

PRODUCT CATALOGUE



PRECISION

PERFECTION

PERFORMANCE



**'WJ' INDUSTRIAL VALVES & BOILER MOUNTINGS IN
CAST STEEL, FORGED STEEL, BRONZE & CAST IRON**

NOTE

- ❖ For sizes and types of Valves not covered in this catalogue can be provided on demand.
- ❖ Certificate in Form III-C issued by the Director of Boilers-Punjab will be supplied with each valve covered under the Indian Boiler Regulations.

COMPANY'S PROFILE

NETA VALVES PRIVATE LIMITED A-11, INDUSTRIAL FOCAL POINT, JALANDHAR – (PUNJAB) IS AN ISO: 9001 & ISO: 14001 : COMPANY WHICH WAS ESTABLISHED IN THE YEAR 1983 AND IS REGISTERED AS A "SMALL SCALE INDUSTRY (UNIT) WITH DIRECTOR OF INDUSTRIES, PUNJAB.

THE COMPANY IS ENGAGED IN MANUFACTURING OF VALVES , COCKS & BOILER MOUNTINGS IN BRONZE / GUN METAL, CAST IRON, CAST CARBON STEEL AND FORGED STEEL IBR APPROVED FROM SIZE 8MM TO 300MM.

INDUSTRIAL VALVES (NON IBR) ARE ALSO MANUFACTURED TO CONTROL OTHER FLUIDS LIKE WATER, AIR, GAS, PETROL & THERMAL OIL (HOT OIL) IN BRONZE / G.M., C.I., C.S. & FORGED STEEL FROM SIZE 8MM TO 300MM (C.I. BUTTERFLY VALVES UPTO 500MM) UNDER OUR REGISTERED TRADE MARK "WJ" BRAND.

THE VALVES ARE MANUFACTURED AS PER FOLLOWING GRADES OF MATERIAL OF CONSTRUCTION :-

BRONZE / G.M.	: IBR CLAUSE 282(a) IV GR.B.,	IS:318 LTB2&BS-1400 GR.LG2/LG4
CAST IRON	: IBR CLAUSE : 86 TO 93. GR.A.	IS: 210 GR.FG-200
CAST CARBON STEEL	: ASTM A 216 GR. WCB. IBR CLAUSE 73 TO 80	
FORGED CARBON STEEL	: ASTM 105	

THE ABOVE VALUES ARE MANUFACTURED AS PER INDIAN BOILER REGULATIONS ACT AND FOLLOWING STANDARDS ARE USED :-

BS-1414, BS-1873, BS-1868, BS-5160, API-600, BS-5352, API-602 & ISI-14846

THE COMPANY (**NETA VALVES (P) LTD**) : IS A LEADING UNIT IN ORGANISED SECTOR IN NORTH INDIA ENGAGED IN MANUFACTURING OF ABOVE DETAILED INDUSTRIAL VALVES PROMOTED BY HIGHLY EXPERIENCED, QUALIFIED AND DYNAMIC ENTREPRENEURS. THE COMPANY TARGETS TO ACHIEVE UNMATCHED QUALITY, CUSTOMER SATISFACTION AND COMPETITIVE PRICING.

THE COMPANY IS HAVING LATEST PLANT & MACHINERY INSTALLED, WHICH IS MANAGED BY A COMPETENT AND EXPERIENCED TEAM OF PROFESSIONALS IN ENGINEERING AND MODERN TECHNOLOGY IN MANUFACTURING OF QUALITY PRODUCTS.

THE COMPANY (**NETA VALVES (P.) LTD.**) IS HAVING IN-HOUSE WELL EQUIPPED LABORATORY FOR TESTING THE RAW MATERIALS BY PROFESSIONALS WITH VAST EXPERIENCE IN THE FIELD, WHO ARE TESTING / INSPECTING THE MATERIALS RIGHT FROM INCOMING TILL THE FINAL DESPATCH TO THE CUSTOMERS.



"WJ" BRAND VALVES & COCKS (THE PRODUCT OF THE COMPANY) HAVE BEEN WIDELY ACCEPTED IN THE DOMESTIC MARKET (ALL OVER INDIA) & ABROAD AS WELL, DUE TO SUPERB QUALITY AND SUPERIOR WORKMANSHIP, DUE TO ITS COMMITMENT TOWARDS QUALITY CONSCIOUSNESS, DEVELOPMENT OF SYSTEMS & IMPLEMENTATION METHODS, THE COMPANY HAS BEEN LEADING IN ITS CLASS/GRADE. **"WJ" VALVES A COCKS** ARE SPECIALLY DESIGNED FOR STEAM AND WATER SERVICES, WHICH ARE FREE FROM FUNCTIONAL PROBLEMS AND HAVE BEEN PROVED LIFE SUFFICIENT ENOUGH FOR USER'S SATISFACTION, THAT IS WHY IT HAS BEEN WIDELY ACCEPTED IN THE DOMESTIC & INTERNATIONAL MARKETS.

AREA / DEPARTMENTAL ACCOMMODATION :-

THE COMPANY IS SPREAD OVER TOTAL AREA OF ABOUT 2 ACRES OF LAND, WHICH IS BUILT AND DIVIDED IN FOLLOWING DEPARTMENTS :-

- | | |
|---|--|
| 1. DRAWING CUM DESIGN OFFICE. | 10. ELECTRICITY SHOP / ROOM. |
| 2. PATTERN SHOP. | 11. LABORATORY FOR CHEMICAL ANALYSIS & HARDNESS TESTING. |
| 3. CAST IRON CASTING & GUN METAL / BRONZE CASTING SHOP. | 12. STEAM TESTING SECTION. |
| 4. SHOT BLASTING SHOP. | 13. GENERATION ROOM. |
| 5. HEAT TREATMENT SHOP. | 14. RAW MATERIALS STORE. |
| 6. MACHINING SECTION. | 15. FINISHED GOODS STORE. |
| 7. FITTING / ASSEMBLY SECTION. | 16. ADM. BLOCK / ACCOMMODATION. |
| 8. HYDRAULIC / AIR TESTING SECTION. | 17. GATE KEEPER ROOM. |
| 9. DESPATCH SECTION. | |

THE COMPANY HAS ADOPTED SAFETY MEASURES i.e. FIRE FIGHTING EQUIPMENTS ARE INSTALLED IN THE COMPANY'S PREMISES.











A MEDICAL DISPENSARY IS RUNNING IN THE COMPANY'S PREMISES FOR THE WELFARE OF COMPANY EMPLOYEE'S AS WELL AS OUTSIDE PATIENTS, IN ORDER TO GIVE EMERGENCY MEDICAL AID TO THE EMPLOYEE'S IN CASE OF ANY INCIDENT.



BUSINESS / DEALING OF THE COMPANY :-

THE COMPANY HAS VAST BUSINESS DEALINGS ALL OVER INDIA AND ABROAD AS WELL AND PRODUCTS ARE BEING SUPPLIED TO GOVERNMENT / SEMI GOVT. DEPTTS., PROJECTS, P.S.U. UNITS LIKE NTPC LTD., ONGC LTD., THERMAL POWER GENERATING PROJECTS, PETRO CHEMICALS & SO MANY OTHER UNITS IN INDIA AND FOREIGN COUNTRIES.




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CAST STEEL

PILOT CONTROLLED METALLIC DIAPHRAGM TYPE PRESSURE REDUCING VALVE

**CONFIRM TO HIGH
QUALITY & LONG LIFE**

DESCRIPTION :

'WJ' Cast Steel Pilot Controlled Metallic Diaphragm Type Pressure Reducing Valve with flanged ends to BS-10 Table 'J' are suitable for 350 psig (24.6 kg/Cm²g) Max. working pressure at 425°C Temp. and are Tested to 700 psig (49.2 Kg/Cm²g) Hydraulic Pressure. These Valves are available in three reduced pressure ranges of 5/60, 20/80 and 40/125 on the down stream side.

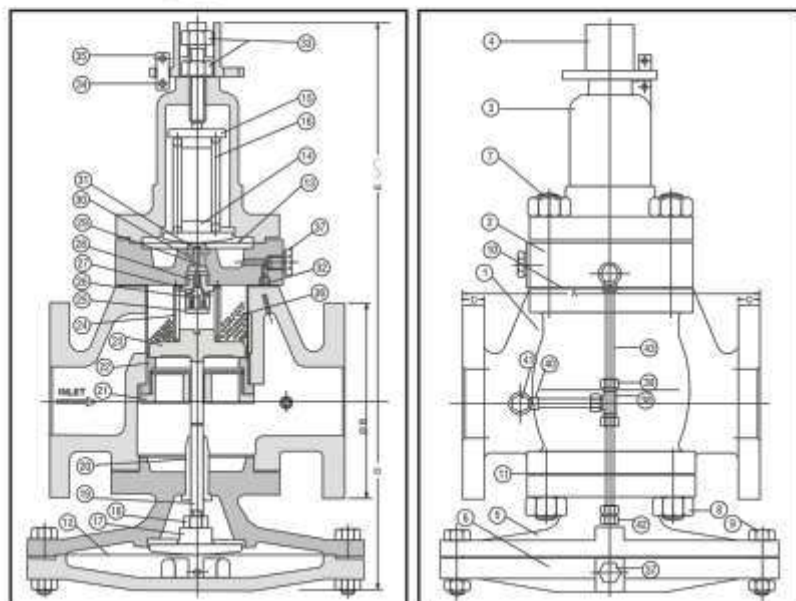
INSTRUCTIONS FOR INSTALLATION :

1. The Valves should be installed in a horizontal pipe line.
2. Stop valves should be installed at inlet & outlet sides of reducing valve.
3. A safety valve should be installed on the down stream side of reducing valve.
4. A steam trap & a strainer should be installed on the upstream side just before the reducing valve.
5. Clean all scale and jointing material from the pipe line before installing the reducing valve.

TESTING AND CERTIFICATION :

All reducing valves are tested at double the max. working pressure. Each valve is supplied with IBR Test certificate in Form III-C issued by The Director of Boilers, Punjab.




DIMENSIONS

Nominal Size	A	B	C	D	E
25mm (1")	181	120.7	19.05	135	220
40mm (1½")	225	140.0	22.2	187	338
50mm (2")	260	165.1	25.4	168	320
65mm (2½")	292	184.5	25.4	180	360
80mm (3")	325	203.2	31.8	212	384

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	C.S.	IBR 73 To 80
2.	Bonnet	C.S.	IBR 73 To 80
3.	Spring Chamber	C.I.	IBR-86 To 93 Gr. A
4.	Locking Guard	C.I.	IBR-86 To 93 Gr. A
5.	Diaphragm Chamber	C.S.	IBR 73 To 80
6.	Bottom Diaphragm Chamber Cover	C.S.	IBR 73 To 80
7.	Studs with Nuts	M.S.	-----
8.	Studs with Nuts	M.S.	-----
9.	Bolts with Nuts	M.S.	-----
10.	Gasket	C.A.F.	IS - 2712
11.	Gasket	C.A.F.	IS - 2712
12.	Lower Diaphragm	S.S.	AISI-304
13.	Upper Diaphragm	S.S.	AISI-304
14.	Lower Spring Disc	S.S.	AISI-410
15.	Upper Spring Disc	S.S.	AISI-410
16.	Spring	Spring Steel	-----
17.	Diaphragm Disc	Bronze	IBR-282 (a) IV Gr. B
18.	Locking Nut	M.S.	-----
19.	Extension Stem	S.S.	AISI-410
20.	Guide Sleeve	Bronze	IBR-282 (a) IV Gr. B
21.	Seat Ring Guide	Bronze	IBR-282 (a) IV Gr. B
22.	Body Seat Ring	S.S.	AISI-410
23.	Valve Disc	S.S.	AISI-410
24.	Disc Spring	S.S.	AISI-302
25.	Pilot Nut	Extruded Brass Rod	-----
26.	Pilot Spring	S.S.	AISI-302
27.	Pilot Ball	S.S.	AISI-304
28.	Pilot Body	S.S.	AISI-410
29.	Pilot Stem	S.S.	AISI-410
30.	Bush	S.S.	AISI-410
31.	Pilot Stem Cap	Bronze	IBR-282 (a) IV Gr. B
32.	Nipple	S.S.	AISI-410
33.	Spring Adjusting Screw	M.S.	-----
34.	Pin	M.S.	-----
35.	Locking Lever	M.S.	-----
36.	Strainer	S.S.	AISI-304
37.	Side Plug with Copper Washer	S.S.	AISI-410
38.	'T' Connector	S.S.	AISI-410
39.	Connector Nut	S.S.	AISI-410
40.	Sensing Pipe Connector	S.S.	AISI-410
41.	Nipple for Pipe Connector	S.S.	AISI-410
42.	Tube Connector for Diaphragm Chamber	S.S.	AISI-410
43.	Steel Tube	S.S.	-----

CAPACITIES OF 'WJ' PRESSURE REDUCING VALVES FOR STEAM IN Kg. PER HOUR

SET PRESSURE Kg. / Cm ² g	OUTLET PRESSURE Kg. / Cm ² g	VALVE SIZE				
		25 mm (1")	40 mm (1½")	50 mm (2")	65 mm (2½")	80 mm (3")
2	0.75	190	520	920	1360	2000
4	1.5	300	820	1470	2150	3100
	2.75	275	740	1290	1950	2800
6	2.0	385	1020	1850	2720	3900
	3.5	350	920	1650	2420	3530
7	3.5	490	1275	2275	3365	5000
	4	475	1230	2190	3280	4790
	6	375	980	1750	2560	3740
9	4	600	1590	2820	4140	6140
	6	555	1485	2620	3840	5650
	7	465	1230	2180	3180	4770
10	5	710	1800	3250	4950	7000
	7	650	1720	3035	4520	6550
	9	500	1300	2550	3450	4950
13	6	850	2210	3900	5720	8230
	7	810	2180	3760	5720	8000
	9	715	1920	3400	5050	7230
	10	550	1465	2610	3840	5480
15	7	920	2380	4340	6380	9565
	9	880	2280	4100	5920	8650
	10	800	2140	3730	5460	7960
17.58	8	1130	3050	5360	7730	11370
	10	1100	2910	5230	7500	11140

**CAST STEEL SINGLE POST FULL LIFT SAFETY VALVE DISCHARGE
CAPACITY FOR SATURATED STEAM (Kg/hr.) AT 5% OVER PRESSURE
CONSTANT 'C' = 0.50**

Size of Valves	Orifice Dia	SET PRESSURE (Kg. / Cm ²)					
		3.5	7.00	10.54	13	15	17.58
25 x 40 mm	19.00 mm	600	1160	1650	2030	2300	2680
40 x 50 mm	25.00 mm	1135	2015	2910	3530	4035	4680
50 x 80 mm	32.50 mm	1915	3410	4925	5975	6830	7920
65 x 90 mm	40.00 mm	2910	5175	7466	9055	10345	12010
80 x 100 mm	48.50 mm	4290	7620	10990	13320	15215	17660
100 x 150 mm	72.00 mm	9490	16830	24250	29400	33600	39000
150 x 200 mm	115.00 mm	23820	43250	61190	74270	84800	98580

CAST STEEL

SPRING LOADED SAFETY VALVE

EFFICIENT PERFORMANCE

DESCRIPTION :

'WJ' Cast Steel Spring Loaded Safety Valve with 13% Cr. Stainless Steel (AISI-410) Seat and stem are manufactured in Single Post Full Lift Design. These Safety Valves are set at max. Pressure of 250 PSIG (17.58 Kg/Cm²).

SALIENT FEATURES :

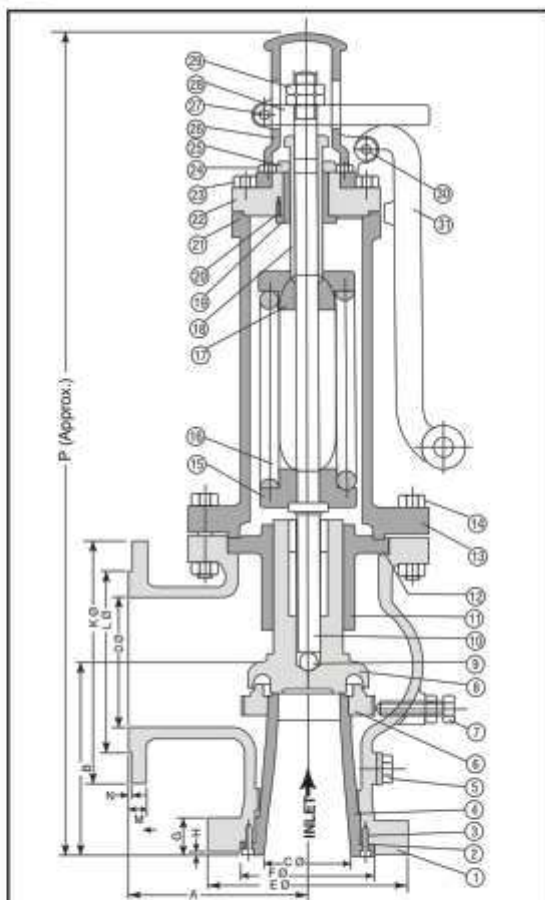
1. These Safety Valves are designed in such a way that instantaneous full lift of the seat is achieved.
2. Each Safety Valve is provided with an easing lever.
3. To avoid unauthorised alteration to the Set Pressure the adjusting screw and check nut are consealed by a cap which is attached to the Valve spindle by fork and pin.

TESTING AND CERTIFICATION :

All Safety Valve Bodies are tested at 500 PSIG (35.15 Kg/Cm²) Hydraulic Pressure. All Valves are set at max. steam Pressure of 250 PSIG (17.58 Kg/Cm²)

Each Valve is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.





DIMENSIONS

Valve Size	A	B	C	D
25 x 40	100	95	26	40
40 x 50	130	110	40	50
50 x 80	140	130	50	80
65 x 90	155	160	65	90
80 x 100	200	190	80	100
100 x 150	205	220	100	150

INLET FLANGE

Valve Size	E	F	G	H
25 x 40	121	63.5	21.5	1.6
40 x 50	140	82.5	23.5	1.6
50 x 80	165.1	101.6	28.5	1.6
65 x 90	184.2	114.5	28.5	1.6
80 x 100	203	127	32	1.6
100 x 150	228.6	152	38	1.6

OUTLET FLANGE

Valve Size	K	L	M	N	P
25 x 40	133.5	82.5	14.5	1.6	432
40 x 50	152.5	92	14.5	1.6	515
50 x 80	184.2	127	14.5	1.6	580
65 x 90	203.2	140	14.5	1.6	675
80 x 100	216	152	18	1.6	855
100 x 150	279.4	209.5	18	1.6	1030

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	C.S.	IBR 73 to 80
2.	Gasket	C.A.F.	IS-2712
3.	Allen Key Bolt	Steel	----
4.	Orifice Nozzle	13% Cr. S.S.	AISI-410
5.	Side Plug	Bronze	IBR-282 (a) (IV) Gr. B
6.	Regulating Ring	Bronze	IBR-282 (a) (IV) Gr. B
7.	Locking Screw	Extruded Brass Rod	----
8.	Valve Disc	13% Cr. S.S.	AISI-410
9.	Ball	S.S.	AISI-304
10.	Stem	S.S.	AISI-410
11.	Valve Disc Retainer	S.S.	AISI-410
12.	Gasket	C.A.F.	IS-2712
13.	Chamber	C.I.	IBR-86 To 93 Gr. A
14.	Bolts & Nuts	Carbon Steel	----
15.	Lower Spring Disc	C.I.	IBR-86 To 93 Gr. A
16.	Spring	Spring Steel	----
17.	Upper Spring Disc	C.I.	IBR-86 To 93 Gr. A
18.	Spring Adjusting Screw	Bronze	IBR-282 (a) IV Gr. B
19.	Bush	Bronze	IBR-282 (a) IV Gr. B
20.	Locking Screw	M.S.	----
21.	Gasket	C.A.F.	IS-2712
22.	Cover Flange	C.I.	IBR-86 To 93 Gr. A
23.	Bolts & Nuts for Cover Flange	Carbon Steel	----
24.	Bolts for Housing Cover	M.S.	----
25.	Check Nut	Bronze	IBR-282 (a) IV Gr. B
26.	Housing Cover	C.I.	IBR-86 To 93 Gr. A
27.	Pin for Fork	S.S.	AISI-410
28.	Fork	M.S.	----
29.	Lock Nut	Bronze	IBR-282 (a) IV Gr. B
30.	Pin for Easing Lever	S.S.	AISI-410
31.	Easing Lever	M.I.	----

CAST STEEL

GLOBE VALVE

STOUT & STURDY, SMOOTH PERFORMANCE

DESCRIPTION :

'WJ' Cast Steel Globe Valve to BS-5160/DIN 2401, PN-40, Straight or Right Angle Pattern, 13% Cr. S.S.(AISI-410) Trim, Outside Screw and Yoke Type, Bolted Bonnet, Integral Flanges as per BS-4504 Part I Table 40/1/DIN 2545 PN-40 Raised Face. Body Tested to 60 Bar Gauge and Seat and Back Seat Tested to 40 Bar Gauge Hydraulic Pressure.

SALIENT FEATURES :

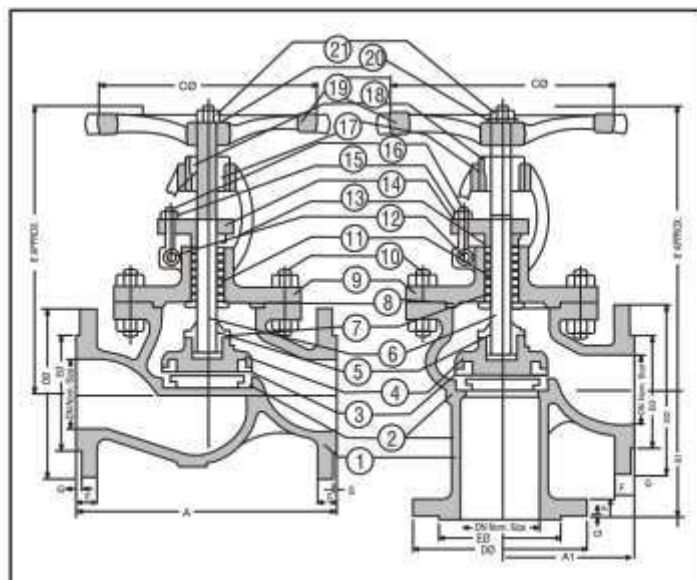
1. Stream lined full flow area is provided in the body to minimise pressure drop.
2. Bolted self aligning two piece gland.
3. Renewable S.S. 13% S.S. (AISI-410) body seat ring and disc facing ring have at least 50 H.B. difference in hardness.
4. Provision of back to facilitate on line replacement of gland packing under pressure when valve is full open.
5. Ample depth of stuffing box.
6. Sturdy hand wheel is provided for operation.

TESTING AND CERTIFICATION :

All valves are tested at double the max. working pressure. Each valve is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.



NOMINAL PRESSURE	STANDARD No.	MAX. Permissible Gauge working pressure at Temperature °C						
		10 To 120	200	250	300	350	400	425
40	BS 5160 (Bar)	40	40	38	33	28	23	20
	DIN 2401 Kg/Cm ² g	40	35	32	28	24	21	-----



Nominal Size	DIMENSIONS							
DN	A	A ¹	B	C	D	E	F	G
DN15 (1/2")	130	90	165	120	95	45	16	2
DN20 (3/4")	150	95	165	120	105	58	18	2
DN25 (1")	160	100	200	150	115	68	18	2
DN32 (1 1/4")	180	105	200	150	140	78	18	2
DN40 (1 1/2")	200	115	245	200	150	88	18	3
DN50 (2")	230	125	260	200	165	102	20	3
DN65 (2 1/2")	290	145	300	250	185	122	22	3
DN80 (3")	310	155	340	250	200	138	24	3
DN100 (4")	350	175	400	300	235	162	24	3
DN125 (5")	400	200	450	300	270	188	26	3
DN150 (6")	480	225	530	400	300	218	28	3
DN200 (8")	600	275	580	400	375	285	34	3
DN250 (10")	730	648	450	450	450	345	38	3
DN300 (12")	850	682	450	450	515	410	42	4

MATERIALS			
PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	Cast Steel	IBR 73 to 80
2.	Body Seat Ring	13% Cr. S.S.	AISI-410
3.	Valve Disc Facing Ring	13% Cr. S.S.	AISI-410
4.	Valve Disc	Cast Steel	IBR 73 to 80
5.	Valve Disc Bush	13% Cr. S.S.	AISI-410
6.	Stem	13% Cr. S.S.	AISI-410
7.	Back Seat Bush	13% Cr. S.S.	AISI-410
8.	Gasket	S.S. Type 304	Spiralwound Asbestos Filler
9.	Bonnet	Cast Steel	IBR 73 to 80
10.	Studs & Nuts	Alloy Steel H.T. Steel	ASTM A-193 Gr. B 7 ASTM A-194 Gr. 2H
11.	Packing	Graphited Asbestos	-----
12.	PIN for Eye Bolts	13% Cr. S.S.	AISI-410
13.	Gland	13% Cr. S.S.	AISI-410
14.	Gland Flange	Cast Steel	IBR 73 to 80
15.	NUT For Eye Bolts	H.T. Steel	ASTM A-194 Gr. 2H
16.	Eye Bolts	13% Cr. S.S.	AISI-410
17.	Yoke Bush	13% Cr. S.S.	AISI-410
18.	Locking Screw	Steel	-----
19.	Handwheel	M.I.	-----
20.	Washer	Carbon Steel	-----
21.	NUT for Handwheel	Carbon Steel	-----

CAST STEEL

LIFT CHECK VALVE

**DESIGNED TO WORK
UNDER VARIED CONDITIONS**

DESCRIPTION :

'WJ' Cast Steel Lift Check Valve to BS-5160/DIN 2401, PN-40, Straight or Right Angle Pattern, 13% Cr. S.S.(AISI-410) Trim, Bolted Bonnet, Integral Flanges as per BS-4504 Part I Table 40/1/DIN 2545 PN-40 Raised Face. Body Tested to 60 Bar Gauge and Seat Tested to 40 Bar Gauge Hydraulic Pressure.

SALIENT FEATURES :

1. Stream lined full flow area is provided to minimise pressure drop in the body.
2. Renewable S.S. 13% S.S. (AISI-410) body seat ring and disc facing ring have at least 50 HB difference in hardness.
3. Bolted body cover joint.
4. Self aligning fully guided disc ensures proper seating of valve disc on body seat ring.

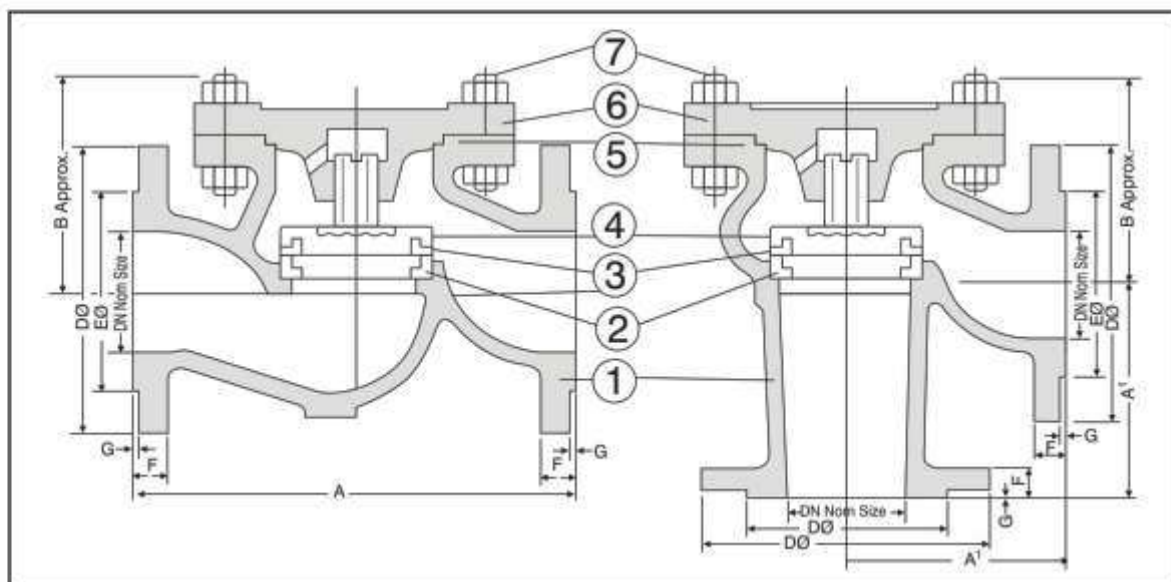
TESTING AND CERTIFICATION :

All valves are tested at double the max. working pressure. Each valve is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.



PRESSURE TEMPERATURE RATING :

NOMINAL PRESSURE	STANDARD No.	MAX. Permissible Gauge working pressure at Temperature °C						
40	BS 5160 (Bar)	10 To 120	200	250	300	350	400	425
		40	40	38	33	28	23	20
	DIN 2401 Kg/Cm ² g	40	35	32	28	24	21



Nominal Size	DIMENSIONS						
DN	A	A ¹	B	D	E	F	G
DN15 (½")	130	90	85	95	45	16	2
DN20 (¾")	150	95	85	105	58	18	2
DN25 (1")	160	100	90	115	68	18	2
DN32 (1¼")	180	105	95	140	78	18	2
DN40 (1½")	200	115	110	150	88	18	3
DN50 (2")	230	125	120	165	102	20	3
DN65 (2½")	290	145	140	185	122	22	3
DN80 (3")	310	155	160	200	138	24	3
DN100 (4")	350	175	175	235	162	24	3
DN125 (5")	400	200	200	270	188	26	3
DN150 (6")	480	225	240	300	218	28	3
DN200 (8")	600	275	300	375	285	34	3
DN250 (10")	730	---	355	450	345	38	3
DN300 (12")	850	---	390	515	410	42	4

MATERIALS			
PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	Cast Steel	IBR 73 to 80
2.	Body Seat Ring	13% Cr. S.S.	AISI-410
3.	Valve Disc Facing Ring	13% Cr. S.S.	AISI-410
4.	Valve Disc	Cast Steel	IBR 73 to 80
5.	Gasket	S.S. Type 304	Spiralwound Asbestos Filler
6.	Bonnet	Cast Steel	IBR 73 to 80
7.	Studs & Nuts	Alloy Steel H.T. Steel	ASTM A-193 Gr. B 7 ASTM A-194 Gr. 2H

CAST STEEL

STOP-CUM-NON RETURN VALVE

VALVES MADE WITH MAXIMUM PRECISION & PERFECTION

DESCRIPTION :

'WJ' Cast Steel Stop Cum Non Return Valve to BS-5160/DIN-2401, PN-40, Straight or Right Angle Pattern. 13% Cr. S.S.(AISI-410) Trim Out Side Screw and Yoke Type, Bolted Bonnet, Integral Flanges as per BS-4504 Part-I Table 40/1/2545 PN-40 Raised Face. Body Tested to 60 Bar Gauge and Seat and Back Seat 40 Bar Gauge Hydraulic Pressure.

