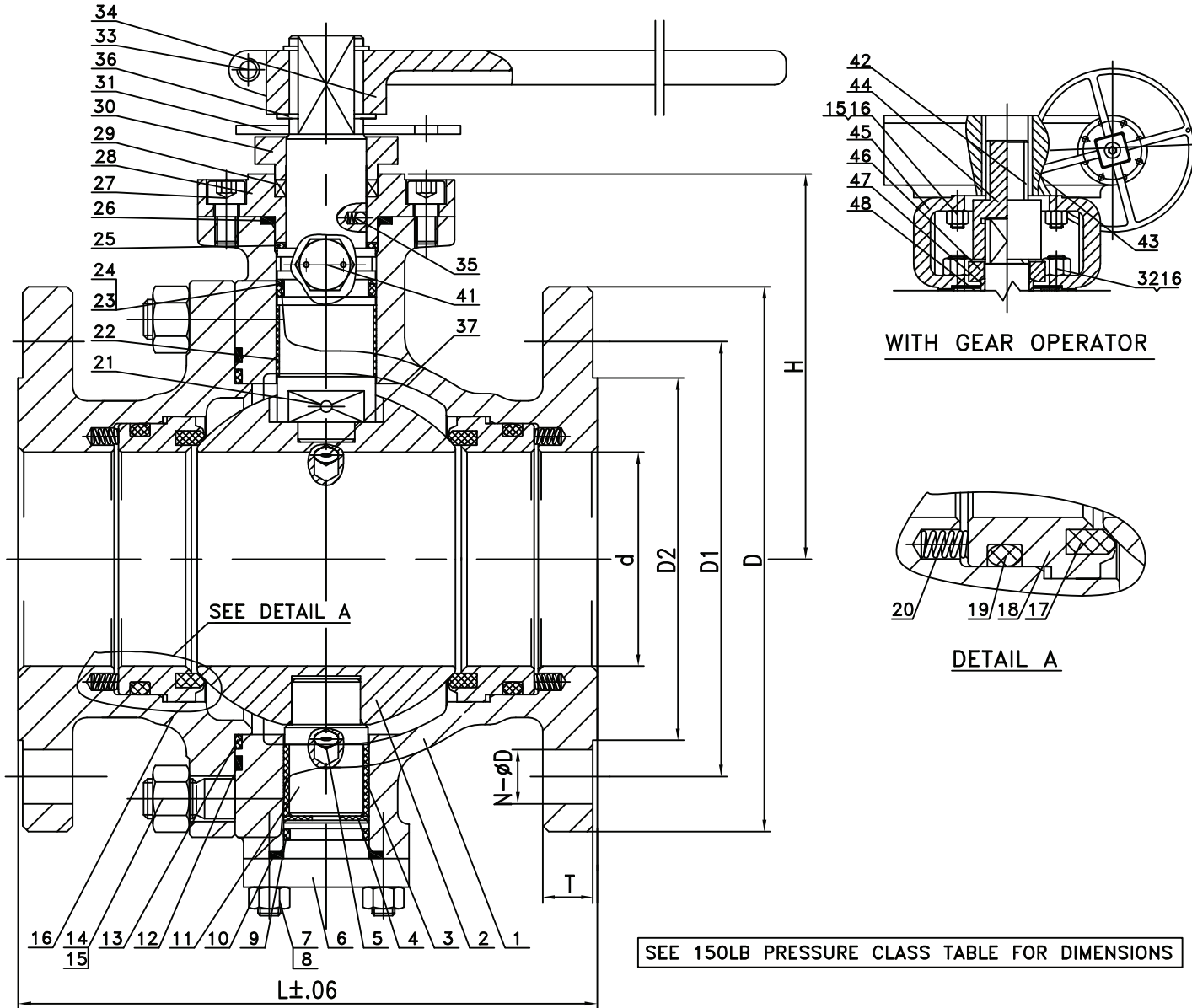
2500 LB	SIZES	d	L	D	D1	D2	D3	T	N-ØD	H
		Size	Face to Face	Outside Diameter of Flange	Bolt Circle	Outside Diameter of Raised Face	Pitch Diameter	Flange Thickness	No. of Holes / Hole Diameter	Center to Top
	2"	1-21/32 (42)	17-7/8 (454)	9-1/4 (235)	6-3/4 (171.4)	5-1/4 (133)	4 (101.6)	2 (51)	8-Ø1-9/64 (29)	
	3"	2-7/16 (62)	23 (584)	12 (305)	9 (228.6)	6-5/8 (168)	5 (127)	2-5/8 (67)	8-Ø1-3/8 (35)	
	4"	3-7/16 (87)	26-7/8 (683)	14 (355)	10-3/4 (273)	8 (203)	6-3/16 (157.18)	3 (76.5)	8-Ø1-21/32 (42)	
	6"	5-5/32 (131)	36-1/2 (927)	19-3/32 (485)	14-1/2 (368.3)	11 (279)	9 (228.6)	4-1/4 (108)	8-Ø2-1/8 (54)	12-3/64 (306)
	8"	7-3/64 (179)	40-7/8 (1038)	21-21/32 (550)	17-1/4 (438.2)	13-3/8 (340)	11 (279.4)	5 (127)	12-Ø2-1/8 (54)	14-7/32 (361)
	10"	8-25/32 (223)	50-7/8 (1292)	26-9/16 (675)	21-1/4 (539.8)	16-3/4 (425)	13-1/2 (342.9)	6-17/32 (166)	12-Ø2-5/8 (67)	16-3/4 (426)
	12"	10-7/16 (265)	56-7/8 (1445)	29-15/16 (760)	24-3/8 (619.1)	19-1/2 (495)	16 (406.4)	7-9/32 (185)	12-Ø2-29/32 (74)	18-27/32 (479)

\*Does not include 1/16" raised face in the 150lb and 300lb standards. Does not include 1/4" raised face in 400lb and heavier standards.

# Wm. E. Williams No. T17F6RT / T17F6RT GO Class 150 RF Full Port Ball Valve ASTM A216 Gr. WCB NACE

**NOTE:**

- BILL OF MATERIAL AND DESIGN MAY DIFFER DEPENDING ON VALVE SIZE.
- OTHER BODY MATERIAL AVAILABLE IN A105, LF2, LCC & 316SS.



BILL OF MATERIAL		
NO.	PART NAME	MATERIAL
1	Body	ASTM A216 WCB
2	Drain Valve	ASTM A105N · HZn
3	Stud	ASTM A193 B7M
4	Nut	ASTM A194 2HM
5	Gasket	Graphite+304
6	Lower Cover	ASTM A105N+HZn
7	"O"-Ring	VITON
8	Thrust Washer	PTFE
9	Lower Stem	ASTM A182 316
10	Stem Bearing	METAL PACKED PTFE
11	Thrust Bearing	PTFE
12	Ball	ASTM A182 316
13	"O"-Ring	VITON
14	Gasket	Graphite+304
15	Stud	ASTM A193 B7M
16	Nut	ASTM A194 2HM
17	Left Body	ASTM A216 WCB
18	Packing	Graphite
19	Seat	PTFE
20	Seat Retainer	ASTM A182 316
21	"O"-Ring	VITON
22	Spring	17-7PH
23	Stem	ASTM A182 316
24	Stem Bearing	METAL PACKED PTFE
25	Thrust Bearing	PTFE
26	"O"-Ring	VITON
27	Sealant Fitting	ASTM A105N · HZn
28	Seal Sleeve	ASTM A105N+ENP
29	Packing	Graphite
30	"O"-Ring	VITON
31	Stoper	A3+HZn
32	Stud	ASTM A193 B7M
33	Bolt	ASTM A193 B7M
34	Lever	ASTM A216 WCB
35	Anti-Static Device	Assembly
36	Snap Ring	65Mn
37	Bolt	ASTM A193 B7M
38	Lever	ASTM A216 WCB
39	Bolt (Not Shown)	ASTM A193 B7M
40	Anti-Static Device	Assembly
41	Sealant Fitting	ASTM A105N · HZn
42	Key	AISI 1045
43	Gear Operator	Assembly
44	Connector	ASTM A105N
45	Yoke	ASTM A216 WCB
46	Gland	ASTM A216 WCB
47	Packing Ring	ASTM A182 F6a
48	Packing	GRAPHITE

WILLIAM E. WILLIAMS VALVE CORPORATION  
 38-52 REVIEW AVENUE LONG ISLAND CITY, NY 11101  
 TEL: 718-392-1660 FAX: 718-729-5106  
 WWW.WILLIAMSVALVE.COM

TITLE: CAST STEEL TRUNNION BALL VALVE  
 CLASS 150 - RF - 2 PIECE - FULL PORT - GEAR OPTION

MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST:	API 6D	MATERIAL:	A216 WCB	UNITS:	Inch, mm
DIM.OF FLANGE	ASME B16.5	SHELL	HYDRO 450PSI	CLASS:	150	DATE:	01/04/13
FACE TO FACE	API 6D	SEAT	AIR 80PSI	SCALE:	SEE TABLE	FIG. No.:	T17F-6RT T17F-6RT GO
FIRE SAFE	API 607	BACK SEAT	HYDRO N/A	DRAWN BY:	F.J.	CHK'D & APP'R'D BY:	R.P.
DESIGNED	API 6D	NACE MR	0175	REV:	1	DWG No.:	15BA120001-T-WEB

NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D
Δ	1/4/13	RELEASED	F.J.	R.P.	R.P.

Full Port Trunnion Ball Valves Dimension Table

**Full Port Trunnion Ball Valves 150lb**

Dimensions: inches (millimeters)

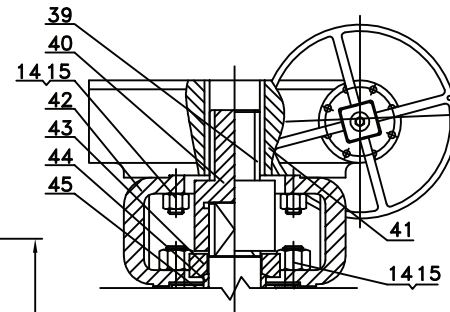
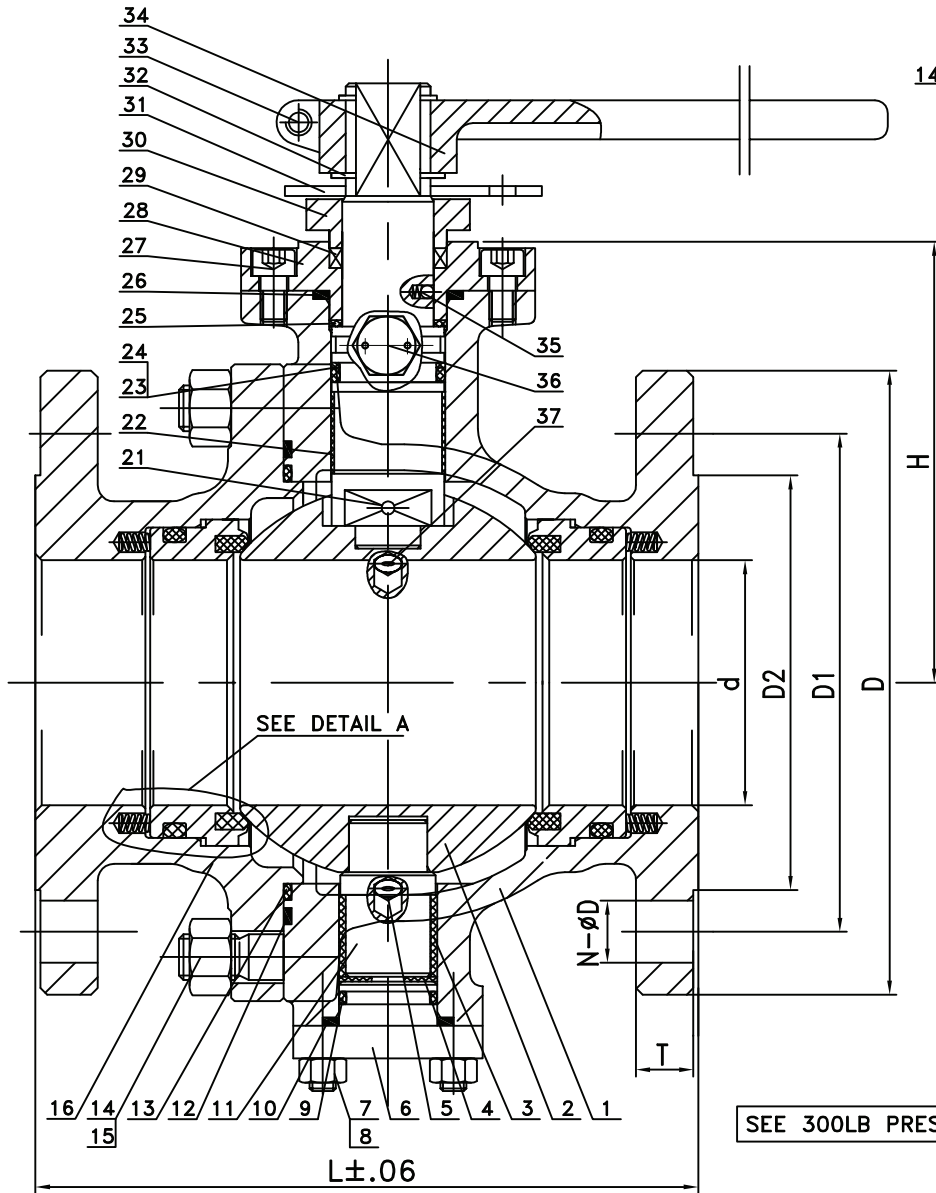
SIZES	d	L	D	D1	D2	T	N-ØD	H
	Size	Face to Face	Outside Diameter of Flange	Bolt Circle	Outside Diameter of Raised Face	Flange Thickness	No. of Holes / Hole Diameter	Center to Top
2"	2 (50)	7 (178)	6 (150)	4-3/4 (120.5)	3-5/8 (92)	9/16 (14.5)	4-Ø3/4 (19)	3-21/32 (93)
3"	3 (75)	8 (203)	7-1/2 (190)	6 (152.5)	5 (127)	11/16 (17.5)	4-Ø3/4 (19)	4-21/32 (118.5)
4"	4 (100)	9 (229)	9-1/16 (230)	7-1/2 (190.5)	6-3/4 (171)	29/32 (22.5)	8-Ø3/4 (19)	5-21/32 (143.5)
6"	6 (150)	15-1/2 (394)	11 (280)	9-1/2 (241.5)	8-1/2 (216)	15/16 (24)	8-Ø7/8 (22)	8-3/16 (208)
8"	8 (201)	18 (457)	13-1/2 (345)	11-3/4 (298.5)	10-5/8 (270)	1-1/16 (27)	8-Ø7/8 (22)	9-3/4 (248)
10"	10 (252)	21 (533)	16 (405)	14-1/4 (362)	12-3/4 (324)	1-9/64 (29)	12-Ø1 (25)	11-9/16 (294)
12"	12 (303)	24 (610)	19 (485)	17 (432)	15 (381)	1-1/4 (30.5)	12-Ø1 (25)	13-9/16 (344.5)
14"	13-3/4 (334)	27 (686)	21 (535)	18-3/4 (476)	16-1/4 (413)	1-5/16 (33.5)	12-Ø1-9/64 (29)	14-27/32 (377)
16"	15-1/4 (385)	30 (762)	23-1/2 (595)	21-1/4 (540)	18-1/2 (470)	1-3/8 (35)	16-Ø1-9/64 (29)	16-15/32 (418)
18"	17-1/4 (436)	34 (864)	25 (635)	22-3/4 (578)	21 (533)	1-1/2 (38.5)	16-Ø1-1/4 (32)	18-7/32 (463)
20"	19-1/4 (487)	36 (914)	27-1/2 (700)	25 (635)	23 (584)	1-5/8 (41.5)	20-Ø1-1/4 (32)	19-3/4 (502)
24"	23-1/4 (589)	42 (1067)	32 (815)	29-1/2 (749.5)	27-1/4 (692)	1-27/32 (46.5)	20-Ø1-3/8 (35)	23-1/16 (586)
26"	25 (633)	45 (1143)	34-1/4 (870)	31-3/4 (806.5)	29-1/2 (749)	2-11/16 (68)	24-Ø1-3/8 (35)	24-21/32 (626)
28"	27 (684)	49 (1245)	36-1/2 (927)	34 (864)	31-1/2 (800)	2-13/16 (71)	28-Ø1-3/8 (35)	25-11/32 (644)
30"	29 (735)	51 (1295)	38-3/4 (984)	36 (914.5)	33-3/4 (857)	3 (75)	28-Ø1-3/8 (35)	28-11/32 (720)
32"	30-11/16 (779)	54 (1372)	41-3/4 (1060)	38-1/2 (978)	36 (914)	3-3/16 (81)	28-Ø1-5/8 (41)	29-7/32 (742)
36"	34-7/16 (874)	60 (1524)	46 (1168)	42-3/4 (1086)	40-1/4 (1022)	3-1/2 (90)	32-Ø1-5/8 (41)	33-1/32 (839)
40"	38-7/16 (976)	69 (1753)	50-3/4 (1289)	47-1/4 (1200)	44-1/2 (1124)	3-1/2 (90)	36-Ø1-5/8 (41)	36 (913.5)
42"	40-5/32 (1020)	73 (1855)	53 (1346)	49-1/2 (1257)	47 (1194)	3-13/16 (97)	36-Ø1-5/8 (41)	37-1/8 (943)
48"	45-29/32 (1166)	84 (2134)	59-1/2 (1511)	56 (1422)	53-1/2 (1359)	4-1/4 (108)	44-Ø1-5/8 (41)	43-3/16 (1097)
56"	53-1/2 (1360)	98 (2489)	68-3/4 (1746)	65 (1651)	62 (1575)	4-7/8 (124)	48-Ø1-7/8 (48)	51-1/4 (1302)

\*Does not include 1/16" raised face in the 150lb and 300lb standards. Does not include 1/4" raised face in 400lb and heavier standards.

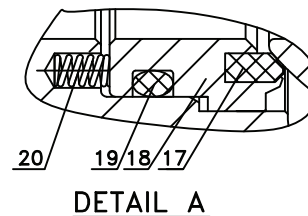
# Wm. E. Williams No. T37F6RT / T37F6RT GO Class 300 RF Full Port Ball Valve ASTM A216 Gr. WCB NACE

**NOTE:**

- BILL OF MATERIAL AND DESIGN MAY DIFFER DEPENDING ON VALVE SIZE.
- OTHER BODY MATERIAL AVAILABLE IN A105, LF2, LCC & 316SS.



WITH GEAR OPERATOR



DETAIL A

BILL OF MATERIAL		
NO.	PART NAME	MATERIAL
1	Body	ASTM A216 WCB
2	Ball	ASTM A351 CF8M
3	Stem Bearing	METAL PACKED PTFE
4	Thrust Bearing	PTFE
5	Drain Valve	ASTM A105 · HZn
6	Lower Cover	ASTM A105 · HZn
7	Stud	ASTM A193 B7M
8	Nut	ASTM A194 2HM
9	"O"-Ring	VITON
10	Gasket	Graphite+304
11	Lower Stem	ASTM A182 F316L
12	Gasket	Graphite+304
13	"O"-Ring	VITON
14	Stud	ASTM A193 B7M
15	Nut	ASTM A194 2HM
16	Left Body	ASTM A216 WCB
17	Seat	PTFE
18	Seat Retainer	ASTM A182 F316L
19	"O"-Ring	VITON
20	Spring	17-7PH
21	Stem	ASTM A182 F316L
22	Stem Bearing	METAL PACKED PTFE
23	"O"-Ring	VITON
24	Thrust Washer	PTFE
25	Thrust Bearing	PTFE
26	Gasket	Graphite+304
27	Bolt	ASTM A193 B7M
28	Connection Plate	ASTM A182 F316L
29	Packing	Graphite
30	Gland	ASTM A216 WCB
31	Stoper	A3 · HZn
32	Snap	65Mn
33	Bolt	ASTM A193 B7M
34	Lever	ASTM A216 WCB
35	Anti-Static Device	Assembly
36	Sealant Fitting	ASTM A105 · HZn
37	Release Valve	ASTM A105 · HZn
38	Bolt (Not Shown)	ASTM A193 B7M
39	Key	AISI 1045
40	Connector	ASTM A105N
41	Gear Operator	ASSEMBLY
42	Yoke	ASTM A216 WCB
43	Gland	ASTM A216 WCB
44	Packing Ring	ASTM A182 F6a
45	Packing	Graphite

SEE 300LB PRESSURE CLASS TABLE FOR DIMENSIONS

WILLIAM E. WILLIAMS VALVE CORPORATION  
 38-52 REVIEW AVENUE LONG ISLAND CITY, NY 11101  
 TEL: 718-392-1660 FAX: 718-729-5106

TITLE: CAST STEEL TRUNNION BALL VALVE  
 CLASS 300 - RF - 2 PIECE - FULL PORT - GEAR OPTION

		MARKING SYSTEM			MSS-SP-25	INSPECTION & TEST: API 6D			MATERIAL: A216 WCB		UNITS: Inch, mm	
		DIM. OF FLANGE			ASME B16.5	SHELL	HYDRO	1125PSI	CLASS: 300	DATE: 01/04/13	SCALE: N.T.S.	
		FACE TO FACE			API 6D	SEAT	AIR	80PSI	SIZE: SEE TABLE		FIG. No.: T37F-6RT	
		FIRE SAFE			API 607	BACK SEAT	HYDRO	N/A	DRAWN BY: F.J.		T37F-6RT GO	
NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGNED	API 6D	NACE MR 0175	CHK'D & APR'D BY: R.P.	REV: 1	DWG No.: 15BA120003-T-WEB	

Full Port Trunnion Ball Valves Dimension Table

Full Port Trunnion Ball Valves 300lb

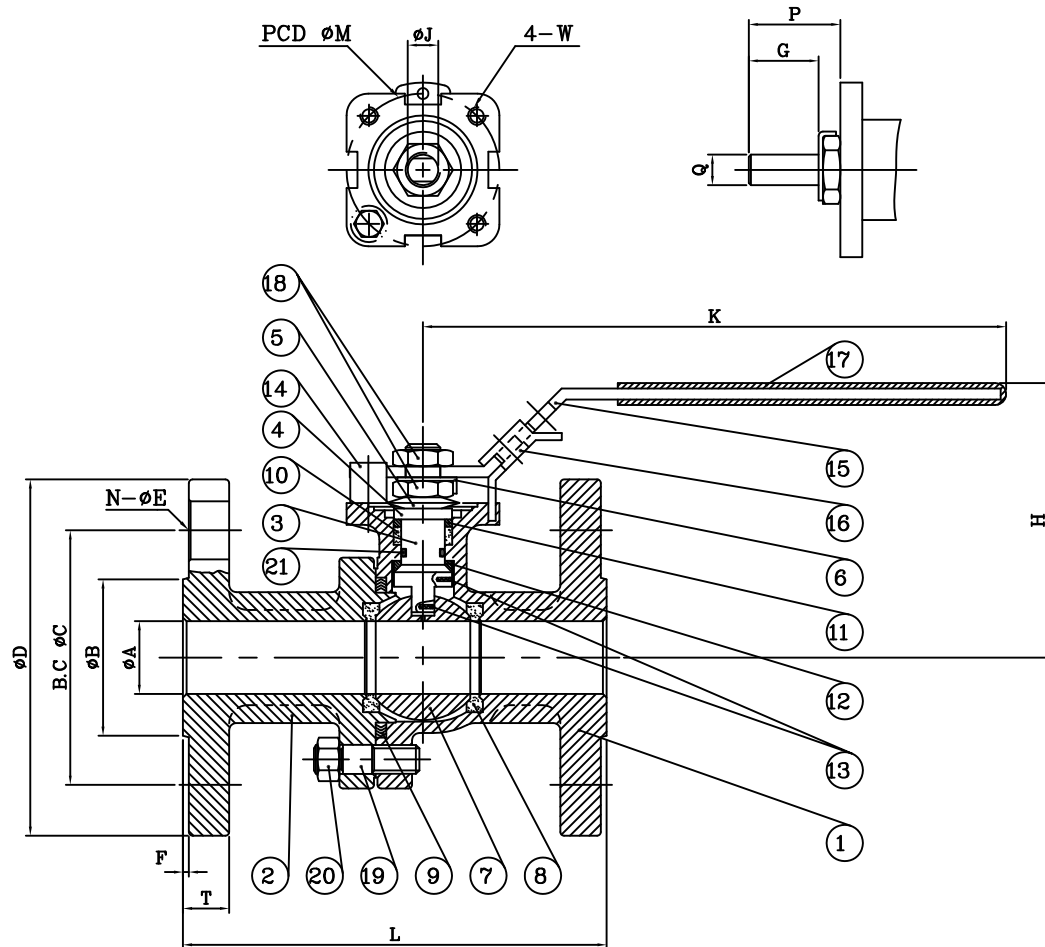
Dimensions: inches (millimeters)

