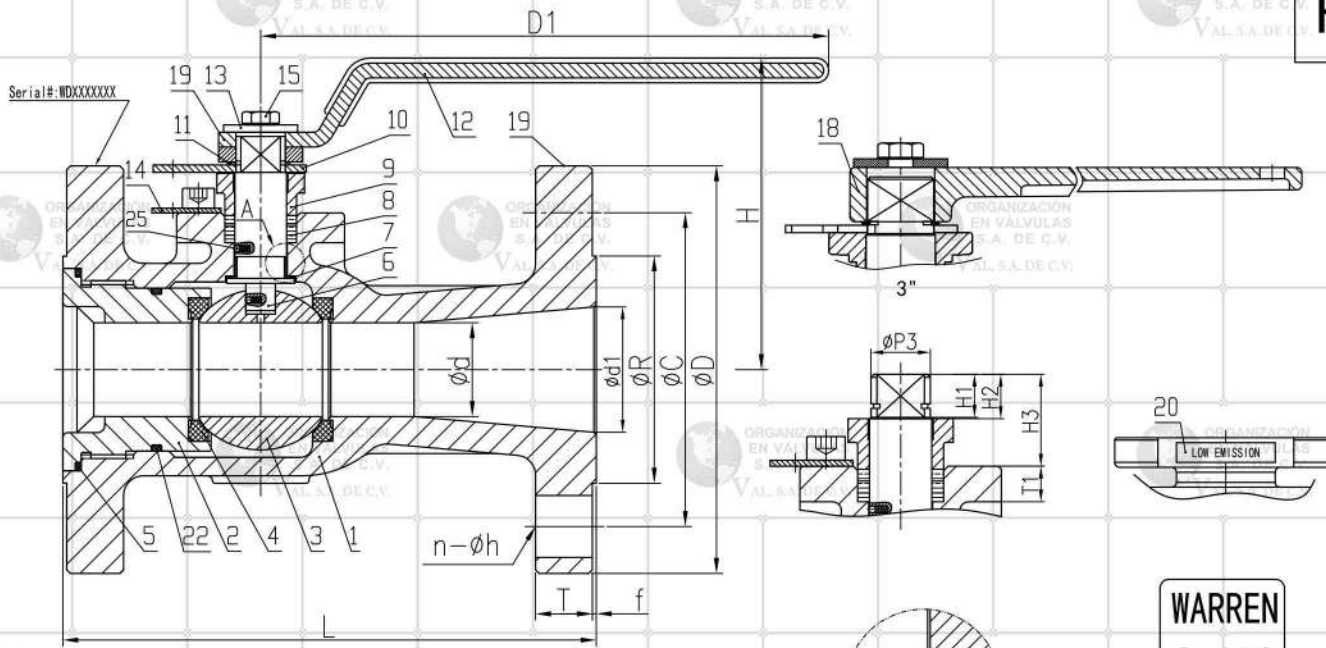


Fig No:WARREN- 5156FS-TR

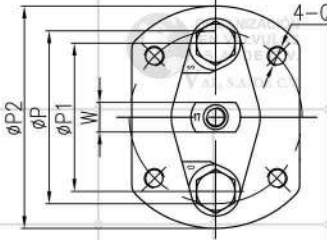
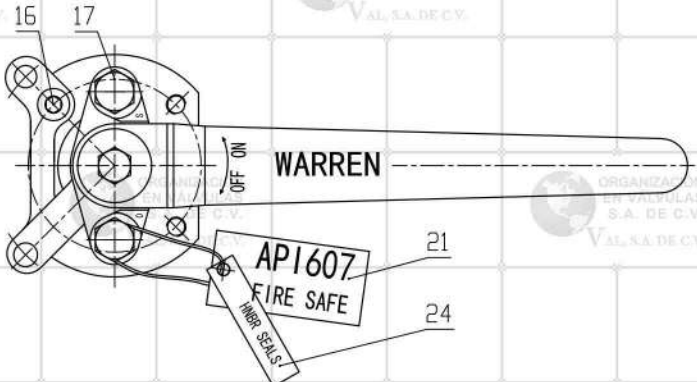