SALIENT FEATURES :

1. Stream lined full flow area is provided in the body to minimise pressure drop.
2. Bolted self aligning two piece gland.
3. Renewable S.S. 13% Cr. (AISI-410) body seat ring and disc facing ring have at least 50 H.B. difference in hardness.
4. Provision of back seat to facilitate on line replacement of gland packing under pressure when valve is fully open.
5. Ample depth of stuffing box.
6. Study hand wheel is provided for operation.

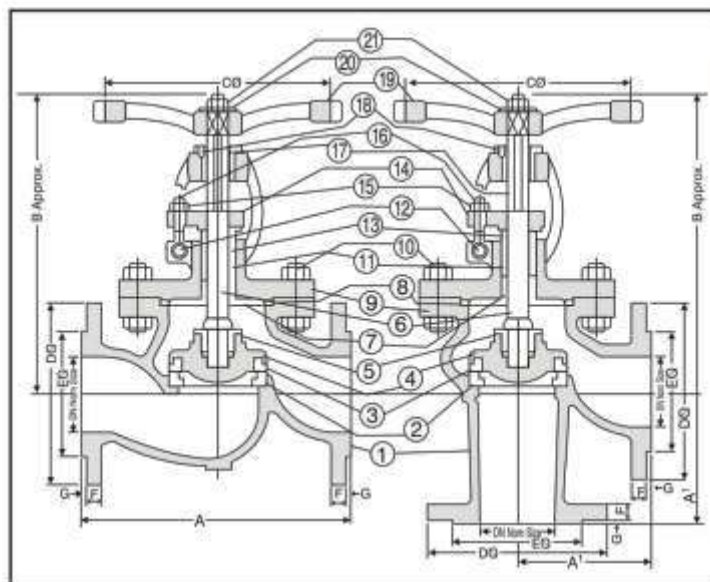
TESTING AND CERTIFICATION :

All valves are tested at double the max. working pressure. Each valve is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.



TEST PRESSURE :

NOMINAL PRESSURE	STANDARD No.	MAX. Permissible Gauge working pressure at Temperature °C						
		10 To 120	200	250	300	350	400	425
40	BS 5160 (Bar)	40	40	38	33	28	23	20
	DIN 2401 Kg/Cm ² g	40	35	32	28	24	21



Nominal Size	DIMENSIONS								
	DN	A	A ¹	B	C	D	E	F	G
DN15 (½")	130	90	165	120	95	45	16	2	
DN20 (¾")	150	95	165	120	105	58	18	2	
DN25 (1")	160	100	200	150	115	68	18	2	
DN32 (1¼")	180	105	200	150	140	78	18	2	
DN40 (1½")	200	115	245	200	150	88	18	3	
DN50 (2")	230	125	260	200	165	102	20	3	
DN65 (2½")	290	145	300	250	185	122	22	3	
DN80 (3")	310	155	340	250	200	138	24	3	
DN100 (4")	350	175	400	300	235	162	24	3	
DN125 (5")	400	200	450	300	270	188	26	3	
DN150 (6")	480	225	530	400	300	218	28	3	
DN200 (8")	600	275	580	400	375	285	34	3	

MATERIALS			
PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	Cast Steel	IBR 73 to 80
2.	Body Seat Ring	13% Cr. S.S.	AISI-410
3.	Valve Disc Facing Ring	13% Cr. S.S.	AISI-410
4.	Valve Disc	Cast Steel	IBR 73 to 80
5.	Valve Disc Bush	13% Cr. S.S.	AISI-410
6.	Stem	13% Cr. S.S.	AISI-410
7.	Back Seat Bush	13% Cr. S.S.	AISI-410
8.	Gasket	S.S. Type 304	Spiralwound Asbestos Filler
9.	Bonnet	Cast Steel	IBR 73 to 80
10.	Studs & Nuts	Alloy Steel H.T. Steel	ASTM A-193 Gr. B7 ASTM A-194 Gr. 2H
11.	Packing	Graphited Asbestos	-----
12.	PIN for Eye Bolts	13% Cr. S.S.	AISI-410
13.	Gland	13% Cr. S.S.	AISI-410
14.	Gland Flange	Cast Steel	IBR 73 to 80
15.	NUT For Eye Bolts	H.T. Steel	ASTM A-194 Gr. 2H
16.	Eye Bolts	13% Cr. S.S.	AISI-410
17.	Yoke Bush	13% Cr. S.S.	AISI-410
18.	Locking Screw	Steel	-----
19.	Handwheel	M.I.	-----
20.	Washer	Carbon Steel	-----
21.	NUT for Handwheel	Carbon Steel	-----

CAST STEEL

GLOBE VALVE

STOUT & STURDY WORKING

DESCRIPTION :

'WJ' Cast Steel Globe Valve to BS 1873-1975 Outside Screw and Yoke Type. Bolted Bonnet, 13% Cr. S.S. (AISI-410) Trim, Plug Type Disc. Flanges as per BS 1560/ANSI-B 16.5. Raised Face are manufactured in Class-150-300 and 600.

These valves have wide applications for high temperature & pressure pipe lines and are specially suitable for oil Refineries, Petrochemical Plants, Power Stations & other Industrial Plants.

SALIENT FEATURES :

1. Stream lined full flow area is provided in body to minimise pressure drop.
2. Renewable 13% Cr. S.S. (AISI-410) body seat ring and disc. have at least 50 HB difference in hardness.
3. Bolted self aligning two piece gland.
4. Back seat provision is provided to facilitate on line replacement of gland packing under pressure when valve is fully open.
5. Ample depth of stuffing box.
6. Sturdy hand wheel is provided for easy operation of valve.

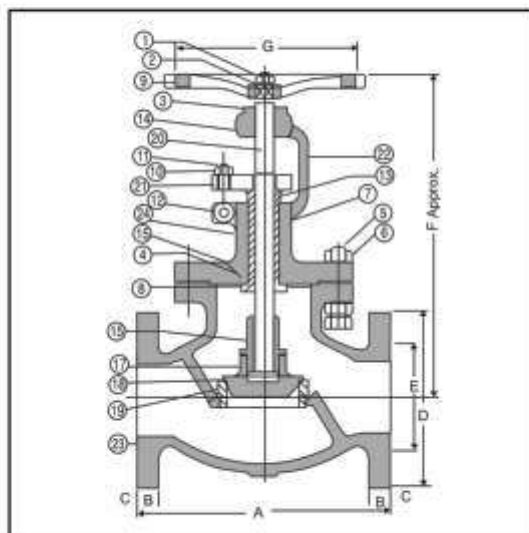
TESTING AND CERTIFICATION :

If required these valves can be supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.



TEST PRESSURE

CLASS	BODY HYD.	SEAT HYD.	AIR
150	30 Bargauge	22 Bargauge	6.9 Bargauge
300	76 Bargauge	55 Bargauge	6.9 Bargauge
600	155 Bargauge	113 Bargauge	6.9 Bargauge


NOTE :

Class 150 & 300 Flanges are Furnished with 1.6mm Raised Face which is included in the min. Flange Thickness (B). Class 600 Flanges are furnished with 6.4mm Raised Face which is additional to the Flange Thickness (B).

DIMENSIONS

Nominal Size	A			B			C			D			E			F			G		
	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600
40 mm (1 1/2")	165	229	241	14.3	20.6	22.2	1.6	1.6	6.4	127	156	156	73	73	73	250	295	315	180	200	200
50 mm (2")	203	267	292	16.0	22.2	25.4	1.6	1.6	6.4	152	165	165	92	92	92	276	320	350	200	205	200
65 mm (2 1/2")	216	292	330	17.5	25.4	28.6	1.6	1.6	6.4	178	190	190	105	105	105	345	380	390	200	250	230
80 mm (3")	241	318	356	19.0	28.6	31.8	1.6	1.6	6.4	190	210	210	127	127	127	390	415	445	200	250	250
100 mm (4")	292	356	432	23.8	31.8	38.1	1.6	1.6	6.4	229	254	273	157	157	157	430	480	501	250	250	300
125 mm (5")	356	401	---	23.8	34.9	---	1.6	1.6	---	254	279	---	186	186	---	460	520	---	300	300	---
150 mm (6")	406	444	559	25.4	36.5	47.6	1.6	1.6	6.4	279	318	356	216	216	216	565	610	660	300	450	450
200 mm (8")	495	559	660	28.6	41.3	55.6	1.6	1.6	6.4	343	381	419	270	270	270	572	675	840	450	500	450
250 mm (10")	622	622	787	30.2	47.6	63.5	1.6	1.6	6.4	406.5	444	508	324	324	324	700	770	880	500	560	550
300 mm (12")	698	711	838	31.8	50.8	66.5	1.6	1.6	6.4	483.0	521	559	381	381	381	765	935	920	575	750	550

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Nut for Hand Wheel	M.S.	-----
2.	Washer	M.S.	-----
3.	Locking Screw	M.S.	-----
4.	Locking Screw	M.S.	-----
5.	Studs	Alloys Steel	ASTM A-193 Gr. B 7
6.	Nuts	High Tensile Steel	ASTM A-193 Gr. 2 H
7.	Packing	Graphited Asbestos	-----
8.	Gasket	C.A.F./SS (AISI 304) Spiral Wound	Asbestos Filled
9.	Hand Wheel	Malleable Iron	-----
10.	Nut for Eye Bolts	H.T. Steel	ASTM A-194 Gr. 2 H
11.	Eye Bolts	13% CR S.S.	AISI-410
12.	Pins for eye Bolts	13% CR S.S.	AISI-410
13.	Gland	13% CR S.S.	AISI-410
14.	Stem Bush	13% CR S.S.	AISI-410
15.	Back Seat Bush	13% CR S.S.	AISI-410
16.	Disc retaining nut	13% CR S.S.	AISI-410
17.	Valve Disc	13% CR S.S.	AISI-410
18.	Thrust Plate	13% CR S.S.	AISI-410
19.	Body Seat Ring	13% CR S.S.	AISI-410
20.	Stem	13% CR S.S.	AISI-410
21.	Gland Flange	Cast Steel	ASTM A-216 GRWCB
22.	Bonnet	Cast Steel	ASTM A-216 GRWCB
23.	Body	Cast Steel	ASTM A-216 GRWCB
24.	Lantern Ring	13% Gr. S.S.	AISI-410

CAST STEEL

GATE VALVE

**STOUT & STURDY,
SMOOTH PERFORMANCE**

DESCRIPTION :

'WJ' Cast Steel Gate Valve to BS-1414-1975 Outside Screw and Yoke Type, Bolted Bonnet, 13% Cr. S.S. (AISI-410) Trim, Solid Wedge Disc, Flanges as per BS-1560/ANSI-B 16.5. Raised Face are manufactured in Cl.150, Cl.300 & Cl. 600.

These valves have wide applications for high temperature & pressure pipe lines and are specially suitable for oil Refineries, Petrochemical Plants, Power Stations & other Industrial Plants.

SALIENT FEATURES :

1. Stream lined full flow area is provided in body to minimise pressure drop.
2. Renewable 13% Cr. S.S. (AISI-410) body seat ring and disc have at least 50 HB difference in hardness.
3. Bolted self aligning two piece gland.
4. Back seat provision is provided to facilitate on line replacement of gland packing under pressure when valve is fully open.
5. Ample depth of stuffing box.
6. Sturdy hand wheel is provided for easy operation of valve.

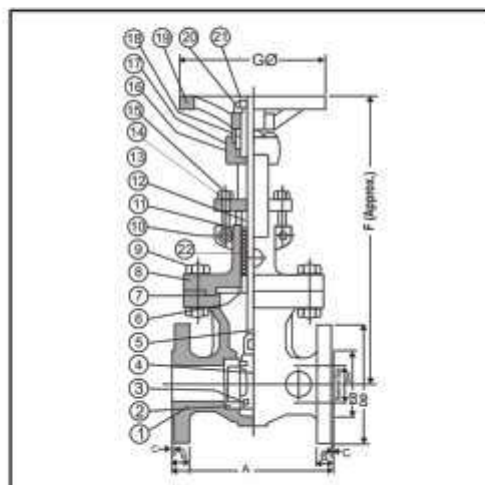
TESTING AND CERTIFICATION :

If required these valves can be supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.



TEST PRESSURE

CLASS	BODY HYD.	SEAT HYD.	AIR
150	30 Bargauge	22 Bargauge	6.9 Bargauge
300	76 Bargauge	55 Bargauge	6.9 Bargauge
600	155 Bargauge	113 Bargauge	6.9 Bargauge


NOTE :

Class 150 & 300 Flanges are Furnished with 1.6mm Raised Face which is included in the min. Flange Thickness (B). Class 600 Flanges are furnished with 6.4mm Raised Face which is additional to the Flange Thickness (B).

DIMENSIONS

Nominal Size	A			B			C			D			E			F			G		
	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600
40 mm (1 1/2")	165	190	241	14.3	20.6	22.2	1.6	1.6	6.4	127	156	156	73	73	73	260	295	305	150	150	180
50 mm (2")	178	216	292	16	22.2	25.4	1.6	1.6	6.4	152	165	165	92	92	92	318	344	352	150	180	180
65 mm (2 1/2")	190	241	330	17.5	25.4	28.6	1.6	1.6	6.4	178	190	190	105	105	105	370	400	430	180	200	250
80 mm (3")	203	283	356	19	28.6	31.8	1.6	1.6	6.4	190	210	210	127	127	127	400	452	465	200	240	250
100 mm (4")	229	305	432	23.8	31.8	38.1	1.6	1.6	6.4	229	254	273	157	157	157	500	530	592	250	250	300
125 mm (5")	254	381	---	23.8	34.9	---	1.6	1.6	---	254	279	---	186	186	---	660	628	---	300	300	---
150 mm (6")	267	403	559	25.4	36.5	47.6	1.6	1.6	6.4	279	318	356	216	216	216	662	700	940	300	350	500
200 mm (8")	292	419	660	28.6	41.3	55.6	1.6	1.6	6.4	343	381	419	270	270	270	900	1000	1015	350	400	550
250 mm (10")	330	457	---	30.2	47.6	---	1.6	1.6	---	406.5	444	---	324	324	---	985	1195	---	400	450	---
300 mm (12")	356	502	---	31.8	50.8	---	1.6	1.6	---	483	521	---	381	381	---	1133	1290	---	400	450	---

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	Cast Steel	ASTM A216 Gr. WCB
2.	Body Seat Ring	S.S.	AISI-410 (Min. HB 250)
3.	Wedge Facing Ring	S.S.	AISI-410 (Min. HB 300)
4.	Wedge	Cast Steel	ASTM A216 Gr. WCB
5.	Stem	S.S.	AISI-410 (Min. HB 200)
6.	Back Seat Bush	S.S.	-----
7.	Gasket Class 150 Gasket Class 300, Class 600	C.A.F. S.S. Type 304	Spiral Wound Asbestos Filler
8.	Bonnet	C.S.	ASTM A216 Gr. WCB
9.	Studs & Nuts	Alloy Steel H.T. Steel	ASTM A-193 Gr. B7 ASTM A-194 Gr. 2H
10.	Pins for Eye Bolts	S.S.	AISI-410
11.	Packing	Graphited Asbestos	-----
12.	Gland	S.S.	AISI-410
13.	Gland Flange	C.S.	ASTM A216 Gr. WCB
14.	Nuts for Eye Bolt	H.T. Steel	AISM A194 Gr. 2H
15.	Eye Bolts	S.S.	AISI-410
16.	Yoke Sleeve	Bronze	-----
17.	Yoke Sleeve Retaining Nut	Bronze	-----
18.	Locking Screw	M.S.	-----
19.	Hand Wheel	C.I. M.I.	IS 210 FG 200 IS 2108 Gr. BM 290
20.	Hand Wheel Nut	G.M.	-----
21.	Locking Screw	M.S.	-----
22.	Lantern Ring	S.S.	AISI-410

CAST STEEL

SWING CHECK VALVE

SUPER TROUBLE - FREE PERFORMANCE

DESCRIPTION :

'WJ' Cast Carbon Steel (A-216 Gr. WCB) Swing Check Valve to BS-1868-1975 bolted bonnet 13% Cr. SS(AISI-410) Trim, Flanges as per BS-1560/ANSI B-16.5 raised face are manufactured in Class-150, 300 & 600.

These valves have wide application for high temperature and pressure pipe lines and are especially suitable for Oil Refineries, Petro-Chemical Plants, Power Stations and other Industrial Plants.

SALIENT FEATURES :

1. Stream lined full flow area is provided in body to minimise pressure drop.
2. Renewable 13% Cr. SS (AISI-410) body seat ring and disc have at least 50 HB difference in hardness.

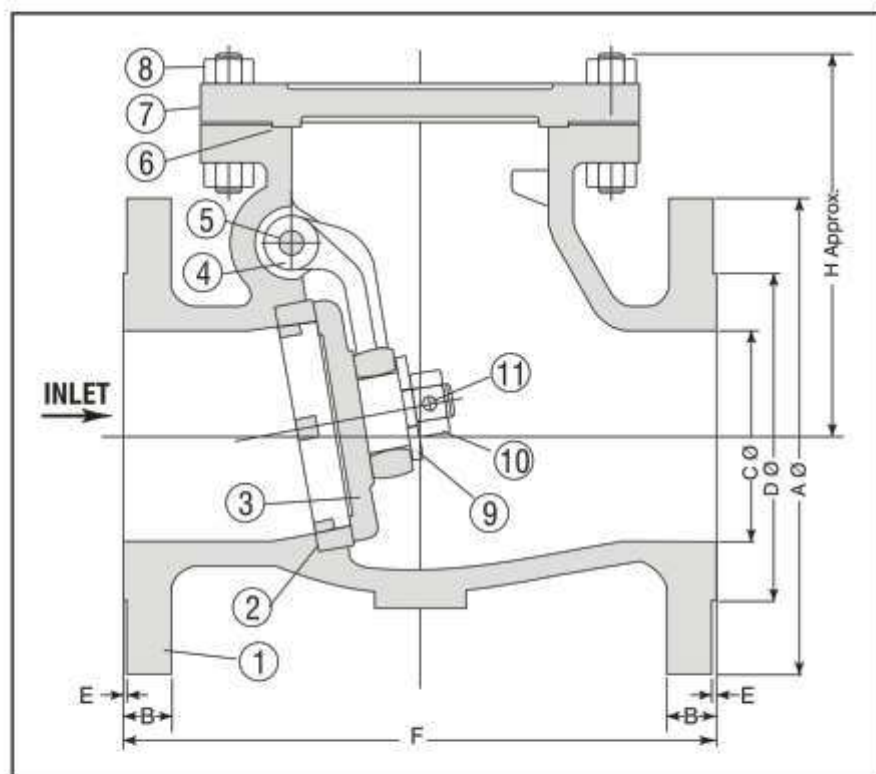
TESTING AND CERTIFICATION :

All Valves are tested hydraulically at the specified pressure. If required these valves can be supplied with IBR test certificate in form III-C issued by the Director of Boilers, Punjab.



TEST PRESSURE

CLASS	BODY HYD.	SEAT HYD.
150	30 Bar Gauge	22 Bar Gauge
300	76 Bar Gauge	55 Bar Gauge
600	155 Bar Gauge	113 Bar Gauge


NOTE :

Class 150 & 300 Flanges are Furnished with 1.6mm Raised Face which is included in the min. Flange Thickness (B). Class 600 Flanges are furnished with 6.4mm Raised Face which is additional to the Flange Thickness (B).

DIMENSIONS

Nominal Size	A			B			C			D			E			F			H (Approx.)		
	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600
40 mm (1½")	127	156	156	14.2	20.6	22.2	38	38	38	73	73	73	1.6	1.6	6.4	165	241	241	118	130	150
50 mm (2")	152.5	165	165	15.8	22.2	25.4	51	51	51	92	92	92	1.6	1.6	6.4	203	267	292	130	155	175
65 mm (2½")	178	190	190	17.5	25.4	28.6	64	64	64	104.8	104.8	105	1.6	1.6	6.4	216	292	330	150	160	185
80 mm (3")	190.5	210	210	19.1	28.6	31.8	76	76	76	127	127	127	1.6	1.6	6.4	241	318	356	160	185	210
100 mm (4")	229	254	273	24	31.8	38.1	102	102	102	157	157	157	1.6	1.6	6.4	292	356	432	184	220	230
125 mm (5")	254	279	---	24	34.9	---	127	127	---	186	186	---	1.6	1.6	---	330	400	---	220	270	---
150 mm (6")	279.5	318	356	25.4	36.5	47.6	152	152	152	216	216	216	1.6	1.6	6.4	356	444	559	223	275	285
200 mm (8")	343	381	419	28.6	41.3	55.6	203	203	203	270	270	270	1.6	1.6	6.4	495	533	660	265	303	320
250 mm (10")	406.5	444	508	30.5	47.6	63.5	254	254	254	324	324	324	1.6	1.6	6.4	622	622	787	325	360	390
300 mm (12")	483	521	559	31.8	50.8	66.5	305	305	305	381	381	381	1.6	1.6	6.4	698	711	838	350	430	460

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	Cast Steel	ASTM A-216 Gr. WCB
2.	Body Seat Ring	S.S.	AISI-410
3.	Valve Disc	S.S./C.S. with S.S. Weld Deposit Facing	AISI-410/ASTM A-216 Gr. WCB
4.	Hinge	Cast Steel	ASTM A-216 Gr. WCB
5.	Hinge Pin	S.S.	AISI-410
6.	Gasket	C.A.F. / S.S. (AISI-304) Spiral Wound	Asbestos Filled
7.	Cover Flange	Cast Steel	ASTM A-216 Gr. WCB
8.	Studs and Nuts	Alloy Steel/HT Steel	ASTM A-193 Gr. B7/ASTM A-194 Gr. 2H
9.	Washer	S.S.	AISI-410
10.	Locking Nut	S. Steel	AISI-410
11.	Pin for Locking Nut	S.S.	AISI-304
12.	Side Plug for Hinge Pin	S.S.	AISI-304

CAST STEEL

Y-TYPE STRAINER

EFFICIENT PERFORMANCE

DESCRIPTION :

'WJ' Cast Steel Y-Type Strainers are manufactured with S.S. (AISI-304) Screen with flanged ends to BS-10 Table 'J'. These strainers can also be supplied with flanges as per BS-1560 Part-2 Class 300 and BS-4504 Part-1 Table 40/1.

These strainers are suitable for 350 PSIG (24.6 Kg/Cm²g) max steam pressure at 800°F (425°C) temp. and are tested at 700 PSIG (49.2 Kg/Cm²g) Hydraulic Pressure.

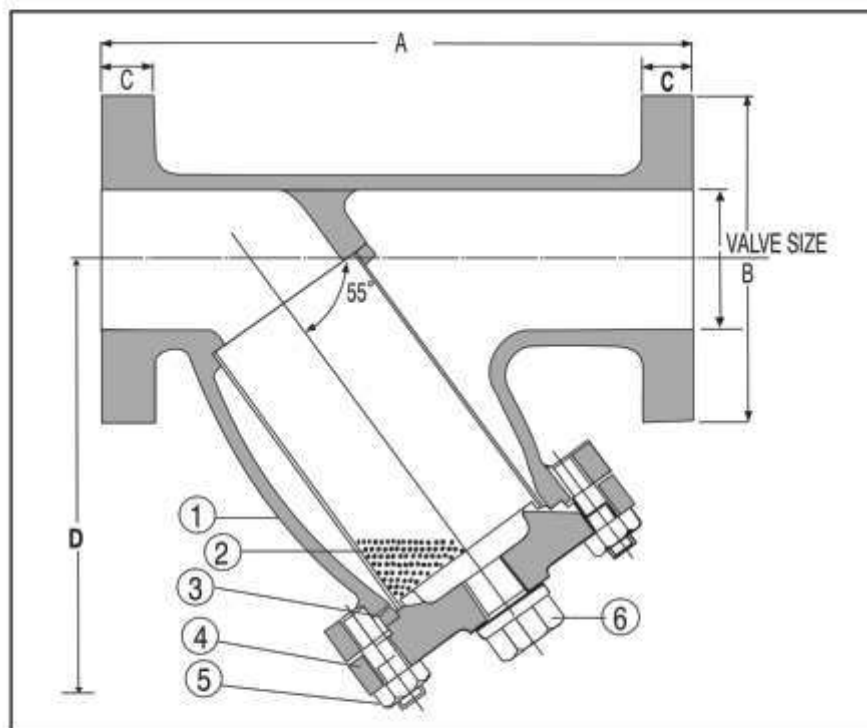
SALIENT FEATURES :

1. Fine finish and smooth contours reduce pressure drop in the strainer.
2. Large screening area makes the strainer efficient.
3. Screen is guided in the body.
4. Strainer may be installed in the down ward vertical lines with effectiveness equal to horizontal installation.
5. Drain plug is provided in larger sizes to drain off the foreign particles accumulated in the strainer.

TESTING AND CERTIFICATION :

All valves are tested at double the max. working pressure. Each strainer is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.





DIMENSIONS				
Nominal Size	A	B	C	D
25 mm (1")	181	120.7	19.05	118
40 mm (1½")	260	139.7	22.2	200
50 mm (2")	276.5	165.1	25.4	225
65 mm (2½")	276.5	184.1	25.4	240
80 mm (3")	296	203.2	31.8	280
100 mm (4")	403	228.6	34.9	310
125 mm (5")	429	279.4	38.1	396
150 mm (6")	476	304.8	38.1	405
200 mm (8")	670	368.0	41.2	650

MATERIALS			
PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	Cast Steel	IBR Grade
2.	Strainer	S.S.	AISI-304
3.	Gasket	Steam Jointing	-----
4.	Cover Flange	Cast Steel	IBR Grade
5.	Studs & Nuts	Carbon Steel	-----
6.	Plug	M.S.	-----

CAST STEEL

Y-TYPE STRAINER

CLASS : 150 - 300 - 600

EFFICIENT PERFORMANCE

DESCRIPTION :

'WJ' Brand Cast Steel Y-Type Strainers are manufactured with S.S. (AISI-304) Screen and have flanged ends. These strainers are available with flanges to ANSI-B 16.5 Class - 150, 300 and 600.

SALIENT FEATURES :

1. Fine finish and smooth contours reduce pressure drop in the strainer.
2. Large screening area makes the strainer efficient.
3. Screen is guided in the body.
4. Strainer may be installed in the down ward vertical lines with effectiveness equal to horizontal installation.
5. Drain plug is provided in larger sizes to drain off the foreign particles accumulated in the strainer.

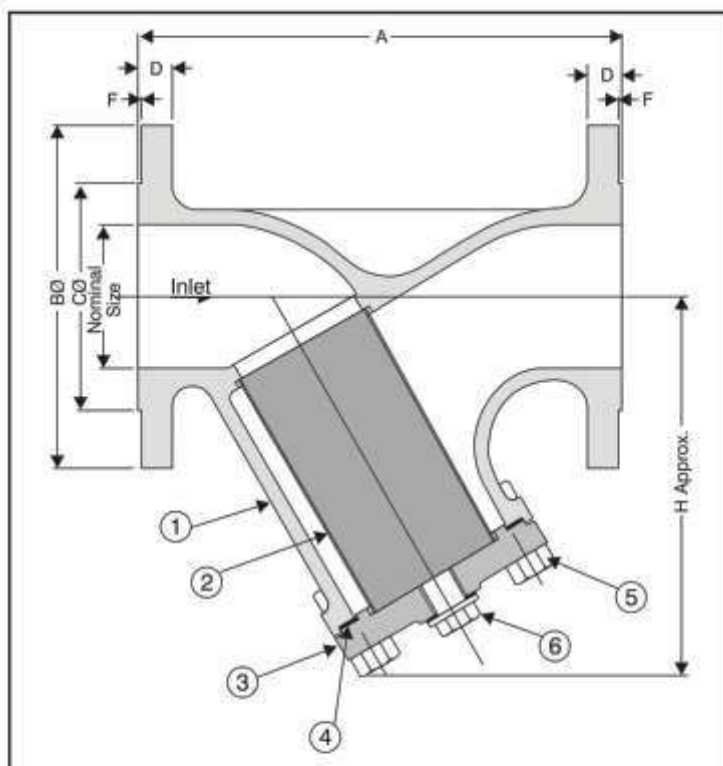
TESTING AND CERTIFICATION :

All Valves are tested at double the maximum working pressure. Each strainer is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.



TEST PRESSURE

CLASS	BODY HYD.
150	30 Bar Gauge
300	76 Bar Gauge
600	155 Bar Gauge


DIMENSIONS CLASS - 150

Nominal Size	A	B	C	D	F	H
25 mm (1")	127	108	50.8	11.2	1.6	85
40 mm (1½")	176	127	73	14.2	1.6	135
50 mm (2")	209	152.5	92	15.8	1.6	180
65 mm (2½")	248	178	104.8	17.5	1.6	200
80 mm (3")	270	190.5	127	19.1	1.6	210
100 mm (4")	314	229	157.2	24	1.6	246
125 mm (5")						
150 mm (6")						
200 mm (8")						

DIMENSIONS CLASS - 300

Nominal Size	A	B	C	D	F	H
25 mm (1")	178	124	50.8	17.5	1.6	120
40 mm (1½")	257	155.5	73	20.6	1.6	200
50 mm (2")	271	165.1	92	22.4	1.6	225
65 mm (2½")	270	190.5	104.8	25.4	1.6	240
80 mm (3")	290	209.6	127	28.5	1.6	280
100 mm (4")	397	254	157.2	32	1.6	310
125 mm (5")	423	279.5	185.7	35.1	1.6	396
150 mm (6")	473	317.5	216	36.6	1.6	405
200 mm (8")	670	381	269.8	41.2	1.6	650

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	Cast Steel	ASTM A - 216 Gr. WCB
2.	Screen	S.S. (Perforated)	AISI-304
3.	Bonnet	Cast Steel	ASTM A - 216 Gr. WCB
4.	Gasket	C.A.F./SS (AISI-304) Spiral Wound	Asbestos Filled
5.	Bolts & Nuts	Alloy Steel / HT Steel	ASTMA 193 Gr. 87/ASTMA 194 Gr. 2 H
6.	Drain Plug	M.S.	-----

CAST STEEL

PARALLEL SLIDE BLOW OFF VALVE

PIN - POINT HIGH PERFORMANCE

DESCRIPTION :

'WJ' Cast Steel Parallel Slide Blow Off Valves rack and pinion operated are manufactured with flanged ends as per BS-10 Table 'J' for maximum Boiler operating pressure of 350 PSIG (24.6 Kg/Cm²g) at 800°F (425°C) Temp. These valves are tested at 700 PSIG. (49.2 Kg/Cm²g) hydraulic pressure.