SIZES	d	L	D	D1	D2	T	N-ØD	H
	Size	Face to Face	Outside Diameter of Flange	Bolt Circle	Outside Diameter of Raised Face	Flange Thickness	No. of Holes / Hole Diameter	Center to Top
2"	2 (50)	8-1/2 (216)	6-1/2 (165)	5 (127)	3-5/8 (92)	13/16 (21)	8-Ø3/4 (19)	3-21/32 (93)
3"	3 (75)	11-9/64 (283)	8-1/4 (210)	6-5/8 (168.5)	5 (127)	1-1/16 (27)	8-Ø7/8 (22)	4-21/32 (118.5)
4"	4 (100)	12 (305)	10 (255)	7-7/8 (200)	6-7/8 (175)	1-1/4 (30.5)	8-Ø7/8 (22)	5-21/32 (143.5)
6"	6 (150)	15-7/8 (403)	12-1/2 (320)	10-5/8 (270)	8-1/2 (216)	1-3/8 (35)	12-Ø7/8 (22)	8-3/16 (208)
8"	8 (201)	19-3/4 (502)	15 (380)	13 (330)	10-5/8 (270)	1-9/16 (40)	12-Ø1 (25)	9-3/4 (248)
10"	10 (252)	22-3/8 (568)	17-1/2 (445)	15-1/4 (387.5)	12-3/4 (324)	1-27/32 (46.5)	16-Ø1-9/64 (29)	11-9/16 (294)
12"	12 (303)	25-1/2 (648)	20-1/2 (520)	17-3/4 (451)	15 (381)	1-15/16 (49.5)	16-Ø1-1/4 (32)	13-9/16 (344.5)
14"	13-3/4 (334)	30 (762)	23 (585)	20-1/4 (514.5)	16-1/4 (413)	2-1/16 (52.5)	20-Ø1-1/4 (32)	14-27/32 (377)
16"	15-1/4 (385)	33 (838)	25-1/2 (650)	22-1/2 (571.5)	18-1/2 (470)	2-1/4 (56)	20-Ø1-3/8 (35)	16-15/32 (418)
18"	17-1/4 (436)	36 (914)	28 (710)	24-3/4 (628.5)	21 (533)	2-5/16 (59)	24-Ø1-3/8 (35)	18-7/32 (463)
20"	19-1/4 (487)	39 (991)	30-1/2 (775)	27 (686)	23 (584)	2-7/16 (62)	24-Ø1-3/8 (35)	19-3/4 (502)
24"	23-1/4 (589)	45 (1143)	36 (915)	32 (813)	27-1/4 (692)	2-11/16 (68.5)	24-Ø1-5/8 (41)	23-5/16 (592)
26"	25 (633)	49 (1245)	38-1/4 (972)	34-1/2 (876.5)	29-1/2 (749)	3 (79)	28-Ø1-3/4 (45)	24-15/16 (633)
28"	27 (684)	53 (1346)	40-3/4 (1035)	37 (940)	31-1/2 (800)	3-3/8 (86)	28-Ø1-3/4 (45)	26-3/4 (680)
30"	29 (735)	55 (1397)	43 (1092)	39-1/4 (997)	33-3/4 (857)	3-5/8 (92)	28-Ø1-7/8 (48)	28-3/4 (730)
32"	30-11/16 (779)	60 (1524)	45-1/4 (1149)	41-1/2 (1054)	36 (914)	3-7/8 (98)	28-Ø2 (51)	30-1/8 (765)
36"	34-7/16 (874)	68 (1727)	50 (1270)	46 (1168)	40-1/4 (1022)	4-1/8 (105)	32-Ø2-1/8 (54)	33-11/32 (847)
40"	38-7/16 (976)	77 (1956)	48-3/4 (1238)	45-1/2 (1156)	42-3/4 (1086)	4-1/2 (114)	32-Ø1-3/4 (45)	36-1/4 (921)
42"	40-5/32 (1020)	82 (2083)	50-3/4 (1289)	47-1/2 (1206.5)	44-3/4 (1137)	4-11/16 (119)	32-Ø1-3/4 (45)	36-7/8 (936)
48"	45-29/32 (1166)	85-1/2 (2170)	57-3/4 (1467)	54 (1372)	51-1/4 (1302)	5-9/32 (134)	32-Ø2 (51)	43-1/32 (1093)
56"	53-1/2 (1360)	108 (2743)	67-1/4 (1708)	63 (1600)	59-3/4 (1518)	6-1/16 (154)	28-Ø2-3/8 (60)	49-3/4 (1263)

\*Does not include 1/16" raised face in the 150lb and 300lb standards. Does not include 1/4" raised face in 400lb and heavier standards.



# Wm. E. Williams No. W17F-6RT Class 150 RF Full Port Ball Valve ASTM A216 Gr. WCB NACE



21	O-RING	VITON	1
20	NUT	STEEL(2HM)	4
19	STUD	STEEL(B7M)	4
18	THIN NUT	SS304	2
17	PLASTIC COVER	PLASTIC	1
16	LOCATING LOCK	SS304	1
15	HANDLE	SS304	1
14	SET SLEEVE	SS304	1
13	ANTI-STATIC	SS316	2
12	THRUST WASHER	TFM+ 25% CARBON	1
11	PACKING(2)	50% PTFE + 50% 316	1
10	PACKING(1)	GRAPHITE	1
9	GASKET	SPIRAL WOUND WIRE (316/GRAPHITE)	1
8	SEAT	RPTFE	2
7	BALL	A351-CF8M	1
6	LOCK WASHER	SS304	1
5	DISK SPRING WASHER	SS301	2
4	SLEEVE	SS304	1
3	STEM	SS316	1
2	CAP	A216-WCB	1
1	BODY	A216-WCB	1
NO	PART NAME	MATERIAL	Q'TY

## BILL OF MATERIALS

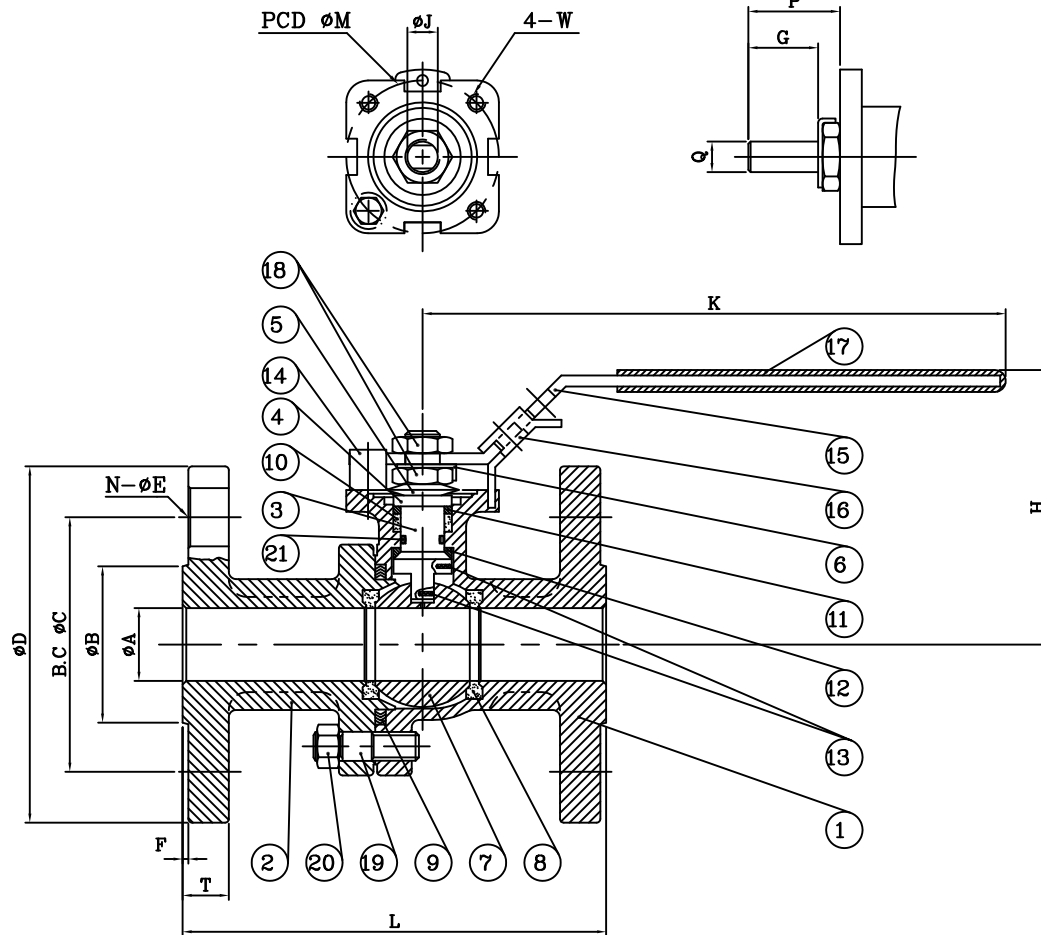
SIZE	A	B	C	D	T	F	N	E	H	K	L	M	J	Q	G	P	W
1/2"	15	35	60.5	89	11.2	1.6	4	16	66	165	108	42	9.3	6.35	8	14	10-24UNC

WILLIAM E. WILLIAMS VALVE CORPORATION  
 38-52 REVIEW AVENUE LONG ISLAND CITY, NY 11101  
 TEL: 718-392-1660 FAX: 718-729-5106

TITLE: CAST STEEL FLOATING BALL VALVE CLASS 150 - FULL PORT	
MATERIAL: A216 WCB	UNITS: Inch, mm
PRESSURE: 150	DATE: 01/25/16
SCALE: N.T.S.	FIG. No.: W17F-6RT
SIZE: 1/2"	DRAWN BY: F.J.
SEAT: HYDRO	325PSI
CHKD & APR'D BY: R.P.	REV: 1
DWG No.: 17BA120003-5-W	

MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST:	API 598					
DIM.OF FLANGE	ASME B16.5	SHELL	HYDRO 450PSI					
FACE TO FACE	API 608	SEAT	AIR 80PSI					
FIRE SAFE	API 607	SEAT	HYDRO 325PSI					
DESIGNED	API 608	NACE MR 0175						
NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGNED	API 608	NACE MR 0175
Δ	1/25/16	RELEASED	F.J.	R.P.	R.P.			

# Wm. E. Williams No. W17F-6RT Class 150 RF Full Port Ball Valve ASTM A216 Gr. WCB NACE



21	O-RING	VTON	1
20	NUT	STEEL(2HM)	4
19	STUD	STEEL(B7M)	4
18	THIN NUT	SS304	2
17	PLASTIC COVER	PLASTIC	1
16	LOCATING LOCK	SS304	1
15	HANDLE	SS304	1
14	SET SLEEVE	SS304	1
13	ANTI-STATIC	SS316	2
12	THRUST WASHER	TFM+ 25% CARBON	1
11	PACKING(2)	50% PTFE + 50% 316	1
10	PACKING(1)	GRAPHITE	1
9	GASKET	SPIRAL WOUND WIRE (316/GRAPHITE)	1
8	SEAT	RPPTFE	2
7	BALL	A351-CF8M	1
6	LOCK WASHER	SS304	1
5	DISK SPRING WASHER	SS301	2
4	SLEEVE	SS304	1
3	STEM	SS316	1
2	CAP	A216-WCB	1
1	BODY	A216-WCB	1
NO	PART NAME	MATERIAL	Q'TY

BILL OF MATERIALS

SIZE	A	B	C	D	T	F	N	E	H	K	L	M	J	Q	G	P	W
2"	50	92	120.5	152	19.1	1.6	4	19	115	265	178	70	15.7	9.5	14	23	5/16-18UNC

WILLIAM E. WILLIAMS VALVE CORPORATION

38-52 REVIEW AVENUE  
LONG ISLAND CITY, NY 11101

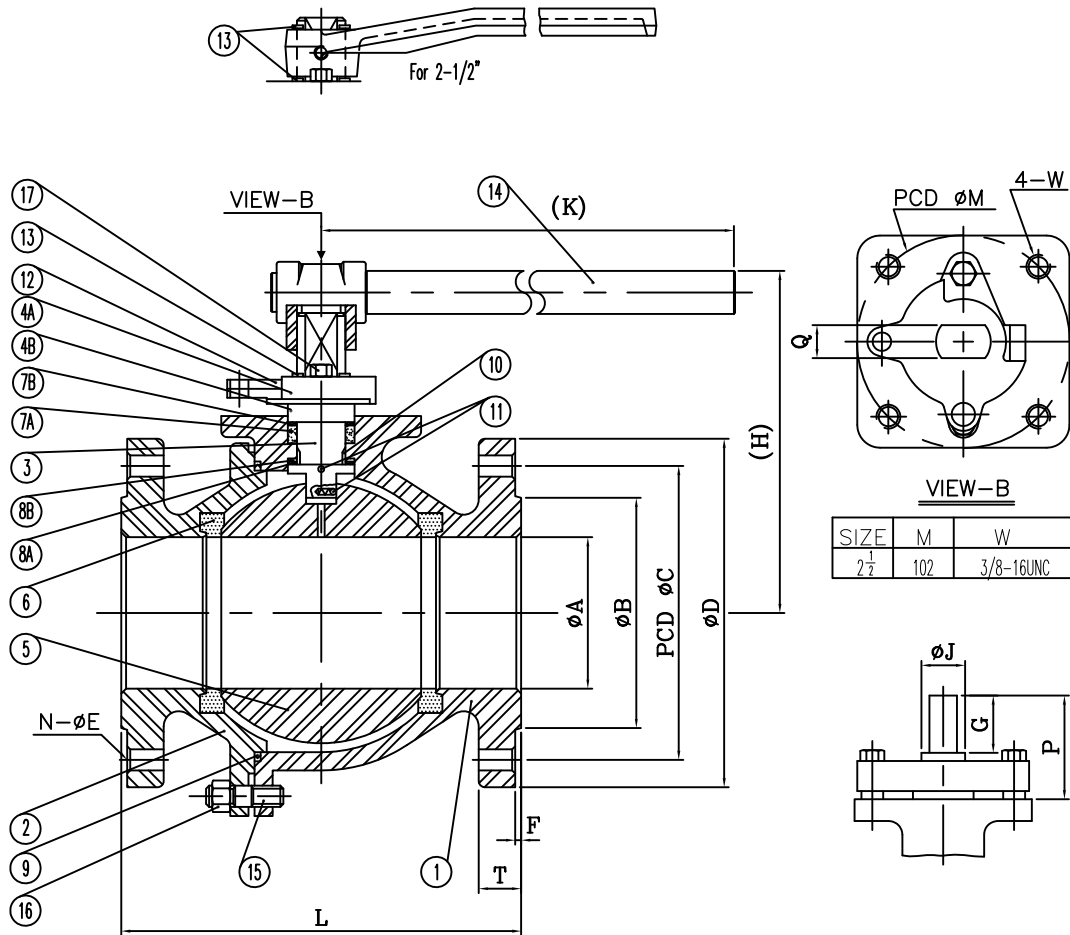
TEL: 718-392-1660  
FAX: 718-729-9106

TITLE: CAST STEEL FLOATING BALL VALVE CLASS 150 - FULL PORT		MATERIAL: A216 WCB	UNITS: Inch, mm
PRESSURE: 150		DATE: 01/25/16	SCALE: N.T.S.
SIZE: 2"		FIG. No.: W17F-6RT	
DRAWN BY: F.J.		CHK'D & APR'D BY: R.P.	
REV: 1		DWG No.: 17BA120003-2-W	

NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGNED	MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 598
							DIM.OF FLANGE	ASME B16.5	SHELL HYDRO 450PSI
							FACE TO FACE	API 608	SEAT AIR 80PSI
							FIRE SAFE	API 607	SEAT HYDRO 325PSI
								API 608	NACE MR 0175

# Wm. E. Williams No. W17F-6RT Class 150 RF Full Port Ball Valve ASTM A216 Gr. WCB NACE

Nominal	Size	
	mm	inch
	2 1/2"	
A	65	2.5
B	105	4.13
C	139.5	5.49
D	178	7
E	19	0.75
F	1.6	0.06
T	22.3	0.88
N	4	4
H	165	6.5
K	390	15.35
L	190	7.48
J	28	1.1
Q	17	0.67
G	44.5	1.75
P	78	3.07



NO.	PART NAME	Q'TY	MATERIAL
			CARBON STEEL
1	BODY	1	A216 -WCB
2	CAP	1	A216 -WCB
3	STEM	1	SS316
4A	GLAND	1	A216 -WCB
4B	SLEEVE	1	STEEL
5	BALL	1	A351-CF8M
6	SEAT	2	RPTFE
7A	PACKING(1)	1	GRAPHITE
7B	PACKING(2)	1	50%PTFE+50%316
8A	THRUST WASHER(1)	1	50%PTFE+50%316
8B	THRUST WASHER(2)	1	RPTFE
9	GASKET	1	SPRIAL WOUND WIRE (316/GRAPHITE)
10	STEM BEARING	1	RPTFE
11	ANTI-STATIC	2	SS316
12	TRAVEL STOPPER	1	STEEL PLATED
13	SNAP RING	1~2	NICKEL PLATED CARBON STEEL
14	HANDLE	1	DUCTILE IRON (FCD )/PIPE GRIP(S15C)
15	STUD	4~10	STEEL(B7M)
16	NUT	4~10	STEEL(2HM)
17	GLAND BOLT	2	STEEL

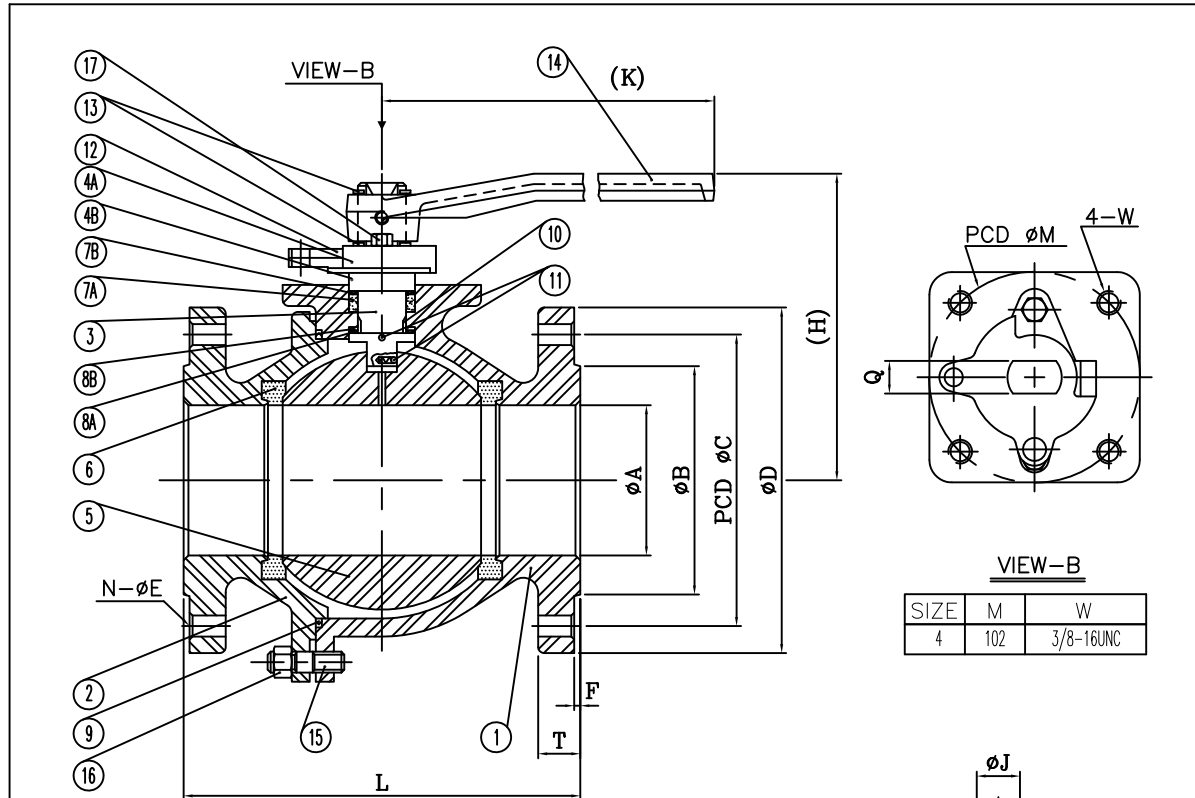
SIZE	M	W
2 1/2"	102	3/8-16UNC

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 TEL: 718-393-1660 FAX: 718-729-5166

TITLE: CAST STEEL FLOATING BALL VALVE CLASS 150 - FULL PORT		MATERIAL: A216 WCB	UNITS: Inch, mm
DATE: 5/13/16	RELEASED	DATE: 05/13/16	SCALE: N.T.S.
FIG. No.:	W17F-6RT	DRAWN BY: F.J.	CHK'D & APR'D BY: R.P.
NO.	DATE	DESCRIPTION	PRP'D
DESIGNED	API 608	NACE MR 0175	

MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 598
DIM.OF FLANGE	ASME B16.5	SHELL HYDRO 450PSI
FACE TO FACE	API 608	SEAT AIR 80PSI
FIRE SAFE	API 607	SEAT HYDRO 325PSI
DESIGNED	API 608	NACE MR 0175

# Wm. E. Williams No. W17F-6RT Class 150 RF Full Port Ball Valve ASTM A216 Gr. WCB NACE



BILL OF MATERIALS			
NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	A216 -WCB
2	CAP	1	A216 -WCB
3	STEM	1	SS316
4A	GLAND	1	A216 -WCB
4B	SLEEVE	1	STEEL
5	BALL	1	A351-CF8M
6	SEAT	2	RPTFE
7A	PACKING(1)	1	GRAPHITE
7B	PACKING(2)	1	50%PTFE+50%316
8A	THRUST WASHER(1)	1	50%PTFE+50%316
8B	THRUST WASHER(2)	1	RPTFE
9	GASKET	1	SPRIAL WOUND WIRE (316/GRAPHITE)
10	STEM BEARING	1	RPTFE
11	ANTI-STATIC	2	SS316
12	TRAVEL STOPPER	1	STEEL PLATED
13	SNAP RING	1	NICKEL PLATED CARBON STEEL
14	HANDLE	1	DUCTILE IRON (FCD )/PIPE GRIP(S15C)
15	STUD	8	STEEL(B7M)
16	NUT	8	STEEL(2HM)
17	GLAND BOLT	2	STEEL

