

USMANI



TUBES & VALVES Co. PVT. LTD.

MFG. OF INDUSTRIAL VALVES & PIPES, PIPE FITTINGS ETC.

FORGED STEEL GATE / GLOBE NON RETURN VALVE

800# SCREWED / SOCKETWELD END

For Air, Chemical, Refineries, Petro-chemical Gas,
Fertilizer Plant, Power Generation Plants (Hydro-Electric & Nuclear)
Steel Plants, Allied Industries, Low Steam, Process Industries Etc.



These valves are manufactured from tested material and have guaranteed performance.
This valve gives trouble free service and long life.

FEATURES :

Forged steel valves are of compact design with bolted bonnet / cover.
shoulder type body seating. Tee head plug / wedge to stem connection.
Rugged outside screw and yoke connection with choice of trims

USMANI TUBES AND VALVES CO. PVT. LTD.

FORGED LIFT CHECK VALVE CLASS 800 / 150 / 300 / 600

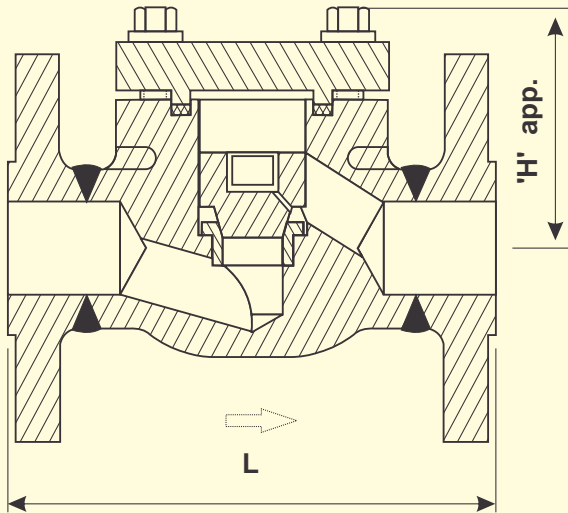


FIG:U-FN 2015WF / U-FN 2030WF / U-FN 2060WF

BOLTED COVER

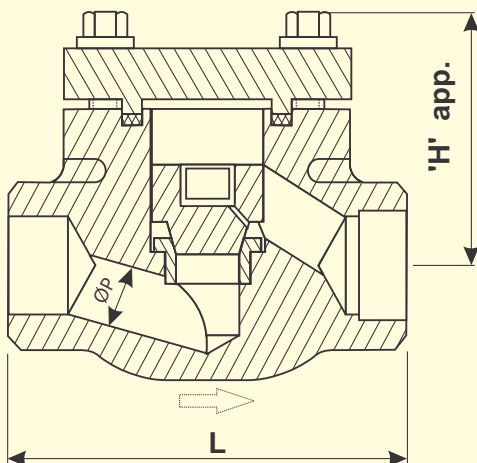


FIG:U-FN 2080 CLASS 800

DIMENSION TABLE - 800 CLASS - REDUCED BORE

Valve Size in mm	0.25 08	0.37 10	0.5 15	0.75 20	1 25	1.5 40	2 50
L	3.3 85	3.3 85	3.3 85	3.5 90	4.0 103	5.0 128	5.6 142
'H' app	60	60	60	70	80	105	115
ØP		6.0	9.0	12.0	17.5	29.5	35.0
Wt. kg app	1.5	1.5	1.5	2.0	2.5	6.0	8

DIMENSION TABLE - 800 CLASS - FULL BORE

Valve Size in mm	0.25 08	0.37 10	0.5 15	0.75 20	1 25	1.5 40
L	3.3 85	3.3 85	3.5 90	4 103	5.0 128	5.6 142
'H' app	60	60	70	80	105	115
ØP	6.0	9.0	12.0	17.5	22.5	35.0
Wt. kg app	1.5	1.5	2.0	2.5	6.0	8.0

NOTE :
1 - SPRING LOADED DESIGN - OPTIONAL
2 - STELLITED ON DISC/ SEAT OPTIONAL FOR 800 CLASS

DIMENSION TABLE 300 CLASS

Valve Size in mm	0.5 15	0.75 20	1 25	1.5 40
L	6.0 152.5	7.0 178	8.0 203	9.0 228.5
'H' app	60	70	80	105
Wt. kg app	2.5	3.5	7.5	12