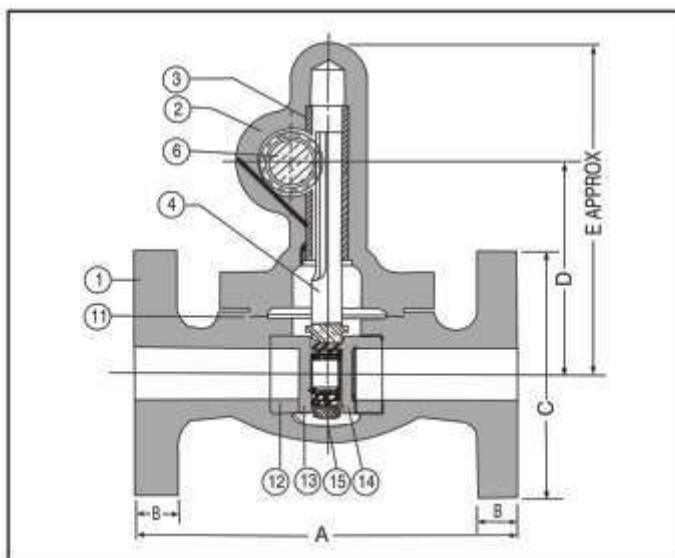
SALIENT FEATURES :

1. Parallel Slide Valve maintains fluid tightness and ease of operation without the aid of wedging action.
2. Discs are kept in close contact with body seat rings by means of a spring when the valve is not under pressure.
3. Slide valve action removes all foreign matter from the faces of seats.
4. Valve is operated by means of rack and pinion arrangement in such a manner that the valve is opened fully with half turn of the box key.
5. Gland forms a locking guard which prevents the removal of key unless the valve is closed.

TESTING AND CERTIFICATION :

All valves are tested at double the max. working pressure. Each valve is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.





DIMENSIONS

Nominal Size	A	B	C	D	E Approx.
25mm (1")	178	19.1	120.7	105	165
32mm (1¼")	241.5	19.1	133.4	125	195
40mm (1½")	267	22.2	139.7	130	215
50mm (2")	305	25.4	165.1	156	258
65mm (2½")	330	25.4	184.2	180	325

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	Cast Steel	IBR Grade
2.	Bonnet	Cast Steel	IBR Grade
3.	Bonnet Sleeve	Bronze	IBR 282 (a) IV Gr. B.
4.	Rack	Bronze	IBR 282 (a) IV Gr. B.
5.	Bush	Bronze	IBR 282 (a) IV Gr. B.
6.	Pinion	S.S.	AISI-410
7.	Stuffing Box	Bronze	IBR 282 (a) IV Gr. B.
8.	Gland	Bronze	IBR 282 (a) IV Gr. B.
9.	Packing	Graphited Asbestos	—
10.	Gasket for Stuffing Box	Steam Jointing	—
11.	Gasket for Body & Bonnet	Steam Jointing	—
12.	Body Seat Ring	Monal/S.S.	AISI-304/410
13.	Valve Seat Female	Monal/S.S.	AISI-304/410
14.	Valve Seat Male	Monal/S.S.	AISI-304/410
15.	Spring	Spring Steel	—
16.	Studs & Nuts for Body and Bonnet	M.S.	—
17.	Studs & Nuts for Stuffing Box	M.S.	—
18.	Studs & Nuts for Gland	M.S.	—

CAST STEEL

ACCESSIBLE

FEED CHECK VALVE

**CHECK VALVE WITH BETTER
ACCESSIBILITY WHILE THE
BOILER IS IN OPERATION**

DESCRIPTION :

'WJ' Cast Steel Accessible Feed Check Valve, Outside Screw, Yoke Type, Rising Spindle with 13% Cr. S.S. (AISI-410) Working Parts, Bolted Bonnet, Flanged Ends to BS-10 Table 'J'. Suitable for Max. 350 psig (24.6 Kg/Cm²g) Working Pressure and 425°C Temp. Tested to 700 psig (49.2 Kg/Cm²g) Hydraulic Pressure.

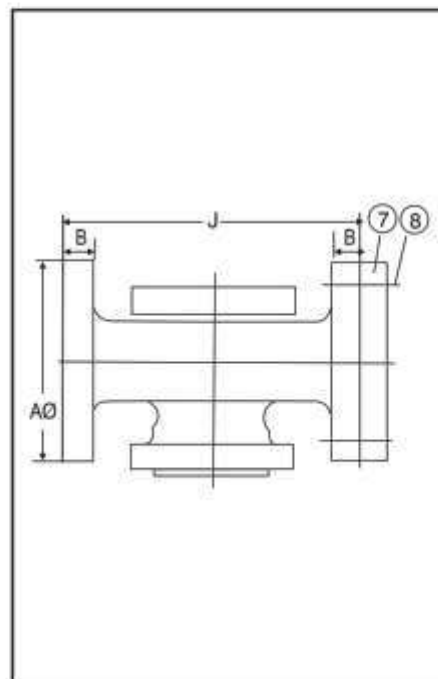
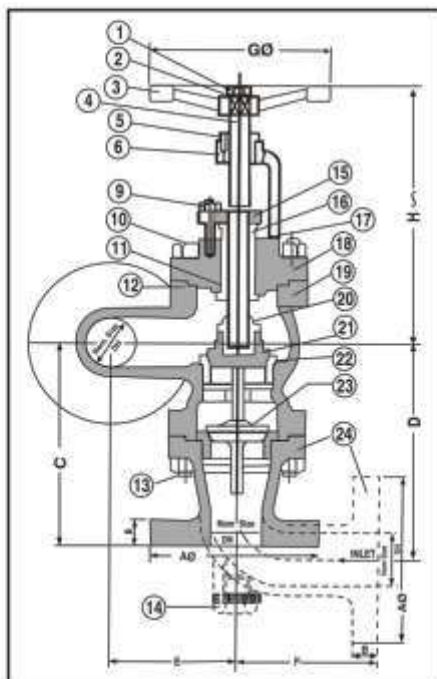
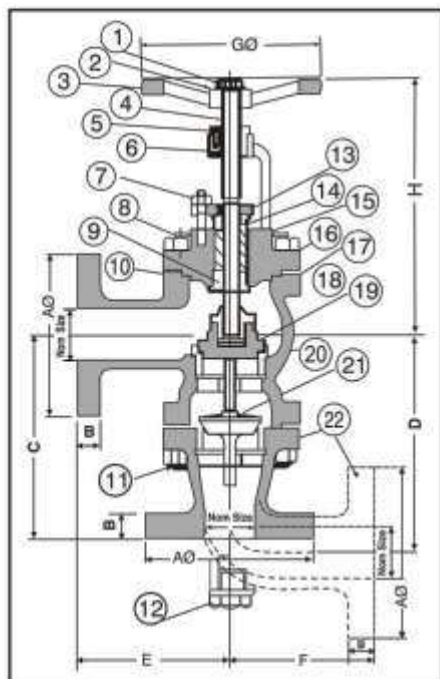
SALIENT FEATURES :

1. Accessible feed check valve consists of two valves, a stop valve operated by a hand wheel and a back pressure check valve.
2. Available with Straight or curved inlet.
3. Accessibility of check valve can be examined while the boiler is in operation by closing the stop valve and removing the inlet.
4. 40mm, 50mm and 65mm size accessible feed check valves are also available with inspection branch.

TESTING AND CERTIFICATION :

All valves are tested at double the max. working pressure. Each valve is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.





**DIMENSIONS
Without Inspection Branch**

Nominal Size	A	B	C	D	E	F	G	H
DN25 (1")	121	19.1	135	135	100	100	150	190
DN40 (1 1/2")	140	22.2	180	191	140	133	175	230
DN50 (2")	165	25.4	203	216	152	140	200	260
DN65 (2 1/2")	184.2	25.4	238	238	178	165	250	300
DN80 (3")	20.3	32	264	264	203	165	250	320

**DIMENSIONS
With Inspection Branch**

Nominal Size	A	B	C	D	E	F	G	H	J
DN40 (1 1/2")	140	22.2	180	191	114	133	175	230	228
DN50 (2")	165	25.4	203	216	127	140	200	260	254
DN65 (2 1/2")	184.2	25.4	238	238	140	165	250	300	280

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Nut for Hand Wheel	M.S.	----
2.	Washer	M.S.	----
3.	Hand Wheel	C.I.	IS 210 FG 200
4.	Stem	S.S.	AISI-410
5.	Locking Screw	S.S.	AISI-410
6.	Bush	S.S.	AISI-410
7.	Studs & Nuts for Gland	Carbon Steel	----
8.	Studs & Nuts	Carbon Steel	----
9.	Back Seat Bush	S.S.	AISI-410
10.	Gasket	Steam Jointing	----
11.	Studs & Nuts	Carbon Steel	----
12.	Drain Plug	Bronze	IBR 282(a)(iv)Gr. B
13.	Gland Flange	Cast Steel	IBR 73 to 80
14.	Gland	S.S.	AISI-410
15.	Packing	Graphited Asbestos	---
16.	Bonnet	Cast Steel	IBR 73 to 80
17.	Body	Cast Steel	IBR 73 to 80
18.	Disc Nut	S.S.	AISI-410
19.	Disc	S.S.	AISI-410
20.	Body Seat Ring	S.S.	AISI-410
21.	Check Valve Disc	S.S.	AISI-410
22.	Straight / Curved Inlet	Cast Steel	IBR 73 to 80

CAST STEEL

SLEEVE PACKED WATER LEVEL GAUGE

**MADE WITH MAXIMUM
PRECISION & PERFECTION**

DESCRIPTION :

'WJ' Cast Steel Sleeve Packed Water Level Gauge. Flanged ends to BS-10 Table 'J' with automatic shut off in the water arm. Suitable for 350 PSIG (24.6 Kg/Cm²g). Max. B.O.P. and Temp. 425°C. Tested to 700 PSIG (49.2 Kg/Cm²g) Hydraulic Pressure.

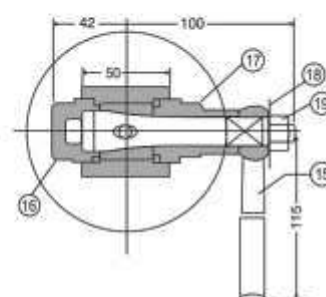
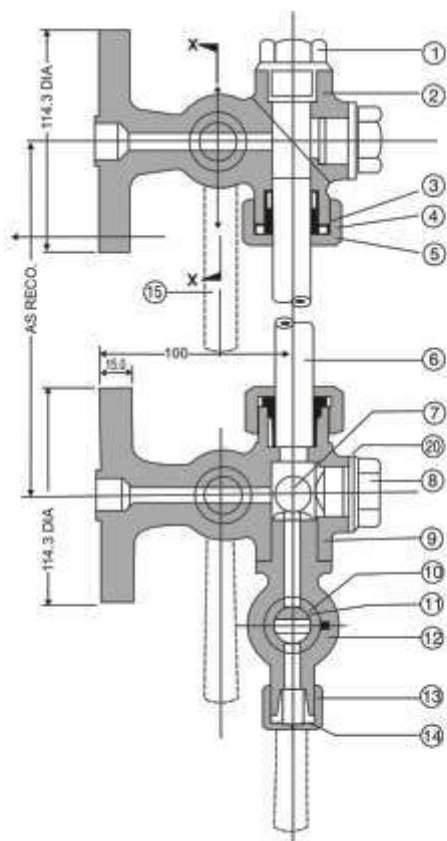
SALIENT FEATURES :

1. Each Cock is fitted with a self adjusting inverted taper plug which forms a seal in a renewable moulded asbestos sleeve.
2. The sleeve can be easily positioned in the cock by a rib which fits a corresponding groove in the body.
3. The sleeve is reinforced by metallic eyelets to avoid clogging of the passage.
4. A ball valve in the water arm cuts off water supply in the event of breakage of glass tube.
5. Glass tubes are fitted with replaceable rubber cones.

TESTING AND CERTIFICATION :

All water level gauges are tested at double the maximum working pressure. Each gauge is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.





MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Top Gauge Side Nut	M.S.	----
2.	Top Gauge Arm	Cast Steel	IBR 73 to 80
3.	Gland Nut	M.S.	----
4.	Rubber Cone	Rubber	----
5.	Washers	S.S.	AISI-410
6.	Glass Tube	Glass	----
7.	Ball	S.S.	AISI-304
8.	Bottom Gauge Side Nut	M.S.	----
9.	Bottom Gauge Arm	Cast Steel	IBR 73 to 80
10.	Sleeve	Moulded Asbestos	----
11.	Spindle	S.S.	AISI-304/AISI-410
12.	Drain Cock Body	Cast Steel	IBR 73 to 80
13.	Drain Nut	M.S.	----
14.	Drain Nipple	S.S.	AISI-410
15.	Handle	M.I./BRASS	---
16.	Back Nut	M.S.	---
17.	Bonnet	M.S.	---
18.	Name Plate Washers	Brass Sheet	---
19.	Nut for Handle	M.S.	---
20.	Gasket Washers	Steam Jointing	---

CAST STEEL

CAST CARBON STEEL

BUCKET TYPE STEAM TRAP

**HIGH PERFORMANCE
UNDER DIFFERENT
STEAM PRESSURES**

DESCRIPTION :

'WJ' Cast Carbon Steel (A-216 Gr. WCB) Vertical Inverted Bucket Type Steam Trap with stainless steel SS (AISI-304) bucket, screwed female ends BSP parallel threads.

Maximum Working Pressure : 24.6 Kg/cm²

Max. Temperature : 425°C

Body Tested to : 49.2 Kg/cm²

TESTING AND CERTIFICATION :

All traps are tested hydraulically at double the max. working pressure. Each trap is tested on steam line to see the performance of traps. Each trap is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.

DISCHARGE CAPACITIES :

Discharge capacities of Steam Traps under different steam pressures are given below in Kg/hour of hot condensate at temperature corresponding to the inlet steam pressure.

Note : These steam traps are suitable for Vertical and Horizontal Installation.



INLET STEAM PRESSURE		CAPACITY IN KILOGRAMS PER HOUR		
Kg/Cm ²	PSIG	25 mm	40 mm	50 mm
3.52	50	1850	4000	8200
5.27	75	1725	4150	8300
7.03	100	1625	4700	8150
10.54	150	1575	4300	8350
13.00	185	1650	4500	8560
17.58	250	1400	4300	8180
21.09	300	1250	3500	7120
24.06	350	1350	3600	7280

VERTICAL INSTALLATION

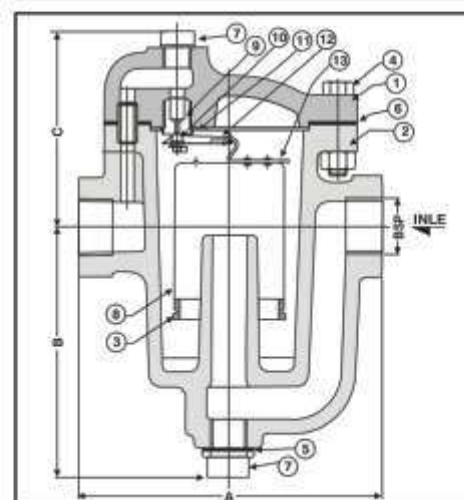
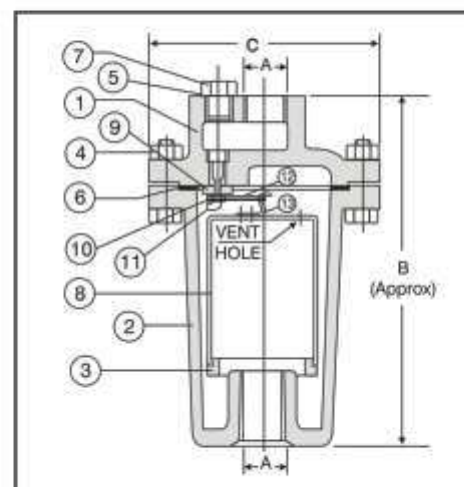
DIMENSIONS

NOMINAL SIZE	A	B (Approx.)	C
25 mm (1")	1" BSP	270	195
40 mm (1½")	1½" BSP	335	235
50 mm (2")	2" BSP	360	255

HORIZONTAL INSTALLATION

DIMENSIONS

NOMINAL SIZE	A	B	C
25 mm (1")	180	147	115
40 mm (1½")	----	----	----
50 mm (2")	----	----	----



MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Cover	Cast Steel	IBR 73 to 80
2.	Body	Cast Steel	IBR 73 to 80
3.	Bucket Ring	M.I.	----
4.	Nuts & Bolts	M.S.	----
5.	Gasket Washer	Steam Jointing	----
6.	Gasket	Steam Jointing	----
7.	Plug	S.S.	SS (AISI-410)
8.	Bucket	S.S. Sheet	----
9.	Valve Seat	S.S.	AISI-410
10.	Valve Ball	S.S.	AISI-304
11.	Hook Plate	S.S.	AISI-304
12.	Lever	S.S.	AISI-304
13.	Bucket Hook	S.S.	AISI-304

CAST STEEL

INVESTMENT CAST STAINLESS STEEL THERMODYNAMIC STEAM TRAP

ENSURES HIGH PERFORMANCE

DESCRIPTION :

'WJ' Investment Cast Stainless Steel Thermodynamic Steam Trap with screwed BSPT Thread/Socket weld ends.

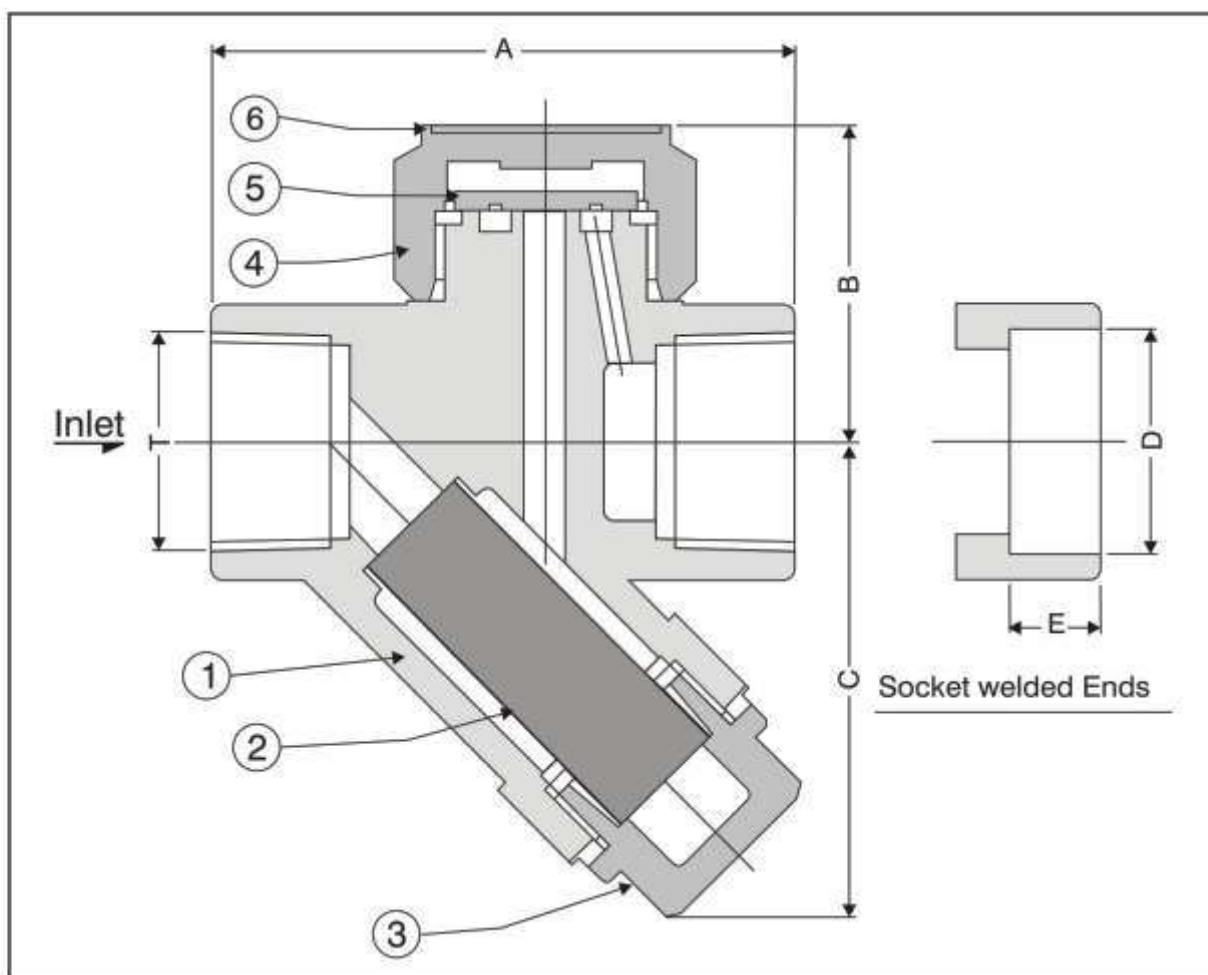
Maximum B.O.P. 31.64 Kg/cm²

Maximum Temperature : 425°C

Body Test Pressure : 63.28 kg./cm² (Hyd.)

TESTING AND CERTIFICATION :

All traps are tested hydraulically at double the maximum working pressure. Each trap is tested on steam line to see its performance. Each trap is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.



Nominal Size	Dimensions			Ends Connection		
	A	B	C	T	D Ø	E
15mm (½")	78	40	58	½" BSPT	21.8 +0.3 -0.0	11
20mm (¾")	78	40	58	¾" BSPT	27.4 +0.3 -0.0	14
25mm (1")	89	48	73	1" BSPT	34.1 +0.3 -0.0	14

MATERIALS			
PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	S.S.	AISI-420
2.	Strainer Screen	S.S.	AISI-304
3.	Strainer Cap	S.S.	AISI-420
4.	Body Cap	S.S.	AISI-420
5.	Disc	S.S.	AISI-420
6.	Name Plate	Aluminium	-----

CAST STEEL

VERTICAL CHECK VALVE

DESIGNED TO WORK UNDER VARIED CONDITIONS

DESCRIPTION :

'WJ' Cast Carbon Steel (A-216 Gr. WCB) Vertical Lift Check Valve, bolted cover with 13% Cr. SS (AISI-410) Trim and having flanged ends as per BS-10 table 'J'. Suitable for:

Maximum working pressure of 24.6 Kg/cm² (350 PSIG) (800°F).

Tested to : 49.2 Kg/cm² (HYD.) (700 PSIG)

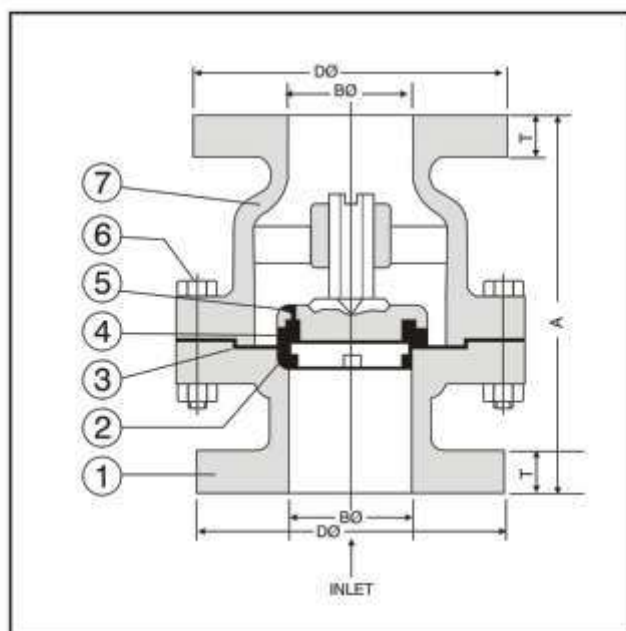
SALIENT FEATURES :

1. Full way area is provided.
2. Valve Disc. is guided to give trouble free service.

TESTING AND CERTIFICATION :

All Valves are tested at double the max. working pressure. Each Valve is supplied with IBR Test Certificate in Form III-C, Issued by The Director of Boilers, Punjab.





DIMENSIONS

Nominal Size	A	B	D	T
DN 40 (1½")	175	40	140	22.2
DN 50 (2")	200	50	165	25.4
DN 65 (2½")	225	65	184.5	25.4
DN 80 (3")	260	80	203	31.8
DN 100 (4")	285	100	229	34.9
DN 125 (5")	350	125	280	38
DN 150 (6")	360	150	305	38
DN 200 (8")	400	200	368.5	41.3

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Lower Body	Cast Steel	IBR 73 to 80
2.	Body Seat Ring	13% Cr. S.S.	AISI-410
3.	Gasket	S.S. Type 304 Spiral Wound	Asbestos Filled
4.	Valve Disc Facing Ring	13% Cr. S.S.	AISI-410
5.	Valve Disc	Cast Steel	IBR 73 to 80
6.	Bolts & Nuts	Carbon Steel	----
7.	Upper Body	Cast Steel	IBR 73 to 80

CAST STEEL

RELIEF VALVE

SMOOTH FLOW AT VARIOUS PRESSURES

DESCRIPTION :

'WJ' Cast Steel Spring Loaded Relief Valve Flange Ends to BS-4504 Part-I Table 40/1/DIN 2545 PN-40 Raised Face with 13% Cr. S.S. (AISI-410) Trim. Max. Set Pressure of 10.54 Kg/Cm²g. Body Tested to 60 Kg/Cm²g. Hydraulic Pressure.

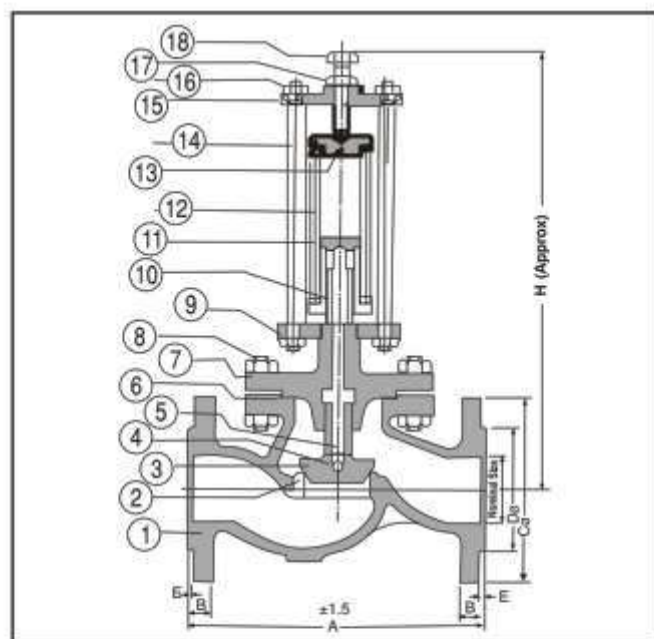
These relief valves are suitable for hot oil.

SALIENT FEATURES :

1. Stream lined full flow area is provided in the body to minimise pressure drop.
2. Renewable 13% Cr. S.S. (AISI-410) Body Seat Ring and Disc. have at least 50 HB difference in hardness.

These Relief Valves are supplied with our own Works Test Certificate.





DIMENSIONS

Nominal Size DN	A	B	C	D	E	H
DN 40 (1½")	200	18	150	88	3	300
DN 50 (2")	230	20	165	102	3	310
DN 65 (2½")	290	22	185	122	3	440
DN 80 (3")	310	24	200	138	3	460
DN 100 (4")	350	24	235	162	3	500

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	Cast Steel	ASTM A216 Gr. WCB
2.	Body Seat Ring	S.S. 13% Cr.	AISI-410
3.	Valve Disc	S.S./Cast S.S.	AISI-410/ASTM A351 CF8
4.	Ball	S.S.	AISI-304
5.	Stem	S.S. 13% Cr.	AISI-410
6.	Gasket	S.S. (AISI-304)	Spiral wound Asbestos Filled
7.	Cover	Cast Steel	ASTM A216 Gr. WCB
8.	Studs & Nuts	Carbon Steel	----
9.	Bottom Plate	M.S.	----
10.	O-Ring	Silicon Rubber	----
11.	Sleeve	S.S. 13% Cr.	AISI-410
12.	Spring	Spring Steel	----
13.	Spring Disc	M.S.	----
14.	Pillar	M.S.	----
15.	Top Plate	M.S.	----
16.	Nuts	Carbon Steel	----
17.	Lock Nut	Carbon Steel	----
18.	Adjusting Screw	Carbon Steel	----

FORGED STEEL

GATE VALVE

SMOOTH PERFORMANCE, TROUBLE FREE SERVICE

DESCRIPTION :

'WJ' Forged Steel Gate Valve to BS-5352-1981/API-602-1985 CI-800 outside screw and Yoke type, bolted bonnet, 13% Cr. SS (AISI-410) trim, solid wedge, screwed female ends to BSPT Threads. Body Tested to 207 Bar Gauge Hyd. Seat and Back Seat Tested to 152 Bar Gauge Hyd. and 6.9. Bar Gauge Air.

These Valves are manufactured in Standard Bore as well as Reduced Bore designs.