SIZE	M	W
4	102	3/8-16UNC

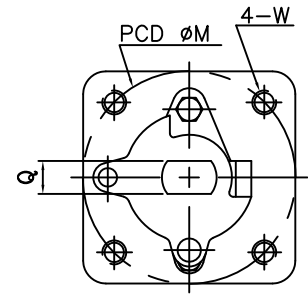
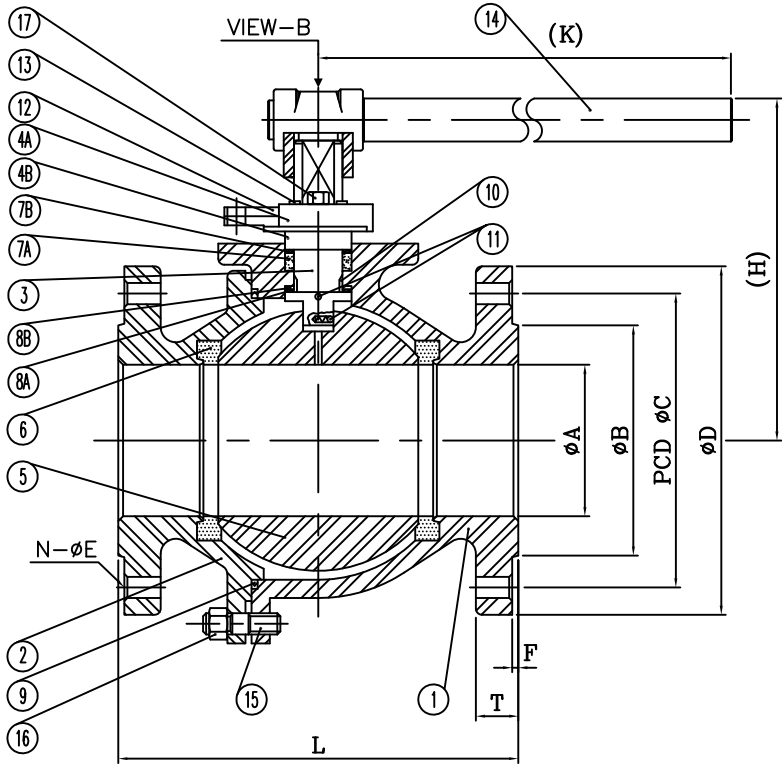
Nominal	Size	
	M M	IN
4"	100	4
A	101.5	4
B	157	6.18
C	190.5	7.5
D	229	9.02
E	19	0.75
F	1.6	0.06
T	23.9	0.94
N	8	8
H	183	7.2
K	390	15.35
L	229	9.02
J	28	1.1
Q	17	0.67
G	44.5	1.75
P	78	3.07

NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 598	MATERIAL: A216 WCB	UNITS: Inch, mm	
						DIM.OF FLANGE	ASME B16.5	SHELL	HYDRO	450PSI	SCALE: N.T.S.
						FACE TO FACE	API 608	SEAT	AIR	80PSI	FIG. No.: W17F-6RT
						FIRE SAFE	API 607	SEAT	HYDRO	325PSI	DRAWN BY: F.J.
						DESIGNED	API 608	NACE MR 0175	CHK'D & APR'D BY: R.P.	REV: 1	DWG No.: 17BA120003-4-W

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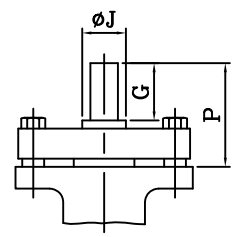
TITLE: CAST STEEL FLOATING BALL VALVE CLASS 150 - FULL PORT

# Wm. E. Williams No. W17F-6RT Class 150 RF Full Port Ball Valve ASTM A216 Gr. WCB NACE



VIEW-B

SIZE	M	W
6	125	1/2-13UNC



BILL OF MATERIALS			
NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	A216 -WCB
2	CAP	1	A216 -WCB
3	STEM	1	SS316
4A	GLAND	1	A216 -WCB
4B	SLEEVE	1	STEEL
5	BALL	1	A351-CF8M
6	SEAT	2	RPTFE
7A	PACKING(1)	1	GRAPHITE
7B	PACKING(2)	1	50%PTFE+50%316
8A	THRUST WASHER(1)	1	50%PTFE+50%316
8B	THRUST WASHER(2)	1	RPTFE
9	GASKET	1	SPRIAL WOUND WIRE (316/GRAPHITE)
10	STEM BEARING	1	RPTFE
11	ANTI-STATIC	2	SS316
12	TRAVEL STOPPER	1	STEEL PLATED
13	SNAP RING	1	NICKEL PLATED CARBON STEEL
14	HANDLE	1	DUCTILE IRON (FCD )/PIPE GRIP(S15C)
15	STUD	8	STEEL(B7M)
16	NUT	8	STEEL(2HM)
17	GLAND BOLT	2	STEEL

SIZE	A	B	C	D	n-øE	F	T	H	K	L	J	Q	G	P
6"	152	216	241.5	279	8-22	1.6	25.4	285	650	394	43.5	26	42	91

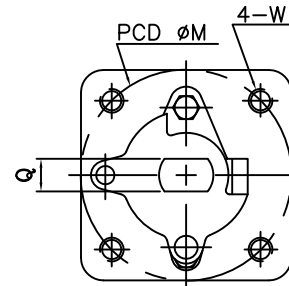
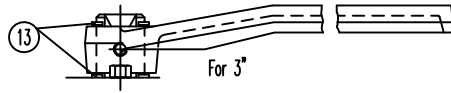
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 28-52 REVIEW AVENUE LONG ISLAND CITY, NY 11101  
 TEL: 718-392-1660 FAX: 718-729-5106

TITLE: CAST STEEL FLOATING BALL VALVE CLASS 150 - FULL PORT		MATERIAL: A216 WCB	UNITS: Inch, mm
DATE: 06/22/15	SCALE: N.T.S.	INSPECTION & TEST: API 598	FIG. No.: W17F-6RT
DESIGNED: API 608	SEAT: AIR	HYDRO: 80PSI	DRAWN BY: F.J.
PRP'D: F.J.	REV'D: R.P.	APP'D: R.P.	CHK'D & APR'D BY: R.P.
NO. DATE	DESCRIPTION	PRP'D	REV'D
6/22/15	RELEASED		

MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 598	MATERIAL: A216 WCB	UNITS: Inch, mm
DIM.OF FLANGE	ASME B16.5	SHELL	HYDRO	450PSI
FACE TO FACE	API 608	SEAT	AIR	80PSI
FIRE SAFE	API 607	SEAT	HYDRO	325PSI
DESIGNED	API 608	NACE MR 0175	CHK'D & APR'D BY: R.P.	REV: 1

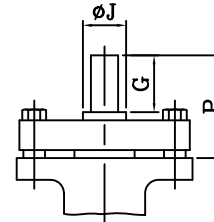
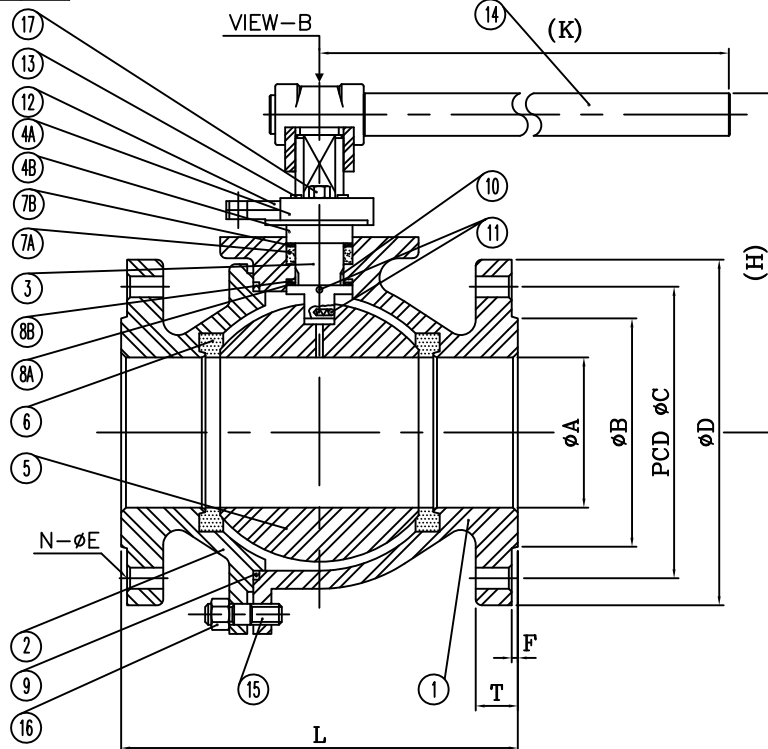
# Wm. E. Williams No. W17F-6RT Class 150 RF Full Port Ball Valve ASTM A216 Gr. WCB NACE

Nominal	8"	
	M M	IN
A	200	8
B	270	10.63
C		11.75
D	343	13.5
E	22	0.87
F	1.6	0.06
T	28.6	1.13
N	8	8
H	294	11.57
K	950	37.4
L	457	18
J	43.5	1.71
Q	26	1.02
G	42	1.65
P	91	3.58



VIEW-B

SIZE	M	W
8	125	1/2-13UNC



NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	A216 -WCB
2	CAP	1	A216 -WCB
3	STEM	1	SS316
4A	GLAND	1	A216 -WCB
4B	SLEEVE	1	STEEL
5	BALL	1	A351-CF8M
6	SEAT	2	RPTFE
7A	PACKING(1)	1	GRAPHITE
7B	PACKING(2)	1	50%PTFE+50%316
8A	THRUST WASHER(1)	1	50%PTFE+50%316
8B	THRUST WASHER(2)	1	RPTFE
9	GASKET	1	SPRIAL WOUND WIRE (316/GRAPHITE)
10	STEM BEARING	1	RPTFE
11	ANTI-STATIC	2	SS316
12	TRAVEL STOPPER	1	STEEL PLATED
13	SNAP RING	1~2	NICKEL PLATED CARBON STEEL
14	HANDLE	1	DUCTILE IRON (FCD )/PIPE GRIP(S15C)
15	STUD	6~10	STEEL(B7M)
16	NUT	6~10	STEEL(2HM)
17	GLAND BOLT	2	STEEL

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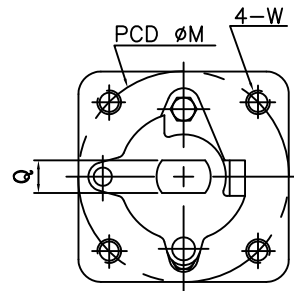
TITLE: CAST STEEL FLOATING BALL VALVE CLASS 150 - FULL PORT

NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 598	MATERIAL: A216 WCB	UNITS: Inch, mm
						DIM.OF FLANGE	ASME B16.5	SHELL	HYDRO	450PSI
						FACE TO FACE	API 608	SEAT	AIR	80PSI
						FIRE SAFE	API 607	SEAT	HYDRO	325PSI
							API 608	NACE MR 0175	CHK'D & APR'D BY: R.P.	REV: 1

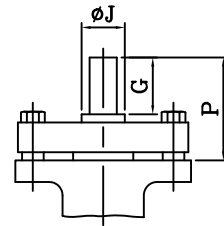
DATE: 07/13/16	SCALE: N.T.S.
DRAWN BY: F.J.	FIG. No.: W17F-6RT
DWG No.: 17BA120003-8-W	

# Wm. E. Williams No. W17F-6RT Class 150 RF Full Port Ball Valve ASTM A216 Gr. WCB NACE

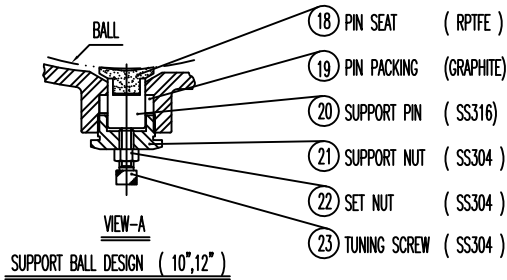
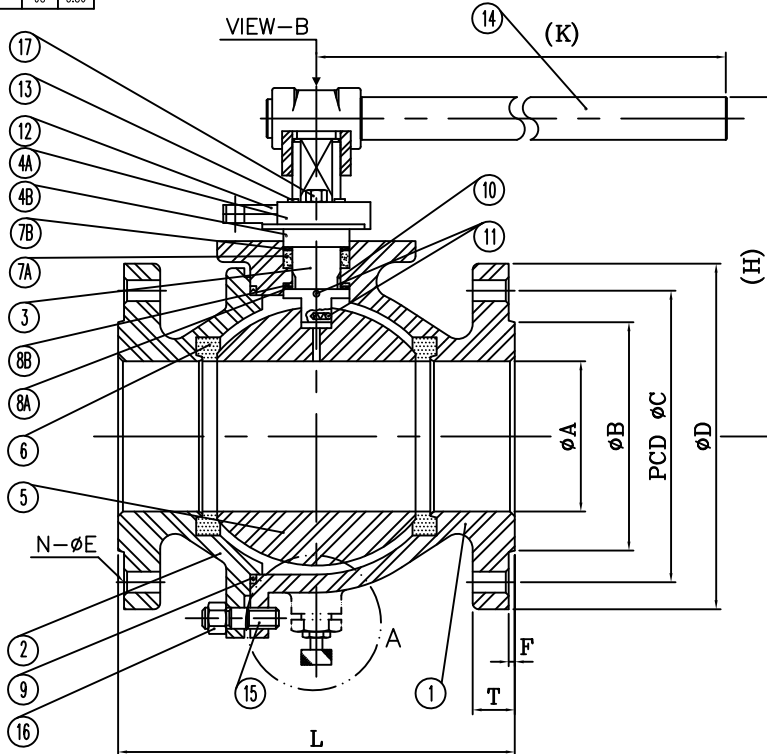
Nominal	TOL	Size	
		M.M	IN
		250	10
A		250	10
B		324	12.76
C		362	14.25
D		406	16
E		25	1
F		1.6	0.06
T		30.2	1.19
N		12	12
H		372	14.65
K		1100	43.3
L		533	21
J		50	1.97
Q		35	1.38
G		54	2.13
P		98	3.86



SIZE	M	W
10	140	5/8-11UNC



NO.	PART NAME	Q'TY	MATERIAL
			CARBON STEEL
1	BODY	1	A216 -WCB
2	CAP	1	A216 -WCB
3	STEM	1	SS316
4A	GLAND	1	A216 -WCB
4B	SLEEVE	1	STEEL
5	BALL	1	A351-CF8M
6	SEAT	2	RPTFE
7A	PACKING(1)	1	GRAPHITE
7B	PACKING(2)	1	50%PTFE+50%316
8A	THRUST WASHER(1)	1	50%PTFE+50%316
8B	THRUST WASHER(2)	1	RPTFE
9	GASKET	1	SPRIAL WOUND WIRE (316/GRAPHITE)
10	STEM BEARING	1	RPTFE
11	ANTI-STATIC	2	SS316
12	TRAVEL STOPPER	1	STEEL PLATED
13	SNAP RING	1	NICKEL PLATED CARBON STEEL
14	HANDLE	1	DUCTILE IRON (FCD )/PIPE GRIP(S15C)
15	STUD	16	STEEL(B7M)
16	NUT	16	STEEL(2HM)
17	GLAND BOLT	2	STEEL



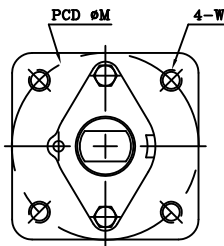
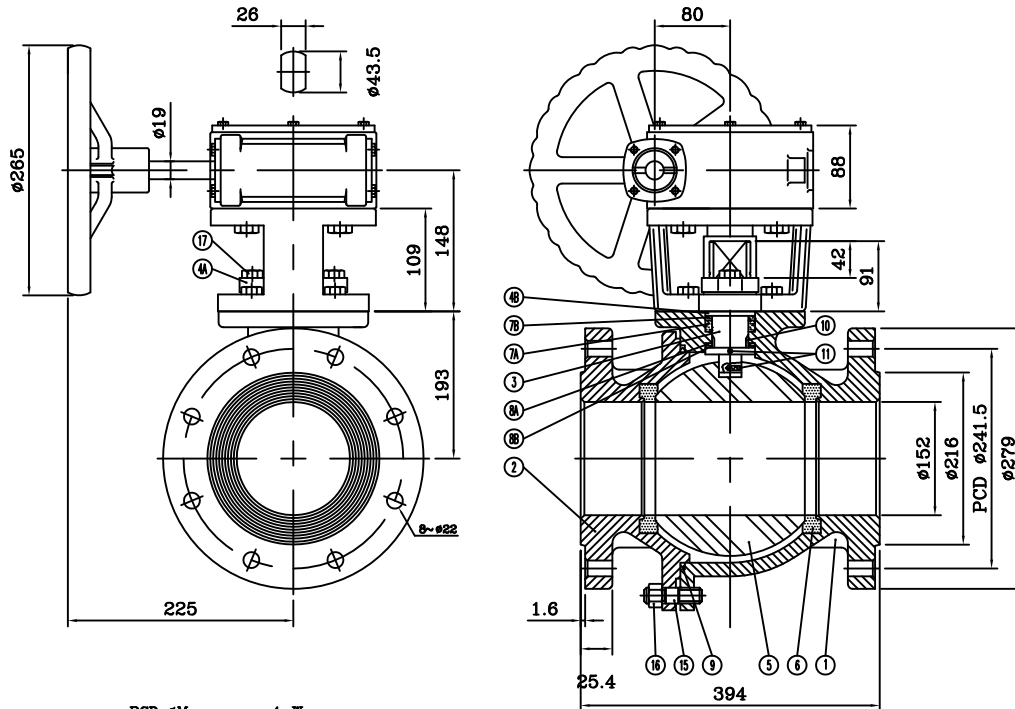
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 38-52 REVIEW AVENUE LONG ISLAND CITY, NY 11101  
 TEL: 718-392-1660 FAX: 718-729-5106

TITLE: CAST STEEL FLOATING BALL VALVE CLASS 150 - FULL PORT

					MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST:	API 598	MATERIAL:	A216 WCB	UNITS:	Inch, mm					
					DIM.OF FLANGE	ASME B16.5	SHELL	HYDRO	450PSI	PRESSURE:	150	DATE:	01/18/18	SCALE:	N.T.S.		
					FACE TO FACE	API 608	SEAT	AIR	80PSI	SIZE:	10"	FIG. No.:	W17F-6RT				
					FIRE SAFE	API 607	SEAT	HYDRO	325PSI	DRAWN BY:	F.J.						
					NO. DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGNED	API 608	NACE MR 0175	CHK'D & APR'D BY:	R.P.	REV: 1	DWG No.:	17BA120003-10-W

1/18/18 RELEASED F.J. R.P. R.P.

# Wm. E. Williams No. W17F-6RT GO Class 150 RF Full Port Ball Valve ASTM A216 Gr. WCB NACE



VIEW-B

SIZE	M	W
6	125	1/2-13UNC

NO.	PART NAME	Q'TY	MATERIAL
			CARBON STEEL
1	BODY	1	A216-WCB
2	CAP	1	A216-WCB
3	STEM	1	SS316
4A	GLAND	1	A216-WCB
4B	SLEEVE	1	STEEL
5	BALL	1	A351-CF8M
6	SEAT	2	RPTFE
7A	STEM PACKING(1)	1	GRAPHITE
7B	PACKING PROTECTOR(2)	1	50%PTFE+50%316
8A	THRUST WASHER(2)	1	RPTFE
8B	WASHER PROTECTOR(1)	1	50%PTFE+50%316
9	GASKET	1	SPRIAL WOUND WIRE (316/GRAPHITE)
10	STEM BEARING	1	RPTFE
11	ANTI-STATIC	2	SS316
15	STUD	10	STEEL(B7M)
16	NUT	10	STEEL(2HM)
17	GLAND BOLT	2	STEEL

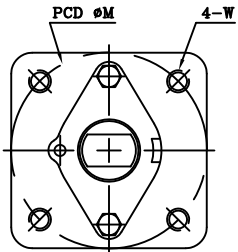
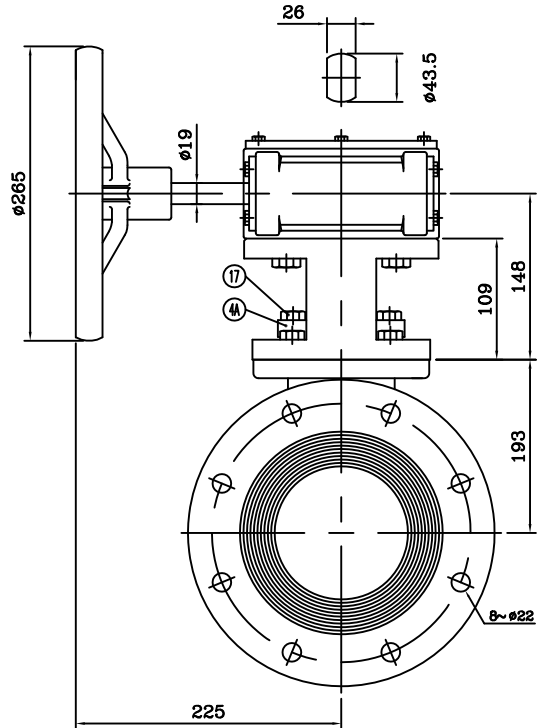
WILLIAM E. VALVE CORPORATION  
 38-52 REVIEW AVENUE  
 LONG ISLAND CITY, NY 11101  
 TEL: 718-392-1660  
 FAX: 718-729-5106

TITLE: CAST STEEL FLOATING BALL VALVE  
 CLASS 150 - FULL PORT - GEAR OPERATED

					MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 598	MATERIAL: A216 WCB	UNITS: Inch, mm
					DIM. OF FLANGE	ANSI B16.5	SHELL HYDRO 425PSI	PRESSURE: 150	DATE: 01/31/18
					FACE TO FACE	API 608	SEAT AIR 80PSI	SIZE: 6"	FIG. No.: W17F-6RT GO
					FIRE SAFE	API 607	BACK SEAT HYDRO N/A	DRAWN BY: F.J.	
NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGNED	API 608	NACE MR 0175	CHK'D & APR'D BY: R.P.
								REV: 1	DWG No.: 17BA120004-G-W