NOTE :
1 - ALL WELDED JOINT'S WILL BE 100% RADIOGRAPHED
2 - SPRING LOADED DESIGN - OPTIONAL
3 - STELLITED ON PLUG / SEAT OPTIONAL

DIMENSION TABLE 600 CLASS

Valve Size in mm	0.5 15	0.75 20	1 25	1.5 40
L	6.5 165	7.5 190.5	8.5 216	9.5 241
'H' app	70	80	105	115
Wt. kg app	2.75	3.7	8.5	13.5



MATERIAL SPECIFICATIONS

NO.	Part Name	Material
1.	Body	A 105 F 304 F 316
2.	Plug	13%Cr. T 304 T 316
3.	Seat	13%Cr. T 304 T 316
4.	Cover	A 105 F 304 F 316
5.	Collar Bolt/ Stud & Nut	B7/ 2H B8/ 8 OR B7/ 2H
6.	Gasket	SPW S.S 304/316 WITH CAF/GRAFOIL
7.	Name Plate	ALUMINIUM

REF STANDARDS

MFG. AND DESIGN : BS 5352
FACE TO FACE : MG STD./ ASME B16.34
INSPECTION AND TESTING: AP1 598/BS 6755

TESTING DETAIL

Hydrotest {KG/CM^2}
Shell
Seat and Back Seat
Seat Ari Test :

DIMENSION TABLE 150 CLASS

Valve Size in mm	0.5 15	0.75 20	1 25	1.5 40
L	4.25 108	4.6 118	5 127	6.5 165
'H' app	60	70	80	105
Wt. kg app	2	3	3.8	11.5

USMANI TUBES AND VALVES CO. PVT. LTD.

FORGED GLOBE VALVE CLASS 800/150/300/600 SCREW / SOCKET WELD / ON FLANGED

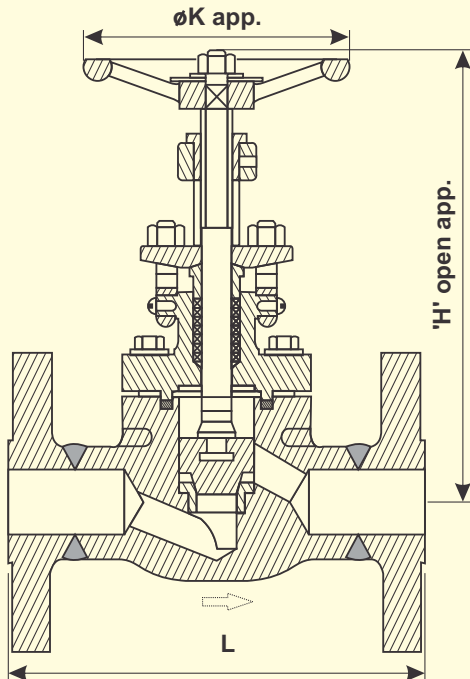


FIG:U-FG 1015WF,U-FG 1030WF,U-FG 1060WF

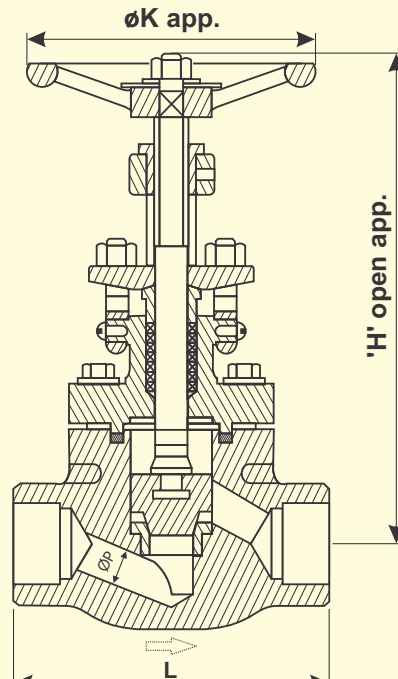


FIG:U-FG 1080 CLASS 800



DIMENSION TABLE - 800 CLASS - FULL BORE

Valve Size in mm	0.25 08	0.37 10	0.5 15	0.75 20	1 25	1.5 40
L	3.3 85	3.3 85	3.5 90	4 103	5.0 128	5.6 142
'H' app	170	170	180	210	280	290
ØK app	95	95	95	105	150	150
ØP	6.0	9.0	12.0	17.5	22.5	35.0
Wt. kg app	2.0	2.0	2.5	4.0	8.5	9.0