SALIENT FEATURES :

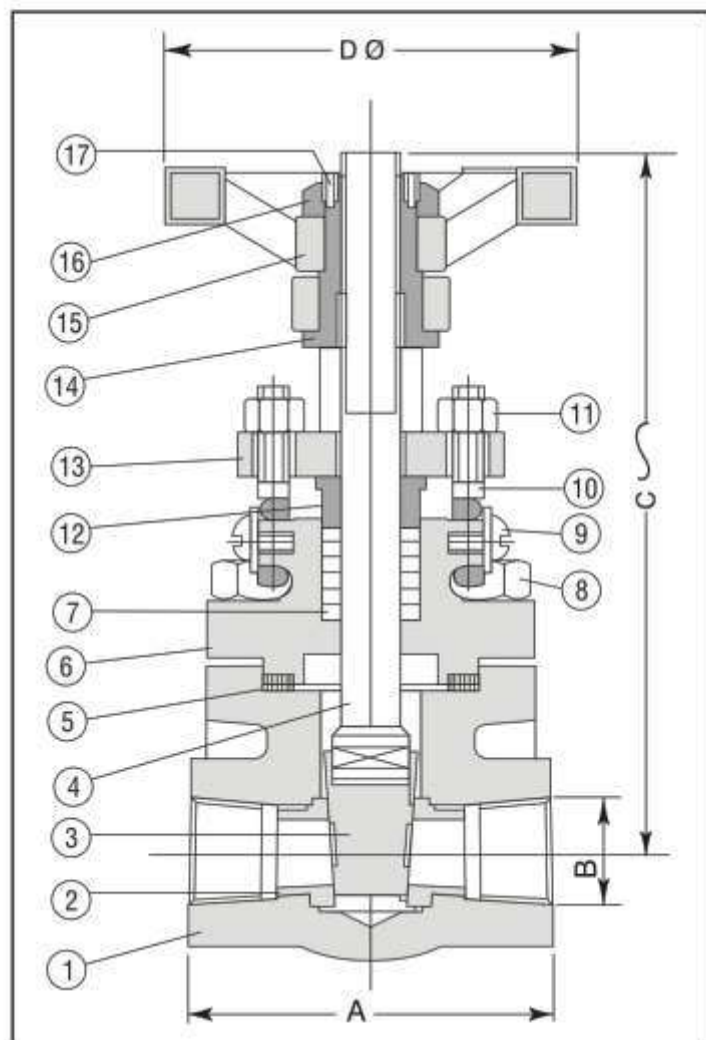
1. Renewable 13% Cr. SS (AISI-410) Body Seat Ring and wedge have atleast 50 HB difference in hardness.
2. Bolted self aligning two piece gland is provided.
3. Back Seat provision is provided to facilitate on line Replacement to gland packing under pressure when valve is fully open.
4. Ample depth of stuffing box is provided.
5. Sturdy hand wheel is provided for easy operation of Valve.

TESTING AND CERTIFICATION :

Each Valve is tested hydraulically at the specified Pressure. These Valves are supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.

NOTE : These Valves can also be supplied with socket weld ends.





Nominal Size	DIMENSIONS							
	STANDARD BORE				REDUCE BORE			
	A	B	C	D	A	B	C	D
10 mm (3/8")	80	3/8" BSPT	135	80	----	----	----	----
15 mm (1/2")	86	1/2" BSPT	145	80	80	1/2" BSPT	135	80
20 mm (3/4")	100	3/4" BSPT	155	100	86	3/4" BSPT	145	80
25 mm (1")	125	1" BSPT	180	120	100	1" BSPT	155	100
32 mm (1 1/4")	145	1 1/4" BSPT	225	150	125	1 1/4" BSPT	180	120
40 mm (1 1/2")	170	1 1/2" BSPT	245	150	145	1 1/2" BSPT	225	150
50 mm (2")	----	----	----	----	170	2" BSPT	245	150

MATERIALS			
PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	F.S.	ASTM A-105
2.	Body Seat Ring	S.S.	AISI-410
3.	Wedge	S.S.	AISI-410
4.	Stem	S.S.	AISI-410
5.	Gasket	S.S. Type 304 Spiralwound Asbestos Filler	
6.	Bonnet	F.S.	ASTM A-105
7.	Packing	Graphited Asbestos	----
8.	Studs & Nuts	Alloy Steel / H.T. Steel	ASTM A-193-B7 / ASTM A-194 2H
9.	Screw with Washer	M.S.	----
10.	Eye Bolts	S.S.	AISI-410
11.	Nut for Eye Bolts	H.T. Steel	ASTM A -194-2H
12.	Gland	S.S.	AISI-410
13.	Gland Flange	F.S.	ASTM A-105
14.	Yoke Sleeve	S.S.	AISI-410
15.	Hand Wheel	M.I.	----
16.	Check Nut	S.S.	AISI-410
17.	Locking Screw	Steel	----

FORGED STEEL

GLOBE VALVE

STOUT & STURDY WORKING

DESCRIPTION :

'WJ' Forged Steel Globe Valve to BS-5352-1981, CI-800 outside screw and yoke type, bolted bonnet, 13% Cr. SS (AISI-410) trim, plug type disc screwed female ends to BSP Taper Threads.

Body Tested 207 Bar Gauge Hyd. Seat and back Seat. Tested 152 Bar Gauge Hyd. and 6.9 Bar Gauge Air.

These Valves are manufactured in Standard Bore as well as Reduced Bore designs.

SALIENT FEATURES :

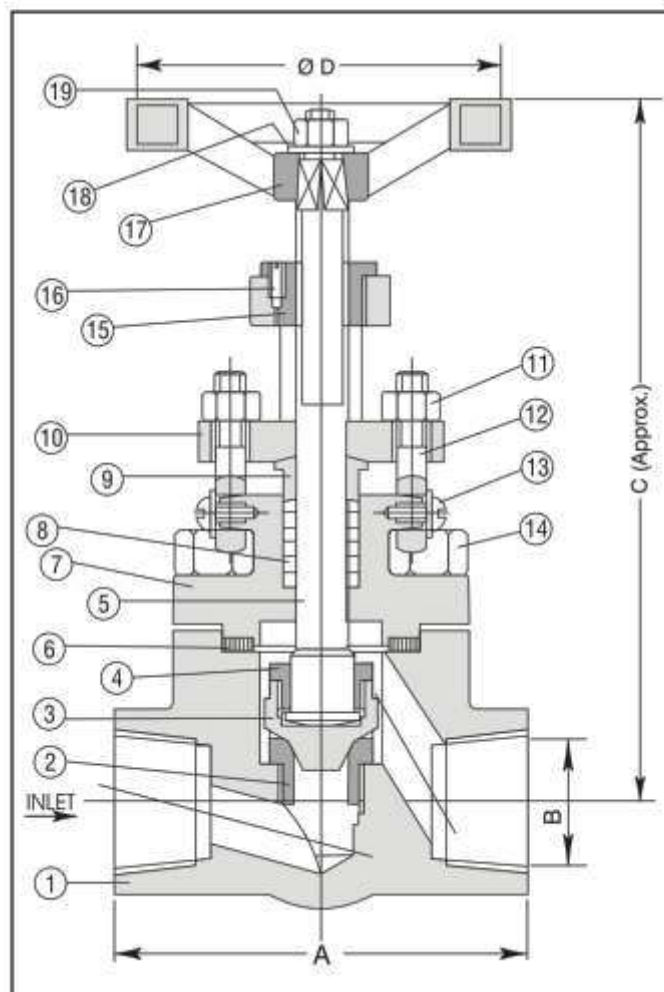
1. Renewable 13% Cr. SS (AISI-410) Body Seat Ring and disc have atleast 50 HB difference in hardness.
2. Bolted self aligning two piece gland is provided.
3. Back Seat provision is provided to facilitate on line replacement of gland packing under pressure when valve is fully open.
4. Ample depth of stuffing box is provided.
5. Sturdy hand wheel is provided for easy operation of the Valve.

TESTING AND CERTIFICATION :

Each Valve is tested hydraulically at the specified Pressure. These Valves are supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.

NOTE : These valves can also be supplied with socket weld ends.





Nominal Size	DIMENSIONS							
	STANDARD BORE				REDUCE BORE			
	A	B	C	D	A	B	C	D
10 mm (3/8")	80	3/8" BSPT	138	76	----	----	----	----
15 mm (1/2")	86	1/2" BSPT	145	76	80	1/2" BSPT	138	76
20 mm (3/4")	100	3/4" BSPT	155	100	86	3/4" BSPT	145	76
25 mm (1")	125	1" BSPT	182	120	100	1" BSPT	155	100
32 mm (1 1/4")	145	1 1/4" BSPT	230	150	125	1 1/4" BSPT	182	120
40 mm (1 1/2")	170	1 1/2" BSPT	265	150	145	1 1/2" BSPT	230	150
50 mm (2")	----	----	----	----	170	2" BSPT	265	150

MATERIALS			
PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	F.S.	ASTM A-105
2.	Body Seat Ring	S.S.	AISI-410
3.	Valve Disc	S.S.	AISI-410
4.	Check Nut	S.S.	AISI-410
5.	Stem	S.S.	AISI-410
6.	Gasket	S.S. Type 304 Spiralwound Asbestos Filler	----
7.	Bonnet	F.S.	ASTM A-105
8.	Packing	Graphited Asbestos	----
9.	Gland	S.S.	AISI-410
10.	Gland Flange	F.S.	ASTM A-105
11.	Nut for Eye Bolts	H.T. Steel	ASTM A-194-2H
12.	Eye Bolts	S.S.	AISI-410
13.	Screw with Washer	M.S.	----
14.	Studs and Nuts	Alloy Steel / H.T. Steel	ASTM A-193 B7 / ASTM A-194 2H
15.	Yoke Bush	S.S.	AISI-410
16.	Locking Screw	M.S.	----
17.	Hand Wheel	M.I.	----
18.	Washer	M.S.	----
19.	Nut for Hand Wheel	M.S.	----

FORGED STEEL

HORIZONTAL LIFT CHECK VALVE

DESIGNED TO WORK UNDER VARIED CONDITIONS

DESCRIPTION :

'WJ' Forged Steel Horizontal Lift Check Valve to BS-5352-1981 CI-800 Bolted Bonnet, 13% SS (AISI-410) trim, plug type disc screwed female ends to BSP Taper Threads.

Body Tested 207 Bar Gauge Hyd.

Seat Tested 152 Bar Gauge Hyd.

These valves are manufactured in standard bore as well as reduced bore design.

SALIENT FEATURES :

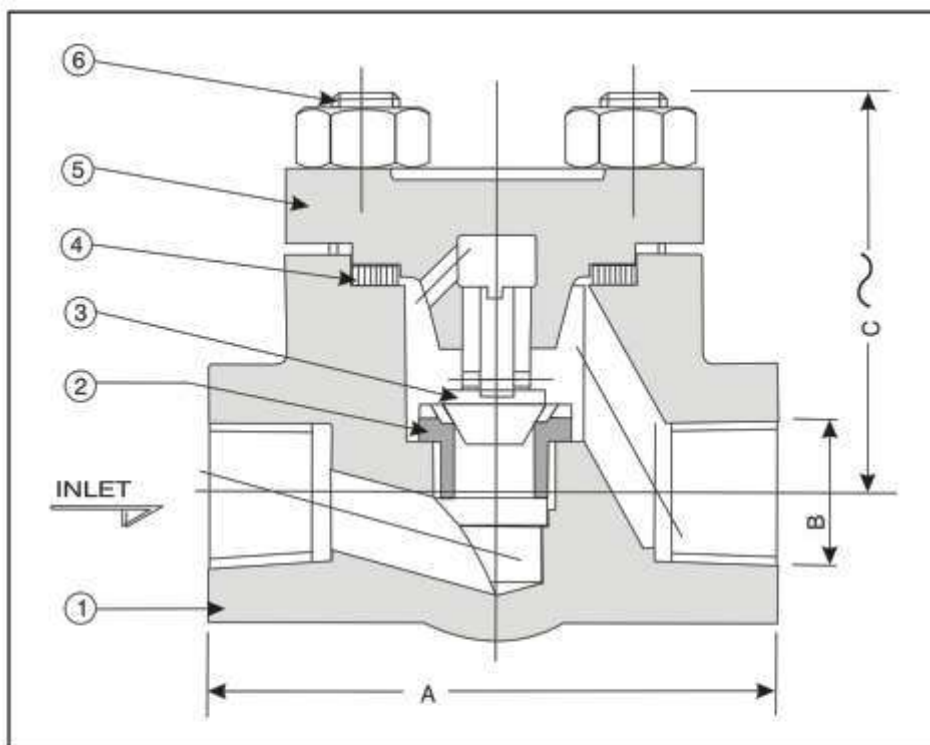
Renewable 13% Cr. SS (AISI-410) Body Seat Ring and disc have atleast 50 HB difference in hardness.

TESTING AND CERTIFICATION :

Each Valve is tested hydraulically at the Specified Pressure. These Valves are supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.

NOTE : These Valves can also be supplied with Socket weld ends.





Nominal Size	DIMENSIONS					
	STANDARD BORE			REDUCE BORE		
	A	B	C	A	B	C
10 mm ($\frac{3}{8}$ "	80	$\frac{3}{8}$ " BSPT	60	----	----	----
15 mm ($\frac{1}{2}$ "	86	$\frac{1}{2}$ " BSPT	60	80	$\frac{1}{2}$ " BSPT	60
20 mm ($\frac{3}{4}$ "	100	$\frac{3}{4}$ " BSPT	73	86	$\frac{3}{4}$ " BSPT	60
25 mm (1"	125	1" BSPT	85	100	1" BSPT	73
32 mm (1 $\frac{1}{4}$ "	145	1 $\frac{1}{4}$ " BSPT	100	125	1 $\frac{1}{4}$ " BSPT	85
40 mm (1 $\frac{1}{2}$ "	170	1 $\frac{1}{2}$ " BSPT	120	145	1 $\frac{1}{2}$ " BSPT	100
50 mm (2"	----	----	----	170	2" BSPT	120

MATERIALS			
PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	Forged Steel	ASTM A-105
2.	Body Seat Ring	S.S.	AISI-410
3.	Valve Disc	S.S.	AISI-410
4.	Gasket	S.S. Type 304 Spiralwound Asbestos Filler	----
5.	Bonnet	Forged Steel	ASTM A-105
6.	Studs and Nuts	Alloy Steel / H.T. Steel	ASTM A-193 B7 / ASTM A-194 2H

BRONZE

GLOBE

STEAM STOP VALVE

EVERLASTING & PERFECT

DESCRIPTION :

'WJ' Bronze Globe Steam Stop Valve, screwed bonnet, inside screw, rising stem, with back seat having renewable stainless steel seat and stem, screwed female ends BSP Taper or Flanged ends to BS-10 Table 'H', hand wheel operated suitable for saturated steam lines upto 250 PSIG (17.58 Kg/Cm²g) and Max. Temp. of 428°F (220°C) tested to 500 PSIG (35.15 Kg/Cm²g) hydraulic pressure.

SALIENT FEATURES :

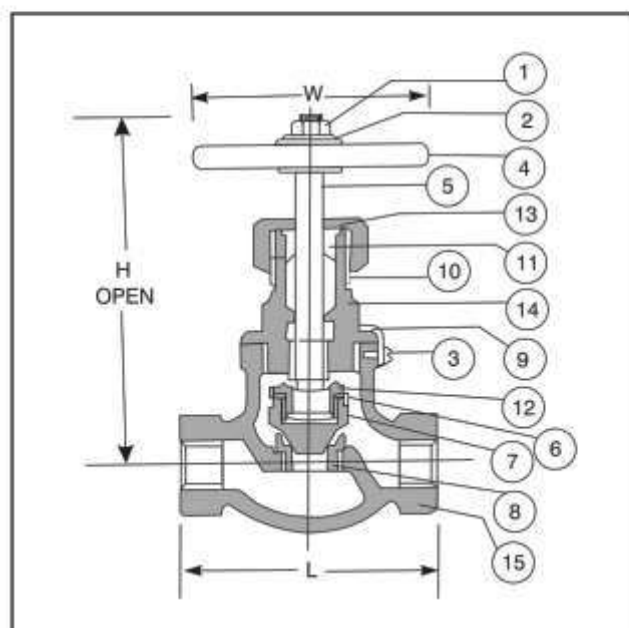
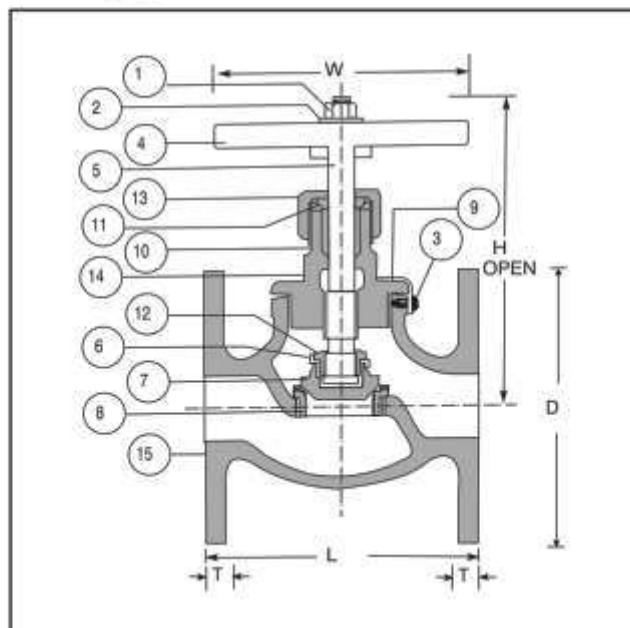
'WJ' Bronze Globe Steam Stop Valves are provided with following features to give trouble free service.

1. Back seat arrangement is provided to facilitate on line replacement of gland packing under pressure when valve is fully open.
2. Bonnet is locked for safety of operating staff.
3. Valve disc and check nut are locked by a S.S. (AISI 304) locking washer.
4. Body seat ring and disc are properly heat treated with at least 50 BHN difference.
5. Heavy and sturdy hand wheel with firm grip is provided.

TESTING AND CERTIFICATION :

All valves are tested at double the max. working pressure. Each valve is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.





DIMENSIONS

Nominal Size DN	END TO END OR FACE TO FACE DISTANCE				CENTER TO TOP OPEN (Approx.)	HANDWHEEL DIAMETER
	SCREWED L	FLANGED L	D	T	H	W
15 mm (½")	83	106	114.3	9.5	120	70
20 mm (¾")	95	112	114.3	9.5	120	75
25 mm (1")	111	124	120.7	11.2	133	90
32 mm (1¼")	133.5	137.5	133.4	11.2	165	90
40 mm (1½")	148	149.5	139.7	12.7	178	105
50 mm (2")	178	177.5	165.1	12.7	215	140

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Nut for Handwheel	M.S.	----
2.	Washer	M.S.	----
3.	Screw	Brass	----
4.	Hand Wheel	Cast Iron	IS : 210, FG-200
5.	Stem	S.S.	AISI-410
6.	Locking Washer	S.S.	AISI-304
7.	Disc	S.S.	AISI-410
8.	Body Seat Ring	S.S.	AISI-410
9.	Locking Device	Brass Sheet	-----
10.	Packing	Graphited Asbestos	-----
11.	Gland	Extruded Brass Rod	-----
12.	Check Nut	Bronze	IBR 282 (a) IV Gr. B.
13.	Gland Nut	Bronze	IBR 282 (a) IV Gr. B.
14.	Bonnet	Bronze	IBR 282 (a) IV Gr. B.
15.	Body	Bronze	IBR 282 (a) IV Gr. B.

BRONZE

HORIZONTAL LIFT CHECK VALVE

**SCIENTIFICALLY DESIGNED,
EVERLASTING,
SMOOTH PERFORMANCE**

DESCRIPTION :

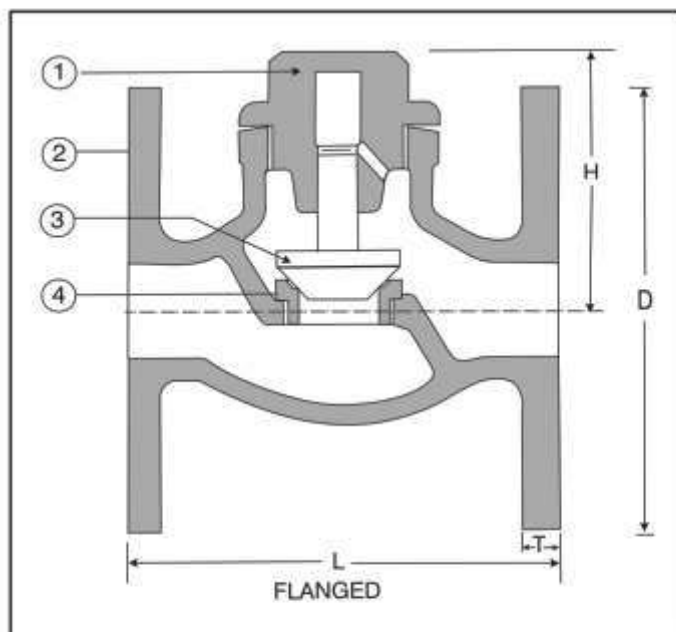
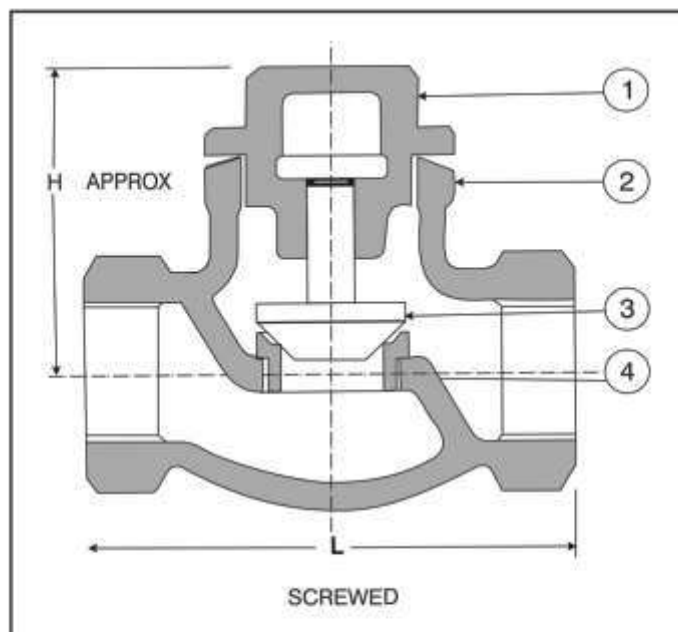
'WJ' Bronze Horizontal Lift Check Valve screwed cover with Stainless Steel trim screwed female ends BSP Taper or flanged ends to BS-10 Table 'H'. Suitable for steam line upto 250 PSIG (17.58 Kg/Cm²g) and temperature 428°F (220°C). Tested to 500 PSIG (35.15 Kg/Cm²g) Hydraulic Pressure.

Valves upto 50mm (2") size are manufactured with screwed in covers and higher sizes are manufactured with bolted covers. Valves of 40mm (1½") and 50mm (2") are also manufactured with bolted cover for direct application on Boilers.

TESTING AND CERTIFICATION :

All valves are tested hydrostatically at double the maximum working pressure. Each valve is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.





DIMENSIONS

NOMINAL SIZE	END TO END / FACE TO FACE DISTANCE				CENTER TO TOP H. APPROX.
	SCREWED L	FLANGED L	D	T	
15 mm (½")	83	106	114.3	9.5	54.5
20 mm (¾")	95	112	114.3	9.5	52.5
25 mm (1")	111	124	120.7	11.2	69
32 mm (1¼")	133.5	137.5	133.4	11.2	75.5
40 mm (1½")	148	149.5	139.7	12.7	84
50 mm (2")	178	177.5	165.1	12.7	90.5
65 mm (2½")	203	216	184.2	14.3	115
80 mm (3")	254	254	203.2	16.0	130
100 mm (4")	275	292	228.6	19.1	170

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Bonnet	Bronze	IBR 282 (a) (IV) Gr. B
2.	Body	Bronze	IBR 282 (a) (IV) Gr. B
3.	Valve Disc	Stainless Steel	AISI-410
4.	Body Seat Ring	Stainless Steel	AISI-410

BRONZE

AUXILIARY

STEAM STOP VALVE

**VALVES MADE WITH MAXIMUM
PRECISION & PERFECTION**

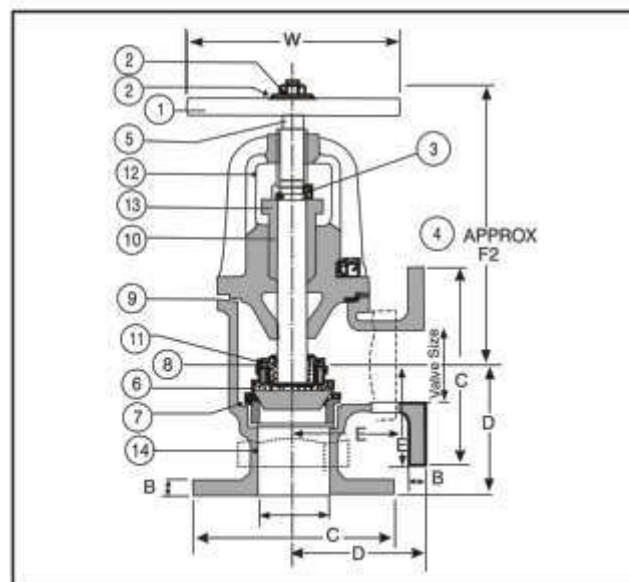
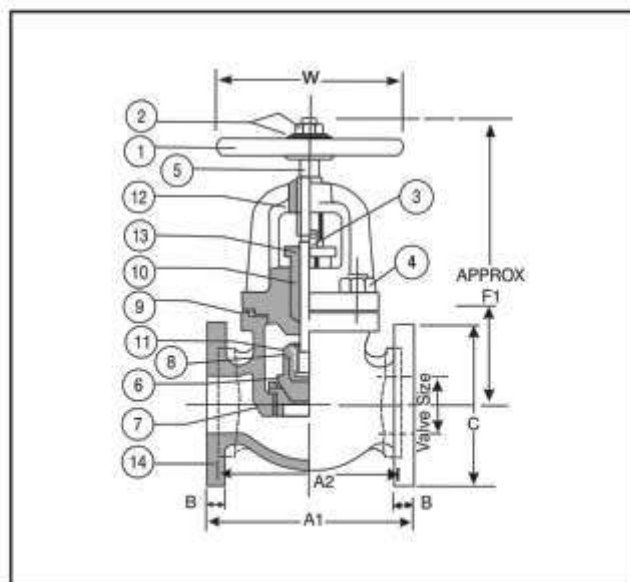
DESCRIPTION :

'WJ' Bronze Auxilliary Steam Stop Valve, straight or right angle pattern, outside screw and yoke type with S.S. (AISI-410) working parts, screwed female ends BSPT or flanged ends to BS-10 Table 'H'. Suitable for 250 PSIG (17.58 Kg/Cm²g) max. working pressure and 428°F (220°C) temperature. Tested to 500 PSIG (35.15 Kg/Cm²g) Hydraulic Pressure.

TESTING AND CERTIFICATION :

All valves are tested at double the max. working pressure. Each valve is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.





DIMENSIONS

Nominal Size	A ¹	A ²	B	C	D	E	F ¹	F ²	W
15 mm (½")	106	83	9.5	114.3	73	41	140	130	70
20 mm (¾")	112	95	9.5	114.3	76	47.5	150	135	75
25 mm (1")	124	111	11.2	120.7	82.5	57	184	155	90
32 mm (1¼")	137.5	133.5	11.2	133.4	89	66.5	227	175	90
40 mm (1½")	149.5	148	12.7	139.7	101.6	76	235	212	105
50 mm (2")	197	178	12.7	165.1	108	89	230	210	140
65 mm (2½")	228	203	14.3	184.2	120	105	300	260	190
80 mm (3")	266.5	228	16	203.2	135	120	320	280	190

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Hand Wheel	Cast Iron	IS : 210 Gr. FG-200
2.	Nut and Washer	M.S.	-----
3.	Studs & Nuts for Gland	M.S.	-----
4.	Studs & Nuts for Part No. 12 & 14	M.S.	-----
5.	Spindle	S.S.	AISI-410
6.	Disc	S.S.	AISI-410
7.	Body Seat Ring	S.S.	AISI-410
8.	Locking Washer	S.S.	AISI-304
9.	Gasket	Steam Jointing	-----
10.	Packing	Graphited Asbestos	-----
11.	Check Nut	Bronze	IBR 282 (a) (IV) Gr. B
12.	Bonnet	Bronze	IBR 282 (a) (IV) Gr. B
13.	Gland	Bronze	IBR 282 (a) (IV) Gr. B
14.	Body	Bronze	IBR 282 (a) (IV) Gr. B

BRONZE

CONTROLLABLE FEED CHECK VALVE

SUPER SMOOTH PERFORMANCE

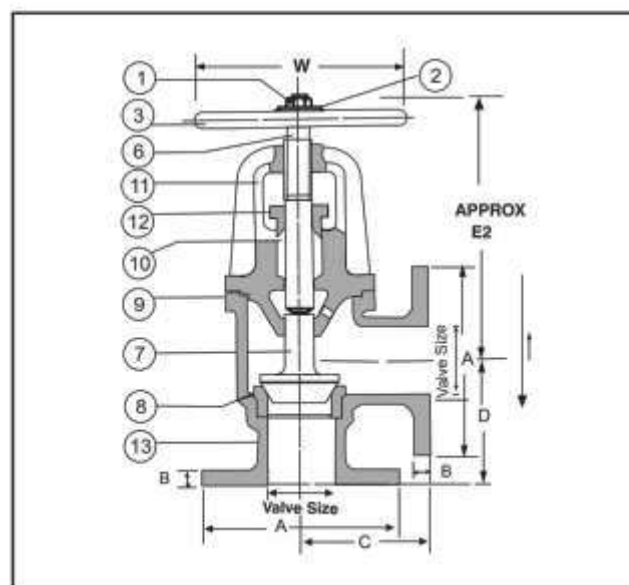
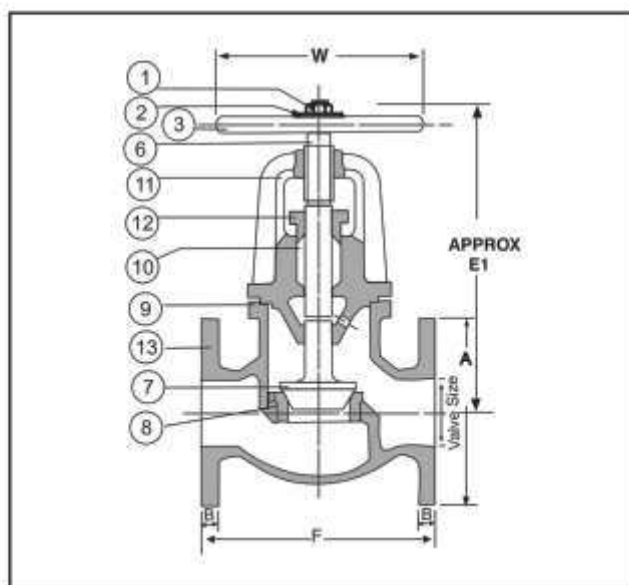
DESCRIPTION :

'WJ' Bronze Controllable Feed Check Valve, straight or right angle pattern, outside screw and Yoke type. With S.S. (AISI-410) working parts flanged ends to BS-10 Table 'H'. Suitable for 250 PSIG (17.58 Kg/Cm²g) max. working pressure and 428°F (220°C) Temperature. Tested to 500 PSIG (35.15 Kg/Cm²g) Hydraulic Pressure.