Steam Rating: 150 PSI WSP
Test Pressure: Inspection Per API 598
Shell (by Water): 425 Psig
Seat (by Air): 85.3 Psig

APPLICABLE STANDARDS:
 Manufacturing Standard :ASME B16.34
 Shell Wall Tickness:ASME B16.34
 Face to Face:ASME B16.10(Long Pattern)
 End Flanges:ASME B16.5
 Iso Mounting Pad :ISO 5211
 Fire-Safe Design, Tested :API607 6th Edition
 Low Emission:ISO 15848-1,15848-2 50 ppm
 Material Requirement: NACE MR 0175
 NACE MR 0103
 Torque Value Is Including 25% Safe Factor

MATERIAL LIST

NO.	PART NAME	SPECIFICATION	Q'TY	REMARKS
1	BODY	ASTM A351-CF8M	1	
2	CAP	ASTM A351-CF8M	1	
3	BALL	ASTM A182-F316	1	
4	SEAT RING	RTFE/TFM1600	2	RTFE (15% GLASS FILLED)
5	GASKET	Graphite	1	
6	STEM	17-4PH	1	
7	THRUST WASHER	RTFE	1	
8	STEM PACKING	Expanded Graphite +Corrosion Inhibitor	1SET	Cup And Cone Design
9	GLAND FLANGE	ASTM A351-CF8	1	
10	STOPPER	AISI A240-304	1	
11	SNAP RING	AISI A686-W1	1	2"&Larger Ni+Cr Plated
12	HANDLE	AISI A283-D+PVC	1	21/2"&Smaller
13	TOP WASHER	AISI A240-304	1	
14	LOCKING PLATE	AISI A240-304	1	
15	TOP BOLT	ASTM A193-B8	1	
16	LOCKING BOLT	ASTM A193-B8	2	
17	GLAND BOLT	ASTM A193-B8	2	
18	HANDLE	AISI A536	1	ONLY 3"
19	NAMEPLATE	AISI A167-304	1	
20	LOW EMISSION	AISI A240-304	1	
21	API607	PLASTIC	1	
22	O-RING	HNBR	1	
23	BEARING	PTFE	1	
24	O-Ring Tag	PLASTIC	1	
25	ANTI STATIC	A276-316	1	1 1/2" 2 2"&Larger



WARREN
2-150
CF8M

Body Mark

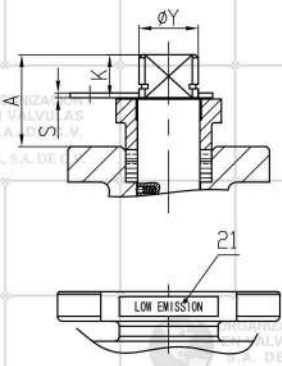
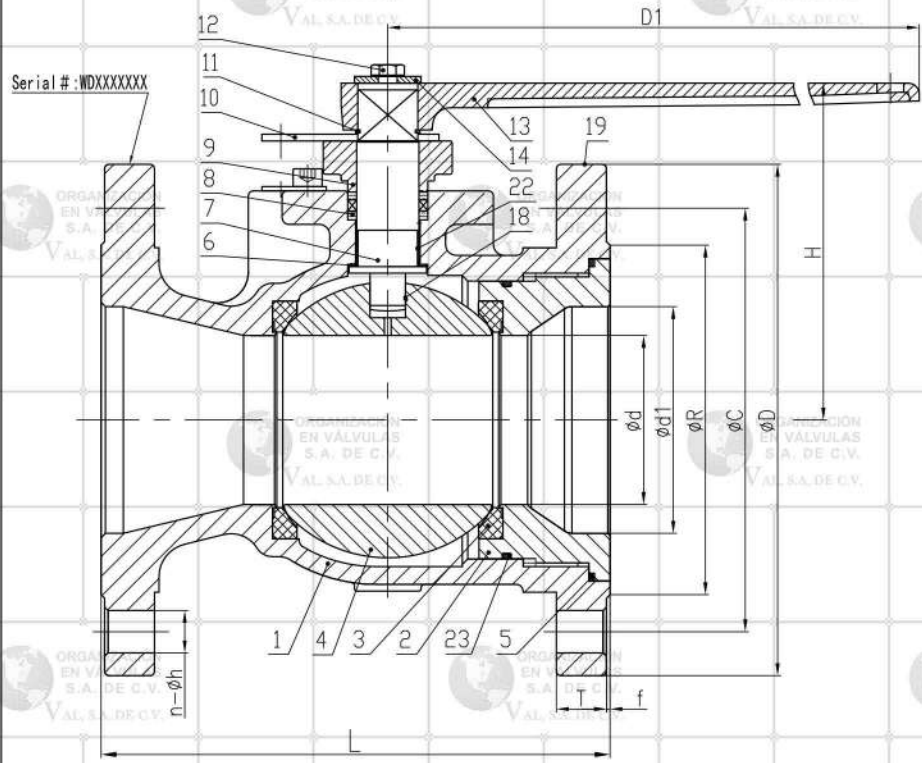
DIMENSIONS