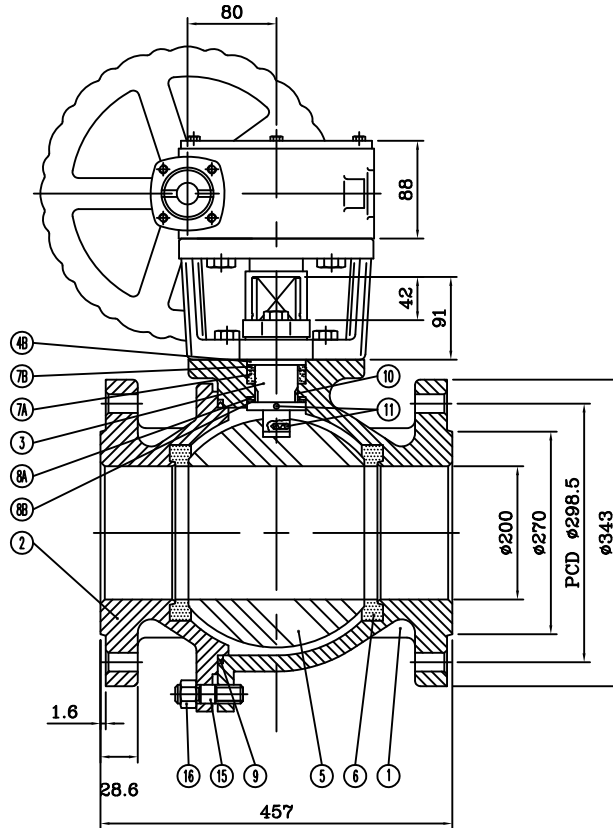


# Wm. E. Williams No. W17F-6RT GO Class 150 RF Full Port Ball Valve ASTM A216 Gr. WCB NACE



VIEW-B

SIZE	M	W
8	125	1/2-13UNC



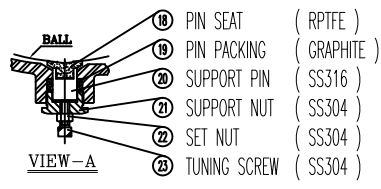
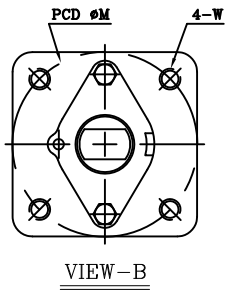
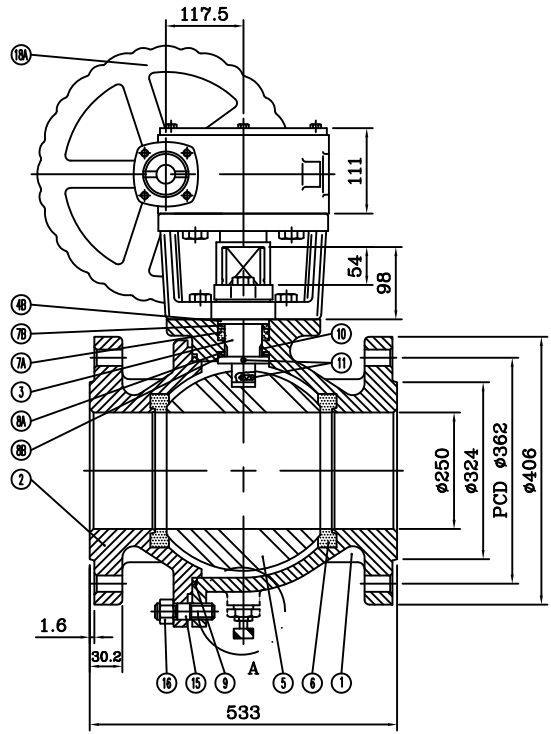
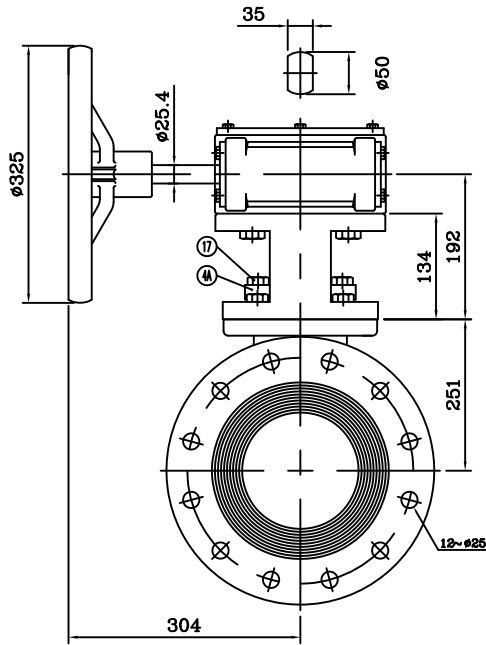
NO.	PART NAME	Q'TY	MATERIAL
			CARBON STEEL
1	BODY	1	A216-WCB
2	CAP	1	A216-WCB
3	STEM	1	SS316
4A	GLAND	1	A216-WCB
4B	SLEEVE	1	STEEL
5	BALL	1	A351-CF8M
6	SEAT	2	RPTFE
7A	STEM PACKING(1)	1	GRAPHITE
7B	PACKING PROTECTOR(2)	1	50%PTFE+50%316
8A	THRUST WASHER(2)	1	RPTFE
8B	WASHER PROTECTOR(1)	1	50%PTFE+50%316
9	GASKET	1	SPRIAL WOUND WIRE (316/GRAPHITE)
10	STEM BEARING	1	RPTFE
11	ANTI-STATIC	2	SS316
15	STUD	10	STEEL(B7)
16	NUT	10	STEEL(2H)
17	GLAND BOLT	2	STEEL
18	GEAR	1	

WILLIAM E. WILLIAMS VALVE CORPORATION  
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 TEL: 718-392-1660 FAX: 718-729-5106

TITLE: CAST STEEL FLOATING BALL VALVE CLASS 150 - FULL PORT - GEAR OPERATED

					MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST:	API 598	MATERIAL:	A216 WCB	UNITS:	Inch, mm			
					DIM.OF FLANGE	ANSI B16.5	SHELL	HYDRO	425PSI	PRESSURE:	150	DATE:	03/09/17	SCALE:	N.T.S.
					FACE TO FACE	API 608	SEAT	AIR	80PSI	SIZE:	8"	FIG. No.:	W17F-6RT GO		
					FIRE SAFE	API 607	BACK SEAT	HYDRO	N/A	DRAWN BY:	F.J.	CHK'D & APR'D BY:	R.P.	REV:	1
NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGNED	API 608	NACE MR 0175				DWG No.:	17BA120004-8-W		

# Wm. E. Williams No. W17F-6RT GO Class 150 RF Full Port Ball Valve ASTM A216 Gr. WCB NACE



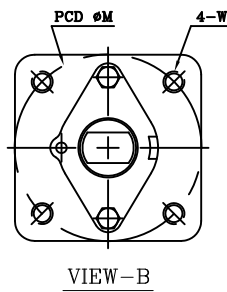
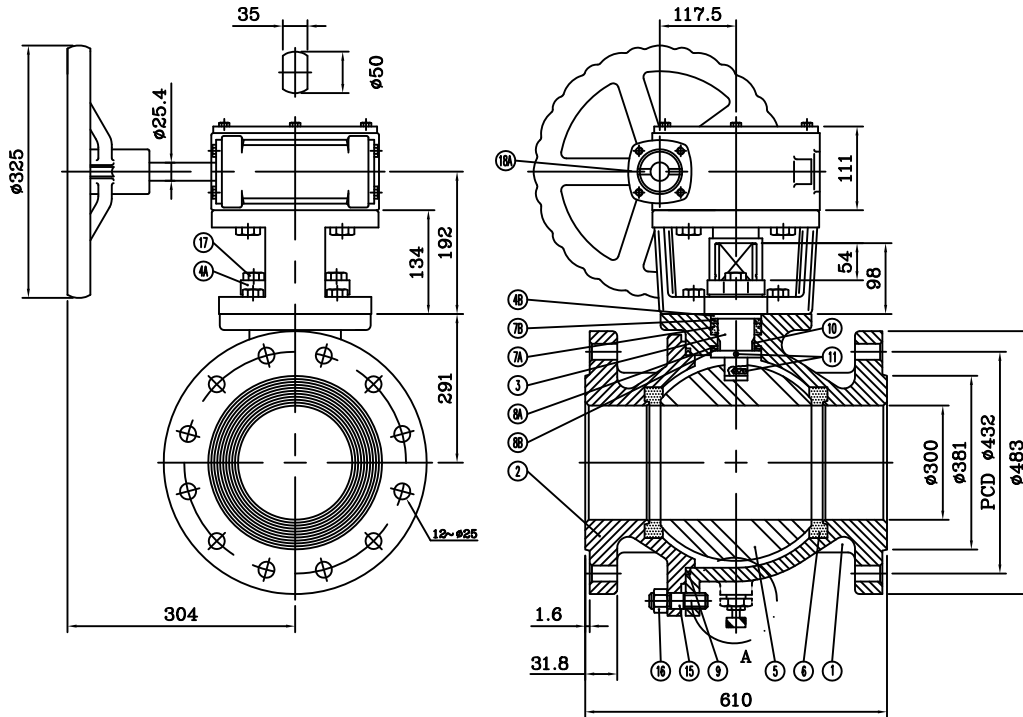
NO.	PART NAME	Q'TY	MATERIAL
			CARBON STEEL
1	BODY	1	A216-WCB
2	CAP	1	A216-WCB
3	STEM	1	SS316
4A	GLAND	1	A216-WCB
4B	SLEEVE	1	STEEL
5	BALL	1	A351-CF8M
6	SEAT	2	RPTFE
7A	STEM PACKING(1)	1	GRAPHITE
7B	PACKING PROTECTOR(2)	1	50%PTFE+50%316
8A	THRUST WASHER(2)	1	RPTFE
8B	WASHER PROTECTOR(1)	1	50%PTFE+50%316
9	GASKET	1	SPRIAL WOUND WIRE (316/GRAPHITE)
10	STEM BEARING	1	RPTFE
11	ANTI-STATIC	2	SS316
15	STUD	16	B7M
16	NUT	16	2HM
17	GLAND BOLT	2	STEEL
18A	GEAR	1	

SIZE	M	W
10	140	5/8-11UNC

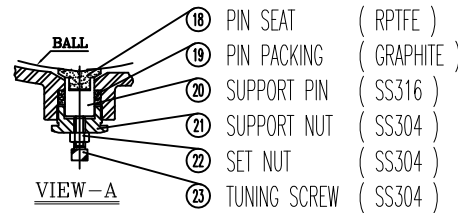
WILLIAM E. VALVE CORPORATION  
 38-52 REVIEW AVENUE LONG ISLAND CITY, NY 11101  
 TEL: 718-399-1660 FAX: 718-729-5106

					MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 598			MATERIAL: A216 WCB	UNITS: Inch, mm		
					DIM.OF FLANGE	ANSI B16.5	SHELL	HYDRO	425PSI	PRESSURE: 150	DATE: 07/14/16	SCALE: N.T.S.	
					FACE TO FACE	API 608	SEAT	AIR	80PSI	SIZE: 10"	FIG. No.: W17F-6RT GO		
					FIRE SAFE	API 607	BACK SEAT	HYDRO	N/A	DRAWN BY: F.J.			
					DESIGNED	API 608	NACE MR 0175				CHK'D & APR'D BY: R.P.	REV: 1	DWG No.:17BA120004-10-W
NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D								
Δ	7/14/16	RELEASED	F.J.	R.P.	R.P.								

# Wm. E. Williams No. W17F-6RT GO Class 150 RF Full Port Ball Valve ASTM A216 Gr. WCB NACE



SIZE	M	W
12	140	5/8-11UNC



NO.	PART NAME	Q'TY	MATERIAL
			CARBON STEEL
1	BODY	1	A216-WCB
2	CAP	1	A216-WCB
3	STEM	1	SS316
4A	GLAND	1	A216-WCB
4B	SLEEVE	1	STEEL
5	BALL	1	A351-CF8M
6	SEAT	2	RPTFE
7A	STEM PACKING(1)	1	GRAPHITE
7B	PACKING PROTECTOR(2)	1	50%PTFE+50%316
8A	THRUST WASHER(2)	1	RPTFE
8B	WASHER PROTECTOR(1)	1	50%PTFE+50%316
9	GASKET	1	SPRIAL WOUND WIRE (316/GRAPHITE)
10	STEM BEARING	1	RPTFE
11	ANTI-STATIC	2	SS316
15	STUD	16	B7M
16	NUT	16	2HM
17	GLAND BOLT	2	STEEL
18A	GEAR	1	

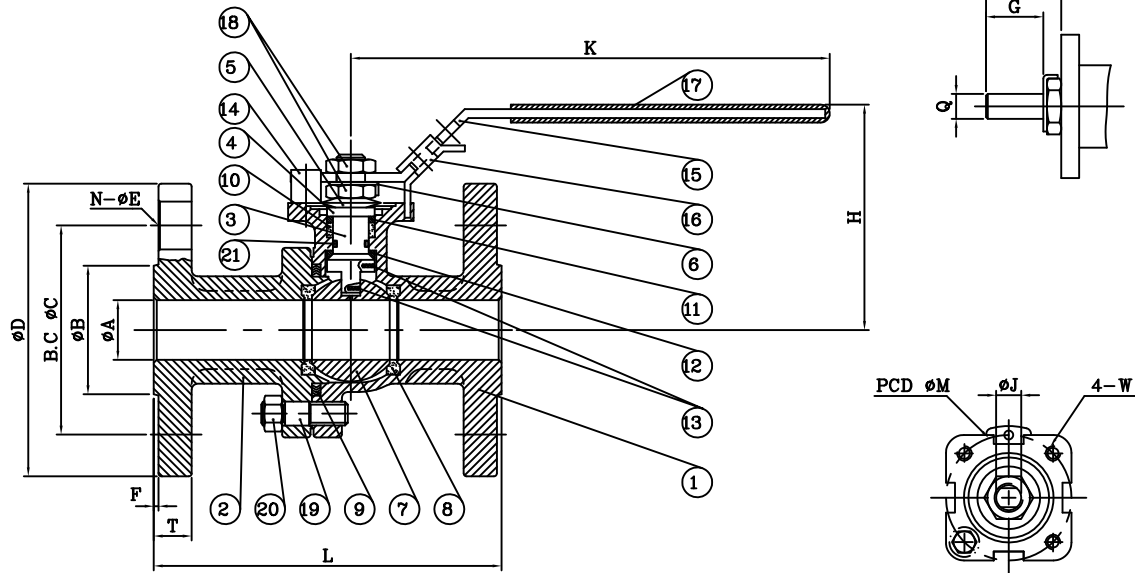
NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 598	MATERIAL: A216 WCB	UNITS: Inch, mm
						DIM.OF FLANGE	ANSI B16.5	SHELL	HYDRO	425PSI
						FACE TO FACE	API 608	SEAT	AIR	80PSI
						FIRE SAFE	API 607	BACK SEAT	HYDRO	N/A
						DESIGNED	API 608	NACE MR 0175		
									PRESSURE: 150	DATE: 07/07/17
									SIZE: 12"	SCALE: N.T.S.
									DRAWN BY: F.J.	FIG. No.: W17F-6RT GO
									CHK'D & APR'D BY: R.P.	REV: 1 DWG No.:17BA120004-12-W

WILLIAM E. WILLIAMS VALVE CORPORATION  
 38-52 REVIEW AVENUE LONG ISLAND CITY, NY 11101  
 TEL: 718-392-1660 FAX: 718-229-5106

TITLE: CAST STEEL FLOATING BALL VALVE CLASS 150 - FULL PORT - GEAR OPERATED



# Wm. E. Williams No. W17F-66RT Class 150 RF Full Port Ball Valve ASTM A351 CF8M NACE



21	O-RING	1	VTON
20	NUT	4	SS316(8M)
19	STUD	4	SS316(B8M)
18	THIN NUT	2	SS304
17	PLASTIC COVER	1	PLASTIC
16	LOCATING LOCK	1	SS304
15	HANDLE	1	SS304
14	SET SLEEVE	1	SS304
13	ANTI-STATIC	2	SS316
12	THRUST WASHER	1	TFM+ 25% CARBON
11	PACKING(2)	1	50% PTFE + 50% 316
10	PACKING(1)	1	GRAPHITE
9	GASKET	1	SPIRAL WOUND WIRE (316/GRAPHITE)
8	SEAT	2	RPTFE
7	BALL	1	A351-CF8M
6	LOCK WASHER	1	SS304
5	DISK SPRING WASHER	2	SS301
4	SLEEVE	1	SS304
3	STEM	1	SS316
2	CAP	1	A351-CF8M
1	BODY	1	A351-CF8M
NO	PART NAME	Q'TY	MATERIAL

## BILL OF MATERIALS

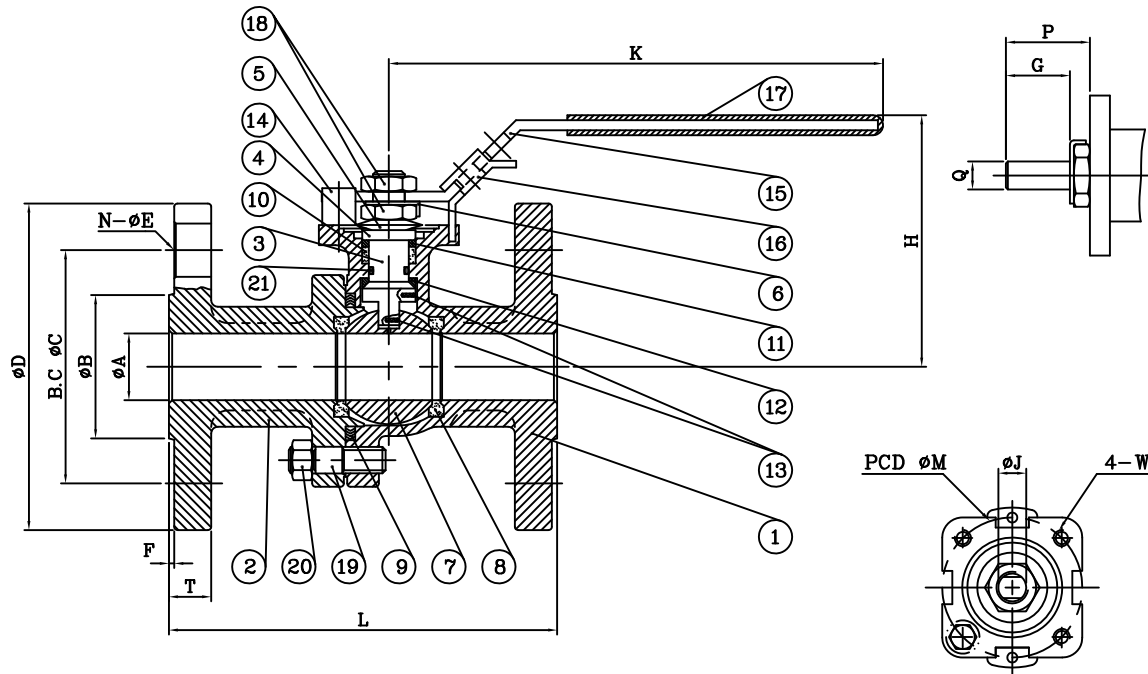
SIZE	A	B	C	D	T	F	N	E	H	K	L	M	J	Q	G	P	W
3/4"	20	43	70	98	12.7	1.6	4	16	74	165	117	42	9.3	6.35	8	14	10-24UNC

WILLIAM E. WILLIAMS VALVE CORPORATION  
 38-52 REVIEW AVENUE LONG ISLAND CITY, NY 11101  
 TEL: 718-392-1660 FAX: 718-729-5105

TITLE: CAST STAINLESS STEEL FLOATING BALL VALVE CLASS 150 - FULL PORT

					MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 598	MATERIAL: A351 CF8M	UNITS: Inch, mm		
					DIM.OF FLANGE	ANSI B16.5	SHELL HYDRO 425PSI	PRESSURE: 150	DATE: 09/13/17	SCALE: N.T.S.	
					FACE TO FACE	API 608	SEAT AIR 80PSI	SIZE: 3/4"		FIG. No.: W17F-66RT	
					FIRE SAFE	API 607	SEAT HYDRO 325PSI	DRAWN BY: F.J.			
NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGNED	API 608	NACE MR 0175	CHK'D & APR'D BY: R.P.	REV: 1	DWG No.: 17BA120003-75-SW

# Wm. E. Williams No. W17F-66RT Class 150 RF Full Port Ball Valve ASTM A351 CF8M NACE



21	O-RING	1	VITON
20	NUT	4	SS316(8M)
19	STUD	4	SS316(B8M)
18	THIN NUT	2	SS304
17	PLASTIC COVER	1	PLASTIC
16	LOCATING LOCK	1	SS304
15	HANDLE	1	SS304
14	SET SLEEVE	1	SS304
13	ANTI-STATIC	2	SS316
12	THRUST WASHER	1	TFM+ 25% CARBON
11	PACKING(2)	1	50% PTFE + 50% 316
10	PACKING(1)	1	GRAPHITE
9	GASKET	1	SPIRAL WOUND WIRE (316/GRAPHITE)
8	SEAT	2	RPTFE
7	BALL	1	A351-CF8M
6	LOCK WASHER	1	SS304
5	DISK SPRING WASHER	2	SS301
4	SLEEVE	1	SS304
3	STEM	1	SS316
2	CAP	1	A351-CF8M
1	BODY	1	A351-CF8M
NO	PART NAME	QTY	MATERIAL

**BILL OF MATERIALS**

SIZE	A	B	C	D	T	F	N	E	H	K	L	M	J	Q	G	P	W
1 1/2"	38	73	98.5	127	17.5	1.6	4	16	105	250	165	70	15.7	9.5	14	23	5/16-18UNC

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LONG ISLAND CITY, NY 11101

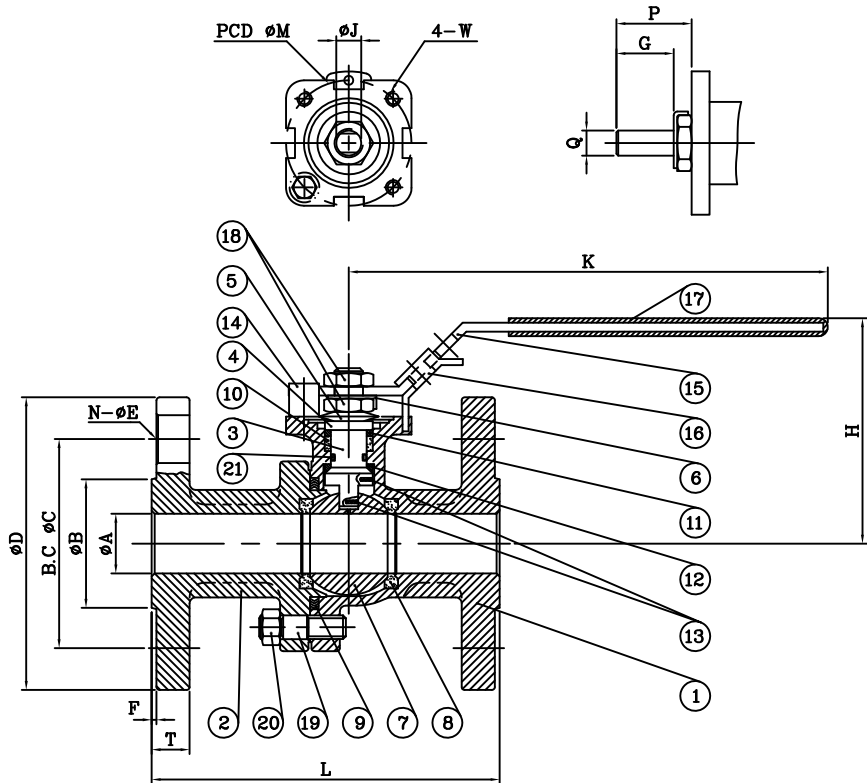
TEL: 718-392-1660  
FAX: 718-729-5106

TITLE: CAST STAINLESS STEEL FLOATING BALL VALVE  
CLASS 150 - FULL PORT

					MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 598			MATERIAL: A351 CF8M		UNITS: Inch, mm
					DIM.OF FLANGE	ANSI B16.5	SHELL	HYDRO	425PSI	PRESSURE: 150	DATE: 06/22/15	SCALE: N.T.S.
					FACE TO FACE	API 608	SEAT	AIR	80PSI	SIZE: 1-1/2"	FIG. No.: W17F-66RT	
					FIRE SAFE	API 607	SEAT	HYDRO	325PSI	DRAWN BY: F.J.		
					DESIGNED	API 608	NACE MR 0175		CHK'D & APR'D BY: R.P.		REV: 1	DWG No.:17BA120003-1,5-SW

NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D
Δ	6/22/15	RELEASED	F.J.	R.P.	R.P.