DIMENSION TABLE - 800 CLASS - REDUCED BORE

Valve Size in mm	0.25 08	0.37 10	0.5 15	0.75 20	1 25	1.5 40	2 50
L	3.3 85	3.3 85	3.3 85	3.5 90	4.0 103	5.0 128	5.6 142
'H' app	170	170	170	180	210	280	290
ØK app	95	95	95	95	105	150	150
ØP	6.0	6.0	9.0	12.0	17.5	29.5	35.0
Wt. kg app	2.0	2.0	2.0	2.5	4.0	8.5	9.0

REF STANDARDS

MFG. AND DESIGN :BS 5352
FACE TO FACE : MG STD. / ASME B16.34
INSPECTION AND TESTING:AP1 598/BS 6755

MATERIAL SPECIFICATIONS

NO.	Part Name	Material		
1.	Body	A 105	F 304	F 316
2.	Bonnet	A 105	F 304	F 316
3.	Plug	13%Cr	T304	T316
4.	Seat	13%Cr	T304	T316
5.	Spindle	T410	T304	T316
6.	Gland Bush	T410	T304	T316
7.	Gland Flange	A 105	F 304	
8.	Yoke Nut	ASTM A 439 Gr.D2/ AL- BRONZE		
9.	Hand Wheel	CAST STEEL		
10.	Hand Wheel Nut	Gr. 2H		
11.	Collar Bolt/ Stud & Nut	B7/ 2H	B8/ 8 OR B7/ 2H	
12.	Eye Bolt & Nut	B7/ 2H	B8 / 8	
13.	Gasket	SPW S.S 304/316 WITH CAF/GRAFOIL		
14.	Gland Packing	GRAPHITE ASBESTOS INHIB. & INCONEL WIRE REIN.		
15.	Screw / Rivet & Washer	STEEL		
16.	Washer	STEEL		
17.	Grub Screw	STEEL		
18.	Name Plate	ALUMINIUM		

DIMENSION TABLE 150 CLASS DIMENSION TABLE 300 CLASS DIMENSION TABLE 600 CLASS

TESTING DETAIL

Hydrotest {KG/CM^2}	
Shell	
Seat and Back Seat	
Seat Ari Test :	

Valve Size in mm	0.5 15	0.75 20	1 25	1.5 40
L	4.25 108	4.6 118	5 127	6.5 165
'H' app	170	180	210	280
ØK app	95	95	105	150
Wt. kg app	3.0	4.5	6.0	10.0

Valve Size in mm	0.5 15	0.75 20	1 25	1.5 40
L	6.0 152.5	7.0 178	8.0 203	9.0 228.5
'H' app	170	180	210	280
ØK app	95	95	105	150
Wt. kg app	4.0	6.0	8.0	17.0

Valve Size in mm	0.5 15	0.75 20	1 25	1.5 40
L	6.5 165	7.5 190.5	8.5 216	9.5 241
'H' app	180	210	280	290
ØK app	95	105	150	150
Wt. kg app	4.5	6.5	8.5	17.5

USMANI TUBES AND VALVES CO. PVT. LTD.

