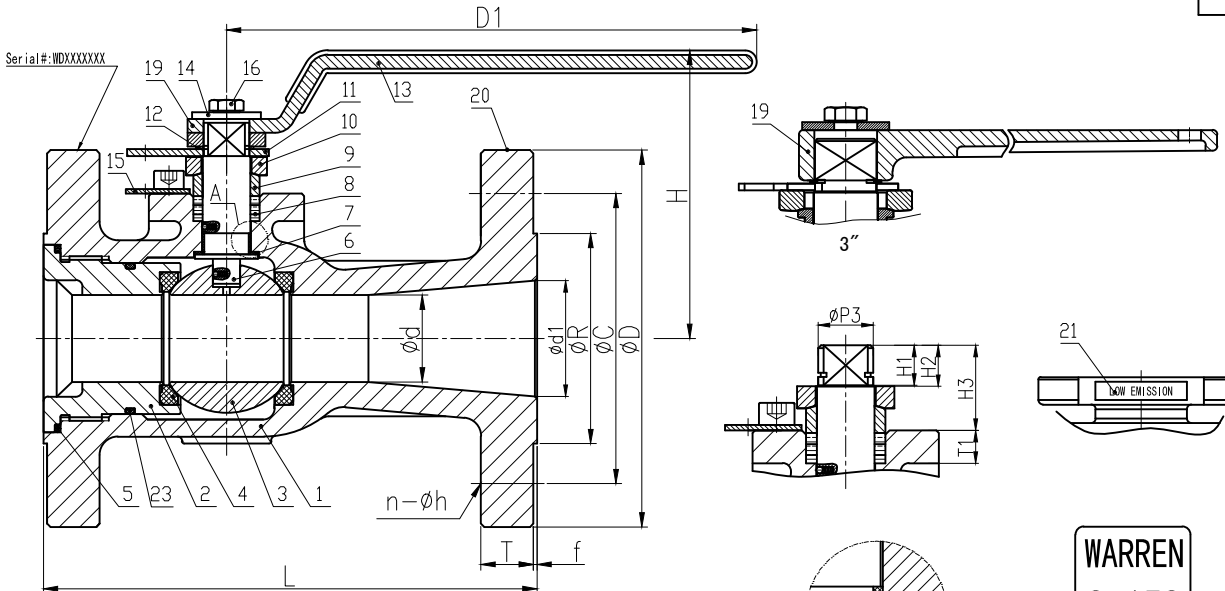


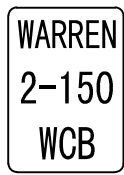
Fig No:WARREN- 5155FS



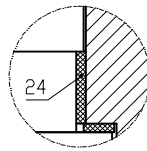
Steam Rating: APPLICABLE STANDARDS:
 150 PSI WSP Manufacturing Standard :ASME B16.34
Test Pressure: Shell Wall Tickness:ASME B16.34
 Inspection Per API 598 Face to Face:ASME B16.10(Long Pattern)
 Shell (by Water)450 Psig End Flanges:ASME B16.5
 Seat(by Air)85.3 Psig Iso Mounting Pad :ISO 5211
 Fire-Safe 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

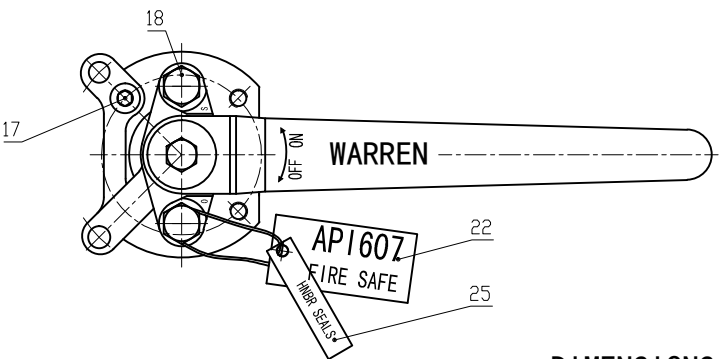
NO.	PART NAME	SPECIFICATION	Q'TY	REMARKS
1	BODY	ASTM A216-WCB	1	
2	CAP	ASTM A216-WCB	1	
3	BALL	ASTM A182-F316	1	
4	SEAT RING	RTFE/TFM1600	2	RTFE (15% GLASS FILLED)
5	GASKET	Graphite	1	
6	STEM	17-4PH	1	
7	THRUST WASHER	RTFE	1	
8	STEM PACKING	Expanded Graphite +Corrosion Inhibitor	1SET	Cup And Cone Design
9	GLAND	AISI A276-316	1	
10	GLAND FLANGE	ASTM A351-CF8	1	
11	STOPPER	AISI A240-304	1	
12	SNAP RING	AISI A686-W1	1	2" & Larger Ni+Cr Plated
13	HANDLE	AISI A283-D+PVC	1	21/2" & Smaller
14	TOP WASHER	AISI A240-304	1	
15	LOCKING PLATE	AISI 1020	1	Zn Plated
16	TOP BOLT	ASTM A193-B8	1	
17	LOCKING BOLT	ASTM A307-B	2	Zn Plated
18	GLAND BOLT	ASTM A193-B8	2	
19	HANDLE	AISI A536	1	ONLY 3"
20	NAMEPLATE	AISI A167-304	1	
21	LOW EMISSION	AISI A240-304	1	
22	API607	PLASTIC	1	
23	O-RING	HNBR	1	
24	BEARING	PTFE	1	
25	O-Ring Tag	PLASTIC	1	