# Wm. E. Williams No. W17F-66RT Class 150 RF Full Port Ball Valve ASTM A351 CF8M NACE



21	O-RING	1	VITON
20	NUT	4	SS316(8M)
19	STUD	4	SS316(8M)
18	THIN NUT	2	SS304
17	PLASTIC COVER	1	PLASTIC
16	LOCATING LOCK	1	SS304
15	HANDLE	1	SS304
14	SET SLEEVE	1	SS304
13	ANTI-STATIC	2	SS316
12	THRUST WASHER	1	TFM+ 25% CARBON
11	PACKING(2)	1	50% PTFE + 50% 316
10	PACKING(1)	1	GRAPHITE
9	GASKET	1	SPIRAL WOUND WIRE (316/GRAPHITE)
8	SEAT	2	RPTFE
7	BALL	1	A351-CF8M
6	LOCK WASHER	1	SS304
5	DISK SPRING WASHER	2	SS301
4	SLEEVE	1	SS304
3	STEM	1	SS316
2	CAP	1	A351-CF8M
1	BODY	1	A351-CF8M
NO	PART NAME	Q'TY	STAINLESS STEEL

## BILL OF MATERIALS

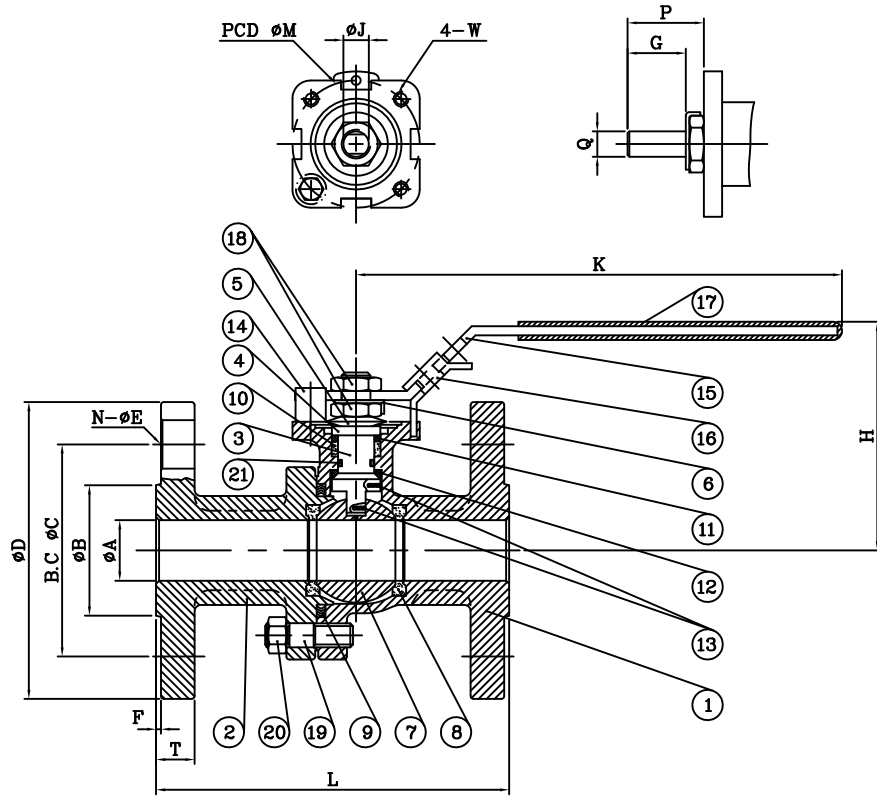
NOMINAL SIZE	A	B	C	D	T	F	N	E	H	K	L	M	J	Q	G	P	W
1"	25	51	79.5	108	14.3	1.6	4	16	87	200	127	50	10.9	8	11	19	1/4-20UNC



TITLE: CAST STAINLESS STEEL FLOATING BALL VALVE CLASS 150 - FULL PORT	
MATERIAL: A351 CF8M	UNITS: Inch, mm
FACE TO FACE: API 608	SCALE: N.T.S.
SEAT: AIR	FIG. No.: W17F-66RT
SEAT: HYDRO	REV: 1
INSPECTION & TEST: API 598	DATE: 03/10/17
HYDRO: 425PSI	
HYDRO: 80PSI	
HYDRO: 325PSI	
NACE MR 0175	

NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	MARKING SYSTEM	INSPECTION & TEST
Δ	3/10/17	RELEASED	F.J.	R.P.	R.P.	MSS-SP-25	API 598
						ANSI B16.5	425PSI
						API 607	325PSI
						API 608	80PSI

# Wm. E. Williams No. W17F-66RT Class 150 RF Full Port Ball Valve ASTM A351 CF8M NACE



21	O-RING	1	VITON
20	NUT	4	SS316(8M)
19	STUD	4	SS316(8M)
18	THIN NUT	2	SS304
17	PLASTIC COVER	1	PLASTIC
16	LOCATING LOCK	1	SS304
15	HANDLE	1	SS304
14	SET SLEEVE	1	SS304
13	ANTI-STATIC	2	SS316
12	THRUST WASHER	1	TFM+ 25% CARBON
11	PACKING(2)	1	50% PTFE + 50% 316
10	PACKING(1)	1	GRAPHITE
9	GASKET	1	SPIRAL WOUND WIRE (316/GRAPHITE)
8	SEAT	2	RPTEFE
7	BALL	1	A351-CF8M
6	LOCK WASHER	1	SS304
5	DISK SPRING WASHER	2	SS301
4	SLEEVE	1	SS304
3	STEM	1	SS316
2	CAP	1	A351-CF8M
1	BODY	1	A351-CF8M
NO	PART NAME	Q'TY	STAINLESS STEEL

## BILL OF MATERIALS

NOMINAL SIZE	A	B	C	D	T	F	N	E	H	K	L	M	J	Q	G	P	W
2"	50	92	120.5	152	19.1	1.6	4	19	115	265	178	70	15.7	9.5	14	23	5/16-18UNC

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TITLE: CAST STAINLESS STEEL FLOATING BALL VALVE CLASS 150 - FULL PORT

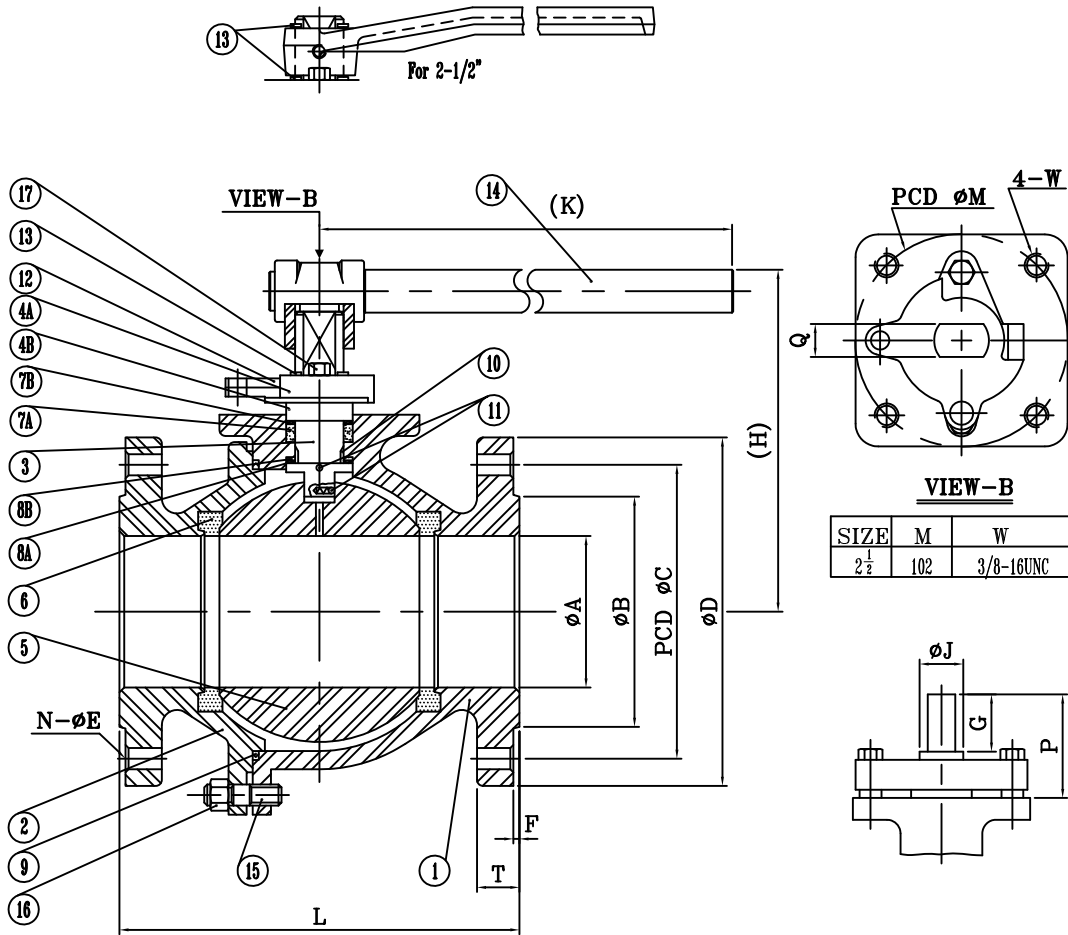
MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 598	MATERIAL: A351 CF8M	UNITS: Inch, mm
DIM.OF FLANGE	ANSI B16.5	SHELL HYDRO 425PSI	PRESSURE: 150	DATE: 03/10/17
FACE TO FACE	API 608	SEAT AIR 80PSI	SIZE: 2"	FIG. No.: W17F-66RT
FIRE SAFE	API 607	SEAT HYDRO 325PSI	DRAWN BY: F.J.	
NO. DATE	DESCRIPTION	PRP'D	REV'D	APP'D
DESIGNED	API 608	NACE MR 0175	CHK'D & APR'D BY: R.P.	REV: 1

DWG No.: 17BA120003-2-SW



# Wm. E. Williams No. W17F-66RT Class 150 RF Full Port Ball Valve ASTM A351 CF8M NACE

Size	2 1/2"	
	mm	inch
Nominal	65	2.5
A	65	2.5
B	105	4.13
C	139.5	5.49
D	178	7
E	19	0.75
F	1.6	0.06
T	22.3	0.88
N	4	4
H	165	6.5
K	390	15.35
L	190	7.48
J	28	1.1
Q	17	0.67
G	44.5	1.75
P	78	3.07



NO.	PART NAME	Q'TY	MATERIAL
			STAINLESS STEEL
1	BODY	1	A351-CF8M
2	CAP	1	A351-CF8M
3	STEM	1	SS316
4A	GLAND	1	A351-CF8
4B	SLEEVE	1	SS304
5	BALL	1	A351-CF8M
6	SEAT	2	RPTFE
7A	PACKING(1)	1	GRAPHITE
7B	PACKING(2)	1	50%PTFE+50%316
8A	THRUST WASHER(1)	1	50%PTFE+50%316
8B	THRUST WASHER(2)	1	RPTFE
9	GASKET	1	SPIRAL WOUND WIRE (316/GRAPHITE)
10	STEM BEARING	1	RPTFE
11	ANTI-STATIC	2	SS316
12	TRAVEL STOPPER	1	SS304
13	SNAP RING	1~2	NICKEL PLATED CARBON STEEL
14	HANDLE	1	DUCTILE IRON (PCD )/PIPE GRIP(S15C)
15	STUD	4~10	SS316(B8M)
16	NUT	4~10	SS316(BM)
17	GLAND BOLT	2	SS304

SIZE	M	W
2 1/2"	102	3/8-16UNC

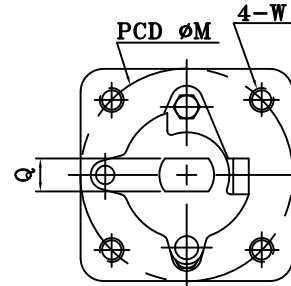
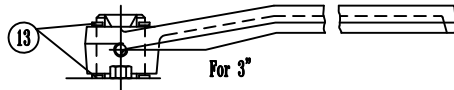
WILLIAM E. WILLIAMS VALVE CORPORATION  
 38-52 REVIEW AVENUE LONG ISLAND CITY, NY 11101  
 TEL: 718-392-1660 FAX: 718-729-5106

TITLE: CAST STAINLESS STEEL FLOATING BALL VALVE CLASS 150 - FULL PORT

NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 598	MATERIAL: A351 CF8M	UNITS: Inch, mm
						DIM.OF FLANGE	ANSI B16.5	SHELL HYDRO 425PSI	PRESSURE: 150	SCALE: N.T.S.
						FACE TO FACE	API 608	SEAT AIR 80PSI	DATE: 05/16/16	FIG. No.:
						FIRE SAFE	API 607	SEAT HYDRO 325PSI	SIZE: 2.5"	W17F-66RT
						DESIGNED	API 608	NACE MR 0175	DRAWN BY: F.J.	
									CHK'D & APR'D BY: R.P.	REV: 1
										DWG No.:17BA120003-2.5-SW

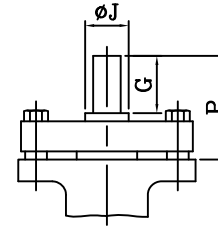
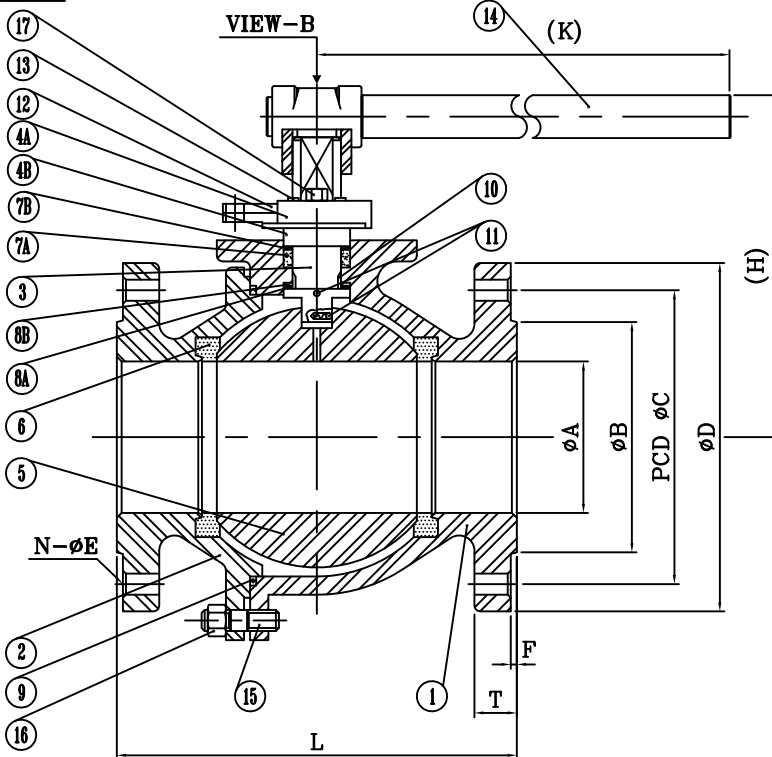
# Wm. E. Williams No. W17F-66RT Class 150 RF Full Port Ball Valve ASTM A351 CF8M NACE

Size		3"	
Nominal	MM	IN	
A	76	3	
B	127	5	
C	152.5	6	
D	190	7.48	
E	19	0.75	
F	1.6	0.06	
T	23.9	0.94	
N	4	4	
H	166	6.54	
K	390	15.35	
L	203	7.99	
J	28	1.1	
Q	17	0.67	
G	44.5	1.75	
P	78	3.07	



VIEW-B

SIZE	M	W
3	102	3/8-16UNC



NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	A351-CF8M
2	CAP	1	A351-CF8M
3	STEM	1	SS316
4A	GLAND	1	A351-CF8
4B	SLEEVE	1	SS304
5	BALL	1	A351-CF8M
6	SEAT	2	RPTFE
7A	PACKING(1)	1	GRAPHITE
7B	PACKING(2)	1	50%PTFE+50%316
8A	THRUST WASHER(1)	1	50%PTFE+50%316
8B	THRUST WASHER(2)	1	RPTFE
9	GASKET	1	SPRIAL WOUND WIRE (316/GRAPHITE)
10	STEM BEARING	1	RPTFE
11	ANTI-STATIC	2	SS316
12	TRAVEL STOPPER	1	STEEL PLATED
13	SNAP RING	1~2	NICKEL PLATED CARBON STEEL
14	HANDLE	1	DUCTILE IRON (FCD )/PIPE GRIP(S15C)
15	STUD	6~10	SS316(B8M)
16	NUT	6~10	SS316(8M)
17	GLAND BOLT	2	STEEL

WILLIAM E. WILLIAMS VALVE CORPORATION  
 38-52 REVIEW AVENUE LONG ISLAND CITY, NY 11101  
 TEL: 718-392-1660 FAX: 718-729-5106

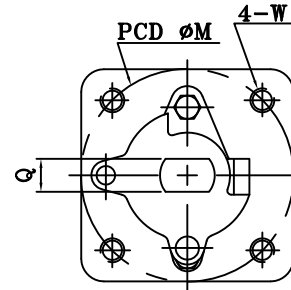
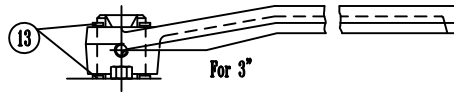
TITLE: CAST STAINLESS STEEL FLOATING BALL VALVE CLASS 150 - FULL PORT

					MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST:	API 598	MATERIAL:	A351 CF8M	UNITS:	Inch, mm			
					DIM.OF FLANGE	ANSI B16.5	SHELL	HYDRO	425PSI	PRESSURE:	150	DATE:	07/13/16	SCALE:	N.T.S.
					FACE TO FACE	API 608	SEAT	AIR	80PSI	SIZE:	3"	FIG. No.:	W17F-66RT		
					FIRE SAFE	API 607	SEAT	HYDRO	325PSI	DRAWN BY:	F.J.				
					DESIGNED	API 608	NACE	MR 0175	CHK'D & APR'D BY:	R.P.	REV:	1	DWG No.: 17BA120003-3-SW		

NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D
Δ	7/13/16	RELEASED	F.J.	R.P.	R.P.

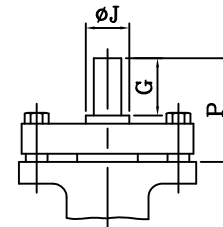
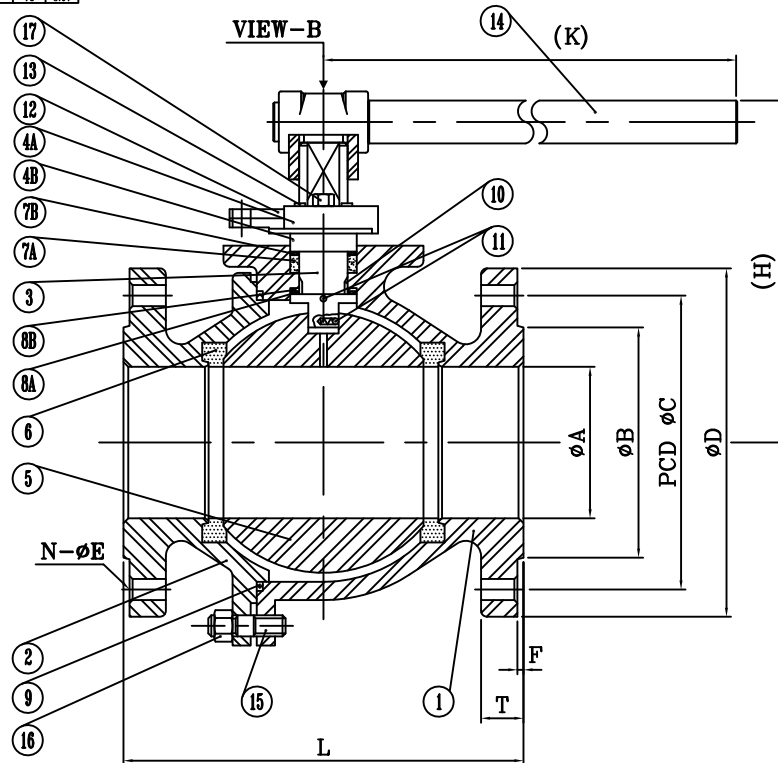
# Wm. E. Williams No. W17F-66RT Class 150 RF Full Port Ball Valve ASTM A351 CF8M NACE

Nominal	TOL.	Size	
		MM	IN
A		101.5	4
B		157	6.18
C		190.5	7.5
D		229	9.02
E		19	0.75
F		1.6	0.06
T		23.9	0.94
N		8	8
H		183	7.2
K		390	15.35
L		229	9.02
J		28	1.1
Q		17	0.67
G		44.5	1.75
P		78	3.07



VIEW-B

SIZE	M	W
3	102	3/8-16UNC



NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	A351-CF8M
2	CAP	1	A351-CF8M
3	STEM	1	SS316
4A	GLAND	1	A351-CF8
4B	SLEEVE	1	SS304
5	BALL	1	A351-CF8M
6	SEAT	2	RPTFE
7A	PACKING(1)	1	GRAPHITE
7B	PACKING(2)	1	50%PTFE+50%316
8A	THRUST WASHER(1)	1	50%PTFE+50%316
8B	THRUST WASHER(2)	1	RPTFE
9	GASKET	1	SPRIAL WOUND WIRE (316/GRAPHITE)
10	STEM BEARING	1	RPTFE
11	ANTI-STATIC	2	SS316
12	TRAVEL STOPPER	1	STEEL PLATED
13	SNAP RING	1~2	NICKEL PLATED CARBON STEEL
14	HANDLE	1	DUCTILE IRON (FCD )/PIPE GRIP(S15C)
15	STUD	6~10	SS316(B8M)
16	NUT	6~10	SS316(8M)
17	GLAND BOLT	2	STEEL

WILLIAM E. WILLIAMS VALVE CORPORATION

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TEL: 718-392-1660 FAX: 718-729-5156

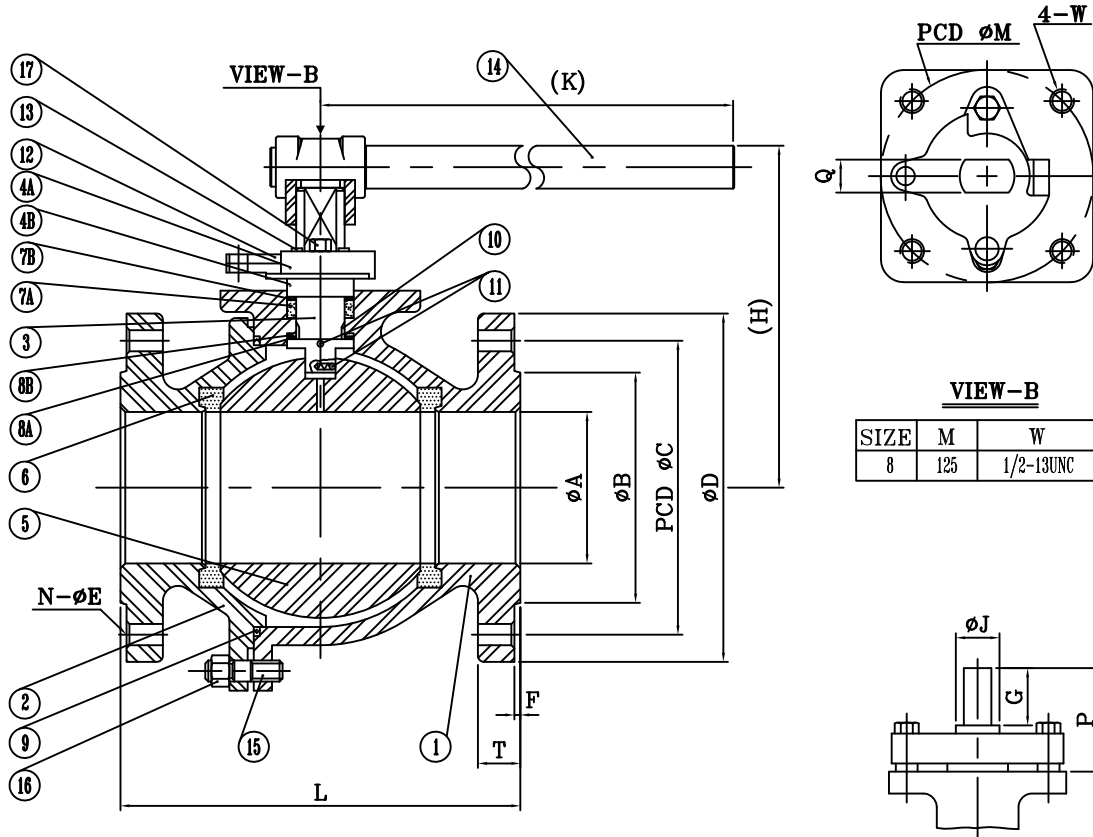
TITLE: CAST STAINLESS STEEL FLOATING BALL VALVE CLASS 150 - FULL PORT

NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 598	MATERIAL: A351 CF8M	UNITS: Inch, mm
						DIM.OF FLANGE	ANSI B16.5	SHELL	HYDRO 425PSI	DATE: 07/13/16
						FACE TO FACE	API 608	SEAT	AIR 80PSI	SCALE: N.T.S.
						FIRE SAFE	API 607	SEAT	HYDRO 325PSI	FIG. No.: W17F-66RT
							API 608	NACE MR 0175	CHK'D & APR'D BY: R.P.	REV: 1