UNIT:(Inch)

SIZE	d	d1	L	H	H1	H2	H3	D1	ISO5211	P	P1	P2	P3	W	D	C	R	Q UNC	n-h	T	T1	f	Qv (GPM)	TORQUE (IN-LB)	WEIGHT (LB)
DN40	1 1/2"	1.0	1.5	6.5	4.35	0.39	0.39	0.874	F05	1.97	1.93	2.56	0.55	0.31	4.92	3.87	2.87	1/4-20	4-0.63	0.52	0.433	0.06	28	232	15.432
DN50	2"	1.5	2.0	7.0	4.94	0.57	0.58	1.263	F07	2.76	2.36	3.54	0.79	0.47	5.984	4.75	3.62	5/16-18	4-0.75	0.63	0.433	0.06	84	387	20.943
DN65	2 1/2"	2.0	2.5	7.48	5.43	0.57	0.58	1.299	F07	2.76	2.36	3.54	0.79	0.47	7.09	5.5	4.13	5/16-18	4-0.75	0.75	0.472	0.06	212	586	30.864
DN80	3"	2.3	3.0	8.0	5.22	0.91	0.93	1.75	F10	4.02	3.31	4.92	1.06	0.67	7.48	6.0	5.0	3/8-16	4-0.75	0.75	0.47	0.06	202	996	37.478

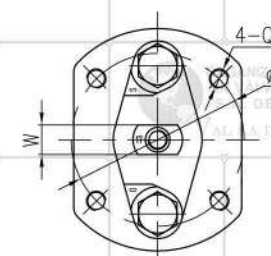
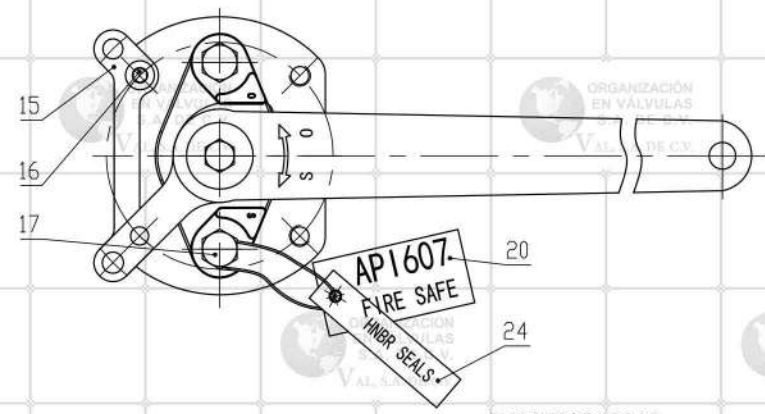
		APPROVED BY.	CHECK BY.	DRAWN BY.	DRAWINGNO.	MATERIAL	UNIT	DESCRIPTION	
Warren Valve		SIGN	YH.YE	YJ.WANG	Z.HAN	WARREN-5156FS-TR	inch	ONE PIECES BALL VALVES FIRE SAFE APPROVED, FLANGE END, BI-DIRECTIONAL, REDUCED BORE, ANSI CLASS 150	
		DATE	2018/06/19	2018/06/19	2018/06/19	REVISION	6	SCALE	FREE