Body Mark



SCALE A



DIMENSIONS

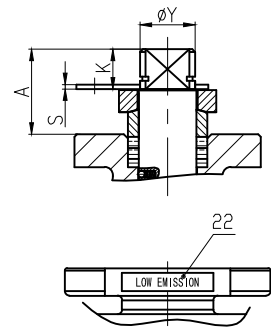
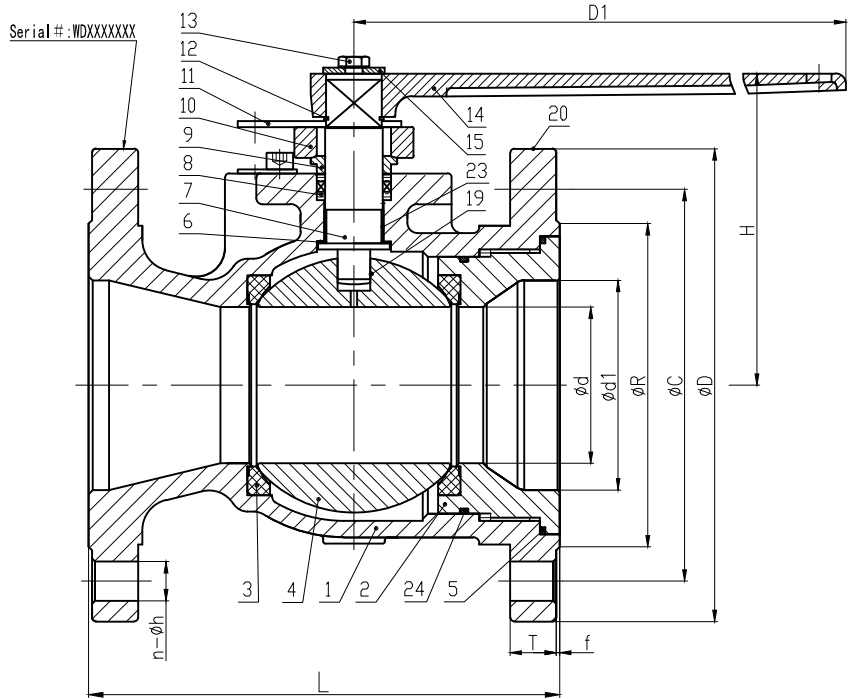
UNIT:(Inch)

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	CV (GPM)	TORQUE (IN-LB)	WEIGHT (LB)
DN40	1 1/2"	1.0	1.5	6.5	4.35	0.39	0.39	0.874	6.1	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	159	15.432
DN50	2"	1.5	2.0	7.0	4.94	0.57	0.58	1.263	9.06	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	425	20.943
DN65	2 1/2"	2.0	2.5	7.48	5.43	0.57	0.58	1.299	9.06	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	664	30.864
DN80	3"	2.3	3.0	8.0	5.22	0.91	0.93	1.75	14.96	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	973	37.478

	APPROVED BY:		CHECK BY:		DRAWN BY:		DRAWING NO.		MATERIAL		UNIT		DESCRIPTION	
	SIGN	YH.YE	YJ.WANG	J.ZENG	WARREN-5155FS	WCB	inch	ONE PIECES BALL VALVES FIRE SAFE APPROVED, FLANGE END, BI-DIRECTIONAL, REDUCED BORE, ANSI CLASS 150						
	DATE	2016/1/19	2016/1/19	2016/1/19	REVISION	13	SCALE	FREE						