DRAWN BY: F.J.	DWG No.: 17BA12003-4-SW
----------------	-------------------------



# Wm. E. Williams No. W17F-66RT Class 150 RF Full Port Ball Valve ASTM A351 CF8M NACE



BILL OF MATERIALS			
NO.	PART NAME	MATERIAL	Q'TY
1	BODY	A351-CF8M	1
2	CAP	A351-CF8M	1
3	STEM	SS316	1
4A	GLAND	A351-CF8	1
4B	SLEEVE	SS304	1
5	BALL	A351-CF8M	1
6	SEAT	RPTFE	2
7A	PACKING(1)	GRAPHITE	1
7B	PACKING(2)	50%PTFE+50%316	1
8A	THRUST WASHER(1)	50%PTFE+50%316	1
8B	THRUST WASHER(2)	RPTFE	1
9	GASKET	SPRIAL WOUND WIRE (316/GRAPHITE)	1
10	STEM BEARING	RPTFE	1
11	ANTI-STATIC	SS316	2
12	TRAVEL STOPPER	SS304	1
13	SNAP RING	NICKEL PLATED CARBON STEEL	1~2
14	HANDLE	DUCTILE IRON (FCD )/PIPE GRIP(S15C)	1
15	STUD	SS316(B8M)	4~10
16	NUT	SS316(8M)	4~10
17	GLAND BOLT	SS304	2

SIZE	UNIT	A	B	C	D	T	F	N	E	H	K	L	J	Q	G	P
8"	mm	200	270	298.5	343	28.6	1.6	8	22	294	950	457	43.5	26	42	91
	Inch	8	10.63	11.75	13.5	1.13	0.06	8	0.87	11.57	37.4	18	1.71	1.02	1.65	3.58

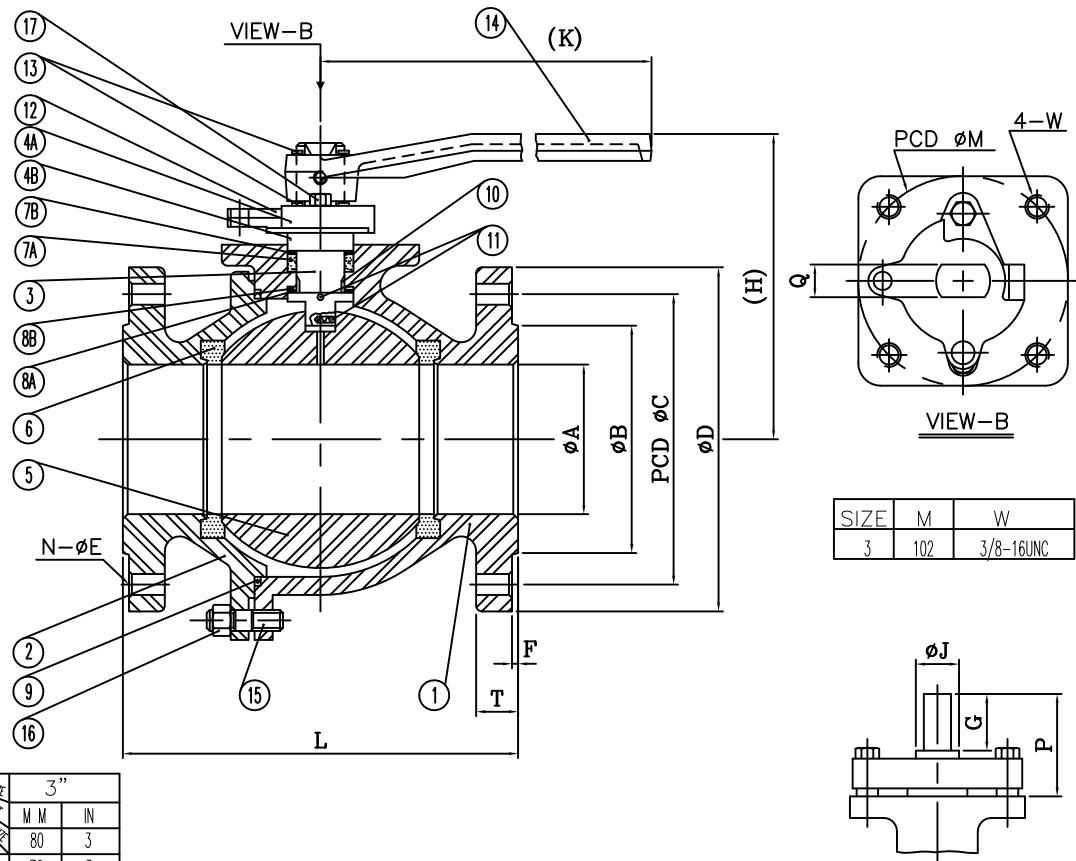
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 38-52 REVIEW AVENUE LONG ISLAND CITY, NY 11101  
 TEL: 718-352-1660 FAX: 718-729-5106

TITLE: CAST STAINLESS STEEL FLOATING BALL VALVE CLASS 150 - FULL PORT

		MARKING SYSTEM		MSS-SP-25	INSPECTION & TEST: API 598		MATERIAL: A351 CF8M		UNITS: Inch, mm	
		DIM.OF FLANGE		ANSI B16.5	SHELL	HYDRO	425PSI	PRESSURE: 150	DATE: 02/03/16	SCALE: N.T.S.
		FACE TO FACE		API 608	SEAT	AIR	80PSI	SIZE: 8"	FIG. No.: W17F-66RT	
		FIRE SAFE		API 607	SEAT	HYDRO	325PSI	DRAWN BY: F.J.		
NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGNED	API 608	NACE MR 0175	CHK'D & APR'D BY: R.P.	REV: 1 DWG No.: 17BA120003-8-SW



# Wm. E. Williams No. W37F-6RT Class 300 RF Full Port Ball Valve ASTM A216 Gr. WCB NACE



NO.	PART NAME	Q'TY	MATERIAL
			CARBON STEEL
1	BODY	1	A216 -WCB
2	CAP	1	A216 -WCB
3	STEM	1	SS316
4A	GLAND	1	A216 -WCB
4B	SLEEVE	1	STEEL
5	BALL	1	A351-CF8M
6	SEAT	2	RPTE
7A	PACKING(1)	1	GRAPHITE
7B	PACKING(2)	1	50%PTFE+50%316
8A	THRUST WASHER(1)	1	50%PTFE+50%316
8B	THRUST WASHER(2)	1	RPTE
9	GASKET	1	SPRIAL WOUND WIRE (316/GRAPHITE)
10	STEM BEARING	1	RPTE
11	ANTI-STATIC	2	SS316
12	TRAVEL STOPPER	1	STEEL PLATED
13	SNAP RING	2	NICKEL PLATED CARBON STEEL
14	HANDLE	1	DUCTILE IRON (FCD )/PIPE GRIP(S15C)
15	STUD	8	STEEL(B7M)
16	NUT	8	STEEL(2HM)
17	GLAND BOLT	2	STEEL

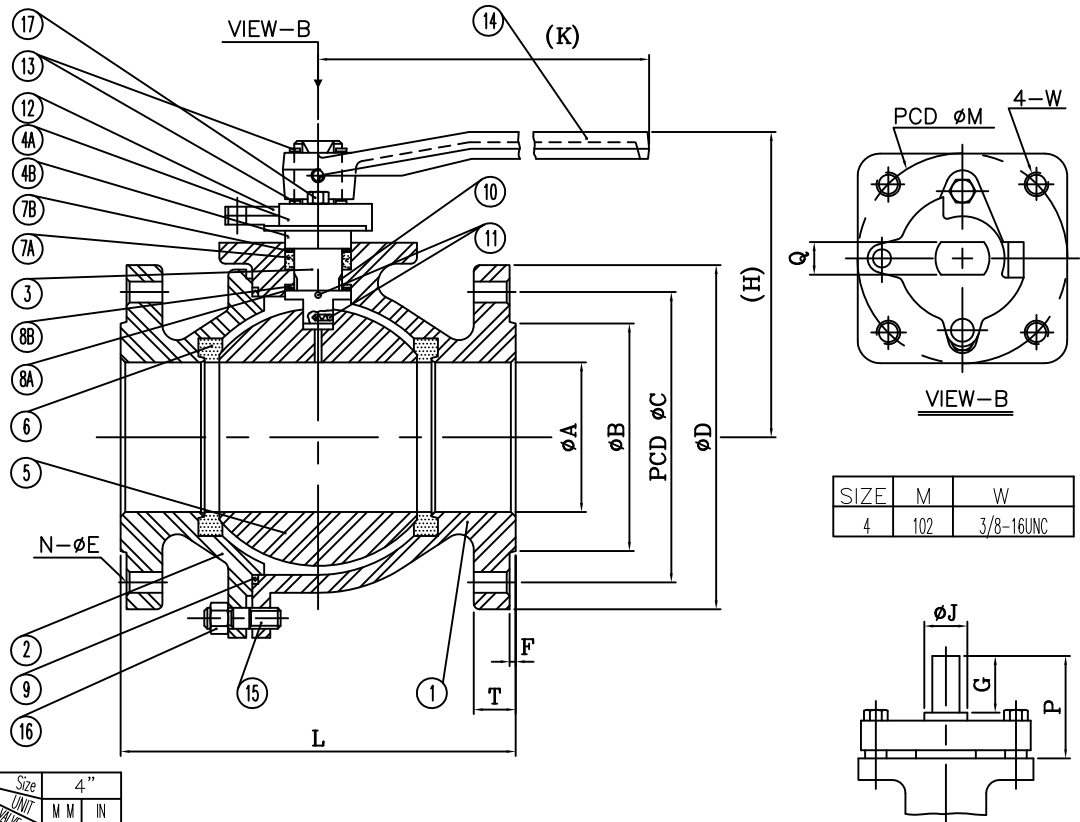
Nominal	3"	
	M M	IN
A	76	3
B	127	5
C	168	6.61
D	210	8.27
E	22	0.87
F	1.6	0.06
T	28.6	1.13
N	8	8
H	166	6.54
K	390	15.35
L	283	11.14
J	28	1.1
Q	17	0.67
G	44.5	1.75
P	78	3.07

NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGNED	MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 598	MATERIAL: A216 WCB	UNITS: Inch, mm
							DIM.OF FLANGE	ASME B16.5	SHELL HYDRO	1125PSI	SCALE: N.T.S.
							FACE TO FACE	ASME B16.10	SEAT AIR	80PSI	FIG. No.:
							FIRE SAFE	API 607	SEAT HYDRO	825PSI	W37F-6RT
	7/14/16	RELEASED	F.J.	R.P.	R.P.		ASME B16.34	NACE MR 0175			DWG No.: 17BA120006-3-W

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 TEL: 718-392-1660 FAX: 718-729-5108

TITLE: CAST STEEL FLOATING BALL VALVE CLASS 300 - FULL PORT

# Wm. E. Williams No. W37F-6RT Class 300 RF Full Port Ball Valve ASTM A216 Gr. WCB NACE



BILL OF MATERIALS			
NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	A216 -WCB
2	CAP	1	A216 -WCB
3	STEM	1	SS316
4A	GLAND	1	A216 -WCB
4B	SLEEVE	1	STEEL
5	BALL	1	A351-CF8M
6	SEAT	2	RPTFE
7A	PACKING(1)	1	GRAPHITE
7B	PACKING(2)	1	50%PTFE+50%316
8A	THRUST WASHER(1)	1	50%PTFE+50%316
8B	THRUST WASHER(2)	1	RPTFE
9	GASKET	1	SPRIAL WOUND WIRE (316/GRAPHITE)
10	STEM BEARING	1	RPTFE
11	ANTI-STATIC	2	SS316
12	TRAVEL STOPPER	1	STEEL PLATED
13	SNAP RING	1	NICKEL PLATED CARBON STEEL
14	HANDLE	1	DUCTILE IRON (FCD )/PIPE GRIP(S15C)
15	STUD	16	STEEL(B7M)
16	NUT	16	STEEL(2HM)
17	GLAND BOLT	2	STEEL

SIZE	M	W
4	102	3/8-16UNC

Nominal	Size	
	UNIT	VALVE SIZE
	M M	IN
A	101.5	4
B	157	6.18
C	200	7.87
D	254	10
E	22	0.87
F	1.6	0.06
T	31.8	1.25
N	8	8
H	183	7.2
K	390	15.35
L	305	12
J	28	1.1
Q	17	0.67
G	44.5	1.75
P	78	3.07

NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGNED	MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 598	MATERIAL: A216 WCB	UNITS: Inch, mm
							FACE TO FACE	ASME B16.10	SEAT AIR	80PSI	SCALE: N.T.S.
							FIRE SAFE	API 607	SEAT HYDRO	825PSI	FIG. No.: W37F-6RT
								ASME B16.34	NACE MR 0175		DRAWN BY: F.J.
											REV: 1
											DWG No.: 17BA120006-4-W

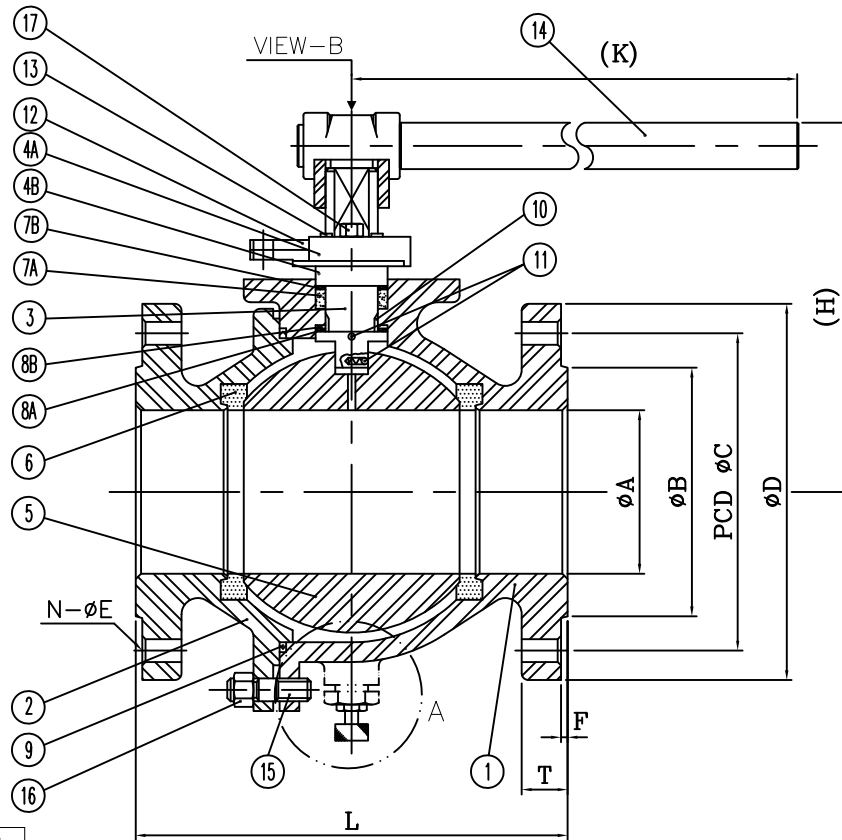
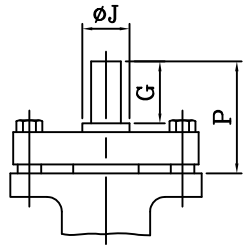
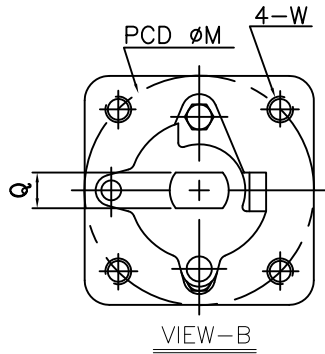
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 TEL: 718-992-1660 FAX: 718-729-5106

TITLE: CAST STEEL FLOATING BALL VALVE CLASS 300 - FULL PORT



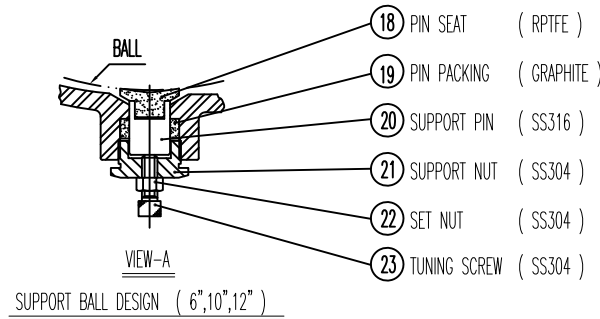
# Wm. E. Williams No. W37F-6RT Class 300 RF Full Port Ball Valve ASTM A216 Gr. WCB NACE

SIZE	M	W
6"	125	1/2-13UNC
10"	140	5/8-11UNC
12"	140	5/8-11UNC



BILL OF MATERIALS			
NO.	PART NAME	Q'TY	MATERIAL
1	BODY	1	A216 -WCB
2	CAP	1	A216 -WCB
3	STEM	1	SS316
4A	GLAND	1	A216 -WCB
4B	SLEEVE	1	STEEL
5	BALL	1	A351-CF8M
6	SEAT	2	RPTFE
7A	PACKING(1)	1	GRAPHITE
7B	PACKING(2)	1	50%PTFE+50%316
8A	THRUST WASHER(1)	1	50%PTFE+50%316
8B	THRUST WASHER(2)	1	RPTFE
9	GASKET	1	SPRIAL WOUND WIRE (316/GRAPHITE)
10	STEM BEARING	1	RPTFE
11	ANTI-STATIC	2	SS316
12	TRAVEL STOPPER	1	STEEL PLATED
13	SNAP RING	1	NICKEL PLATED CARBON STEEL
14	HANDLE	1	DUCTILE IRON (FCD )/PIPE GRIP(S15C)
15	STUD	16	STEEL(B7M)
16	NUT	16	STEEL(2HM)
17	GLAND BOLT	2	STEEL

Nominal	TOL	6"		10"		12"	
		M M	IN	M M	IN	M M	IN
A		152	6	250	10	300	12
B		216	8.5	324	12.76	381	15
C		270	10.63	387.5	15.26	451	17.76
D		318	12.52	444	17.5	521	20.51
E		22	0.87	29	1.14	32	1.26
F		1.6	0.06	1.6	0.06	1.6	0.06
T		36.6	1.44	47.7	1.88	50.8	2
N		12	12	16	16	16	16
H		285	11.22	368	14.5	408	16.06
K		650	25.59	1100	43.3	1100	43.3
L		403	15.86	568	22.36	648	25.51
J		43.5	1.71	55	2.17	55	2.17
Q		26	1.02	35	1.38	35	1.38
G		42	1.65	54	2.13	54	2.13
P		91	3.58	98	3.86	98	3.86



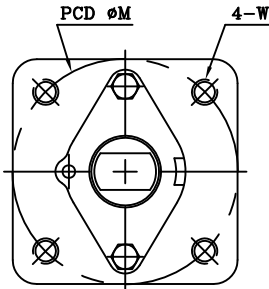
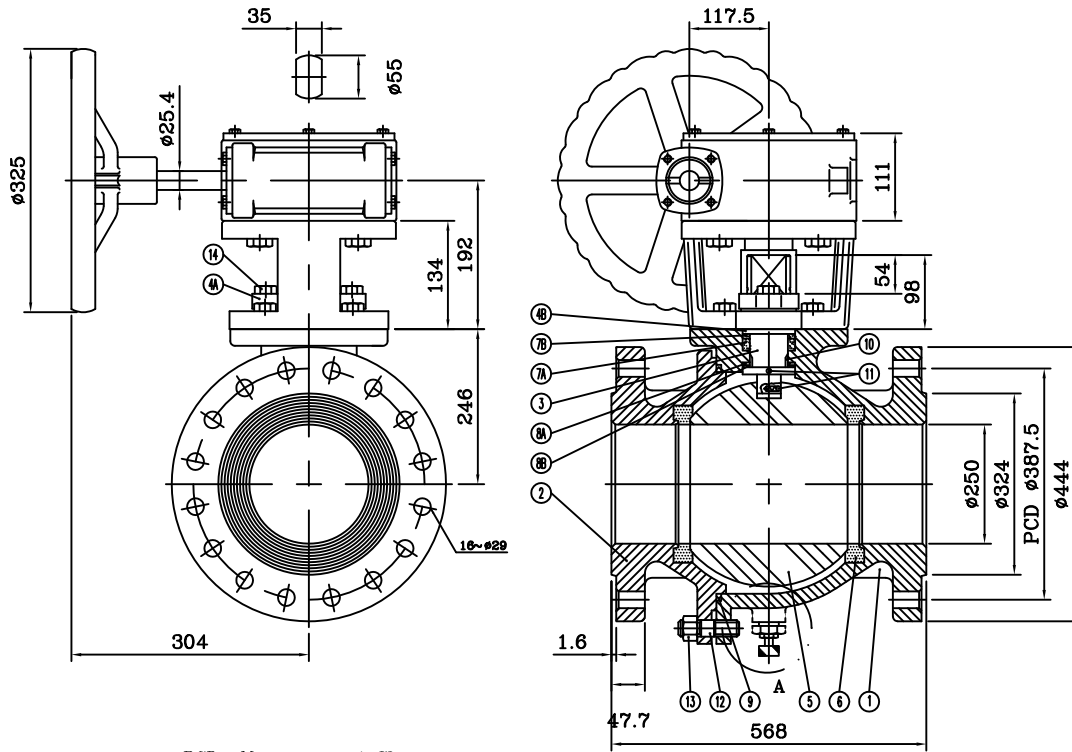
NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 598	MATERIAL: A216 WCB	UNITS: Inch, mm
						DIM.OF FLANGE	ASME B16.5	SHELL	HYDRO	1125PSI
						FACE TO FACE	ASME B16.10	SEAT	AIR	80PSI
						FIRE SAFE	API 607	SEAT	HYDRO	825PSI
						DESIGNED	ASME B16.34	NACE MR 0175	CHK'D & APR'D BY: R.P.	REVISION: 1
									DATE: 09/01/16	SCALE: N.T.S.
									FIG. No.: W37F-6RT	DWG No.: 17BA120006-612-W