FORGED GATE VALVE CLASS 800/150/300/600 SCREWED / SOCKET WELD / FLANGED

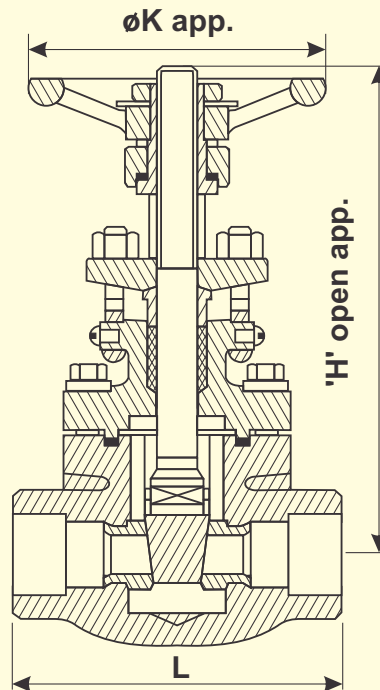
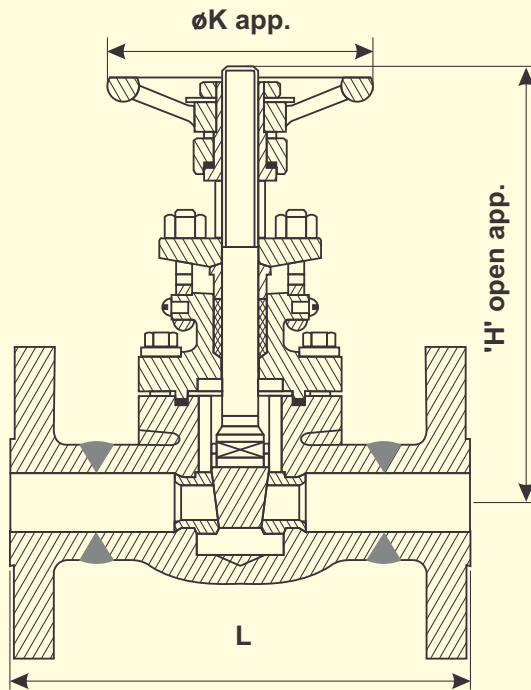


FIG:U-FGT 1015WF U-FGT 1030WF U-FGT 1060WF FIG:U-FGT 1080 CLASS 800

DIMENSION TABLE - 800 CLASS - FULL BORE

Valve Size in mm	0.25 08	0.37 10	0.5 15	0.75 20	1 25	1.5 40
L	3.3 85	3.3 85	3.5 90	3.5 90	4 103	5 128
'H' app	165	165	175	175	220	270
ØK app	95	95	95	95	105	150
ØP	6.0	9.0	12.0	18.0	23.0	36.0
Wt. kg app	2.0	2.0	2.5	3.5	7.5	7.5

DIMENSION TABLE - 800 CLASS - REDUCED BORE

Valve Size in mm	0.25 08	0.37 10	0.5 15	0.75 20	1 25	1.5 40	2 50
L	3.3 85	3.3 85	3.3 85	3.5 90	4 103	5 128	5.6 142
'H' app	165	165	165	175	215	270	285
ØK app	95	95	95	95	105	150	150
ØP	6.4	6.4	9.5	12.7	17.5	28.6	36.5
Wt. kg app	2.0	2.0	2.0	2.5	3.5	7.5	9.0

REF STANDARDS

MFG. AND DESIGN :BS 5352/API 602
FACE TO FACE : MG STD. / ASME B16.34
INSPECTION AND TESTING:AP1 598/BS 6755

MATERIAL SPECIFICATIONS

NO.	Part Name	Material		
1.	Body	A 105	F 304	F 316
2.	Bonnet	A 105	F 304	F 316
3.	Wedge	13%Cr	T304	T316
4.	Seat	13%Cr	T304	T316
5.	Spindle	T410	T304	T316
6.	Gland Bush	T410	T304	T316
7.	Gland Flange	A 105	F 304	
8.	Yoke Nut	ASTM A 439 Gr.D2/ AL- BRONZE		
9.	Hand Wheel	CAST STEEL		
10.	Hand Wheel Nut	Gr. 2H		
11.	Collar Bolt/ Stud & Nut	B7/ 2H	B8/ 8 OR B7/ 2H	
12.	Eye Bolt & Nut	B7/ 2H	B8 / 8	
13.	Gasket	SPW S.S 304/316 WITH CAF/GRAFOIL		
14.	Gland Packing	GRAPHITE ASBESTOS INHIB. & INCONEL WIRE REIN.		
15.	Screw / Rivet & Washer	STEEL		
16.	Bearing Washer	HARDENED STEEL	T304	T316
17.	Name Plate	ALUMINUM /SS		

DIMENSION TABLE 150 CLASS DIMENSION TABLE 300 CLASS DIMENSION TABLE 600 CLASS

TESTING DETAIL

Hydrotest {KG/CM^2}	
Shell	
Seat and Back Seat	
Seat Ari Test :	

Valve Size in mm	0.5 15	0.75 20	1 25	1.5 40
L	4.25 108	4.6 117	5 127	6.5 165
'H' app	165	175	215	270
ØK app	95	95	105	150
Wt. kg app	3.0	4.5	6.0	10.0