TESTING AND CERTIFICATION :

All valves are tested at double the maximum working pressure. Each valve is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.





DIMENSIONS

Nominal Size	A	B	C	D	E ¹ (Approx.)	E ² (Approx.)	F	W (Approx.)
15 mm (½")	114.3	9.5	73	73	140	130	106	70
20 mm (¾")	114.3	9.5	76	76	150	135	112	75
25 mm (1")	120.7	11.2	82.5	82.5	184	155	124	90
32 mm (1¼")	133.4	11.2	89	89	227	175	137.5	90
40 mm (1½")	139.5	12.7	101.6	101.6	235	212	149.5	105
50 mm (2")	165.1	12.7	108	108	230	210	197	140
65 mm (2½")	184.2	14.3	120	120	300	260	228	190
80 mm (3")	203.2	16	135	135	320	280	266.5	190

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Nut for Handwheel	M.S.	----
2.	Washer for Handwheel	M.S.	----
3.	Hand Wheel	Cast Iron	IS : 210 Gr. FG 200
4.	Studs & Nuts for Gland	M.S.	----
5.	Studs & Nuts for Part No. 11 & 13	M.S.	----
6.	Spindle	S.S.	AISI-410
7.	Valve Disc	S.S.	AISI-410
8.	Body Seat Ring	S.S.	AISI-410
9.	Gasket	Steam Jointing	AISI-410
10.	Packing	Graphited Asbestos	----
11.	Bonnet	Bronze	IBR 282 (a) (IV) Gr. B
12.	Gland	Bronze	IBR 282 (a) (IV) Gr. B
13.	Body	Bronze	IBR 282 (a) (IV) Gr. B

BRONZE

ACCESSIBLE

FEED CHECK VALVE

EASILY ACCESSIBLE WHILE IN OPERATION

DESCRIPTION :

'WJ' Bronze Accessible Feed Check Valve, angle pattern, outside screw and Yoke type, SS (AISI-410) seat and spindle, having flanged ends to BS-10 Table 'H'. Suitable for 250 PSIG (17.58 Kg/Cm²g) max working pressure and 428°F (220°C) Temp. Tested to 500 PSIG (35.15 Kg/Cm²g) Hydraulic Pressure.

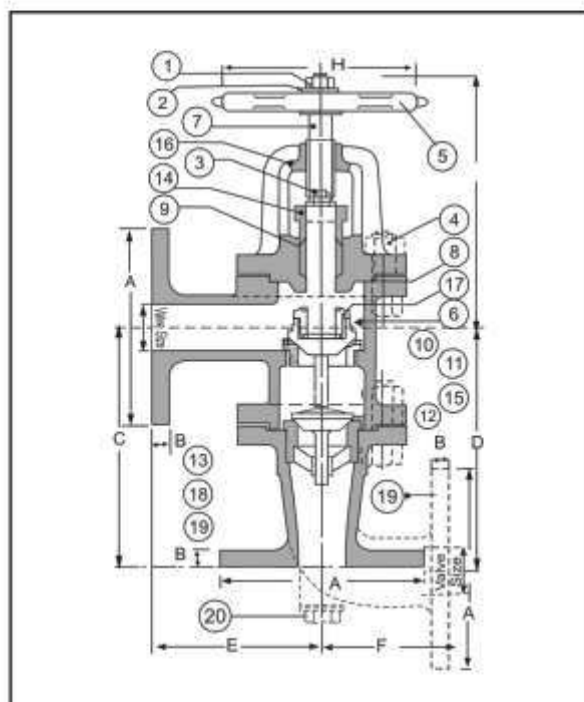
SALIENT FEATURES :

1. Accessible feed check valve consists of two valves a stop valve operated by a hand wheel and a back pressure check valve.
2. Available with straight or curved inlet.
3. Accessibility of check valve can be examined while the Boiler is in operation by closing the stop valve & removing the inlet.

TESTING AND CERTIFICATION :

All valves are tested at double the maximum working pressure. Each valve is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.





DIMENSIONS								
Nominal Size	A	B	C	D	E	F	G Approx.	H Approx.
20mm (3/4")	114.3	9.5	127	130	67	67	145	75
25mm (1")	120.7	11.2	152	156	114	114	160	90
32mm (1 1/4")	133.4	11.2	159	162	111	83	170	90
40mm (1 1/2")	139.7	12.7	141	146	90	90	200	105
50mm (2")	165.1	12.7	172	178	102	102	225	140
65mm (2 1/2")	184.2	14.29	211	213	122	122	250	190
80mm (3")	203.2	15.88	232	238	133	133	270	190

MATERIALS			
PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Nut for Handwheel	M.S.	----
2.	Washer	M.S.	----
3.	Studs and Nuts for Gland	M.S.	IS : 1367
4.	Bolts and Nuts	M.S.	IS : 1367
5.	Bolts and Nuts	M.S.	IS : 1367
6.	Hand Wheel	Cast Iron	IS : 210 Gr. F. G 200
7.	Spindle	S.S.	AISI-410
8.	Gasket	Steam Jointing	----
9.	Packing	Graphited Asbestos	----
10.	Valve Disc	S.S.	AISI-410
11.	Body Seat Ring	S.S.	AISI-410
12.	Check Valve Disc	S.S.	AISI-410
13.	Check Valve Seat Ring	S.S.	AISI-410
14.	Gland	Bronze	IBR 282 (a) (IV) Gr. B
15.	Bonnet	Bronze	IBR 282 (a) (IV) Gr. B
16.	Body	Bronze	IBR 282 (a) (IV) Gr. B
17.	Check Nut	Bronze	IBR 282 (a) (IV) Gr. B
18.	Check Valve Guide	Bronze	IBR 282 (a) (IV) Gr. B
19.	Valve Inlet	Bronze	IBR 282 (a) (IV) Gr. B
20.	Drain Plug	Bronze	IBR 282 (a) (IV) Gr. B

BRONZE

SPRING LOADED SAFETY VALVE

**SPECIALLY DESIGNED FOR
SAFETY UNDER
MAXIMUM PRESSURE**

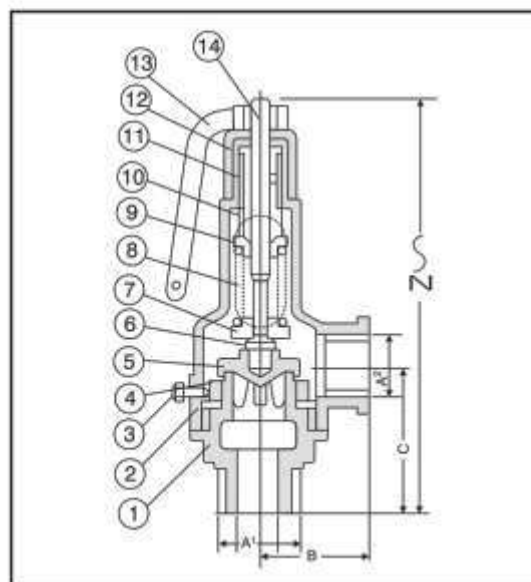
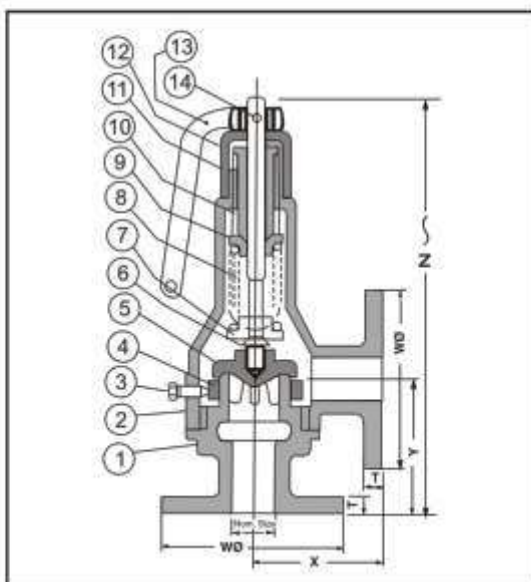
DESCRIPTION :

'WJ' Bronze Spring Loaded Safety Valve screwed male ends BSPT Threads or flanged ends to BS-10 Table 'F'. Max Set pressure for these safety valves is 150 PSIG (10.54 Kg/Cm²g). These are manufactured in enclosed discharge and open discharge designs.

TESTING AND CERTIFICATION :

All safety valves are set at the pressure required by the customer. Max set pressure being 150 PSIG (10.54 Kg/Cm²g). Each safety valve is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.





DIMENSIONS

NOMINAL SIZE	A ¹	A ²	B	C	D	W	T	X	Y	Z
DN 15 (½")	½" BSPT	½" BSP	40	55	180	95.3	8	60	65	190
DN 20 (¾")	¾" BSPT	¾" BSP	50	65	190	102	8	65	75	200
DN 25 (1")	1" BSPT	1" BSP	55	75	215	121	9.5	75	85	225
DN 32 (1¼")	1¼" BSPT	1¼" BSP	60	85	253	133.5	9.5	80	90	258
DN 40 (1½")	1½" BSPT	1½" BSP	65	88	255	140	11.5	85	100	267
DN 50 (2")	2" BSPT	2" BSP	72	103	290	165	11.5	100	110	297
DN 65 (2½")	2½" BSPT	2½" BSP	90	120	360	184.5	13	110	125	365
DN 80 (3")	3" BSPT	3" BSP	105	135	385	203.5	14.5	120	140	390

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	Bronze	IBR 282 (a) (IV) Gr. B
2.	Chamber	Bronze	IBR 282 (a) (IV) Gr. B
3.	Locking Screw	Brass	-----
4.	Regulating Ring	Bronze	IBR 282 (a) (IV) Gr. B
5.	Valve Disc	Bronze	IBR 282 (a) (IV) Gr. B
6.	Stem	Mn. Bronze	-----
7.	Lower Spring Disc	Bronze	IBR 282 (a) (IV) Gr. B
8.	Spring	Spring Steel	-----
9.	Upper Spring Disc	Bronze	IBR 282 (a) (IV) Gr. B
10.	Adjusting Screw	Bronze	IBR 282 (a) (IV) Gr. B
11.	Check Nut	Bronze	IBR 282 (a) (IV) Gr. B
12.	Cap	Bronze	IBR 282 (a) (IV) Gr. B
13.	Easing Lever	C.I.	IBR 86 to 93 Gr. A
14.	Locking Pin	S.S.	-----

BRONZE

SPRING LOADED POP TYPE SAFETY VALVE

**SPECIALLY DESIGNED FOR
SAFETY UNDER
MAXIMUM PRESSURE**

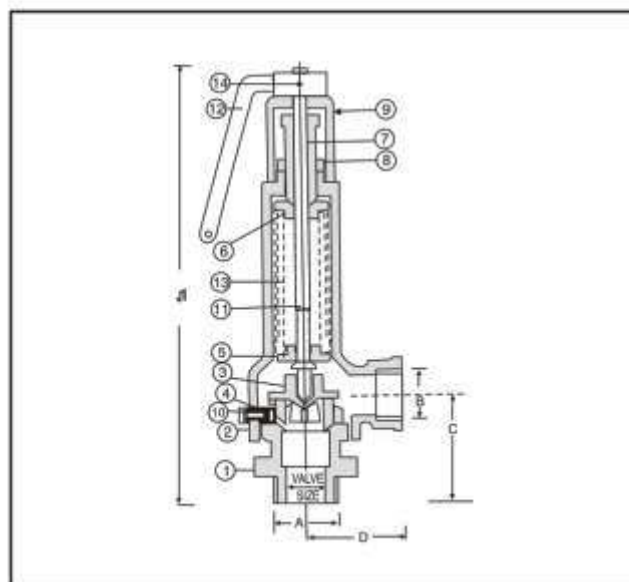
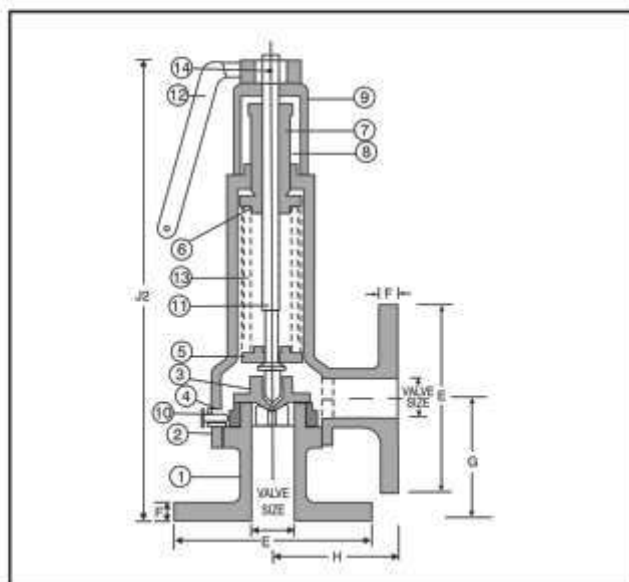
DESCRIPTION :

'WJ' Bronze Spring Loaded Pop Type Safety Valve screwed male ends BSPT Threads or flanged ends to BS-10 Table 'H'. Max Set pressure for these safety valves is 250 PSIG (17.58 Kg/Cm²g). These are manufactured in enclosed discharge and open discharge designs.

TESTING AND CERTIFICATION :

All pop type safety valves are set at the pressure required by the customer. Max set pressure being 250 PSIG (17.58 Kg/Cm²g). Each pop type safety valve is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.





DIMENSIONS

Nominal Size	A	B	C	D	E	F	G	H	J ¹	J ²
15 mm (½")	¾" BSPT	½" BSP	65	44	114.3	9.5	73	70	240	248
20 mm (¾")	1" BSPT	¾" BSP	70	64	114.3	9.5	73	73	260	263
25 mm (1")	1¼" BSPT	1" BSP	70	64	120.7	11.2	75	75	290	295
32 mm (1¼")	1½" BSPT	1¼" BSP	95	66	133.4	11.2	83	83	342	330
40 mm (1½")	2" BSPT	1½" BSP	95	66	139.7	12.7	95	95	342	342
50 mm (2")	2½" BSPT	2" BSP	110	85	165.1	12.7	110	110	410	406
65 mm (2½")	3" BSPT	2½" BSP	112	110	184.2	14.28	125	125	455	468
80 mm (3")	4" BSPT	3" BSP	145	120	203.2	15.88	140	140	485	480

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	Bronze	IBR 282 (a) (IV) Gr. B
2.	Chamber	Bronze	IBR 282 (a) (IV) Gr. B
3.	Disc	Bronze	IBR 282 (a) (IV) Gr. B
4.	Regulating Ring	Bronze	IBR 282 (a) (IV) Gr. B
5.	Lower Spring Disc	Bronze	IBR 282 (a) (IV) Gr. B
6.	Upper Spring Disc	Bronze	IBR 282 (a) (IV) Gr. B
7.	Adjusting Screw	Bronze	IBR 282 (a) (IV) Gr. B
8.	Check Nut	Bronze	IBR 282 (a) (IV) Gr. B
9.	Cap	Bronze	IBR 282 (a) (IV) Gr. B
10.	Locking Screw	Brass	-----
11.	Spindle	MN. Bronze	-----
12.	Easing Lever	Cast Iron	-----
13.	Spring	Spring Steel	-----
14.	Pin	S.S.	AISI-410

RELIEVING CAPACITIES OF 'WJ' BRONZE POP TYPE SAFETY VALVE FOR SATURATED STEAM AT 10% ACCUMULATION IN Kg. OF STEAM PER HOUR AT SET PRESSURE

SET PRESSURE Kg. / Cm ² g	VALVE SIZE							
	15 mm (½")	20 mm (¾")	25 mm (1")	32 mm (1¼")	40 mm (1½")	50 mm (2")	65 mm (2½")	80 mm (3")
1.0	20	46	82	128	185	329	514	740
2.0	29	68	122	191	276	491	767	1104
3.0	39	91	162	254	367	653	1020	1469
4.0	49	113	203	317	458	815	1273	1833
5.0	59	136	243	380	549	977	1526	2198
6.0	69	159	283	443	640	1139	1780	2562
7.0	79	181	324	506	731	1301	2033	2927
8.0	88	204	364	569	822	1463	2286	3291
9.0	98	227	405	632	914	1625	2539	3656
10.0	108	249	445	695	1005	1787	2792	4020
12.0	128	295	526	821	1187	2111	3299	4749
15.0	157	363	647	1010	1460	2597	4058	5843
17.58	183	421	751	1172	1695	3014	4709	6780



NETA VALVES PVT. LTD.



BRONZE

PARALLEL SLIDE BLOW OFF VALVE

CONFIRM TO HIGH PERFORMANCE

DESCRIPTION :

'WJ' Bronze Parallel Slide Blow Off Valve Rack and Pinion operated flanged ends to BS-10 Table 'H' is manufactured for maximum Boiler operating pressure of 250 PSIG (17.58 Kg/Cm²g) upto 428°F (220°C). Tested to 500 PSIG (35.15 Kg/Cm²g) Hydraulic Pressure.

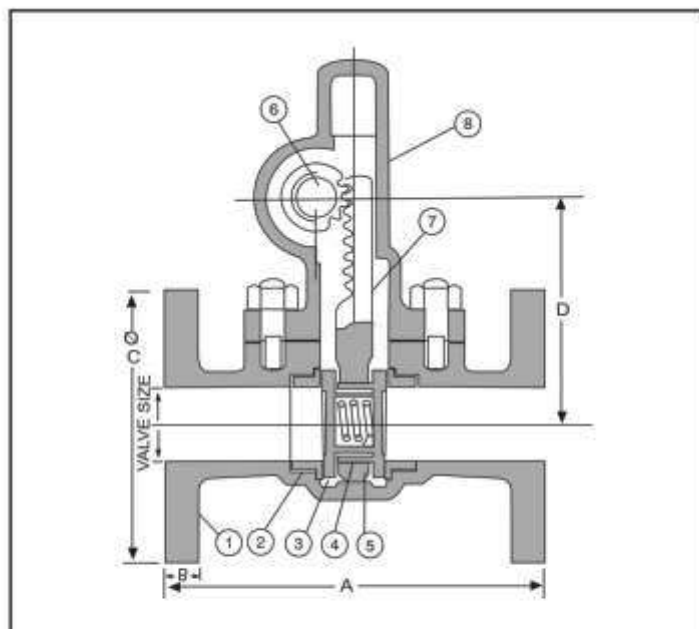
SALIENT FEATURES :

1. It maintains fluid tightness and ease of operation without the aid of wedging action.
2. Discs are kept in close contact with body seat rings by means of a spring when the valve is not under pressure.
3. Slide valve action removes all foreign matter from the faces of seats.
4. Valve is operated by means of Rack and pinion arrangement in such a manner that valve is opened fully with half turn of the box key.
5. Gland forms a locking guard which prevents the removal of key unless the valve is closed.

TESTING AND CERTIFICATION :

All valves are tested at double the maximum working pressure. Each valve is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.





DIMENSIONS				
Nominal Size	A	B	C	D
25 mm (1")	167	11.2	120.7	92
32 mm (1¼")	173	11.2	133.4	112
40 mm (1½")	179.5	12.7	139.7	116
50 mm (2")	193.5	12.7	165.1	146
65 mm (2½")	219	14.2	184.2	163
80 mm (3")	241.5	16.0	203.2	182

MATERIALS			
PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	Bronze	IBR 282 (a) (IV) Gr. B
2.	Body Seat Ring	S.S.	AISI-304 / AISI-410
3.	Inside Disc	S.S.	AISI-304 / AISI-410
4.	Outside Disc	S.S.	AISI-304 / AISI-410
5.	Spring	S.S.	AISI-304
6.	Pinion	S.S.	AISI-410
7.	Rack	Bronze	IBR 282 (a) (IV) Gr. B
8.	Bonnet	Bronze	IBR 282 (a) (IV) Gr. B
9.	Stuffing Box	Bronze	IBR 282 (a) (IV) Gr. B
10.	Gland	Bronze	IBR 282 (a) (IV) Gr. B
11.	Packing	Graphited Asbestos	----

BRONZE

SLEEVE PACKED WATER LEVEL GAUGE

**MADE WITH MAXIMUM
PRECISION & PERFECTION**

DESCRIPTION :

'WJ' Bronze Sleeve Packed Water Level Gauge. Flanged ends to Table 'H' or Screwed male ends to BSP Taper Threads and with automatic shut off in the water arm. Suitable for 250 PSIG (17.58 Kg/Cm²g). Max. B.O.P. and Max. Temp. upto 428°F (220°C). Tested to 500 PSIG (35.15 Kg/Cm²g) Hydraulic Pressure.

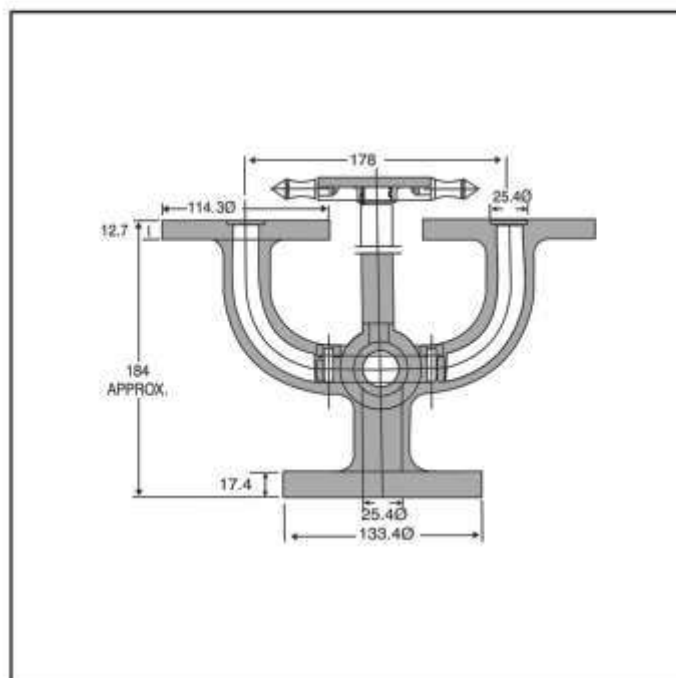
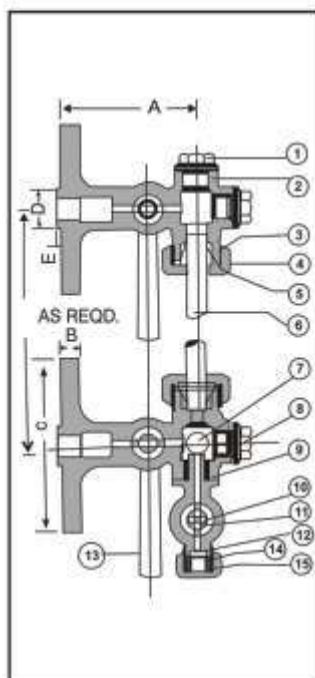
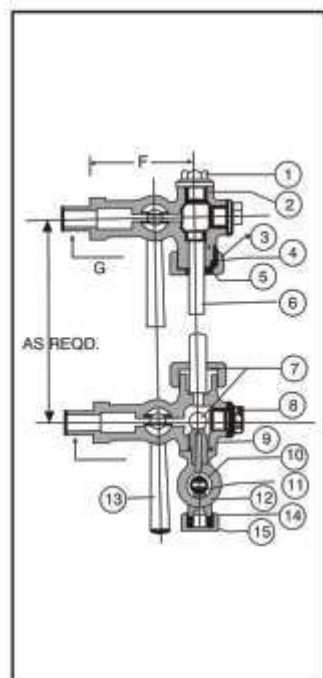
SALIENT FEATURES :

1. Each Cock is fitted with a self adjusting inverted taper plug which forms a seal in a renewable moulded asbestos sleeve.
2. The sleeve can be easily positioned in the cock by a rib which fits a corresponding groove in the body.
3. The sleeve is reinforced by metallic eyelets to avoid clogging of the passage.
4. A ball valve in the water arm cuts off water supply in the event of breakage of glass tube.
5. Glass tubes are fitted with replaceable rubber cones.

TESTING AND CERTIFICATION :

All water level gauges are tested at double the maximum working pressure. Each gauge is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.





DIMENSIONS

Nominal Size	A	B	C	D	E	F	G
15 mm (1/2")	88.5	12.7	114.3	19	3	80	1/2" BSPT
20 mm (3/4")	95.0	12.7	114.3	25	3	90	3/4" BSPT

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Top Gauge Plug	Bronze	IBR 282 (a) (IV) Gr. B.
2.	Top Gauge Arm	Bronze	IBR 282 (a) (IV) Gr. B.
3.	Gland Nut	Bronze	IBR 282 (a) (IV) Gr. B.
4.	Rubber Cone	Rubber	----
5.	Washers	Bronze	IBR 282 (a) (IV) Gr. B.
6.	Glass Tube	Glass	----
7.	Ball	S.S.	AISI-304
8.	Bottom Gauge Side Nut	Bronze	IBR 282 (a) (IV) Gr. B.
9.	Bottom Gauge Arm	Bronze	IBR 282 (a) (IV) Gr. B.
10.	Sleeve	Moulded Asbestos	----
11.	Spindle	S.S.	AISI-410/AISI-304
12.	Drain Cock	Bronze	IBR 282 (a) (IV) Gr. B.
13.	Handle	Brass	----
14.	Bottom Nut	Bronze	IBR 282 (a) (IV) Gr. B.
15.	Drain Nipple	Bronze	IBR 282 (a) (IV) Gr. B.
16.	Bonnet	Bronze	IBR 282 (a) (IV) Gr. B.
17.	Sleeve Bottom Nut	Bronze	IBR 282 (a) (IV) Gr. B.
18.	Spindle Adjusting Nut	M.S.	----

BRONZE

ASBESTOS PACKED WATER LEVEL GAUGE

**MADE WITH
MAXIMUM PERFECTION**

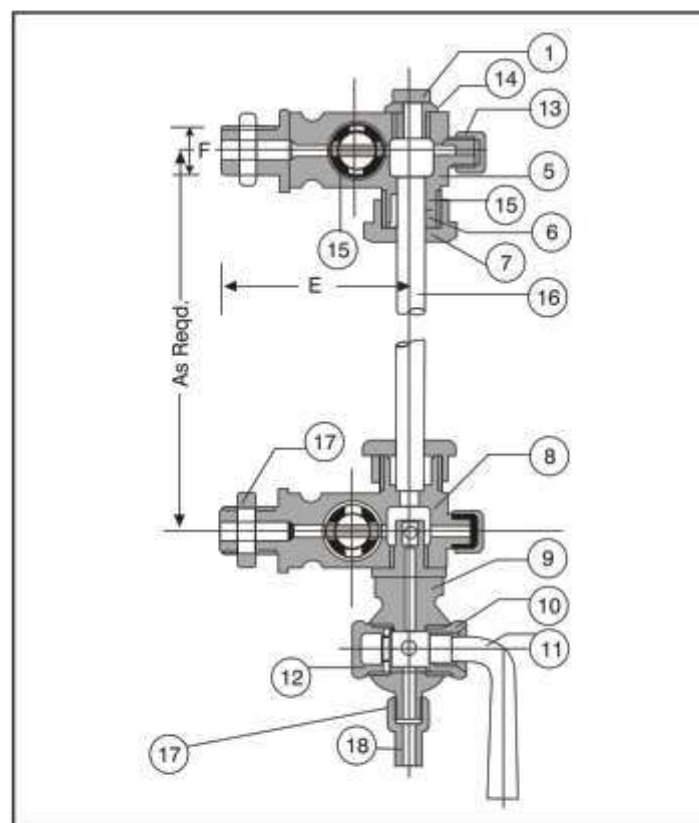
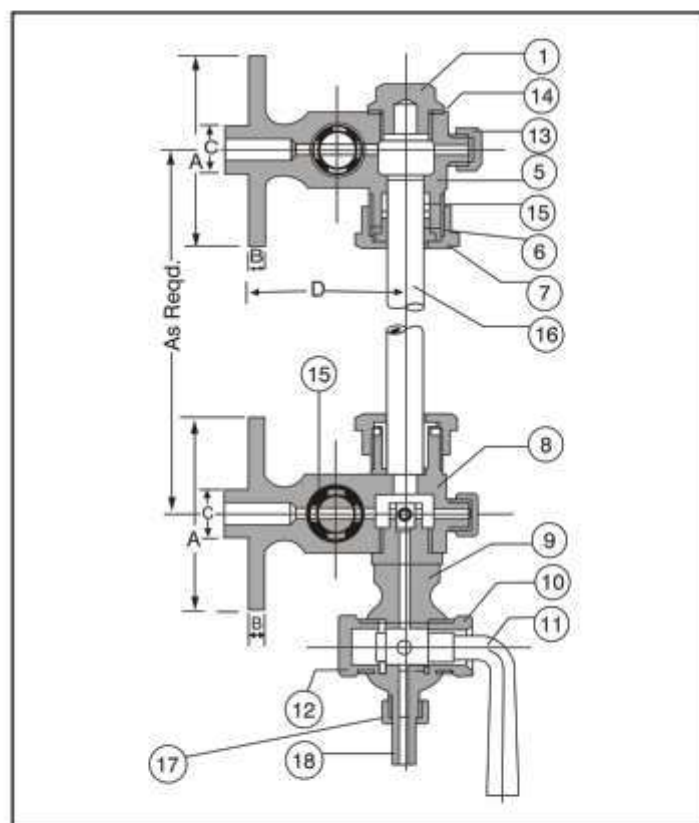
DESCRIPTION :

'WJ' Bronze Asbestos Packed Water Level Gauge screwed male ends BSPT Threads or flanged ends to BS-10 Table 'F'. Suitable for 150 PSIG (10.54 Kg/Cm²g) max. pressure and 428°F (220°C) max. temperature. Tested to 300 PSIG (21.08 Kg/Cm²g) Hydraulic Pressure.