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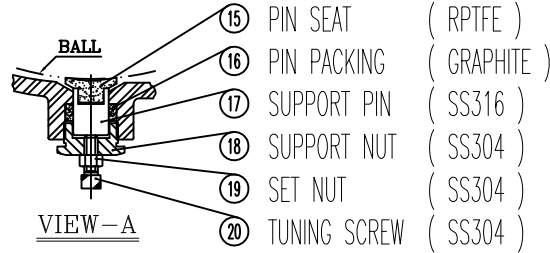
TITLE: CAST STEEL FLOATING BALL VALVE CLASS 300 - FULL PORT



# Wm. E. Williams No. W37F-6RT GO Class 300 RF Full Port Ball Valve ASTM A216 Gr. WCB NACE



VIEW - B



VIEW - A

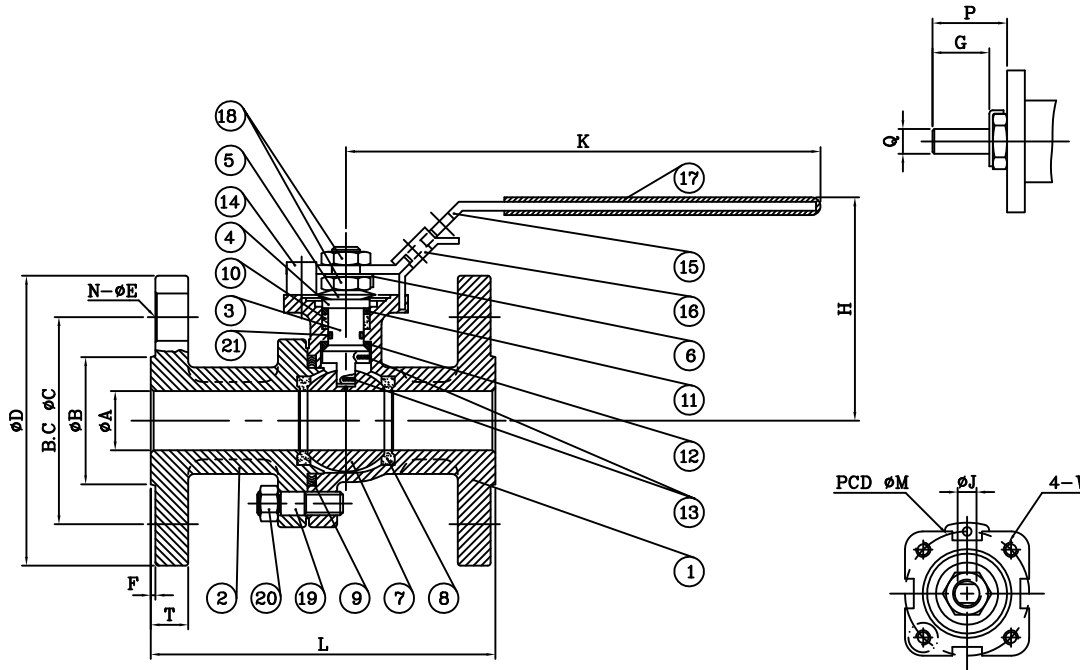
SIZE	M	W
10	140	5/8-11UNC

NO.	PART NAME	Q'TY	MATERIAL
			STAINLESS STEEL
1	BODY	1	A216-WCB
2	CAP	1	A216-WCB
3	STEM	1	SS316
4A	GLAND	1	A216-WCB
4B	SLEEVE	1	STEEL
5	BALL	1	A351-CF8M
6	SEAT	2	RPTFE
7A	STEM PACKING(1)	1	GRAPHITE
7B	PACKING PROTECTOR(2)	1	50%PTFE+50%316
8A	THRUST WASHER(2)	1	RPTFE
8B	WASHER PROTECTOR(1)	1	50%PTFE+50%316
9	GASKET	1	SPRIAL WOUND WIRE (316/GRAPHITE)
10	STEM BEARING	1	RPTFE
11	ANTI-STATIC	2	SS316
12	STUD	20	STEEL(B7M)
13	NUT	20	STEEL(2HM)
14	GLAND BLOT	2	STEEL

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 LONG ISLAND CITY, NY 11101  
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 FAX: 718-729-5106

TITLE:		CAST STEEL FLOATING BALL VALVE CLASS 300 - FULL PORT - GEAR OPERATED	
MATERIAL:	A216 WCB	UNITS:	Inch, mm
PRESSURE:	300	DATE:	09/07/17
SCALE:	N.T.S.	FIG. No.:	W37F-6RT GO
SIZE:	10"	DRAWN BY:	F.J.
CHK'D & APR'D BY:	R.P.	REV:	1
MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST:	API 6D
DIM.OF FLANGE	ANSI B16.5	SHELL	HYDRO 1125PSI
FACE TO FACE	API 6D	SEAT	AIR 80PSI
FIRE SAFE	API 607	BACK SEAT	HYDRO N/A
NO.	DATE	DESCRIPTION	PRP'D
DESIGNED	API 6D	NACE MR 0175	

# Wm. E. Williams No. W37F-66RT Class 150 RF Full Port Ball Valve ASTM A351 CF8M NACE



21	O-RING	1	VITON
20	NUT	4	SS316(8M)
19	STUD	4	SS316(B8M)
18	THIN NUT	2	SS304
17	PLASTIC COVER	1	PLASTIC
16	LOCATING LOCK	1	SS304
15	HANDLE	1	SS304
14	SET SLEEVE	1	SS304
13	ANTI-STATIC	2	SS316
12	THRUST WASHER	1	TFM+ 25% CARBON
11	PACKING(2)	1	50% PTFE + 50% 316
10	PACKING(1)	1	GRAPHITE
9	GASKET	1	SPIRAL WOUND WIRE (316/GRAPHITE)
8	SEAT	2	RPTFE
7	BALL	1	A351-CF8M
6	LOCK WASHER	1	SS304
5	DISK SPRING WASHER	2	SS301
4	SLEEVE	1	SS304
3	STEM	1	SS316
2	CAP	1	A351-CF8M
1	BODY	1	A351-CF8M
NO	PART NAME	Q'TY	MATERIAL

NOMINAL SIZE	A	B	C	D	T	F	N	E	H	K	L	M	J	Q	G	P	W
2"	50	92	127	165	22.3	1.6	8	19	115	265	216	70	15.7	9.5	14	23	5/16-18UNC

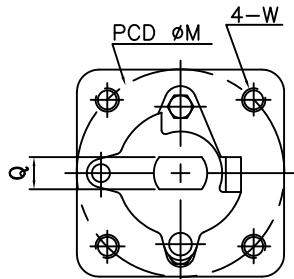
WILLIAM E. VALVE CORPORATION  
 38-52 REVIEW AVENUE  
 LONG ISLAND CITY, NY 11101  
 TEL: 718-392-1640  
 FAX: 718-729-5106  
 WWW.WILLIAMSVALVE.COM

TITLE: CAST STAINLESS STEEL FLOATING BALL VALVE CLASS 300 - FULL PORT	
MATERIAL: A351 CF8M	UNITS: Inch, mm
FACE TO FACE: API 608	DATE: 10/30/17
SEAT: AIR	SCALE: N.T.S.
SEAT: HYDRO	FIG. No.: W37F-66RT
SEAT: HYDRO	DRAWN BY: F.J.
SEAT: HYDRO	CHK'D & APR'D BY: R.P.
SEAT: HYDRO	REV: 1
SEAT: HYDRO	DWG No.: 17BA120006-2-SW

MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST:	API 598					
DIM.OF FLANGE	ANSI B16.5	SHELL	HYDRO 1125PSI					
FACE TO FACE	API 608	SEAT	AIR 80PSI					
FIRE SAFE	API 607	SEAT	HYDRO 825PSI					
NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGNED	API 608	NACE MR 0175

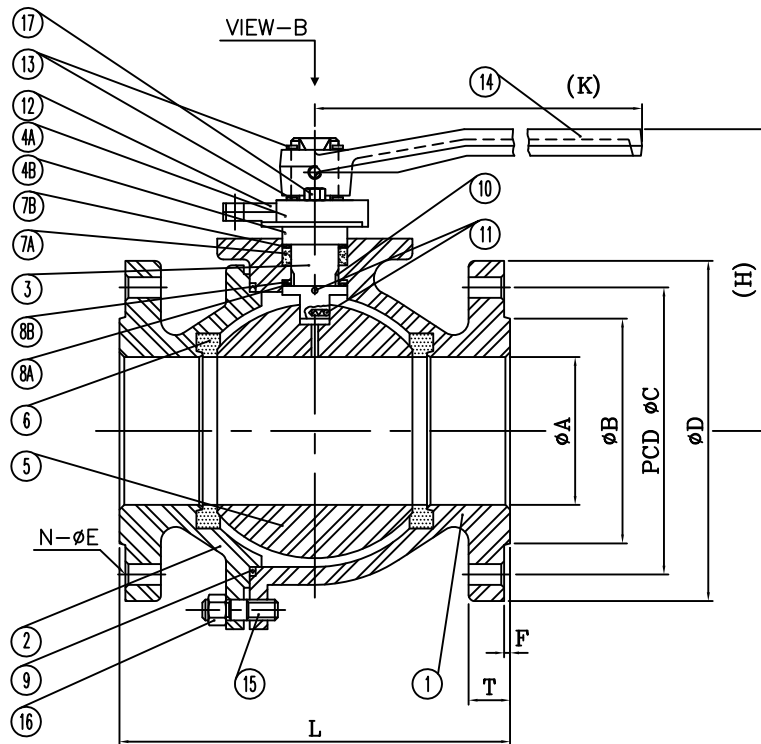
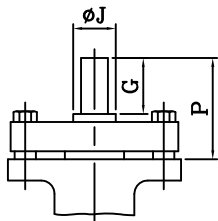
10/30/17	RELEASED	F.J.	R.P.	R.P.				
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# Wm. E. Williams No. W37F-66RT Class 150 RF Full Port Ball Valve ASTM A351 CF8M NACE



VIEW-B

SIZE	M	W
3	102	3/8-16UNC



BILL OF MATERIALS			
NO.	PART NAME	MATERIAL	QTY
1	BODY	A351-CF8M	1
2	CAP	A351-CF8M	1
3	STEM	SS316	1
4A	GLAND	A351-CF8	1
4B	SLEEVE	SS304	1
5	BALL	A351-CF8M	1
6	SEAT	RPTFE	2
7A	PACKING(1)	GRAPHITE	1
7B	PACKING(2)	50%PTFE+50%316	1
8A	THRUST WASHER(1)	50%PTFE+50%316	1
8B	THRUST WASHER(2)	RPTFE	1
9	GASKET	SPRIAL WOUND WIRE (316/GRAPHITE)	1
10	STEM BEARING	RPTFE	1
11	ANTI-STATIC	SS316	2
12	TRAVEL STOPPER	SS304	1
13	SNAP RING	NICKEL PLATED CARBON STEEL	2
14	HANDLE	FCD	1
15	STUD	SS316(B8M)	8
16	NUT	SS316(8M)	8
17	GLAND BOLT	SS304	2

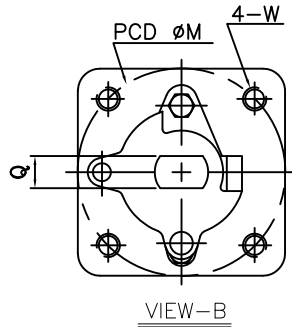
SIZE	UNIT	A	B	C	D	T	F	N	E	H	K	L	J	Q	G	P
80	mm	76	127	168	210	28.6	1.6	8	22	166	390	283	28	17	44.5	78
3"	inch	3	5	6.61	8.27	0.87	0.06	8	0.87	6.54	15.35	11.14	1.1	0.67	1.75	3.07

					MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST:	API 598	MATERIAL:	A351 CF8M	UNITS:	Inch, mm							
					DIM.OF FLANGE	ANSI B16.5	SHELL	HYDRO	1125PSI	PRESSURE:	300	DATE:	01/25/16	SCALE:	N.T.S.				
					FACE TO FACE	API 608	SEAT	AIR	80PSI	SIZE:	3"	FIG. No.:	W37F-66RT						
					FIRE SAFE	API 607	SEAT	HYDRO	825PSI	DRAWN BY:	F.J.								
					NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGNED	API 608	NACE MR 0175	CHKD & APPR'D BY:	R.P.	REV:	1	DWG No.:	17BA120006-3-SW

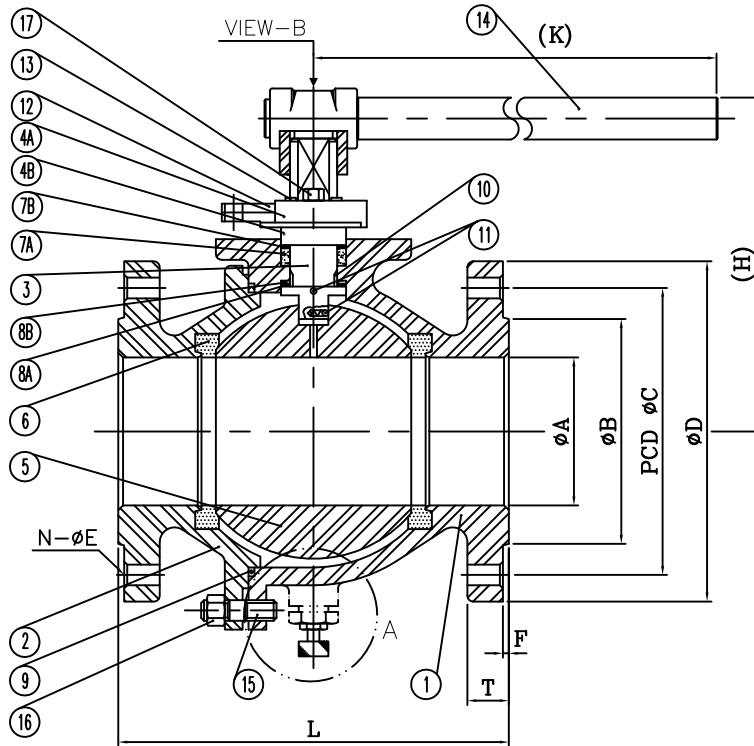
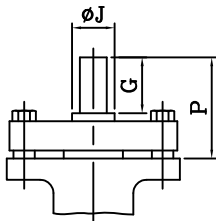
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 38-52 REVIEW AVENUE LONG ISLAND CITY, NY 11101  
 TEL: 718-992-1660 FAX: 718-729-5108

TITLE: CAST STAINLESS STEEL FLOATING BALL VALVE CLASS 300 - FULL PORT

# Wm. E. Williams No. W37F-66RT Class 150 RF Full Port Ball Valve ASTM A351 CF8M NACE



SIZE	M	W
4	102	3/8-16UNC



Nominal	TOL	Size UNIT	
		M M	IN
A		101.5	4
B		157	6.18
C		200	7.87
D		254	10
E		22	0.87
F		1.6	0.06
T		31.8	1.25
N		8	8
H		183	7.2
K		390	15.35
L		305	12
J		28	1.1
Q		17	0.67
G		44.5	1.75
P		78	3.07

## BILL OF MATERIALS

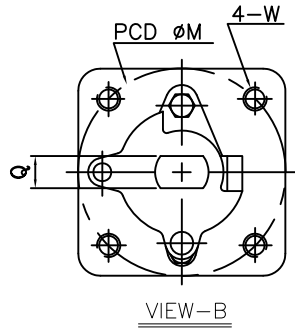
NO.	PART NAME	MATERIAL
1	BODY	A351-CF8M
2	CAP	A351-CF8M
3	STEM	SS316
4A	GLAND	A351-CF8
4B	SLEEVE	SS304
5	BALL	A351-CF8M
6	SEAT	RPTFE
7A	PACKING(1)	GRAPHITE
7B	PACKING(2)	50%PTFE+50%316
8A	THRUST WASHER(1)	50%PTFE+50%316
8B	THRUST WASHER(2)	RPTFE
9	GASKET	SPRIAL WOUND WIRE (316/GRAPHITE)
10	STEM BEARING	RPTFE
11	ANTI-STATIC	SS316
12	TRAVEL STOPPER	SS304
13	SNAP RING	NICKEL PLATED CARBON STEEL
14	HANDLE	DUCTILE IRON (FCD )/PIPE GRIP(S15C)
15	STUD	SS316(B8M)
16	NUT	SS316(8M)
17	GLAND BOLT	SS304

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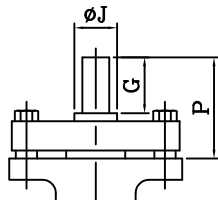
TITLE: CAST STAINLESS STEEL FLOATING BALL VALVE  
 CLASS 300 - FULL PORT

					MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST: API 598	MATERIAL: A351 CF8M	UNITS: Inch, mm
					DIM.OF FLANGE	ANSI B16.5	SHELL	HYDRO 1125PSI	PRESSURE: 300
					FACE TO FACE	API 608	SEAT	AIR 80PSI	DATE: 07/26/17
					FIRE SAFE	API 607	SEAT	HYDRO 825PSI	SCALE: N.T.S.
					DESIGNED	API 608	NACE MR 0175	CHK'D & APR'D BY: R.P.	FIG. No.: W37F-66RT
7/26/17	RELEASED	F.J.	R.P.	R.P.				REV: 1	DWG No.: 17BA120006-4-SV

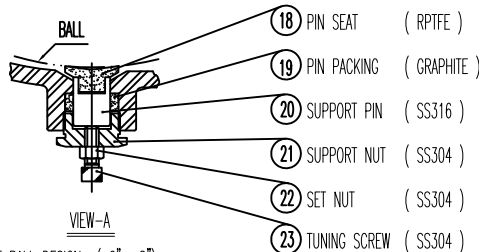
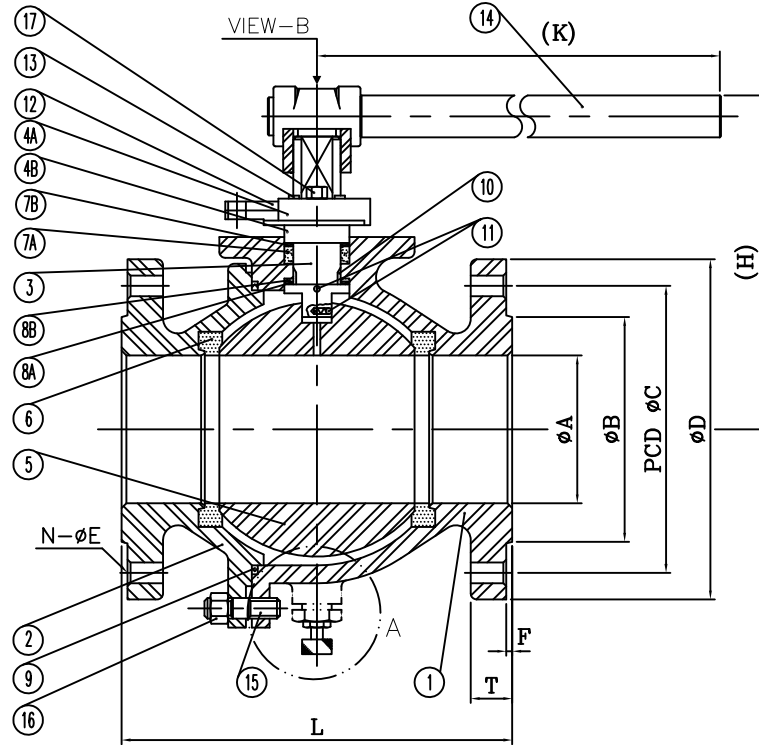
# Wm. E. Williams No. W37F-66RT Class 150 RF Full Port Ball Valve ASTM A351 CF8M NACE



SIZE	M	W
6	125	1/2-13UNC
8	125	1/2-13UNC



Nominal	TOL	6"		8"	
		M.M	IN	M.M	IN
A		152	6	200	8
B		216	8.5	270	10.63
C		270	10.63	330	13
D		318	12.52	381	15
E		22	0.87	25	0.98
F		1.6	0.06	1.6	0.06
T		36.6	1.44	41.3	1.63
N		12	12	12	12
H		285	11.22	323	12.72
K		650	25.59	950	37.4
L		403	15.86	502	19.76
J		43.5	1.71	43.5	1.71
Q		26	1.02	26	1.02
G		42	1.65	42	1.65
P		91	3.58	91	3.58



SUPPORT BALL DESIGN ( 6" , 8" )

## BILL OF MATERIALS

NO.	PART NAME	MATERIAL
1	BODY	A351-CF8M
2	CAP	A351-CF8M
3	STEM	SS316
4A	GLAND	A351-CF8
4B	SLEEVE	SS304
5	BALL	A351-CF8M
6	SEAT	RPTFE
7A	PACKING(1)	GRAPHITE
7B	PACKING(2)	50%PTFE+50%316
8A	THRUST WASHER(1)	50%PTFE+50%316
8B	THRUST WASHER(2)	RPTFE
9	GASKET	SPRIAL WOUND WIRE (316/GRAPHITE)
10	STEM BEARING	RPTFE
11	ANTI-STATIC	SS316
12	TRAVEL STOPPER	SS304
13	SNAP RING	NICKEL PLATED CARBON STEEL
14	HANDLE	DUCTILE IRON (FCD )/PIPE GRIP(S15C)
15	STUD	SS316(88M)
16	NUT	SS316(8M)
17	GLAND BOLT	SS304

NOTE: GEAR OPERATOR AVAILABLE

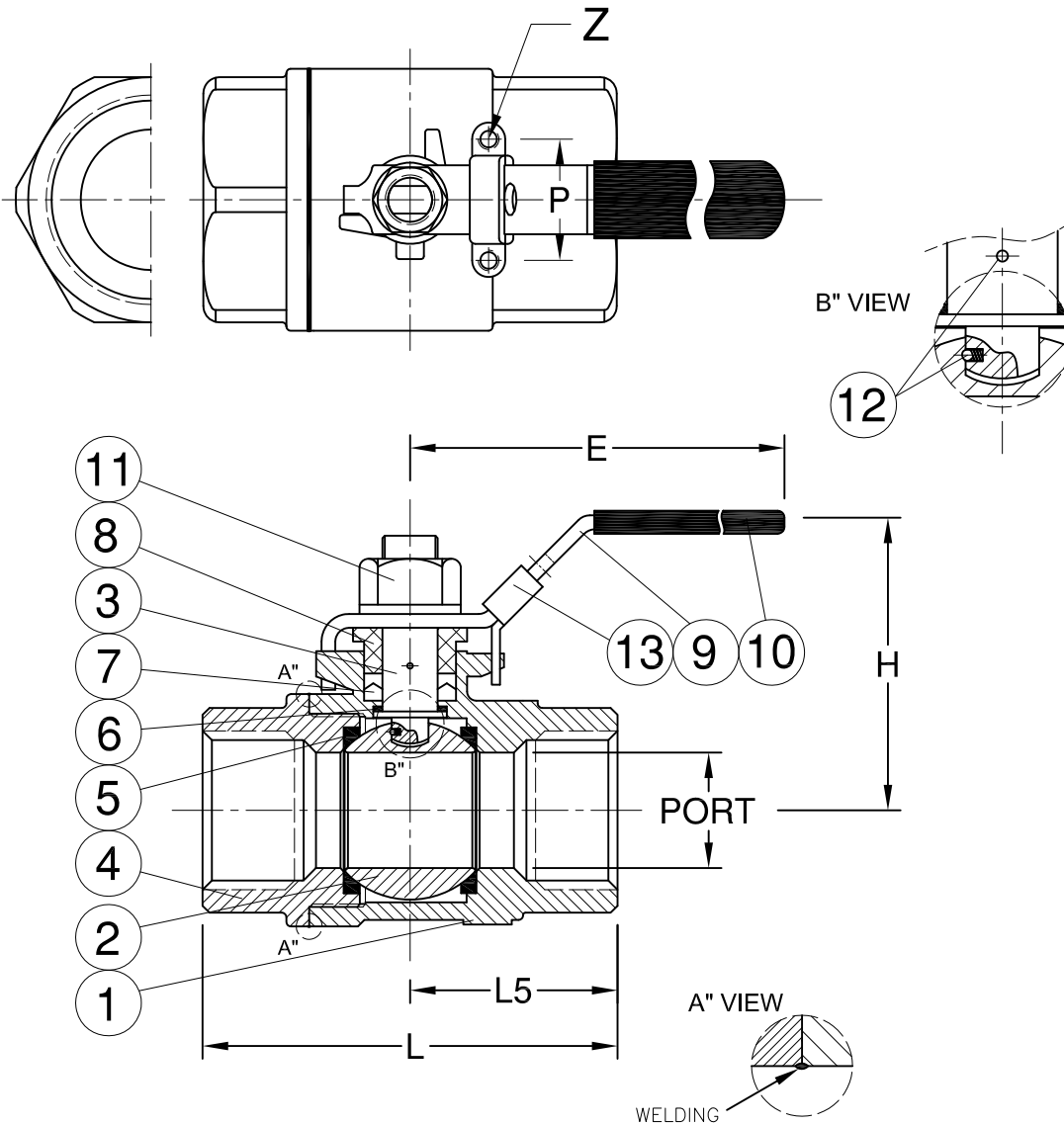
WILLIAM E. WILLIAMS VALVE CORPORATION  
 38-59 REVIEW AVENUE, LONG ISLAND CITY, NY 11101  
 TEL: 718-991-1660 FAX: 718-929-9106