Fig No:WARREN- 5156FS-TR



WARREN
4-150
CF8M

Body Mark



Steam Rating: 150 PSI WSP
 Test Pressure: Inspection Per API 598
 Shell (by Water)425 Psig
 Seat(by Air)85.3 Psig

APPLICABLE STANDARDS:
 Manufacturing Standard :ASME B16.34
 Shell Wall Tickness:ASME B16.34
 Face to Face:ASME B16.10(Short Pattern)
 End Flanges:ASME B16.5
 Iso Mounting Pad :ISO 5211
 Fire-Safe Design,Tested :API607 6th Edition
 Low Emission:ISO 15848-1,15848-2 50PPM
 Material Requirement: NACE MR 0175
 NACE MR 0103

Torque Value Is Including 25% Safe Factor

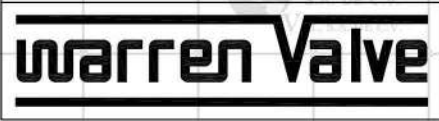
MATERIAL LIST

NO.	PART NAME	SPECIFICATION	QTY
1	BODY	A351-CF8M	1
2	CAP	A351-CF8M	1
3	SEAT RING	RTFE/TFM1600	2
4	BALL	A182-F316	1
5	GASKET	Graphite	1
6	THRUST WASHER	RTFE	1
7	STEM	17-4PH	1
8	GLAND PACKING	Expanded Graphite +Corrosion Inhibitor	1SET
9	GLAND FLANGE	A351-CF8	1
10	STOPPER	A240-304	1
11	SNAP RING	A686-W1	1
12	HANDLE BOLT	A193-B8	1
13	HANDLE	A536	1
14	HANDLE WASHER	A240-304	1
15	LOCKING PLATE	A240-304	1
16	LOCKING PLATE BOLT	A193-B8	2
17	GLAND BOLT	A193-B8	2
18	ANTI STATIC	A276-316	2
19	NAMEPLATE	A167-304	1
20	API607 TAG	PLASTIC	1
21	LOW EMISSION TAG	A167-304	1
22	STEM BEARING	PTFE	1
23	O-RING	HNBR	1
24	O-Ring Tag	PLASTIC	1

DIMENSIONS

UNIT:(Inch)

SIZE	d	d1	L	H	D1	ISO 5211	P	W	D	C	R	Q UNC	n-h	T	f	A	S	Y	K	Cv(GPM)	TORQUE(IN-LB)	WEIGHT(LB)	
DN100	4"	3.0	4.0	9.0	5.96	14.96	F10	4.02	0.67	9.06	7.5	6.19	3/8-16	8-0.75	0.88	0.06	1.71	0.12	1.06	0.91	302	907	59
DN150	6"	4.01	6.0	10.5	7.22	17.72	F10	4.02	0.87	11.02	9.5	8.5	3/8-16	8-0.88	0.94	0.06	1.93	0.12	1.34	1.18	304	2378	99



SIGN	APPROVED BY.	CHECK BY.	DRAWN BY.	DRAWINGNO.	MATERIAL	UNIT	DESCRIPTION
	YH.YE	YJ.WANG	Z.HAN	WARREN- 5156FS-TR	CF8M	inch	BVWA
DATE	2019/04/16	2019/04/16	2019/04/16	REVISION	6	SCALE	FREE