TESTING AND CERTIFICATION :

All water level gauges are tested at double the max. working pressure. Each gauge is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.





DIMENSIONS

Nominal Size	A	B	C	D	E	F
15 mm ($\frac{1}{2}$ ")	95.4	7.9	19.0	58	85	$\frac{1}{2}$ " BSPT
16 mm ($\frac{5}{8}$ ")	101.6	7.9	25.4	77	110	$\frac{5}{8}$ " BSPT
20 mm ($\frac{3}{4}$ ")	101.6	7.9	25.4	77	110	$\frac{3}{4}$ " BSPT

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Top Nut	Bronze	IBR 282 (a) (IV) Gr. B.
2.	Cap Nut	Bronze	IBR 282 (a) (IV) Gr. B.
3.	Nut for Plug	Bronze	IBR 282 (a) (IV) Gr. B.
4.	Plug	Bronze	IBR 282 (a) (IV) Gr. B.
5.	Top Arm	Bronze	IBR 282 (a) (IV) Gr. B.
6.	Gland	Bronze	IBR 282 (a) (IV) Gr. B.
7.	Gland Nut	Bronze	IBR 282 (a) (IV) Gr. B.
8.	Bottom Arm	Bronze	IBR 282 (a) (IV) Gr. B.
9.	Drain Cock Body	Bronze	IBR 282 (a) (IV) Gr. B.
10.	Plug Nut	Bronze	IBR 282 (a) (IV) Gr. B.
11.	Drain Plug	Bronze	IBR 282 (a) (IV) Gr. B.
12.	Adjusting Nut	Bronze	IBR 282 (a) (IV) Gr. B.
13.	Drain Nut	Bronze	IBR 282 (a) (IV) Gr. B.
14.	Washer	Steam Jointing	----
15.	Packing	Graphited Asbestos	----
16.	Glass Tube	Glass	----
17.	Retaining Nut	Bronze	IBR 282 (a) (IV) Gr. B.
18.	Nozzle	Bronze	IBR 282 (a) (IV) Gr. B.

BRONZE

COMBINED

COCK & FEED CHECK VALVE

**EXCLUSIVELY MADE TO
WITHSTAND THE
MAXIMUM OPERATIONS**

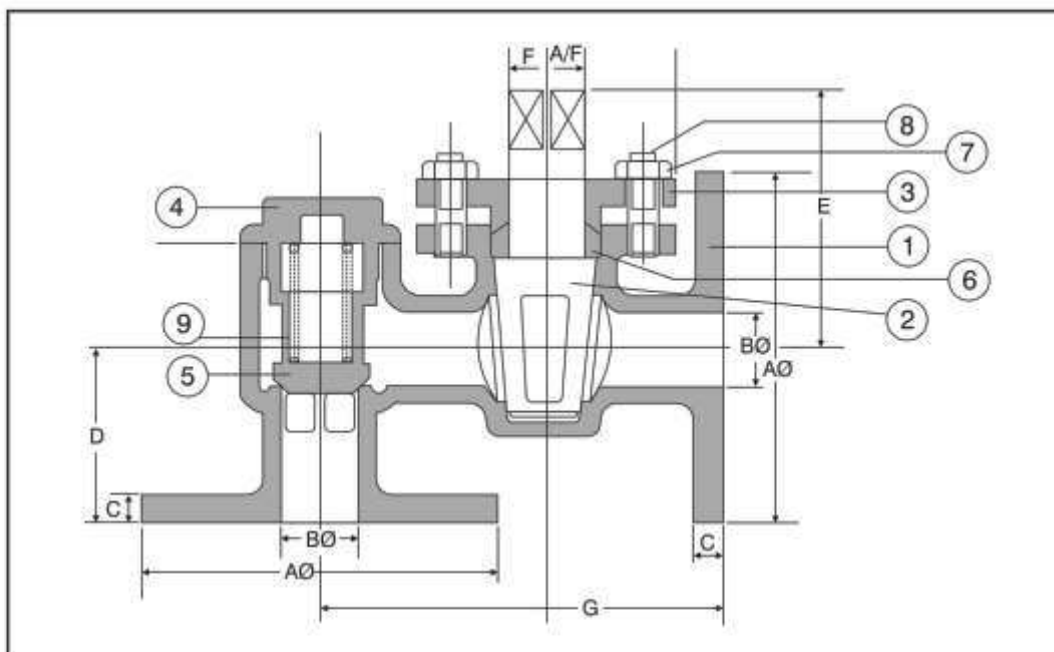
DESCRIPTION :

'WJ' Bronze Combined Cock and Feed Check Valve. Flanged ends to BS-10 Table 'F'. Suitable for a maximum boiler operating pressure of 150 PSIG (10.54 Kg/Cm²g) at 428°F (220°C). Tested to 300 PSIG (21.08 Kg/Cm²g) Hydraulic Pressure.

TESTING AND CERTIFICATION :

All valves are tested hydrostatically at double the maximum working pressure. Each valve is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.





DIMENSIONS

Nominal Size	A	B	C	D	E	F	G
15 mm (½")	95.3	12.7	7.9	46	60	12.7	103.2
20 mm (¾")	101.6	20	7.9	49.2	75	16	111
25 mm (1")	120.7	25.4	9.5	60.3	90	17.5	134.2
32 mm (1¼")	133.4	32	9.5	66.7	95	21.4	152.4
40 mm (1½")	139.7	38	11.1	73	102	23.8	169.3
50 mm (2")	165	50.8	11.1	81	140	27	198.4
65 mm (2½")	184.2	63.5	12.7	98.4	165	35	225

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	Bronze	IBR 282 (a) (IV) Gr. B.
2.	Plug	Bronze	IBR 282 (a) (IV) Gr. B.
3.	Gland	Bronze	IBR 282 (a) (IV) Gr. B.
4.	Bonnet	Bronze	IBR 282 (a) (IV) Gr. B.
5.	Disc	Bronze	IBR 282 (a) (IV) Gr. B.
6.	Packing	Graphited Asbestos	-----
7.	Nuts	Mild Steel	IS : 226
8.	Studs	Mild Steel	IS : 226
9.	Spring	Spring Steel	-----

BRONZE

Y-TYPE STRAINER

SUPER HIGH PERFORMANCE

DESCRIPTION :

'WJ' Bronze Y-Type strainers are manufactured with Brass/S.S. (AISI-304) screen with screwed female ends to BSP Taper Threads or flanged ends to BS-10 Table H. These strainers are suitable for 250 PSIG (17.58 Kg/Cm²g) max. steam pressure at 428°F (220°C) temp. and are tested to 500 PSIG (35.15 Kg/Cm²g) Hydraulic Pressure.

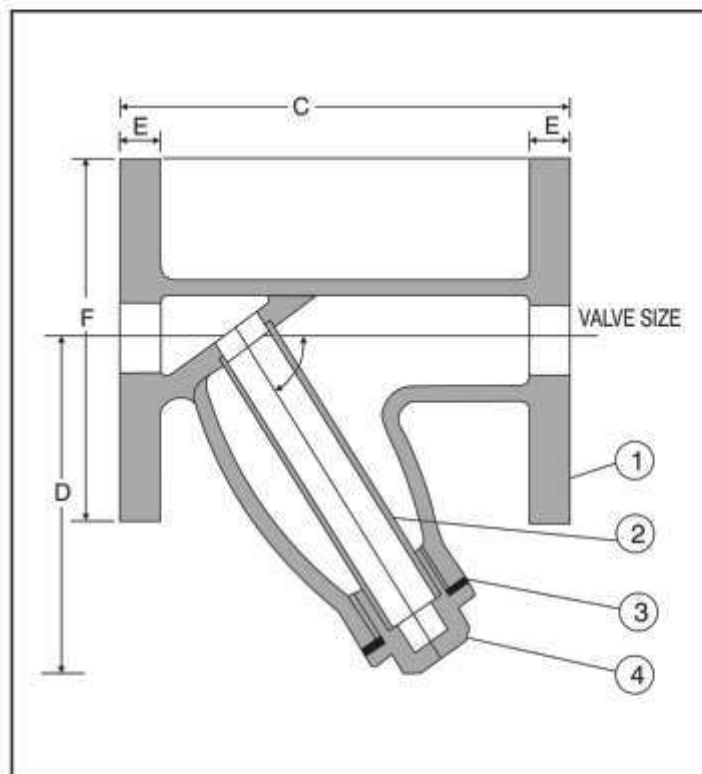
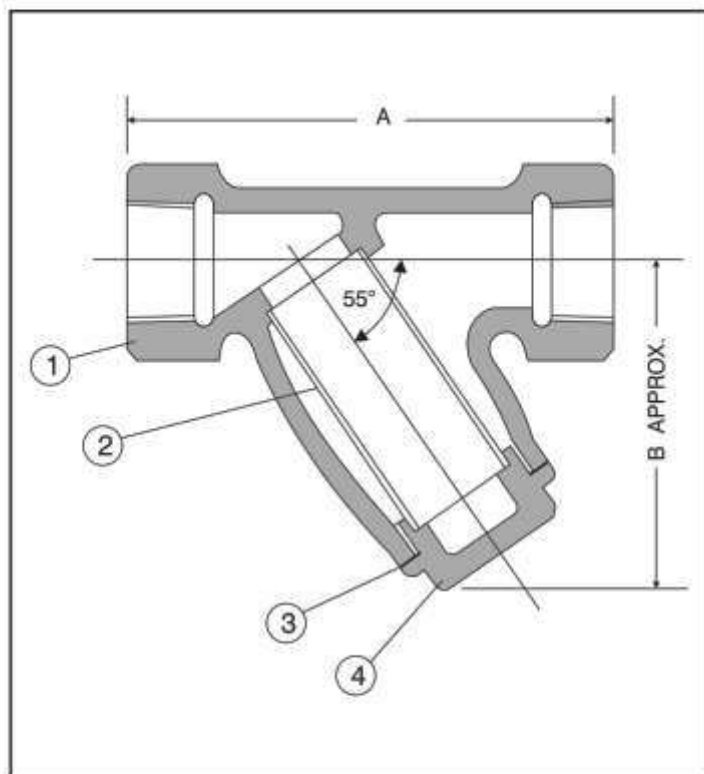
SALIENT FEATURES :

1. Fine finish and smooth contours reduce pressure drop in the strainer.
2. Large screening area makes the strainer efficient.
3. Screen is guided in the body.
4. Strainer may be installed in the down ward vertical lines with effectiveness equal to horizontal installation.

TESTING AND CERTIFICATION :

All strainers are tested at double the maximum working pressure. Each strainer is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.





DIMENSIONS

Nominal Size	A	B	C	D	E	F
15 mm (1/2")	70	54	130	84	9.5	114.3
20 mm (3/4")	98.5	64	133	90	9.5	114.3
25 mm (1")	127	90	155	112	11.2	120.7
32 mm (1 1/4")	156	110	184	112	11.2	133.4
40 mm (1 1/2")	178	140	190.4	150	12.7	139.7
50 mm (2")	222	160	219	170	12.7	165.1
65 mm (2 1/2")	----	----	241	229	14.29	184.2
80 mm (3")	----	----	263.5	257	15.88	203.2
100 mm (4")	----	----	371.5	270	19.01	228.6

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	Bronze	IBR 282 (a) (IV) Gr. B
2.	Strainer	S.S.	AISI-304
3.	Gasket	C.A.F.	----
4.	Cover	Bronze	IBR 282 (a) (IV) Gr. B

BRONZE

FUSIBLE PLUG

**DESIGNED IN THREE DIFFERENT
TYPES TO FUNCTION
CONVENIENTLY & SUITABLY**

DESCRIPTION :

'WJ' Bronze Fusible Plugs are manufactured in three designs namely one piece, two piece and Loco Type designs. These are suitable for 250 PSIG (17.58 Kg/Cm²g) max. Boiler operating pressure and temp. of 428°F (220°C). Tested to 500 PSIG (35.15 Kg/Cm²g) Hydraulic Pressure.

TYPE 1: ONE PIECE DESIGN

This design has one piece Bronze body filled with fusible alloy having male BSPT threads. It is manufactured in 15 mm (½"), 20 mm (¾") and 25 mm (1") sizes.

TYPE 2 : TWO PIECE DESIGN

This design has a replaceable cone containing fusible alloy screwed into Bronze body, having male BSPT Threads. It is manufactured in 15 mm (½"), 20 mm (¾") and 25 mm (1"), 32 mm (1¼"), 40 mm (1½") and 50 mm (2") sizes.

TYPE 3 : LOCO TYPE

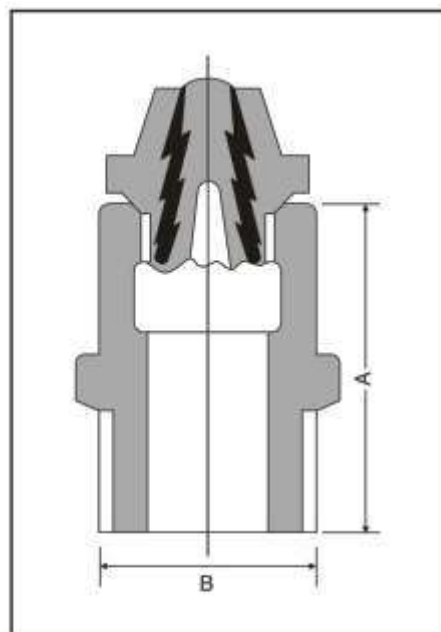
It is suitable for Loco Type Boilers. These have BSPT threads.

It is manufactured in 25mm (1") and 32 mm (1¼").

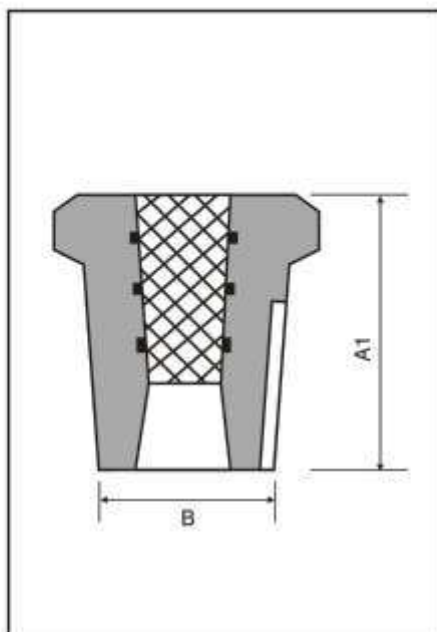
TESTING AND CERTIFICATION :

All Fusible Plugs are tested at double the max. working pressure. Each Fusible Plug is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.

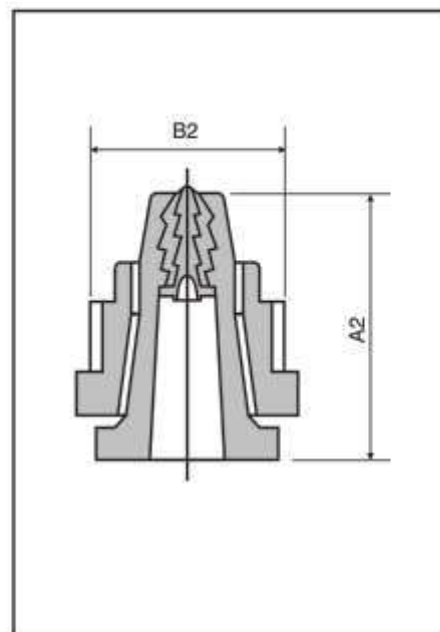




TWO PIECE DESIGN



ONE PIECE DESIGN



LOCO TYPE

DIMENSIONS

Nominal Size	A	B	A ¹	B ¹	A ²	B ²
15 mm (½")	57	½" BSPT	32	½" BSPT	----	----
20 mm (¾")	58	¾" BSPT	38	¾" BSPT	----	----
25 mm (1")	74	1" BSPT	45	1" BSPT	52	1" BSPT
32 mm (1¼")	84	1¼" BSPT	----	----	52	1¼" BSPT
40 mm (1½")	88	1½" BSPT	----	----	----	----
50 mm (2")	102	2" BSPT	----	----	----	----

MATERIALS

Bronze and covers are made of Bronze conforming to IBR 282 (a) (IV) Gr B. Fusible alloy is specially prepared to meet requirements of Indian Boiler Regulations.

BRONZE

THERMODYNAMIC STEAM TRAP

ENSURES HIGH PERFORMANCE

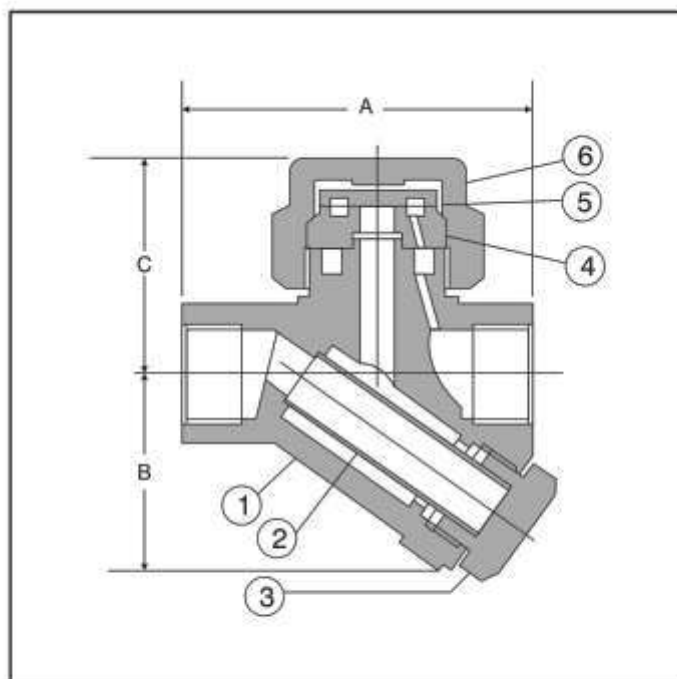
DESCRIPTION :

'WJ' Bronze Thermodynamic Type Steam Trap with S.S. (AISI-410) working parts and S.S. (AISI-304) strainer, screwed female ends. Suitable for 250 PSIG (17.58 Kg/Cm²g) max. working pressure and 428°F (220°C) temp. Tested to 500 PSIG (35.15 Kg/Cm²g) hydraulic pressure.

TESTING AND CERTIFICATION :

All traps are tested hydraulically at double the max. working pressure. Each trap is tested on steam line to see its performance. Each trap is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.





DIMENSIONS			
NOMINAL SIZE	A	B	C
15 mm (1/2")	83	55	62
20 mm (3/4")	95	55	62
25 mm (1")	117	70	80

MATERIALS			
PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	Bronze	IBR 282 (a) (IV) Gr. B
2.	Screen	S.S.	AISI-304
3.	Screen Retaining Nut	M.S.	-----
4.	Lower Disc	S.S.	AISI-410
5.	Upper Disc	S.S.	AISI-410
6.	Top Nut	M.S.	-----

BRONZE

SPRING LOADED METALLIC DIAPHRAGM TYPE PRESSURE REDUCING VALVE

**CONFIRM TO HIGH QUALITY
& LONG LIFE**

DESCRIPTION :

'WJ' Bronze Spring Loaded Metallic Diaphragm Type Pressure Reducing Valve, having screwed BSP parallel female threads Max. inlet steam pressure 250 PSIG (17.58 Kg/Cm²g) and temp. upto 428°F (220°C) tested to 500 PSIG (35.15 Kg/Cm²g) hydraulic pressure.

These are available in three out let pressure ranges i.e. 5/60, 20/80 and 40/125 PSIG.

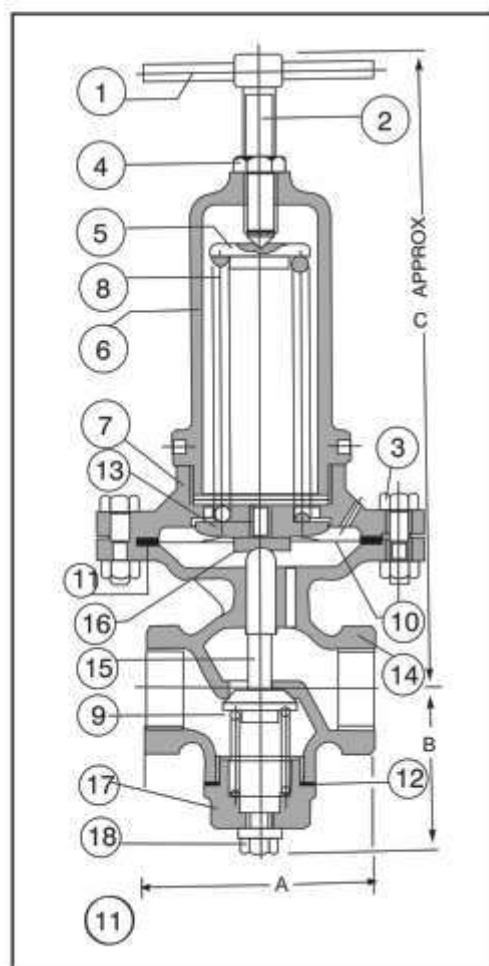
TESTING AND CERTIFICATION :

All valves are tested at double the max. working pressure. Each valve is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.

NOTE :

These valves can also be supplied for water and air service with Rubber diaphragm & Rubber seat with our own works test certificates.





DIMENSIONS			
NOMINAL SIZE	A	B	C
15 mm (1/2")	76.2	50	245
20 mm (3/4")	108	68	290
25 mm (1")	114.5	80	360
32 mm (1 1/4")	133	90	365
40 mm (1 1/2")	136.5	97	385
50 mm (2")	171.5	115	435

MATERIALS			
PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Tomy Bar	M.S.	----
2.	Spring Adjusting Screw	M.S.	----
3.	Nuts and Bolts	M.S.	----
4.	Check Nut	Bronze	IBR 282 (a) (IV) Gr. B
5.	Upper Spring Disc	Cast Iron	IS-210-Gr. FG 200
6.	Spring Chamber	Cast Iron	IS-210-Gr. FG 200
7.	Bonnet	Cast Iron	IS-210-Gr. FG 200
8.	Spring	Spring Steel	-----
9.	Bottom Spring	Spring Steel	-----
10.	Diaphragm	S.S.	AISI 304
11.	Joint Packing	Steam Jointing	-----
12.	Joint Ring	Steam Jointing	-----
13.	Bottom Spring Disc	Bronze	IBR 282 (a) (IV) Gr. B
14.	Body	Bronze	IBR 282 (a) (IV) Gr. B
15.	Valve Disc	Bronze	IBR 282 (a) (IV) Gr. B
16.	Seat Holding Disc	Bronze	IBR 282 (a) (IV) Gr. B
17.	Bottom Cover	Bronze	IBR 282 (a) (IV) Gr. B
18.	Plug	Bronze	IBR 282 (a) (IV) Gr. B

BRONZE

VERTICAL LIFT CHECK VALVE

**SMOOTH PERFORMANCE,
TROUBLE FREE SERVICE**

DESCRIPTION :

'WJ' Bronze Vertical Lift Check Valve with S.S. (AISI-410) Trim, screwed female ends BSPT or flanged ends to BS to Table 'H' suitable for 250 PSIG (17.58 Kg/Cm²g) max. working pressure and 428°F (220°C) temp. Tested to 500 PSIG (35.15 Kg/Cm²g) Hydraulic Pressure.

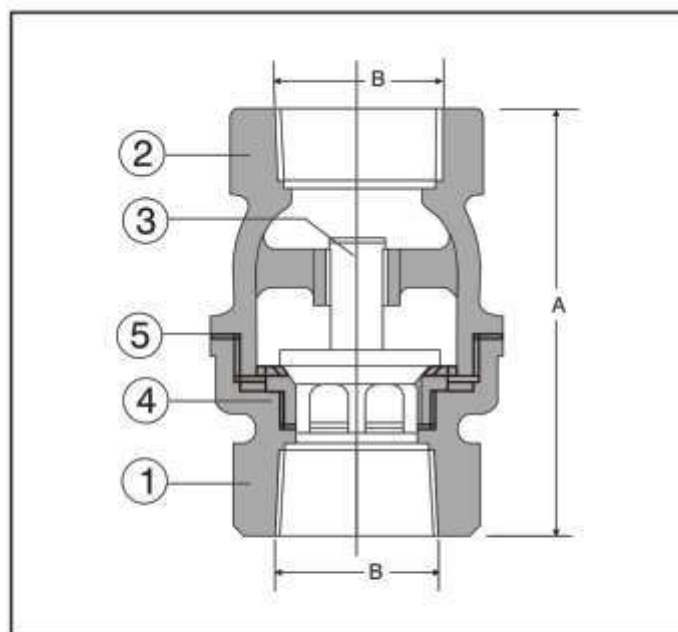
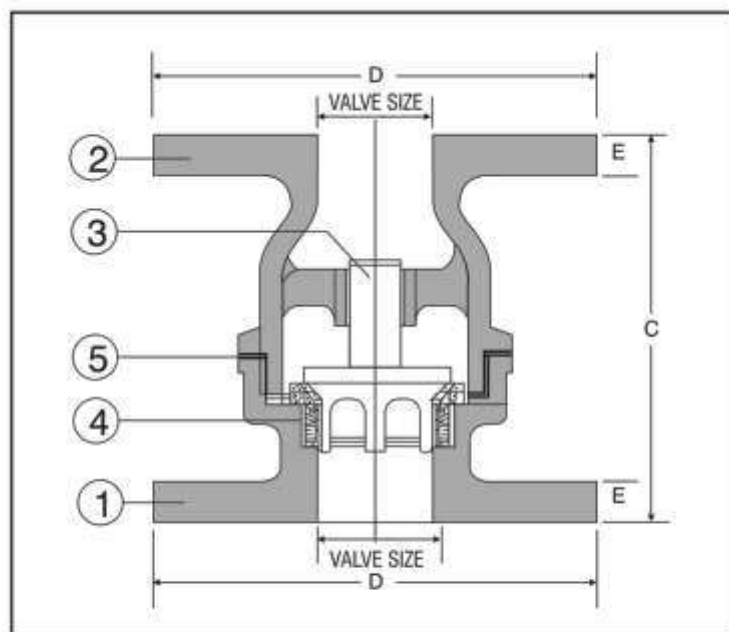
SALIENT FEATURES :

1. Full way area is provided.
2. Valve disc is guided to give trouble free service.

TESTING AND CERTIFICATION :

All valves are tested at double the maximum working pressure. Each valve is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.





DIMENSIONS

Nominal Size	A	B	C	D	E
15 mm (½")	73	½" BSPT	70	114.3	9.5
20 mm (¾")	76	¾" BSPT	76	114.3	9.5
25 mm (1")	89	1" BSPT	95	120.7	11.1
32 mm (1¼")	115	1¼" BSPT	102	133.4	11.1
40 mm (1½")	127	1½" BSPT	123	139.7	12.7
50 mm (2")	153	2" BSPT	140	165.1	12.7

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Lower Body	Bronze	IBR 282 (a) (IV) Gr. B
2.	Upper Body	Bronze	IBR 282 (a) (IV) Gr. B
3.	Valve Disc	S.S.	AISI-410
4.	Body Seat Ring	S.S.	AISI-410
5.	Gasket	Steam Jointing	----

BRONZE

MOBREY VALVE

**DESIGNED TO WORK AT
VARIOUS PRESSURES**

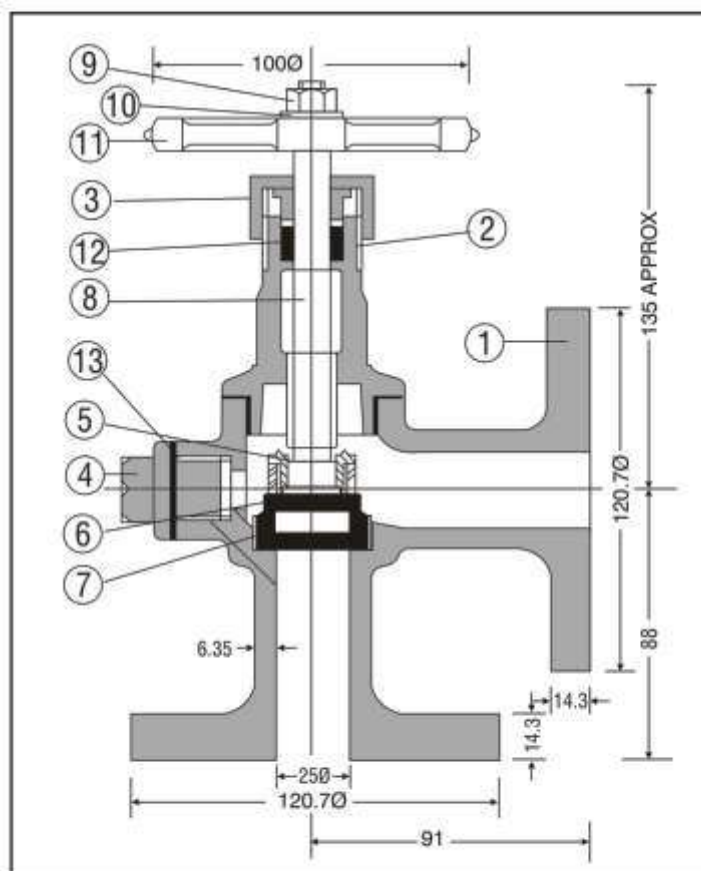
DESCRIPTION :

'WJ' Bronze Mobrey Valve Angle Pattern Inside Screw, rising Stem with S.S.(AISI-410) Seat and Spindle, having flanges ends to BS-10 Table H is suitable for 250 PSIG (17.58Kg/Cm²g) max. working pressure at 428°F (220°C) Temp. and is tested to 500 PSIG (35.15 Kg/Cm²g) Hydraulic Pressure.

TESTING AND CERTIFICATION :

All Mobrey Valves are tested at double the max. working pressure. Each valve is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.