TITLE: CAST STAINLESS STEEL FLOATING BALL VALVE  
 CLASS 300 - FULL PORT

MARKING SYSTEM	MSS-SP-25	INSPECTION & TEST:	API 598	MATERIAL:	A351 CF8M	UNITS:	Inch, mm
DIM.OF FLANGE	ANSI B16.5	SHELL	HYDRO	1125PSI	PRESSURE: 300	DATE:	07/25/17
FACE TO FACE	API 608	SEAT	AIR	80PSI	SCALE:	N.T.S.	FIG. No.:
FIRE SAFE	API 607	SEAT	HYDRO	825PSI	DRAWN BY:	F.J.	W37F-66RT
DESIGNED	API 608	NACE	MR 0175	CHK'D & APR'D BY:	R.P.	REV:	1
NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGNED	API 608

DWG No.:17BA120006-68-SW

# Wm. E. Williams No. W207S-6RT WOG 2000 Full Port Ball Valve ASTM A216 Gr. WCB



NO.	PART NAME	MATERIAL
1	BODY	ASTM A216 Gr.WCB
2	BALL	ASTM A351 Gr.CF8M
3	STEM	SS316
4	END CAP	ASTM A216 Gr.WCB
5	SEAT	PTFE
6	THRUST WASHER	GRAPHITTE
7	STEM PACKING	GRAPHITTE
8	GLAND NUT	SS304
9	HANDLE	SS304
10	HANDLE COVER	PLASTIC
11	HANDLE NUT	SS304
12	ANTI-STATIC DEVICE	SS304
13	LOCKING DEVICE	SS304

unit:inch

SIZE	PORT	L	L5	E	H	P	Z-2
DN8	1/4"	0.45	2.36	1.11	3.83	1.97	3/16"-24
DN10	3/8"	0.49	2.36	1.11	3.83	1.97	3/16"-24
DN15	1/2"	0.59	2.95	1.41	4.84	2.31	3/16"-24
DN20	3/4"	0.79	3.15	1.58	4.84	2.46	3/16"-24
DN25	1"	0.98	3.54	1.77	5.71	2.73	3/16"-24
DN32	1-1/4"	1.26	4.33	2.10	5.71	2.99	1/4"-20
DN40	1-1/2"	1.50	4.72	2.36	7.44	3.42	1/4"-20
DN50	2"	1.97	5.51	2.74	7.44	3.74	1/4"-20

WILLIAM E. VALVE CORPORATION  
 38-52 REVIEW AVENUE  
 LONG ISLAND CITY, NY 11101  
 TEL: 718-392-1660  
 FAX: 718-729-5105  
 WWW.WILLIAMSVALVE.COM

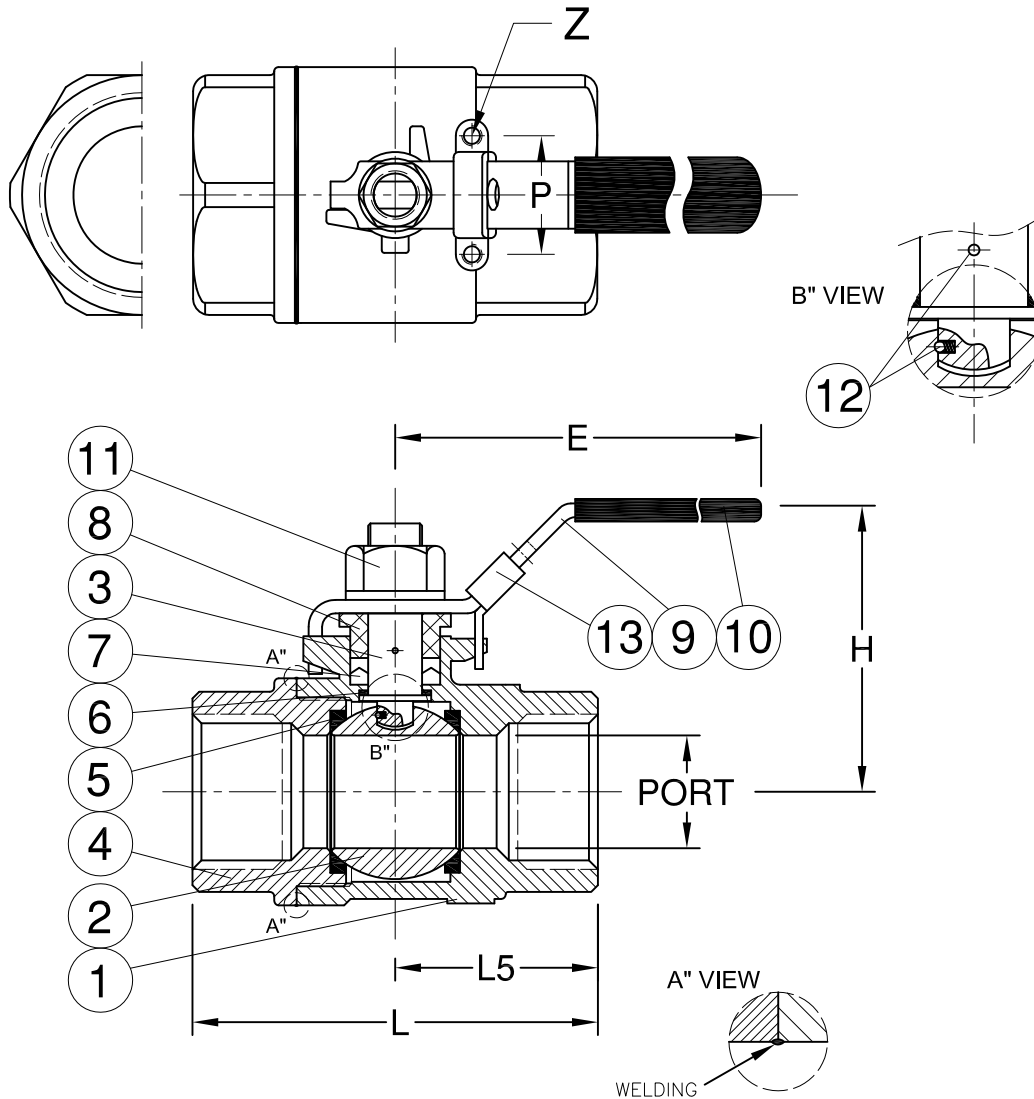
TITLE: CAST STEEL FLOATING BALL VALVE  
 2 PIECE - FULL PORT - SOCKETWELD ENDS - 316 BALL

NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGN	ANSI B16.34	MARKING SYSTEM	MSS-SP-25	SIZE	WORKING PRESSURE	MATERIAL: ASTM A216 Gr. WCB	UNITS: Inch, mm
										1/4" - 1"	2000PSI	PRESSURE:2000WOG	SCALE: N.T.S.
										1-1/4" - 2"	1500PSI	DATE: 10/07/16	FIG. No.: W207S-6RT
												DRAWN BY: F.J.	
												CHK'D & APR'D BY: R.P.	REV: 1 DWG No.: 46BA120016-W

10/7/16 RELEASED F.J. R.P. R.P. FIRESAFE API 607



# Wm. E. Williams No. W207S-66RT WOG 2000 Full Port Ball Valve A351 CF8M NACE



NO.	PART NAME	MATERIAL
1	BODY	ASTM A351 Gr.CF8M
2	BALL	ASTM A351 Gr.CF8M
3	STEM	SS316
4	END CAP	ASTM A351 Gr.CF8M
5	SEAT	PTFE
6	THRUST WASHER	GRAPHITTE
7	STEM PACKING	GRAPHITTE
8	GLAND NUT	SS304
9	HANDLE	SS304
10	HANDLE COVER	PLASTIC
11	HANDLE NUT	SS304
12	ANTI-STATIC DEVICE	SS304
13	LOCKING DEVICE	SS304

unit:inch

SIZE	PORT	L	L5	E	H	P	Z-2
DN8	1/4"	0.45	2.36	1.11	3.83	1.97	3/16"-24
DN10	3/8"	0.49	2.36	1.11	3.83	1.97	3/16"-24
DN15	1/2"	0.59	2.95	1.41	4.84	2.31	3/16"-24
DN20	3/4"	0.79	3.15	1.58	4.84	2.46	3/16"-24
DN25	1"	0.98	3.54	1.77	5.71	2.73	3/16"-24
DN32	1-1/4"	1.26	4.33	2.10	5.71	2.99	1/4"-20
DN40	1-1/2"	1.50	4.72	2.36	7.44	3.42	1/4"-20
DN50	2"	1.97	5.51	2.74	7.44	3.74	1/4"-20

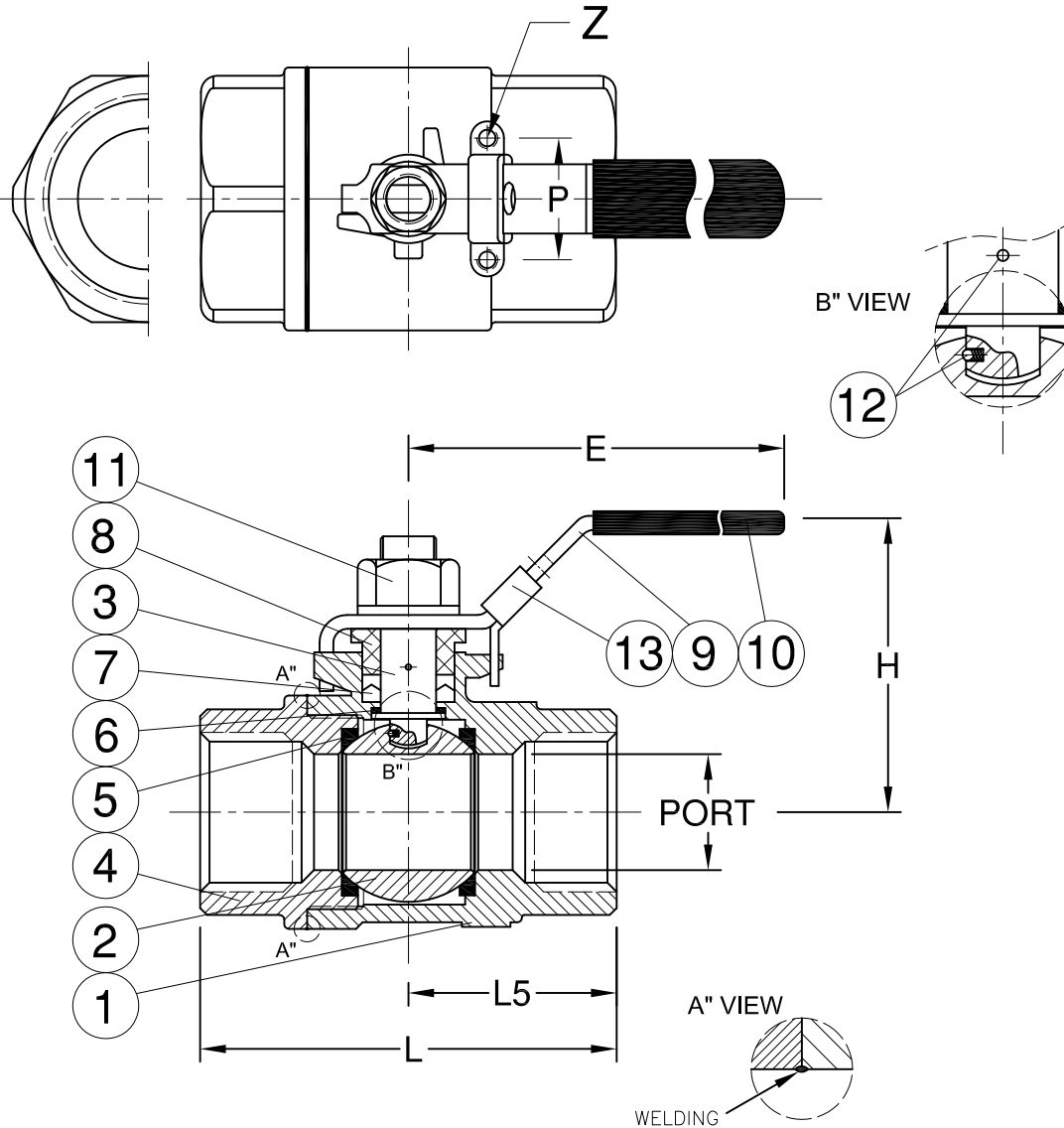
NOTE: AVAILABE IN NPT ENDS.

WILLIAM E. WWW.WILLIAMSVALVE.COM  
**WILLIAMS**  
 VALVE CORPORATION  
38-52 REVIEW AVENUE TEL: 718-392-1660  
 LONG ISLAND CITY, NY 11101 FAX: 718-729-5106

TITLE: STAINLESS STEEL 2 PIECE FULL PORT BALL VALVE  
 SOCKETWELD ENDS - CF8M BODY - 316 BALL

NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGN	ANSI B16.34	MARKING SYSTEM	MSS-SP-25	SIZE	WORKING PRESSURE	MATERIAL: CF8M	UNITS: Inch, mm
										1/4" - 1"	2000PSI	DATE: 10/07/16	SCALE: N.T.S.
										1-1/4" - 2"	1500PSI	FIG. No.: W207S-66RT	
												DRAWN BY: F.J.	
												CHK'D & APR'D BY: R.P.	REV: 1 DWG No.: 46BA120010-SW

# Wm. E. Williams No. W207T-6RT WOG 2000 Full Port Ball Valve ASTM A216 Gr. WCB



NO.	PART NAME	MATERIAL
1	BODY	ASTM A216 Gr.WCB
2	BALL	ASTM A351 Gr.CF8M
3	STEM	SS316
4	END CAP	ASTM A216 Gr.WCB
5	SEAT	PTFE
6	THRUST WASHER	GRAPHITE
7	STEM PACKING	GRAPHITE
8	GLAND NUT	SS304
9	HANDLE	SS304
10	HANDLE COVER	PLASTIC
11	HANDLE NUT	SS304
12	ANTI-STATIC DEVICE	SS304
13	LOCKING DEVICE	SS304

unit:inch

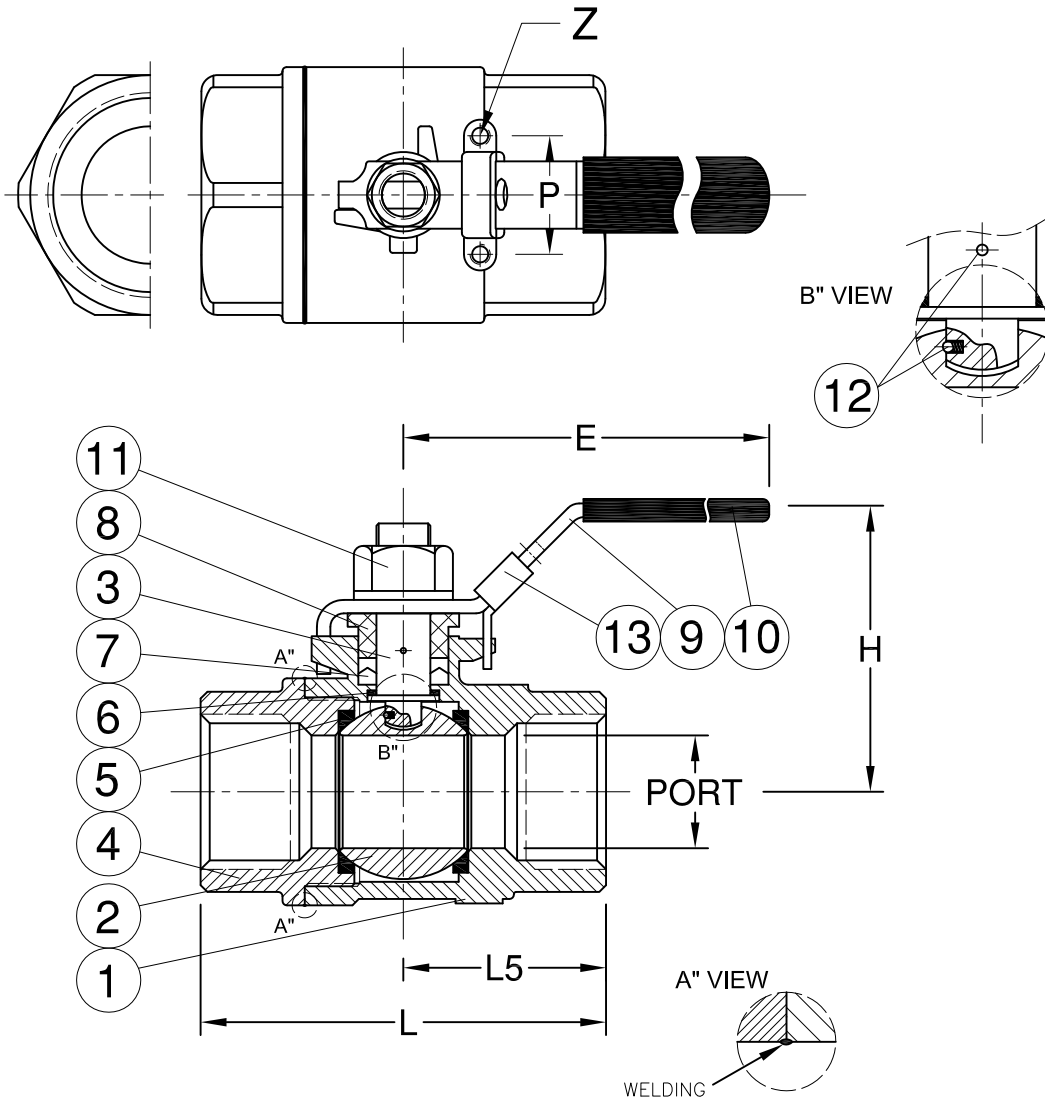
	SIZE	PORT	L	L5	E	H	P	Z-2
DN8	1/4"	0.45	2.36	1.11	3.83	1.97	1.12	3/16"-24
DN10	3/8"	0.49	2.36	1.11	3.83	1.97	1.12	3/16"-24
DN15	1/2"	0.59	2.95	1.41	4.84	2.31	1.12	3/16"-24
DN20	3/4"	0.79	3.15	1.58	4.84	2.46	1.38	3/16"-24
DN25	1"	0.98	3.54	1.77	5.71	2.73	1.38	3/16"-24
DN32	1-1/4"	1.26	4.33	2.10	5.71	2.99	1.50	1/4"-20
DN40	1-1/2"	1.50	4.72	2.36	7.44	3.42	1.50	1/4"-20
DN50	2"	1.97	5.51	2.74	7.44	3.74	1.50	1/4"-20

WILLIAM E. WILLIAMS VALVE CORPORATION  
 38-52 REVIEW AVENUE LONG ISLAND CITY, NY 11101  
 TEL: 718-392-1660 FAX: 718-729-5106

TITLE: CAST STEEL FLOATING BALL VALVE  
 2 PIECE - FULL PORT - THREADED ENDS - 316 BALL

NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGN	ANSI B16.34	MARKING SYSTEM	MSS-SP-25	SIZE	WORKING PRESSURE	MATERIAL: ASTM A216 Gr. WCB	UNITS: Inch, mm
										1/4" - 1"	2000PSI	DATE: 10/07/16	SCALE: N.T.S.
										1-1/4" - 2"	1500PSI	SIZE: 1/4" - 2"	FIG. No.: W207T-6RT
												DRAWN BY: F.J.	
												CHK'D & APR'D BY: R.P.	REV: 1 DWG No.: 46BA120013-W

# Wm. E. Williams No. W207T-66RT WOG 2000 Full Port Ball Valve A351 CF8M NACE



NO.	PART NAME	MATERIAL
1	BODY	ASTM A351 Gr.CF8M
2	BALL	ASTM A351 Gr.CF8M
3	STEM	SS316
4	END CAP	ASTM A351 Gr.CF8M
5	SEAT	PTFE
6	THRUST WASHER	GRAPHITTE
7	STEM PACKING	GRAPHITTE
8	GLAND NUT	SS304
9	HANDLE	SS304
10	HANDLE COVER	PLASTIC
11	HANDLE NUT	SS304
12	ANTI-STATIC DEVICE	SS304
13	LOCKING DEVICE	SS304

unit:inch

SIZE	PORT	L	L5	E	H	P	Z-2
DN8	1/4"	0.45	2.36	1.11	3.83	1.97	1.12 3/16"-24
DN10	3/8"	0.49	2.36	1.11	3.83	1.97	1.12 3/16"-24
DN15	1/2"	0.59	2.95	1.41	4.84	2.31	1.12 3/16"-24
DN20	3/4"	0.79	3.15	1.58	4.84	2.46	1.38 3/16"-24
DN25	1"	0.98	3.54	1.77	5.71	2.73	1.38 3/16"-24
DN32	1-1/4"	1.26	4.33	2.10	5.71	2.99	1.50 1/4"-20
DN40	1-1/2"	1.50	4.72	2.36	7.44	3.42	1.50 1/4"-20
DN50	2"	1.97	5.51	2.74	7.44	3.74	1.50 1/4"-20

WILLIAM E. WILLIAMS VALVE CORPORATION  
 38-52 REVIEW AVENUE LONG ISLAND CITY, NY 11101  
 TEL: 718-392-1660 FAX: 718-729-5106

TITLE: STAINLESS STEEL 2 PIECE FULL PORT BALL VALVE  
 NPT ENDS - CF8M BODY - 316 BALL

NO.	DATE	DESCRIPTION	PRP'D	REV'D	APP'D	DESIGN	ANSI B16.34	MARKING SYSTEM	MSS-SP-25	SIZE	WORKING PRESSURE	MATERIAL: CF8M	UNITS: Inch, mm
										1/4" - 1"	2000PSI	DATE: 10/07/16	SCALE: N.T.S.
										1-1/4" - 2"	1500PSI	FIG. No.:	W207T-66RT
												DRAWN BY: F.J.	
												CHK'D & APR'D BY: R.P.	REV: 1 DWG No.: 46BA120009-SW