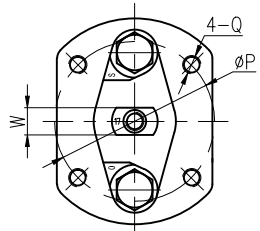
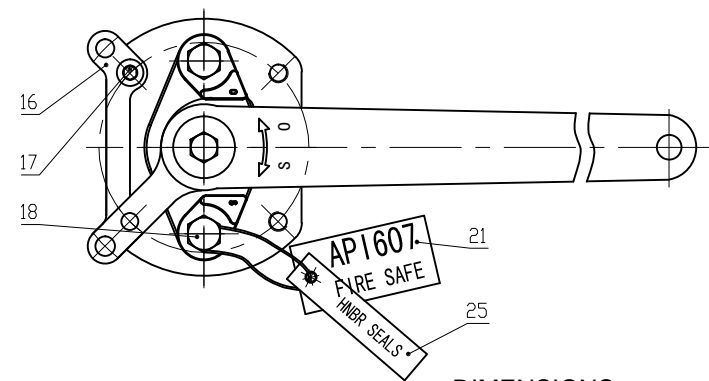
Fig No:WARREN- 5155FS

Steam Rating: APPLICABLE STANDARDS:
 150 PSI WSP Manufacturing Standard :ASME B16.34
Test Pressure: Shell Wall Tickness:ASME B16.34
 Inspection Per API 598 Face to Face:ASME B16.10(Long Pattern)
 Shell (by Water)450 Psig End Flanges:ASME B16.5
 Seat(by Air)85.3 Psig 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



WARREN
4-150
WCB

Body Mark



MATERIAL LIST

NO.	PART NAME	SPECIFICATION	Q'TY	
1	BODY	A216-WCB	1	
2	CAP	A216-WCB	1	
3	SEAT RING	RTFE/TFM1600	2	RTFE (15% GLASS FILLED)
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	CUP AND CONE DESIGN
9	GLAND RING	A276-316	1	
10	GLAND FLANGE	A351-CF8	1	
11	STOPPER	A240-304	1	
12	SNAP RING	A686-W1	1	Ni+Cr Plated
13	HANDLE BOLT	A193-B8	1	
14	HANDLE	A536	1	
15	HANDLE WASHER	A240-304	1	
16	LOCKING PLATE	AISI 1020	1	Zn Plated
17	LOCKING PLATE BOLT	A307-B	2	Zn Plated
18	GLAND BOLT	A193-B8	2	
19	ANTI STATIC	A276-316	2	
20	NAMEPLATE	A167-304	1	
21	API607 TAG	PLASTIC	1	
22	LOW EMISSION TAG	A167-304	1	
23	STEM BEARING	PTFE	1	
24	O-RING	HNBR	1	
25	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	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	1062	59
DN150	6"	4.01	6.0	10.5	7.22	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	2655	99

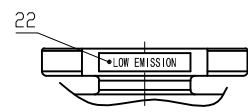
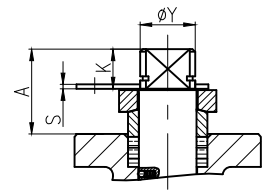
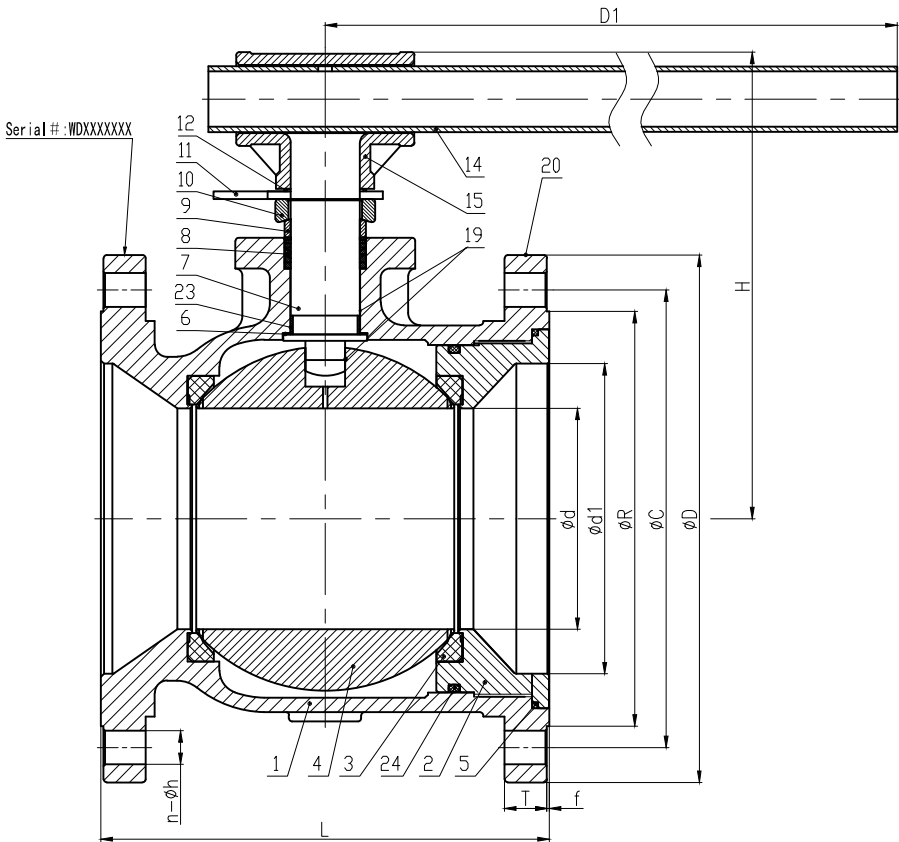