MATERIALS			
PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	Bronze	IBR 282 (a) IV Gr. B
2.	Bonnet	Bronze	IBR 282 (a) IV Gr. B
3.	Gland Nut	Bronze	IBR 282 (a) IV Gr. B
4.	Plug	Bronze	IBR 282 (a) IV Gr. B
5.	Check Nut	Bronze	IBR 282 (a) IV Gr. B
6.	Disc	Stainless Steel	AISI-410
7.	Body Seat Ring	Stainless Steel	AISI-410
8.	Spindle	Stainless Steel	AISI-410
9.	Nut	M.S.	----
10.	Washer	M.S.	----
11.	Hand Wheel	C.I.	----
12.	Packing	Graphited Asbestos	----
13.	Gasket	Steam Jointing	----

CAST IRON

PILOT CONTROLLED METALLIC DIAPHRAGM TYPE PRESSURE REDUCING VALVE

**OPERATES PERFECTLY
UNDER DIFFERENT CONDITIONS**

DESCRIPTION :

'WJ' Cast Iron Pilot Controlled Metallic Diaphragm Type Pressure Reducing Valve with flanged ends to BS-10 Table 'F' are suitable for 185 PSIG (13 Kg/Cm²g) Max. working pressure at 428°F (220°C) Temp. and are Tested to 370 PSIG (26 Kg/Cm²g) Hydraulic Pressure. These Valves are available in three reduced pressure ranges of 5/60, 20/80 and 40/125 on the down stream side.

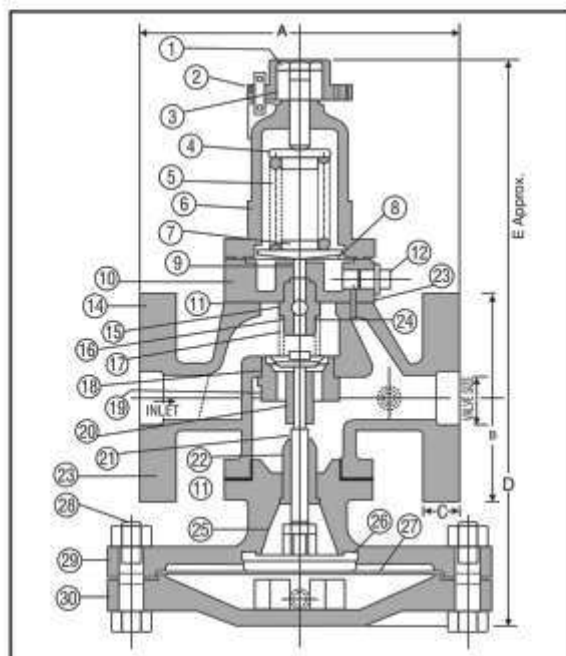
INSTRUCTIONS FOR INSTALLATION :

1. The Valves should be installed in a horizontal pipe line.
2. Stop valves should be installed at inlet & outlet sides of reducing valve.
3. A safety valve should be installed on the down stream side of reducing valve.
4. A steam trap & a strainer should be installed on the upstream side just before the reducing valve.
5. Clean all scale and jointing material from the pipe line before installing the reducing valve.

TESTING AND CERTIFICATION :

All reducing valves are tested at double the max. working pressure. Each valve is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.




DIMENSIONS

Nominal Size	A	B	C	D	E
25mm (1")	168	120.7	12.7	130	200
40mm (1 1/2")	203	139.7	15.88	140	235
50mm (2")	248	165.1	19.05	160	300
65mm (2 1/2")	280	184.15	19.05	180	345
80mm (3")	300	203.2	19.05	200	350

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Adjusting Screw	M.S.	----
2.	Locking Guard	C.I.	IBR-86 To 93 Gr. A
3.	Locking Lever	M.S.	----
4.	Upper Disc	M.S.	----
5.	Spring	Spring Steel	----
6.	Spring Chamber	C.I.	IBR-86 To 93 Gr. A
7.	Bottom Spring Disc	M.S.	----
8.	Diaphragm	S.S.	AISI-304
9.	Pilot Stem	S.S.	AISI-410
10.	Bonnet	C.I.	IBR-86 To 93 Gr. A
11.	Gasket	Steam Jointing	----
12.	Side Plug	Bronze	IBR-282 (a) IV Gr. B
13.	Nipple	S.S.	AISI-410
14.	Ball	S.S.	AISI-304
15.	Pilot	S.S.	AISI-410
16.	Spring	S.S.	AISI-410
17.	Pilot Nut	Bronze	IBR-282 (a) IV Gr. B
18.	Body Seat Ring	S.S.	AISI-410
19.	Disc Guide	Bronze	IBR-282 (a) IV Gr. B
20.	Valve Disc	S.S.	AISI-410
21.	Extension Stem	S.S.	AISI-410
22.	Guide Sleeve	Bronze	IBR-282 (a) IV Gr. B
23.	Body	C.I.	IBR-86 To 93 Gr. A
24.	Spring	Spring Steel / S.S.	----
25.	Nut	M.S.	----
26.	Diaphragm Disc	Bronze	IBR-282 (a) IV Gr. B
27.	Diaphragm	S.S.	AISI-304
28.	Bolts & Nuts	M.S.	----
29.	Diaphragm Chamber	C.I.	IBR-86 To 93 Gr. A
30.	Cover Flange	C.I.	IBR-86 To 93 Gr. A
31.	Union Nipple	Bronze	IBR-282 (a) IV Gr. B
32.	Pipe Connector	Bronze	IBR-282 (a) IV Gr. B
33.	Copper Pipe	Copper	----
34.	Union Nuts	Brass Rod	----
35.	T-Connection	Bronze	IBR-282 (a) IV Gr. B
36.	Studs & Nuts	M.S.	----
37.	Studs & Nuts	M.S.	----

CAPACITIES OF 'WJ' PRESSURE REDUCING VALVES FOR STEAM IN Kg. PER HOUR

SET PRESSURE Kg. / Cm ² g	OUTLET PRESSURE Kg. / Cm ² g	VALVE SIZE				
		25 mm (1")	40 mm (1½")	50 mm (2")	65 mm (2½")	80 mm (3")
2	0.75	190	520	920	1360	2000
4	1.5	300	820	1470	2150	3100
	2.75	275	740	1290	1950	2800
6	2.0	385	1020	1850	2720	3900
	3.5	350	920	1650	2420	3530
7	3.5	490	1275	2275	3365	5000
	4	475	1230	2190	3280	4790
	6	375	980	1750	2560	3740
9	4	600	1590	2820	4140	6140
	6	555	1485	2620	3840	5650
	7	465	1230	2180	3180	4770
10	5	710	1800	3250	4950	7000
	7	650	1720	3035	4520	6550
	9	500	1300	2550	3450	4950
13	6	850	2210	3900	5720	8230
	7	810	2180	3760	5720	8000
	9	715	1920	3400	5050	7230
	10	550	1465	2610	3840	5480



**CAST IRON FULL LIFT SINGLE POST SAFETY VALVE DISCHARGE
CAPACITY FOR SATURATED STEAM (Kg/hr.) AT 10% OVER PRESSURE**

CONSTANT 'C' = 0.4

SIZE OF VALVES	ORIFICE DIA	SET PRESSURE (Kg/Cm ²)		
		3.5	7.0	10.54
25 mm (1")	20 mm	600	1075	1550
40 mm (1½")	28 mm	1179	2109	3050
50 mm (2")	38 mm	2172	3884	5618
65 mm (2½")	48 mm	3467	6198	8965
80 mm (3")	57 mm	4889	8740	12647
100 mm (4")	70 mm	7333	13182	19065

CAST IRON

SPRING LOADED

SAFETY VALVE **SINGLE POST & DOUBLE POST** **(Tested upto 10.5 Kg/Cm²g)**

MAXIMUM SAFETY AT VARIOUS PRESSURES

DESCRIPTION :

'WJ' Cast Iron Spring Loaded Safety Valves with 13% Cr. SS (AISI-410) seat and stem are manufactured in Single Post as well as Double Post full lift design. These Safety Valves are set at max. Pressure of 150 PSIG (10.54 Kg/Cm²g).

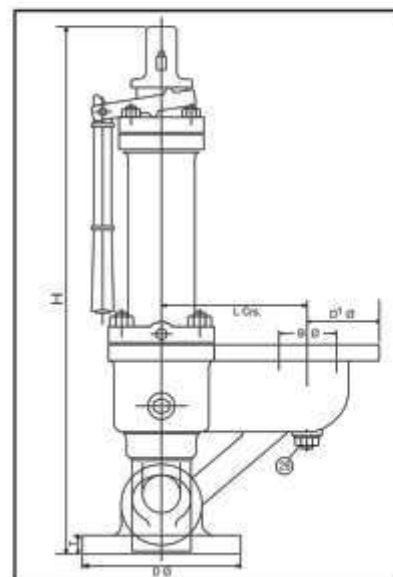
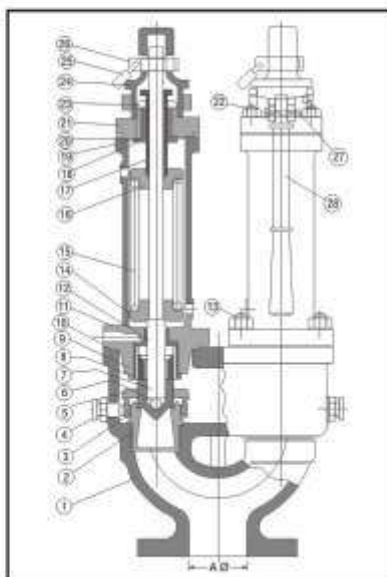
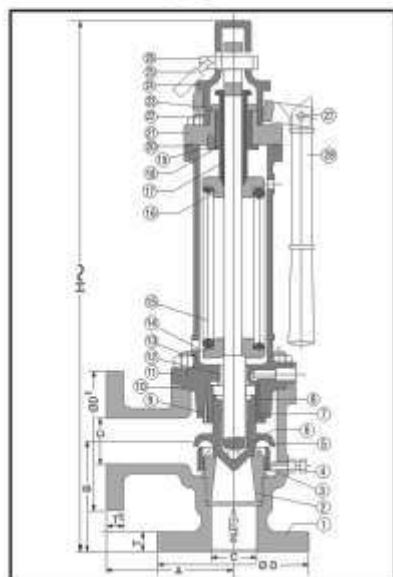
SALIENT FEATURES :

1. These Safety Valves are designed in such a way that instantaneous full lift to the seat is achieved.
2. Each Safety Valve is provided with an easing lever.
3. To avoid unauthorised alteration to the Set Pressure the adjusting screw and check nut are connected by a cap which is attached to the Valve spindle by cotter and a pad lock.

TESTING AND CERTIFICATION :

All Safety Valve Bodies are tested at 300 PSIG (21.08 Kg/Cm²g) Hydraulic Pressure. All Valves are set at a max. Steam Pressure of 150 PSIG (10.54 Kg/Cm²g). Each valve is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.





DIMENSIONS
C.I. SINGLE POST SAFETY VALVE

Nominal Size	A	B	C	D	T	D ¹	T ¹	H
25 mm (1")	108	90	25	121	13	114.5	13	430
40 mm (1½")	120	102	38	140	19	133.5	16	525
50 mm (2")	140	121	50	165	22.2	152.5	19	580
65 mm (2½")	152	135	65	184.5	22.2	165.1	19	800
80 mm (3")	178	160	76	203.5	22.2	184.5	19	813
100 mm (4")	190	186	100	228.6	25.5	216	22.2	900

DIMENSIONS
C.I. DOUBLE POST SAFETY VALVE

Nominal Size	A	B	D	T	D ¹	L	H
25 mm (1")	40	40	139.7	17.5	133.5	150	480
40 mm (1½")	57	63.5	184.5	22	165.1	165	585
50 mm (2")	73	76	203.2	22	184.5	190	670
65 mm (2½")	90	90	215.9	25.4	203.2	203.2	890
80 mm (3")	115	115	254	25.4	254	254	940
100 mm (4")	147	147	304.8	28.5	279.4	280	1050

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	C.I.	IBR-86 To 93 Gr. A
2.	Body Seat Ring	13% Cr. S.S.	AISI-410
3.	Regulating Ring	Bronze	IBR-282 (a) IV Gr. B
4.	Locking Screw for Regulating Ring	Bronze	IBR-282 (a) IV Gr. B
5.	Valve Head	13% Cr. S.S.	AISI-410
6.	Ball	S.S.	----
7.	Stem	13% Cr. S.S.	AISI-410
8.	Piston Liner	Bronze	IBR-282 (a) IV Gr. B
9.	Locking Screw	Steel	----
10.	Gasket	C.A.F.	IS : 2712
11.	Chamber	C.I.	IBR-86 To 93 Gr. A
12.	Bush for Chamber	Bronze	IBR-282 (a) IV Gr. B
13.	Studs & Nuts for Body Bonnet	Carbon Steel	----
14.	Bottom Spring Disc	C.I.	IBR-86 To 93 Gr. A
15.	Spring	Spring Steel	----
16.	Upper Spring Disc	C.I.	IBR-86 To 93 Gr. A
17.	Spring Adjusting Screw	Bronze	IBR-282 (a) IV Gr. B
18.	Bush for Chamber Flange	Bronze	IBR-282 (a) IV Gr. B
19.	Locking Screw	Steel	----
20.	Gasket	C.A.F.	IS : 2712
21.	Chamber Flange	C.I.	IBR-86 To 93 Gr. A
22.	Bolts & Nuts for Chamber Flange	Carbon Steel	----
23.	Check Nut	Bronze	IBR-282 (a) IV Gr. B
24.	Housing Cap	C.I.	IBR-86 To 93 Gr. A
25.	Pad Lock	----	----
26.	Locking Guard	Bronze	IBR-282 (a) IV Gr. B
27.	Pin	S.S.	AISI-410
28.	Easing Lever	M.I.	----
29.	Drain Plug	Bronze	IBR-282 (a) IV Gr. B

CAST IRON

GLOBE STOP VALVE

STOUT & STURDY, WORKS SMOOTHLY WITHOUT ANY OBSTRUCTION

DESCRIPTION :

'WJ' Cast Iron Globe Stop Valve Straight or Right Angle Pattern Bolted Bonnet outside screw and yoke type rising stem and back seat with renewable SS (AISI-410/AISI-304) Seat and stem Flanged ends. Flanges of Valves upto 200 mm Size are as per DIN 2533, PN-16 raised face and flanges of Valves above 200 mm Size are as per DIN 2532, PN-10 raised face.

SALIENT FEATURES :

1. Provision of Back seat arrangement for on line replacement of gland packing when valve is fully open.
2. Minimum pressure drop due to stream lined flow throughout the body.
3. High lift to avoid obstruction in the flow way.
4. Sturdy hand wheel operation with ample grip and clear from top of Yoke.

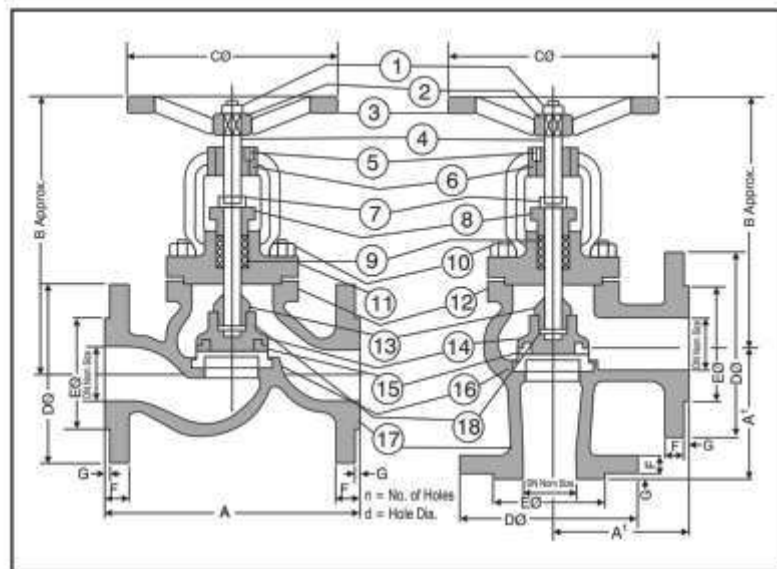
TESTING AND CERTIFICATION :

All valves are tested at double the max. working pressure. Each valve is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.



TEST PRESSURE

Nominal Size	Nominal Pressure (PN)	Body Test Pressure	Max. Steam Working Pressure	Max. Temp.
15mm to 200 mm	16	26 Kg/Cm ²	13 Kg/Cm ²	220°C
250mm to 300 mm	10	17 Kg/Cm ²	8.5 Kg/Cm ²	220°C



Noninal Size	DIMENSIONS							
DN	A	A¹	B	C	D	E	F	G
DN 15 (½")	130	90	155	120	95	45	14	2
DN 20 (¾")	150	95	160	120	105	58	16	2
DN 25 (1")	160	100	180	140	115	68	16	2
DN 32 (1¼")	180	105	210	140	140	78	18	2
DN 40 (1½")	200	115	225	190	150	88	18	3
DN 50 (2")	230	125	255	190	165	102	20	3
DN 65 (2½")	290	145	300	250	185	122	20	3
DN 80 (3")	310	155	320	250	200	138	22	3
DN 100 (4")	350	175	360	300	220	158	24	3
DN 125 (5")	400	200	425	300	250	188	26	3
DN 150 (6")	480	225	475	350	285	212	26	3
DN 200 (8")	600	275	550	400	340	268	30	3
DN 250 (10")	730	---	604	450	395	320	28	3
DN 300 (12")	850	---	650	450	445	370	28	4

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Nut for Handwheel	Carbon Steel	---
2.	Washer	Carbon Steel	---
3.	Handwheel	C.I.	IS 210 FG 200
4.	Stem	13% Cr. S.S.	AISI-410
5.	Locking Screw	Carbon Steel	---
6.	Yoke Bush	13% Cr. S.S.	AISI-410
7.	'T' Head Bolts and Nuts	Carbon Steel	---
8.	Gland	C.I.	IBR 86 to 93 Gr. A
9.	Packing	Graphited Asbestos	---
10.	Studs and Nuts	Carbon Steel	---
11.	Bonnet	C.I.	IBR 86 to 93 Gr. A
12.	Gasket	C.A.F.	IS-2712
13.	Disc Nut	13% Cr. S.S.	AISI-410
14.	Valve Disc	C.I.	IBR 86 to 93 Gr. A
15.	Disc Facing Ring	13% Cr. S.S.	AISI-410
16.	Body Seat Ring	13% Cr. S.S.	AISI-410
17.	Body	C.I.	IBR 86 to 93 Gr. A
18.	Stem Collar	13% Cr. S.S.	AISI-410

CAST IRON

HORIZONTAL LIFT CHECK VALVE

**FULLY TESTED &
CERTIFIED TO YIELD
HIGH PERFORMANCE**

DESCRIPTION :

'WJ' Cast Iron Horizontal Lift Check Valve Straight or Right Angle Pattern, bolted bonnet with SS (AISI-410/AISI-304) trim. Flanged ends. Flanges of Valves upto 200 mm are as per DIN 2533, PN-16 raised face and flanges of Valves above 200 mm size are as per DIN 2532, PN-10 raised face.

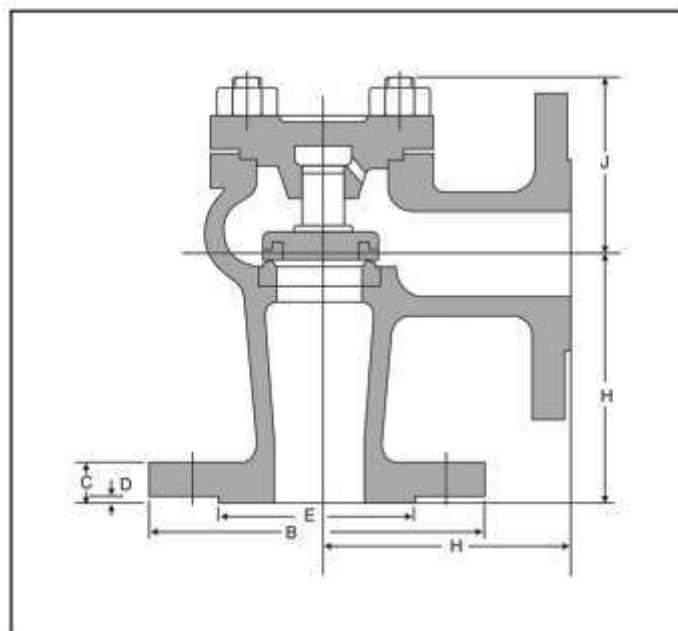
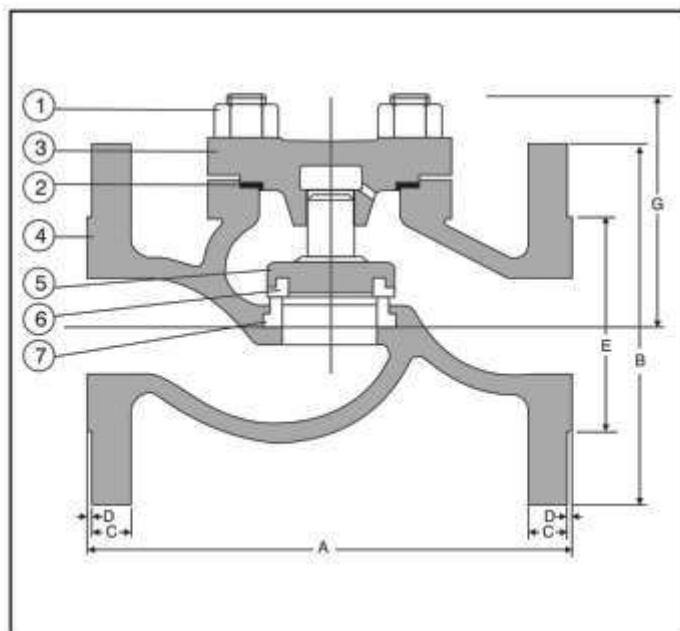
TESTING AND CERTIFICATION :

All valves are tested at double the max. working pressure. Each valve is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.



TEST PRESSURE

Nominal Size	Nominal Pressure (PN)	Body Test Pressure	Max. Steam Working Pressure	Max. Temp.
15mm to 200 mm	16	26 Kg/Cm ²	13 Kg/Cm ²	220°C
250mm to 300 mm	10	17 Kg/Cm ²	8.5 Kg/Cm ²	220°C



DIMENSIONS

Nominal Size	A	B	C	D	E	G	H	J
15 mm (1/2")	130	95	14	2	45	75	90	60
20 mm (3/4")	150	105	16	2	58	75	95	60
25 mm (1")	160	115	16	2	68	80	100	65
32 mm (1 1/4")	180	140	18	2	78	90	105	75
40 mm (1 1/2")	200	150	18	3	88	95	115	82
50 mm (2")	230	165	20	3	102	120	125	95
65 mm (2 1/2")	290	185	20	3	122	125	145	105
80 mm (3")	310	200	22	3	138	135	155	115
100 mm (4")	350	220	24	3	158	145	175	120
125 mm (5")	400	250	26	3	188	205	200	150
150 mm (6")	480	285	26	3	212	220	225	180
200 mm (8")	600	340	30	3	268	275	275	190
250 mm (10")	730	395	28	3	320	350	---	---
300 mm (12")	850	445	28	4	370	380	---	---

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Studs and Nuts	M.S.	IS : 1367
2.	Gasket	C.A.F.	----
3.	Cover	Cast Iron	IBR 86-93 Gr. A
4.	Body	Cast Iron	IBR 86-93 Gr. A
5.	Disc	Cast Iron	IBR 86-93 Gr. A
6.	Disc Ring	S.S.	AISI-410/304
7.	Body Seat Ring	S.S.	AISI-410/304

CAST IRON

STOP-CUM-NON RETURN VALVE

**VALVES MADE WITH
MAXIMUM PRECISION
AND PERFECTION**

DESCRIPTION :

'WJ' Cast Iron Globe Stop-Cum-Non Return Valve Straight or Right Angle Pattern, bolted bonnet, outside screw and yoke type rising stem and back seat arrangement with renewable SS (AISI-410/AISI-304) Seat and stem flanged ends. Flanges of Valves upto 200 mm Sizes are as per DIN-2533, PN-16 raised face and flanges of valves above 200 mm size are as per DIN 2532, PN-10 raised face.

SALIENT FEATURES :

1. Provision of Back seat arrangement for on line replacement of gland packing when valve is full open.
2. Minimum pressure drop due to stream lined flow throughout the body.
3. High lift to avoid obstruction in the flow way.
4. Sturdy hand wheel operation with ample grip and clear from top of Yoke.

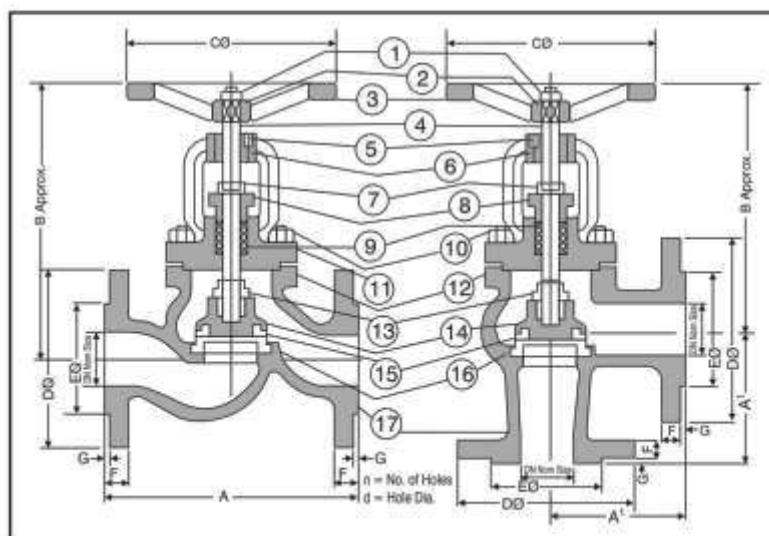
TESTING AND CERTIFICATION :

All valves are tested at double the max. working pressure. Each valve is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.



TEST PRESSURE

Nominal Size	Nominal Pressure (PN)	Body Test Pressure	Max. Steam Working Pressure	Max. Temp.
15mm to 200 mm	16	26 Kg/Cm ²	13 Kg/Cm ²	220°C
250mm to 300 mm	10	17 Kg/Cm ²	8.5 Kg/Cm ²	220°C



DIMENSIONS

Nominal Size	A	A'	B	C	D	E	F	G
DN 15 (1/2")	130	90	155	120	95	45	14	2
DN 20 (3/4")	150	95	160	120	105	58	16	2
DN 25 (1")	160	100	180	140	115	68	16	2
DN 32 (1 1/4")	180	105	210	140	140	78	18	2
DN 40 (1 1/2")	200	115	225	190	150	88	18	3
DN 50 (2")	230	125	255	190	165	102	20	3
DN 65 (2 1/2")	290	145	300	250	185	122	20	3
DN 80 (3")	310	155	320	250	200	138	22	3
DN 100 (4")	350	175	360	300	220	158	24	3
DN 125 (5")	400	200	425	300	250	188	26	3
DN150 (6")	480	225	475	350	285	212	26	3
DN 200 (8")	600	275	550	400	340	268	30	3
DN 250 (10")	730	---	604	450	395	320	28	3
DN 300 (12")	850	---	650	450	445	370	28	4

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Nut for Handwheel	Carbon Steel	-----
2.	Washer	Carbon Steel	-----
3.	Hand Wheel	C.I.	IS : 210 FG 200
4.	Stem	13% Cr. S.S.	AISI-410
5.	Locking Screw	Carbon Steel	-----
6.	Yoke Bush	13% Cr. S.S.	AISI-410
7.	T Head Bolts & Nuts	Carbon Steel	-----
8.	Gland	C.I.	IBR 86 to 93 Gr. A
9.	Packing	Graphited Asbestos	-----
10.	Studs & Nuts	Carbon Steel	-----
11.	Bonnet	C.I.	IBR 86 to 93 Gr. A
12.	Gasket	C.A.F.	IS : 2712
13.	Disc Nut	13% Cr. S.S.	AISI-410
14.	Valve Disc	C.I.	IBR 86 to 93 Gr. A
15.	Disc Facing Ring	13% Cr. S.S.	AISI-410
16.	Body Seat Ring	13% Cr. S.S.	AISI-410
17.	Body	C.I.	IBR 86 to 93 Gr. A

CAST IRON

SPRING LOADED

SINGLE POST SAFETY VALVE

(Tested upto 13 Kg/Cm²)

**SPECIALLY DESIGNED
FOR SAFETY UNDER
MAXIMUM PRESSURE**

DESCRIPTION :

'WJ' Cast Iron Spring Loaded Single Post Safety Valve with 13% Cr. SS (AISI-410) Seat and Stem with full lift. Inlet flange to BS-10 Table 'H' and outlet flange to BS-10 Table 'D'. These Safety Valves are set at a Max. Pressure of 13 Kg/Cm² (185 PSIG).

SALIENT FEATURES :

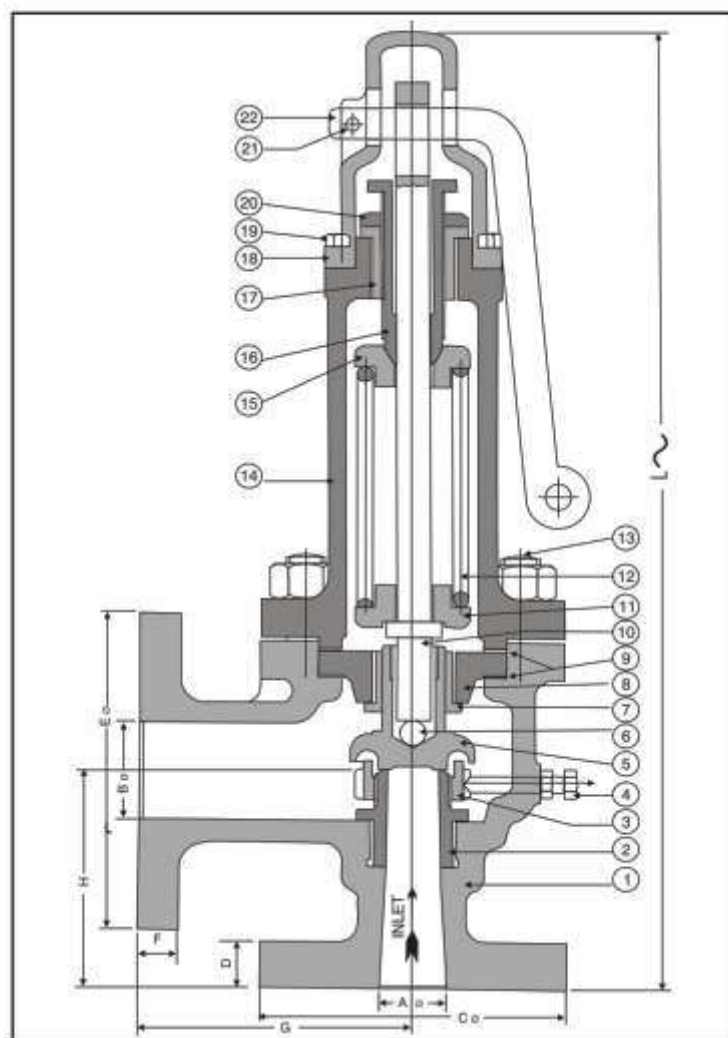
1. The Valves are designed in such a way to impart an instantaneous full lift of Seat.
2. Outlet flange is of large size than the inlet flange.
3. Each Valve is provided with an easing lever.
4. Unauthorised alteration to the set pressure is prevented by con sealing the adjusting screw with a cast iron cap. Easing lever is locked by a pin.