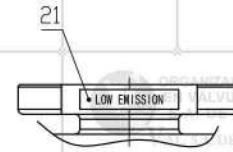
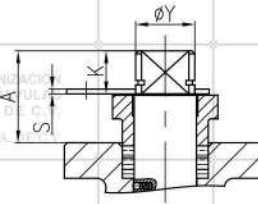
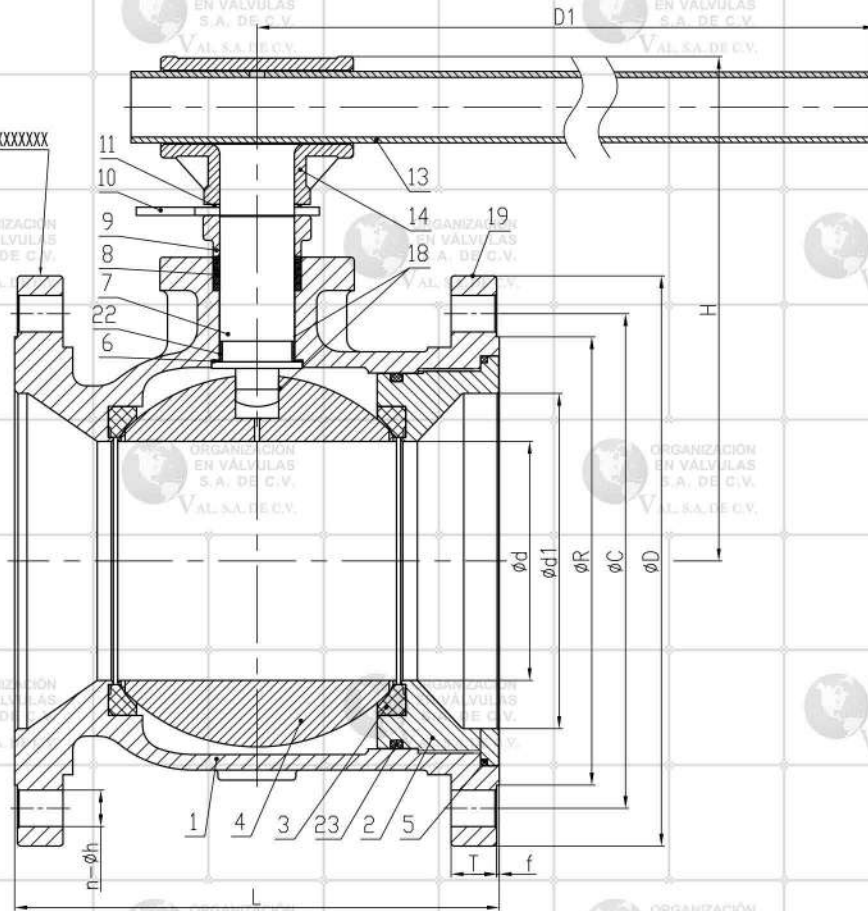
ONE PIECES BALL VALVES
FIRE SAFE APPROVED,FLANGE END,
BI-DIRECTIONAL, REDUCED BORE,
ANSI CLASS 150

Fig No:WARREN- 5156FS-TR

Steam Rating:
150 PSI WSP
Test Pressure:
Inspection Per API 598
Shell (by Water)425 Psig
Seat (by Air)85.3 Psig

APPLICABLE STANDARDS:
Manufacturing Standard :ASME B16.34
Shell Wall Thickness:ASME B16.34
Face to Face:ASME B16.10(Short Pattern)
End Flanges:ASME B16.5
Iso Mounting Pad :ISO 5211
Fire-Safe Design, Tested :API607 6th Edition
Low Emission:ISO 15848-1,15848-2 50PPM
Material Requirement: NACE MR 0175
NACE MR 0103
Torque Value Is Including 25% Safe Factor