Valve Size in mm	0.5 15	0.75 20	1 25	1.5 40
L	5.5 140	6.0 152.5	6.5 165	7.5 190.5
'H' app	165	175	215	270
ØK app	95	95	105	150
Wt. kg app	4.0	5.0	7.5	13.5

Valve Size in mm	0.5 15	0.75 20	1 25	1.5 40
L	6.5 165	7.5 190.5	8.5 216	9.5 241
'H' app	165	175	215	270
ØK app	95	95	105	150
Wt. kg app	4.5	5.5	8.5	17.5

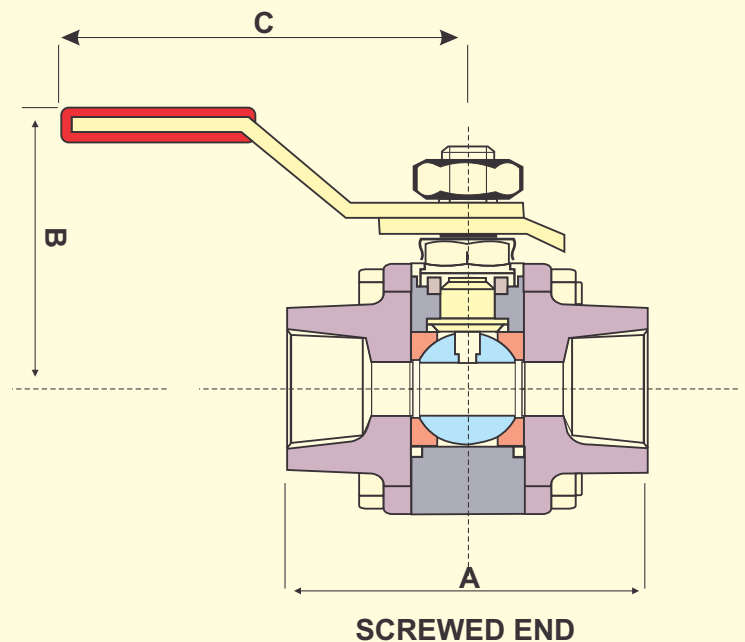
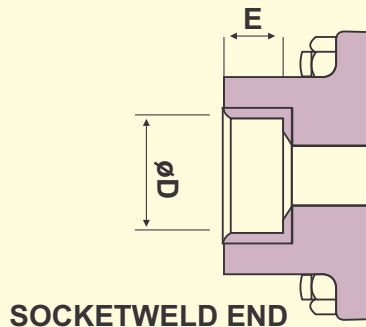
USMANI TUBES AND VALVES CO. PVT. LTD.

FS/IC/3 PIECE DESIGN BALL VALVE : SCREWED END/ SOCKETWELD END



MATERIAL SPECIFICATIONS

NO.	Part Name	Carbon Steel Valve	Stainless Steel Valve
1.	Body	ASTM A 105 OR ASTM A216 Gr. WCB	ASTM A 351 Gr. CF 8M
2.	Body Connector		
3.	Ball	AISI 316 or ASTM A 351 Gr. CF 8M	
4.	Seat	Virgin PTFE	
5.	Stem	Stainless Steel AISI 316	
6.	Back Seat	Virgin PTFE	
7.	Gland Packing		
8.	Stem Seal	35% Carbon filled PTFE	



DIMENSION

Valve Size in mm	8	10	15	20	25	40	50
A	66.6	66.6	66.6	72.6	95.2	116	128
B	45	45	45	48	59	75	80
C	122	122	122	122	149	181	181
D	14.61 14.10	18.03 17.53	22.23 21.72	27.56 27.05	34.29 48.64	49.15 48.64	61.62 61.11
E	9.7	9.7	9.7	12.7	12.7	12.7	15.9

TEST PRESSURE

	psig	kg/cm ²
Shell Hydro (optional)	1500	103
Seat (Air)	80	5.5

USMANI TUBES AND VALVES CO. PVT. LTD.