APPROVED BY.	CHECK BY.	DRAWN BY.	DRAWINGNO.	MATERIAL	UNIT	DESCRIPTION
SIGN	YH.YE	YJ.WANG	J.ZENG	WARREN- 5155FS	WCB	ONE PIECES BALL VALVES
DATE	2016/1/19	2016/1/19	2016/1/19	REVISION	04	FIRE SAFE APPROVED,FLANGE END, BI-DIRECTIONAL, REDUCED BORE, ANSI CLASS 150
				SCALE	FREE	

Fig No:WARREN- 5155FS

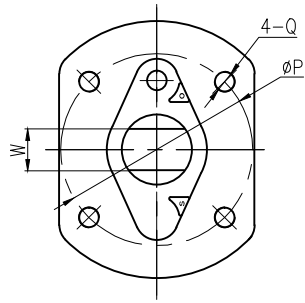
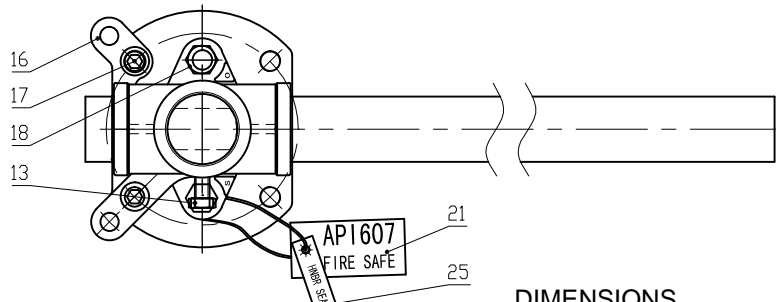
Steam Rating: APPLICABLE STANDARDS:
 150 PSI WSP Manufacturing Standard :ASME B16.34
Test Pressure: Shell Wall Thickness:ASME B16.34
 Inspection Per API 598 Face to Face:ASME B16.10(Long Pattern)
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 Seat(by Air)85.3 Psig Iso Mounting Pad :ISO 5211
 Fire-Safe 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 # :WDXXXXXX



WARREN
8-150
WCB

Body Mark



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	20.63	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	4867	170
DN250 10"	7.32	10.0	13.0	14.06	28.54	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	7611	287

MATERIAL LIST

NO.	PART NAME	SPECIFICATION	Q'TY	
1	BODY	A216-WCB	1	
2	CAP	A216-WCB	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	CUP AND CONE DESIGN
9	GLAND RING	A276-316	1	
10	GLAND FLANGE	A351-CF8	1	
11	STOPPER	A240-304	1	
12	SNAP RING	A686-W1	1	Ni+Cr Plated
13	SET SCREW	A193-B8	2	
14	HANDLE	CARBON STEEL	1	
15	HANDLE GUIDE	A216-WCB	1	
16	LOCKING PLATE	AISI 1020	1	Zn Plated
17	LOCKING PLATE BOLT	A307-B	2	Zn Plated
18	GLAND BOLT	A193-B8	2	
19	ANTI STATIC	A276-316	2	
20	NAMEPLATE	A167-304	1	
21	API607 TAG	PLASTIC	1	
22	LOW EMISSION TAG	A167-304	1	
23	STEM BEARING	PTFE	1	
24	O-RING	HNBR	1	
25	O-Ring Tag	PLASTIC	1	



	APPROVED BY.	CHECK BY.	DRAWN BY.	DRAWINGNO.	MATERIAL	UNIT	DESCRIPTION
SIGN	YH.YE	YJ.WANG	J.ZENG	WARREN- 5155FS	WCB	inch	ONE PIECES BALL VALVES FIRE SAFE APPROVED,FLANGE END, BI-DIRECTIONAL, REDUCED BORE, ANSI CLASS 150
DATE	2016/1/19	2016/1/19	2016/1/19	REVISION	04	SCALE	