Serial #: WDXXXXXXX

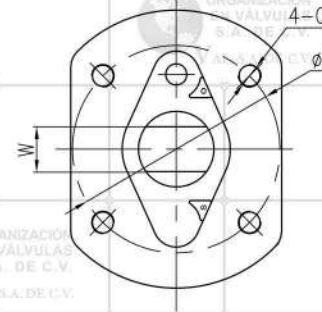
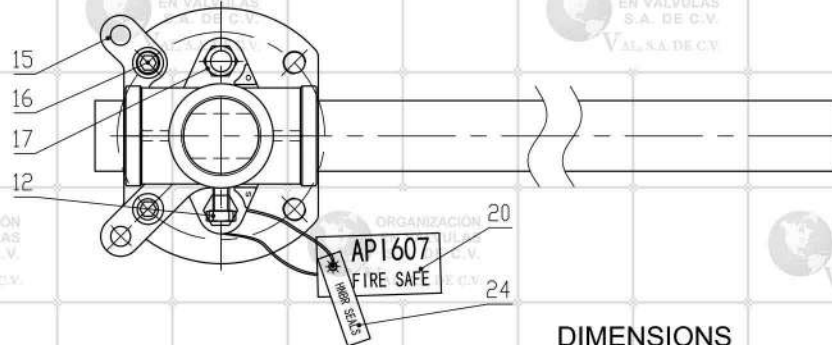


WARREN
8-150
CF8M

Body Mark

MATERIAL LIST

NO.	PART NAME	SPECIFICATION	QTY
1	BODY	A351-CF8M	1
2	CAP	A351-CF8M	1
3	SEAT RING	RTFE/TFM1600	2
4	BALL	A182-F316	1
5	GASKET	Graphite	1
6	THRUST WASHER	RTFE	1
7	STEM	17-4PH	1
8	GLAND PACKING	Expanded Graphite +Corrosion Inhibitor	1SET
9	GLAND FLANGE	A351-CF8	1
10	STOPPER	A240-304	1
11	SNAP RING	A686-W1	1
12	SET SCREW	A193-B8	2
13	HANDLE	CARBON STEEL	1
14	HANDLE GUIDE	A216-WCB	1
15	LOCKING PLATE	A240-304	1
16	LOCKING PLATE BOLT	A193-B8	2
17	GLAND BOLT	A193-B8	2
18	ANTI STATIC	A276-316	2
19	NAMEPLATE	A167-304	1
20	API607 TAG	PLASTIC	1
21	LOW EMISSION TAG	A167-304	1
22	STEM BEARING	PTFE	1
23	O-RING	HNBR	1
24	O-Ring Tag	PLASTIC	1



DIMENSIONS

UNIT:(Inch)

SIZE	d	d1	L	H	D1	ISO 5211	P	W	D	C	R	Q UNC	n-h	T	f	A	S	Y	K	Cv(GPM)	TORQUE(IN-LB)	WEIGHT(LB)
DN200	8"	5.67	8.0	11.5	11.61	F12	4.92	1.02	13.58	11.75	10.63	1/2-13	8-0.88	1.06	0.06	2.32	0.20	1.73	1.34	675	5531	170
DN250	10"	7.32	10.0	13.0	14.06	F14	5.51	1.26	15.94	14.25	12.75	5/8-11	12-1.02	1.125	0.06	2.87	0.20	2.01	1.65	1147	9513	287

Warren Valve

	APPROVED BY.	CHECK BY.	DRAWN BY.	DRAWINGNO.	MATERIAL	UNIT	DESCRIPTION
SIGN	YH.YE	YJ.WANG	Z.HAN	WARREN- 5156FS-TR	CF8M	inch	BVWA
DATE	2019/07/08	2019/07/08	2019/07/08	REVISION	4	SCALE	FREE

ONE PIECES BALL VALVES
FIRE SAFE APPROVED, FLANGE END,
BI-DIRECTIONAL, REDUCED BORE,
ANSI CLASS 150