BALL VALVE 800 CLASS

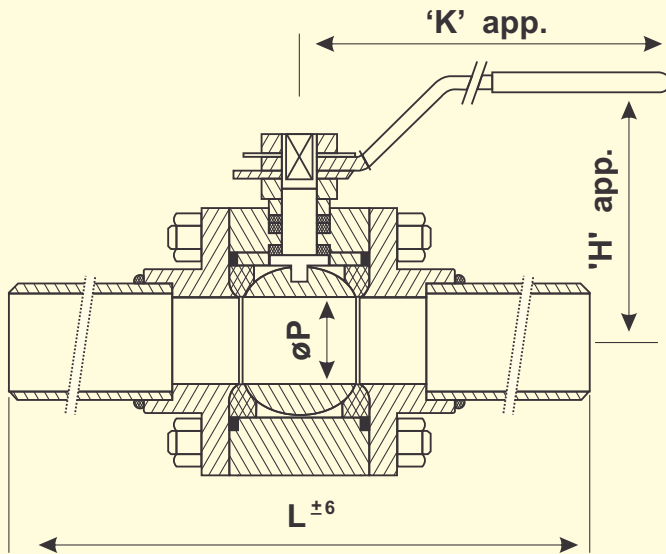


FIG:UTV 1080 E

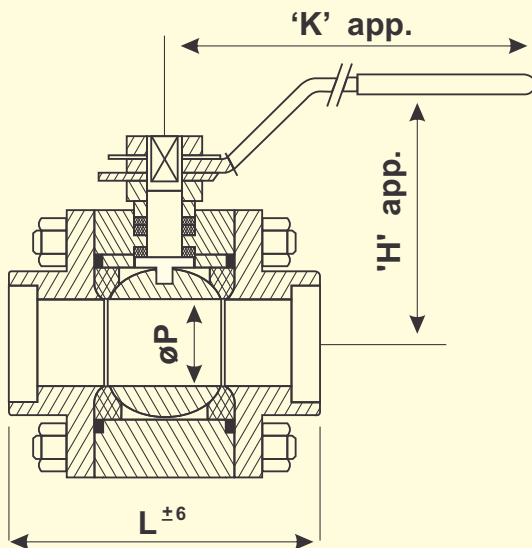


FIG: UTV 1080

DIMENSION TABLE

Valve Size in mm	0.5 15	0.75 20	1 25	1.25 32	1.5 40	2 50
L	3.1 80	3.3 85	3.9 100	4.5 115	5.1 130	9.5 150
L1	10.8 275	11.0 280	11.8 300	12.4 315	12.6 320	13.8 350
'H' app	70	80	90	105	110	125
'K' app	130	140	160	240	240	240
øP	12	19	24	30	37	50
Wt. kg app	1.4	2	3.5	6	7	8

MATERIAL SPECIFICATIONS

NO.	Part Name	Material		
1.	Body	A 105	F 304	F 316
2.	Ball	T 304		T 316
3.	Seat	PTFE		
4.	Spindle	T410/ T304	T 304	T 316
5.	Gland Bush	T410/ T304	T 304	T 316
6.	Handle	STEEL		
7.	Handle Nut	T410	T304	
8.	Stud & Nut	B7/2H		
9.	Gasket	PTFE		
10.	Gland Packing	PTFE		
11.	Bottom Washer	PTFE		
12.	End Piece	105	F 304	F 316
13.	Gland Nut	T410	T 304	F 316
14.	Name Plate	ALUMINIUM		
15.	Position Indicator	ALUMINIUM		
16.	Extended Pipe	A 106	TP 304	TP 316

REF STANDARDS

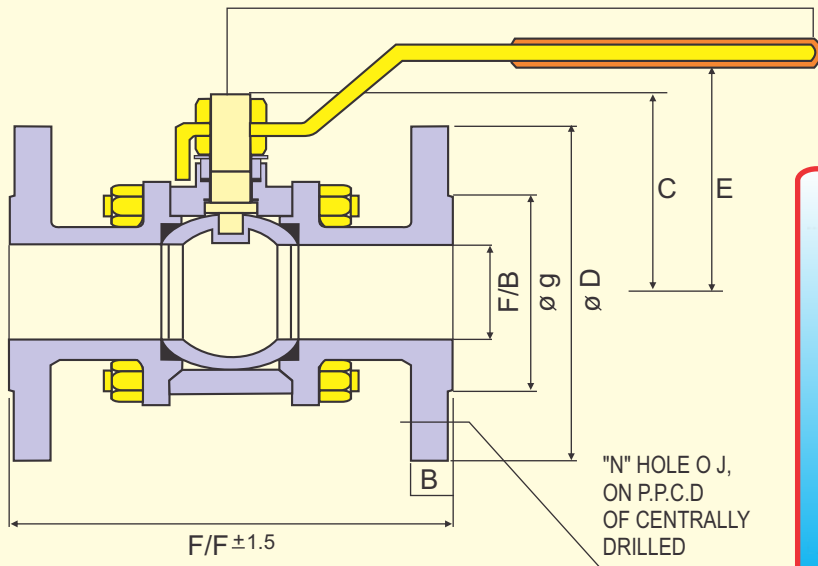
MFG. AND DESIGN :BS 5351
FACE TO FACE : MG STD.
INSPECTION AND TESTING:AP1598/BS6755

TESTING DETAIL

Hydrotest {KG/CM ² }	
Shell	
Seat and Back Seat	
Seat Ari Test :	

USMANI TUBES AND VALVES CO. PVT. LTD.

IC BALL VALVE CLASS 150 / E / F TABLES FLANGED 3 PC DESIGN



F TABLE

SIZE	F/B	F/F	ø D	b	P	J	N
15	12.5	108	95	9.5	66.6	14.2	4
20	19	118	101.5	9.5	73	14.2	4
25	25	127	120.5	9.5	87.8	17.5	4
40	38	165	140	12.7	104.7	17.5	4
50	51	178	165	15.8	127	17.5	4
65	63	190	184	15.8	146	17.5	8
80	76	203	203	15.8	165	17.5	8
100	101	229	228.5	19	190.5	17.5	8

E TABLE

SIZE	F/B	F/F	ø D	b	P	J	N
15	12.5	108	95	9.5	66.6	14.2	4
20	19	118	101.5	9.5	73	14.2	4
25	25	127	114.5	9.5	82.5	14.2	4
40	38	165	133.5	12.7	98.5	14.2	4
50	51	178	152.5	14.2	114.3	17.5	4
65	63	190	165	14.2	127	17.5	4
80	76	203	184	14.2	146	17.5	4
100	101	229	216	17.5	177.8	17.5	8

NO.	Part Name	Material		
1.	Body	ASTM	ASTM	ASTM
2.	Body Connector	A351 CF8	A351 CF8M	A216 WCB
3.	Connector Seal	PTFE		
4.	Ball	AISI 304, AISI 316		
5.	Stem	AISI 304, AISI 316		
6.	Ball Seat	PTFE		
7.	Steam Seal	PTFE		
8.	Gland Packing	PTFE		
9.	Gland	AISI 304, AISI 316		
10.	Gland Nut	SS 304		
11.	Lever	SS / MS		
12.	Lever Nut	SS 304		
13.	Lever Sleeve	PVC		
14.	Body Studs & Nuts	SS 304 / MS		
15.	Wisher	SS / MS		

DIMENSIONS OF 3 PC F/E 150 # IN MM

SIZE	F/B	F/F	ø D	b	ø g	P	C	J	N
15	12.5	108	89	11.2	35	60.4	52	15.8	4
20	19	118	98.5	11.2	42.8	69.8	54	15.8	4
25	25	127	108	11.2	50.8	79.2	62	16	4
40	38	165	127	14.2	73	98.5	77	16	4
50	51	178	152.5	16	92	120.6	85.5	19	4
65	63	190	178	17.5	104.7	139.7	100	19	4
80	76	203	191	19	127	152.4	110	19	4
100	101	229	229	24	157	190.5	132	19	8

TEST PRESSURE (HYDROSTATIC)

CLASS	150 lbs
BODY	250 PSIG or 31.5 Kg/ cm ² g
SEAT	315 PSIG or 22 Kg/ cm ² g

TEST PRESSURE (PNEUMATIC)

CLASS	150 lbs
SEAT	80 PSIG or 5.5 Kg/ cm ² g

The illustrations, specifications & data in this leaflet are as accurate as possible, improvements and modifications from time to time may necessitate changes in designs and dimensions without prior notice.

NOTE:

1. Minimum Pressure / Temperature Seat Ratings table is as shown in other leaflets
2. All other dimensions of E & F Table not mentioned are same as of 150# dimensions. Face in E & f table will be straight.