TESTING AND CERTIFICATION :

All Safety Valve bodies are tested at 26 Kg/Cm² (370 PSIG) Hydraulic Pressure. All Valves are set at a Max. Pressure of 13 Kg/Cm² (185 PSIG) under steam.

Each Valve is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.





DIMENSIONS							
Valve Sizes	A	B	C x D	E x F	G	H	L
25 x 40	26	40	121x19.1	133.5x16	108	90	400
40 x 50	40	50	140x22.2	152.5x17.5	120	110	510
50 x 80	----	----	----	----	----	----	----
65 x 90	----	----	----	----	----	----	----
80 x 100	----	----	----	----	----	----	----
100 x 150	----	----	----	----	----	----	----

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	C.I.	IBR-86 To 93 Gr. A
2.	Body Seat Ring	S.S.	AISI-410
3.	Regulating Ring	Bronze	IBR-282 (a) IV Gr. B
4.	Locking Screw for Regulating Ring	Extruded Brass Rod	----
5.	Valve Head	S.S.	AISI-410
6.	Ball (10mm Dia)	S.S.	----
7.	Retainer Plate Bush	Bronze	IBR-282 (a) IV Gr. B
8.	Valve Disc Retainer Plate	C.I.	IBR-86 To 93 Gr. A
9.	Gasket	C.A.F.	----
10.	Stem	S.S.	AISI-410
11.	Lower Spring Disc	C.I.	IBR-86 To 93 Gr. A
12.	Spring	Spring Steel	----
13.	Studs and Nuts	M.S.	----
14.	Chamber	C.I.	IBR-86 To 93 Gr. A
15.	Upper Spring Disc	C.I.	IBR-86 To 93 Gr. A
16.	Spring Adjusting Screw	Bronze	IBR-282 (a) IV Gr. B
17.	Bush for Chamber	Bronze	IBR-282 (a) IV Gr. B
18.	Housing Cover	C.I.	IBR-86 To 93 Gr. A
19.	Bolt for Housing Cover	M.S.	----
20.	Check Nut	Bronze	IBR-282 (a) IV Gr. B
21.	Pin for Lever	M.S.	----
22.	Easing Lever	M.I. / M.S.	----

CAST IRON

Y-TYPE STRAINER

ELEGANT SMOOTH PERFORMANCE

DESCRIPTION :

'WJ' Cast Iron Y-Type Strainers are manufactured with S.S. (AISI-304) screen with screwed female ends to BSP threads or flanged ends to BS-10 Table 'F'.

These strainers are suitable for 150 PSIG (10.54 Kg/Cm²g) max steam pressure at 428°F (220°C) Temp. and are tested at 300 PSIG (21.08 Kg/Cm²g) Hydraulic Pressure.

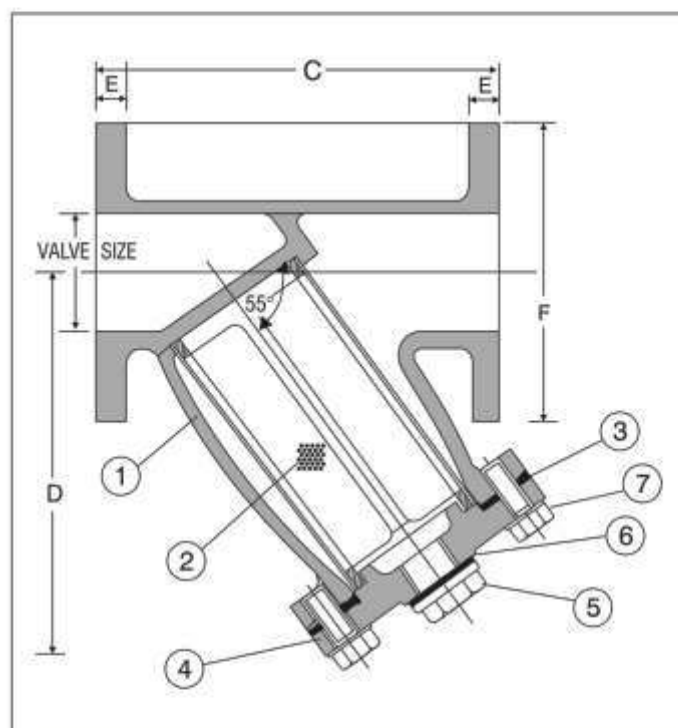
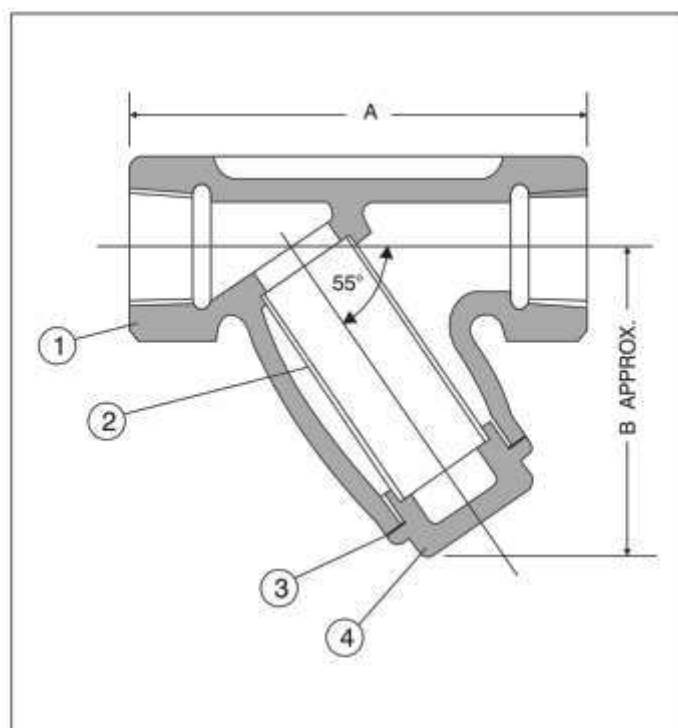
SALIENT FEATURES :

1. Fine finish and smooth contours reduce pressure drop in the strainer.
2. Large screening area makes the strainer efficient.
3. Screen is guided in the body.
4. Strainer may be installed in the downward vertical lines with effectiveness equal to horizontal installation.
5. Drain plug is provided in larger sizes to drain off the foreign particles accumulated in the strainer.

TESTING AND CERTIFICATION :

All strainers are tested at double the max. working pressure. Each strainer is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.





DIMENSIONS

Nominal Size	A	B	C	D	E	F
15 mm ($\frac{1}{2}$ "	76	68	136.5	90	12.7	95.3
20 mm ($\frac{3}{4}$ "	98	72	140	90	12.7	101.6
25 mm (1"	133	90	162	115	12.7	120.7
32 mm (1 $\frac{1}{4}$ "	175	110	185	143	15.88	133.4
40 mm (1 $\frac{1}{2}$ "	178	130	206	150	15.88	139.7
50 mm (2"	222	158	210	203	19.01	165.1
65 mm (2 $\frac{1}{2}$ "	----	----	248	240	19.01	184.2
80 mm (3"	----	----	270	260	19.01	203.2
100 mm (4"	----	----	381	285	22.2	228.6
125 mm (5"	----	----	416	381	25.4	279.4
150 mm (6"	----	----	451	394	25.4	304.8
200 mm (8"	----	----	522.5	550	38.1	368.5

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	Cast Iron	IBR 86 to 93 Gr. A
2.	Strainer	S.S.	AISI-304
3.	Gasket	C.A.F.	----
4.	Cover	Cast Iron	IBR 86 to 93 Gr. A
5.	Plug	Steel	----
6.	Gasket	C.A.F.	----
7.	Studs & Nuts	Steel	----

CAST IRON

ACCESSIBLE

FEED CHECK VALVE

**CHECK VALVE WITH BETTER
ACCESSIBILITY WHILE THE
BOILER IS IN OPERATION**

DESCRIPTION :

'WJ' Cast Iron Accessible Feed Check Valve, out side screw yoke type, rising spindle, SS (AISI-410) seat and spindle, bolted bonnet, flanges as per BS-10 Table 'H'. Suitable for max. 185 PSIG (13 Kg/Cm²g) working pressure and 428°F (220°C). Temp. tested to 370 PSIG (26 Kg/Cm²g) Hydraulic Pressure.

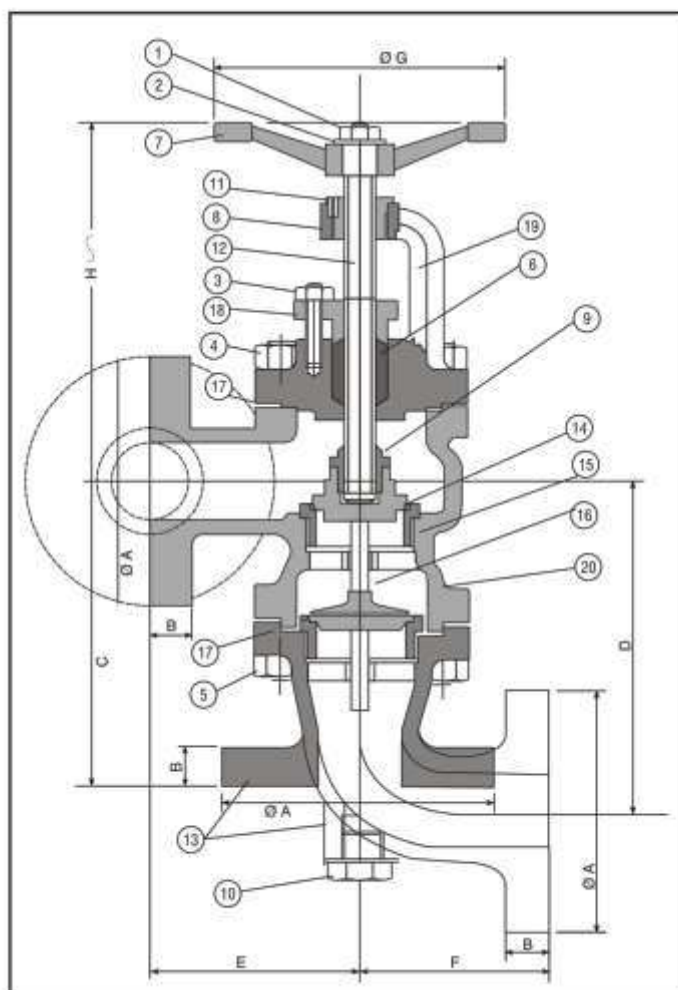
SALIENT FEATURES :

1. Accessible Feed Check Valve consists of two valves, a stop valve operated by a hand wheel and a back pressure check valve.
2. Available with straight or curved inlet.
3. Accessibility of check valve can be examined while the boiler is in operation by closing the stop valve and removing the inlet.
4. 40mm, 50mm and 65mm size accessible feed check valves are also available with inspection branch.

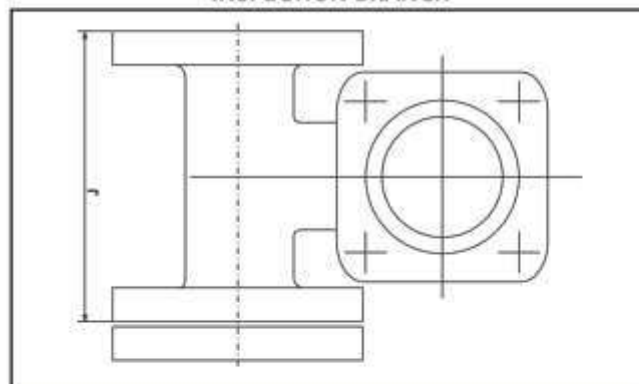
TESTING AND CERTIFICATION :

All valves are tested at double the max. working pressure. Each valve is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.





INSPECTION BRANCH



DIMENSIONS WITHOUT INSPECTION BRANCH

Nominal Size	A	B	C	D	E	F	G	H (Approx.)
25mm (1")	120.7	19.1	152.5	159	116	82.6	175	200
32mm (1 1/4")	133.5	22.2	167	167	108	121	175	213
40mm (1 1/2")	139.7	22.2	173	189	114	102	175	220
50mm (2")	165.1	25.4	203	216	127	114	175	240
65mm (2 1/2")	184.2	25.4	238	238	152	127	250	290
80mm (3")	203.2	28.6	238	238	191	152	250	320

DIMENSIONS WITH INSPECTION BRANCH

Nominal Size	A	B	C	D	E	F	G	H (Approx.)	J
40mm (1 1/2")	139.7	22.2	173	189	102	102	175	220	228
50mm (2")	165	25.4	203	216	124	114	175	240	254
65mm (2 1/2")	184.2	25.4	238	238	140	127	250	290	280

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Nut	M.S.	----
2.	Washer	M.S.	----
3.	Studs & Nuts	M.S.	----
4.	Studs & Nuts	M.S.	----
5.	Studs & Nuts	M.S.	----
6.	Packing	Graphited Asbestos	----
7.	Hand Wheel	C.I.	IS : 210 FG 200
8.	Yoke Bush	Bronze	IBR-282 (a) IV Gr. B
9.	Check Nut	S.S.	AISI-410
10.	Drain Plug	Bronze	IBR-282 (a) IV Gr. B
11.	Locking Screw	S.S.	AISI-410
12.	Stem	S.S.	AISI-410
13.	Straight/Curved Inlet	C.I.	IBR-86 To 93 Gr. A
14.	Disc	S.S.	AISI-410
15.	Body Seat Ring	S.S.	AISI-410
16.	Check Valve Disc	S.S.	AISI-410
17.	Gasket	Steam Jointing	----
18.	Gland	C.I.	IBR-86 To 93 Gr. A
19.	Bonnet	C.I.	IBR-86 To 93 Gr. A
20.	Body	C.I.	IBR-86 To 93 Gr. A

CAST IRON

VERTICAL INVERTED BUCKET TYPE STEAM TRAP

**HIGH PERFORMANCE
UNDER DIFFERENT
STEAM PRESSURES**

DESCRIPTION :

'WJ' Cast Iron Vertical Inverted Bucket Type Steam Trap with Brass/S.S. (AISI-304) Bucket having screwed female ends : suitable for max. working pressure of 13 kg/cm² (185 PSIG) and temperature : 428°F (220°C).

Body Tested to : 26 kg/cm² (370 PSIG) HYD.

TESTING AND CERTIFICATION :

All traps are tested hydraulically at double the max. working pressure. Each trap is tested on steam line to see the performance of traps. Each trap is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.

DISCHARGE CAPACITIES :

Discharge capacities of Steam Traps under different steam pressures are given below in Kg/hour of hot condensate at temperature corresponding to the inlet steam pressure.

Note : These steam traps are suitable for Vertical and Horizontal Installation.

INLET STEAM PRESSURE		CAPACITY IN KILOGRAMS PER HOUR					
Kg/Cm ² g	PSIG	½"	¾"	1"	1¼"	1½"	2"
0.70	10	400	850	1575	2600	4000	7800
1.76	25	425	850	1700	2700	4150	9000
3.52	50	380	850	1850	2850	4000	8200
5.27	75	425	1000	1725	2850	4150	8300
7.03	100	390	810	1625	2900	4700	8150
10.54	150	370	680	1575	2600	4300	8350
13	185	380	700	1650	2810	4500	8560

VERTICAL INSTALLATION

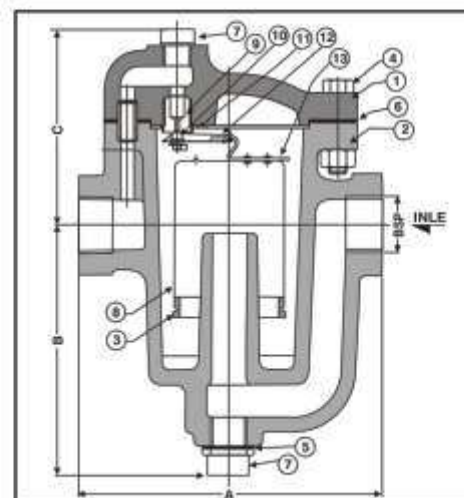
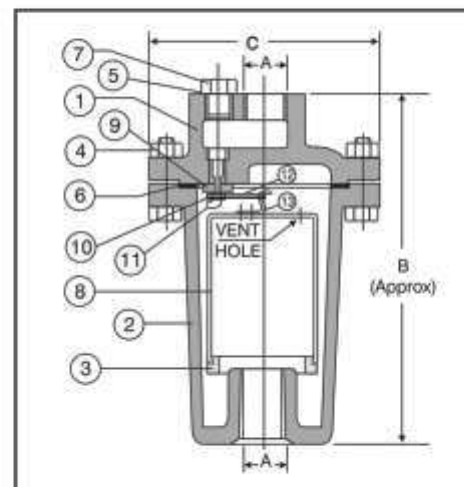
DIMENSIONS

NOMINAL SIZE	A	B (Approx.)	C
15 mm (½")	½" BSP	168	110
20 mm (¾")	¾" BSP	200	138
25 mm (1")	1" BSP	265	187
32 mm (1¼")	1¼" BSP	325	220
40 mm (1½")	1½" BSP	325	220
50 mm (2")	2" BSP	352	240

HORIZONTAL INSTALLATION

DIMENSIONS

NOMINAL SIZE	A	B	C
25 mm (1")	180	147	115
40 mm (1½")	----	----	----
50 mm (2")	----	----	----



MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Cover	Cast Iron	IBR 86 to 93 Gr. A
2.	Body	Cast Iron	IBR 86 to 93 Gr. A
3.	Bucket Ring	Cast Iron	IBR 86 to 93 Gr. A
4.	Nuts & Bolts	M.S.	----
5.	Gasket Washer	Steam Jointing	----
6.	Gasket	Steam Jointing	----
7.	Plug	Bronze	IBR 282 (a) (IV) Gr. B
8.	Bucket	S.S. Sheet	----
9.	Valve Seat	S.S.	AISI-410
10.	Valve Ball	S.S.	AISI-304
11.	Hook Plate	S.S.	AISI-304
12.	Lever	S.S.	AISI-304
13.	Bucket Hook	S.S.	AISI-304

CAST IRON

VERTICAL LIFT CHECK VALVE

DESIGNED TO WORK UNDER VARIED CONDITIONS

DESCRIPTION :

'WJ' Cast Iron Vertical Lift Check Valve Bolted Cover, with 13% Cr S.S. (AISI-410) Trim and having flanged ends to BS-10 Table 'H' are suitable for (13 Kg/Cm²g). Max. working pressure and 428°F (220°C) Temp. Tested to (26 Kg/Cm²g) Hydraulic Pressure.

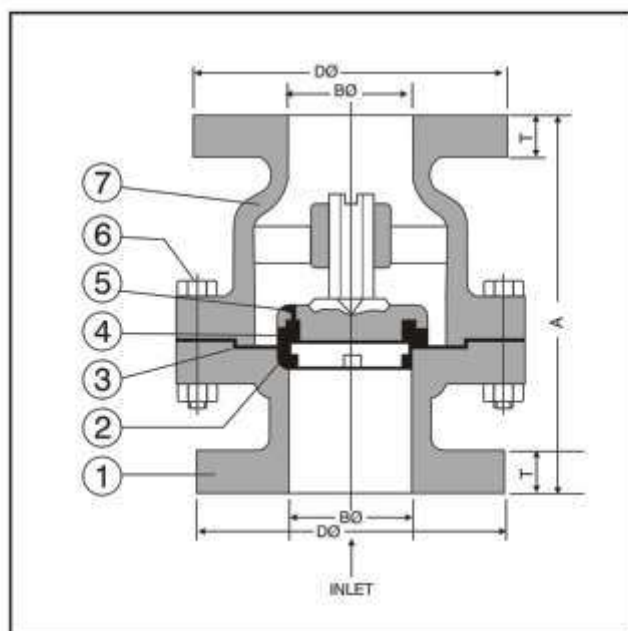
SALIENT FEATURES :

1. Full way area is provided.
2. Valve disc is guided to give trouble free service.

TESTING AND CERTIFICATION :

All valves are tested at double the max. working pressure. Each valve is supplied with IBR Test Certificate in Form III-C issued by The Director of Boilers, Punjab.





DIMENSIONS

Nominal Size	A	B	D	T
DN 40 (1½")	175	40	140	22.2
DN 50 (2")	200	50	165	25.4
DN 65 (2½")	225	65	184.5	25.4
DN 80 (3")	250	80	203	28.5
DN 100 (4")	275	100	229	32
DN 125 (5")	340	125	280	35
DN 150 (6")	350	150	305	35
DN 200 (8")	390	200	368.5	38

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Lower Body	C.I.	IBR 86 to 93 Gr. A
2.	Body Seat Ring	13% Cr. S.S.	AISI-410
3.	Gasket	C.A.F.	IS : 2712
4.	Valve Disc Facing Ring	13% Cr. S.S.	AISI-410
5.	Valve Disc	C.I.	IBR 86 to 93 Gr. A
6.	Bolts & Nuts	Carbon Steel	----
7.	Upper Body	C.I.	IBR 86 to 93 Gr. A

CAST IRON

MOISTURE SEPARATOR



STOUD & STURDY WORKING

DESCRIPTION :

'WJ' Cast Iron Moisture Separators are manufactured, with flanged ends to BS-10 Table 'H'. These are suitable for maximum working pressure of (13 Kg/Cm²g) on steam lines.

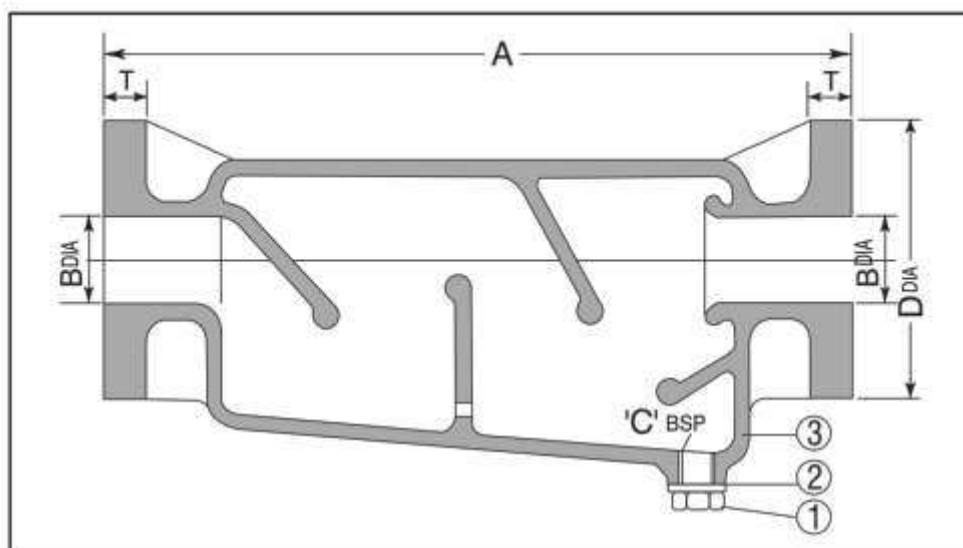
SALIENT FEATURES :

Moisture Separators are provided with internal ribs which help to remove the condensate from the steam lines.

TERMS & CONDITIONS :

All the Moisture Separators are tested at 26 Kg/Cm² Hydraulic Pressure. Each Moisture Separator is supplied with IBR Test Certificate in Form III-C, issued by The Director of Boilers, Punjab.





DIMENSIONS					
NOMINAL SIZE	A	B	C	DØ	T
25 mm (1")	300	25	½" BSP	121	19.1
40 mm (1 ½")	370	40	½" BSP	140	22.2
50 mm (2")	466	50	½" BSP	165.1	25.4
65 mm (2 ½")	485	63	1" BSP	184.2	28.6
80 mm (3")	485	76	1" BSP	203.2	28.6
100 mm (4")	696	100	1" BSP	228.6	32

MATERIALS			
PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Drain Plug	Bronze	IBR 282 (a) (IV) Gr. B
2.	Gasket	Steam Jointing	---
3.	Body	C.I.	IBR 86 to 93 Gr. A

CAST IRON

SWING CHECK VALVE

SUPER TROUBLE - FREE PERFORMANCE

DESCRIPTION :

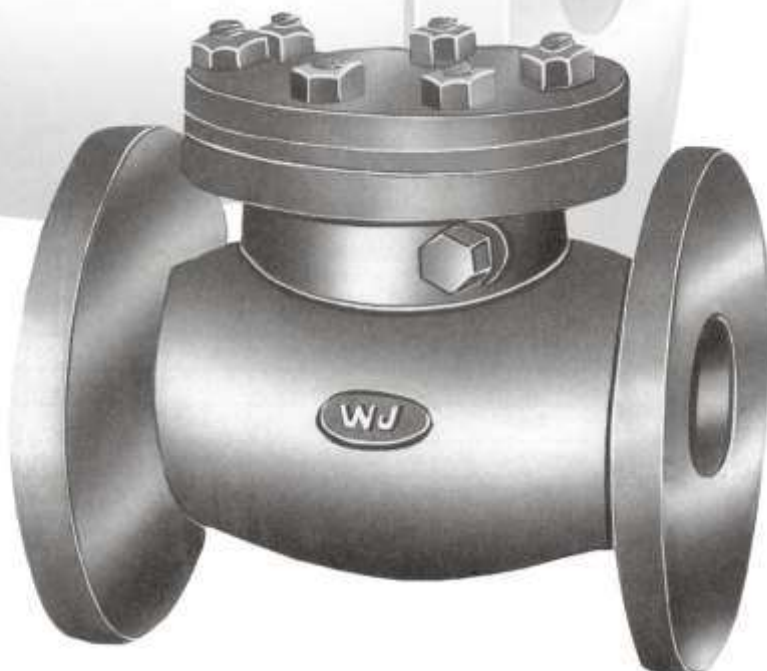
'WJ' Cast Iron Swing Check Valve, with 13% Cr. S.S. (AISI-410) trim, bolted bonnet and with flanged ends to BS-10 Table 'F' are suitable for 150 PSIG (10.54 Kg/Cm²g) max. pressure at 428°F (220°C). Body tested to 300 PSIG (21.08 Kg/Cm²g) and seat tested to 150 PSIG (10.54 Kg/Cm²g) Hydraulic Pressure.

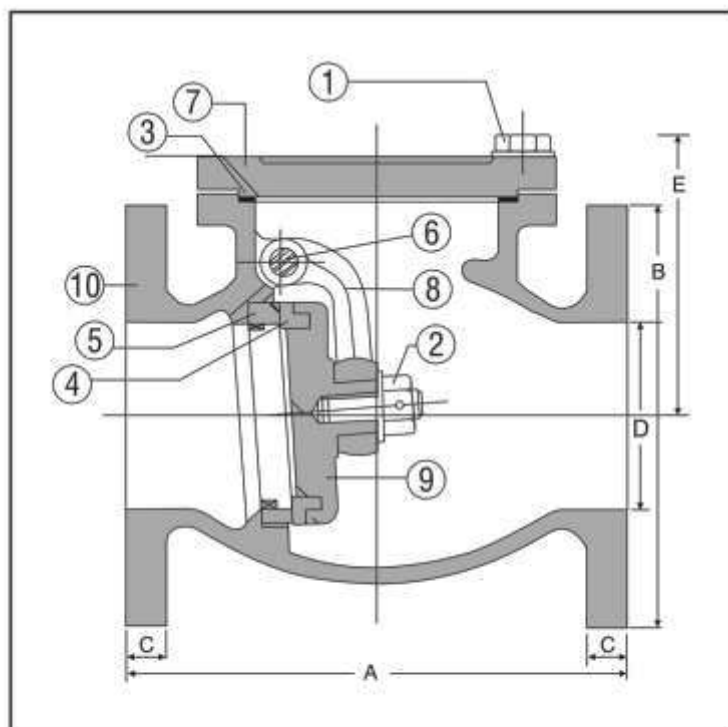
These swing check valves can also be supplied in all Iron or Bronze trim and with soft seats of nitrile rubber & teflon with flanges as per BS-10 Table 'D' and ANSI Class-125.

TESTING AND CERTIFICATION :

All Swing Check Valves are tested at double the max. working pressure.

If required IBR Test Certificate can also be provided in Form III-C issued by The Director of Boilers, Punjab.





DIMENSIONS					
Nominal Size	A	B	C	D	E (Approx.)
40 mm (1½")	165	139.7	15.88	38	98
50 mm (2")	203	165.1	19.05	50	118
65 mm (2½")	216	184.15	19.05	65	128
80 mm (3")	241	203.2	19.05	76.2	138
100 mm (4")	292	228.6	22.2	100	175
125 mm (5")	330	279.4	25.4	125	195
150 mm (6")	356	304.8	25.4	150	220

MATERIALS			
PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Studs with Nuts	M.S.	----
2.	Studs with Nuts	M.S.	----
3.	Gasket	Steam Jointing	----
4.	Disc Ring	S.S. / Bronze	AISI-410/IBR 282 (a) (IV) Gr. B
5.	Body Seat Ring	S.S. / Bronze	AISI-410/IBR 282 (a) (IV) Gr. B
6.	Hinge Pin	S.S. / Extruded Brass Rod	AISI-410/IS : 3488-1980
7.	Cover	Cast Iron	IBR 86 to 93 Gr. A / IS-210 FG-200
8.	Hinge	Cast Iron	IBR 86 to 93 Gr. A / IS-210 FG-200
9.	Disc	Cast Iron	IBR 86 to 93 Gr. A / IS-210 FG-200
10.	Body	Cast Iron	IBR 86 to 93 Gr. A / IS-210 FG-200
11.	Side Plug	Bronze / S.S.	IBR 282 (a) (IV) Gr. B / AISI-410

CAST IRON

WAFER TYPE CHECK VALVE

EFFICIENT PERFORMANCE

DESCRIPTION :

'WJ' Cast Iron Wafer Type Check Valve with G.M. Body Seat Ring and Cast Iron Disc. are suitable for working pressure of 10 bar gauge.

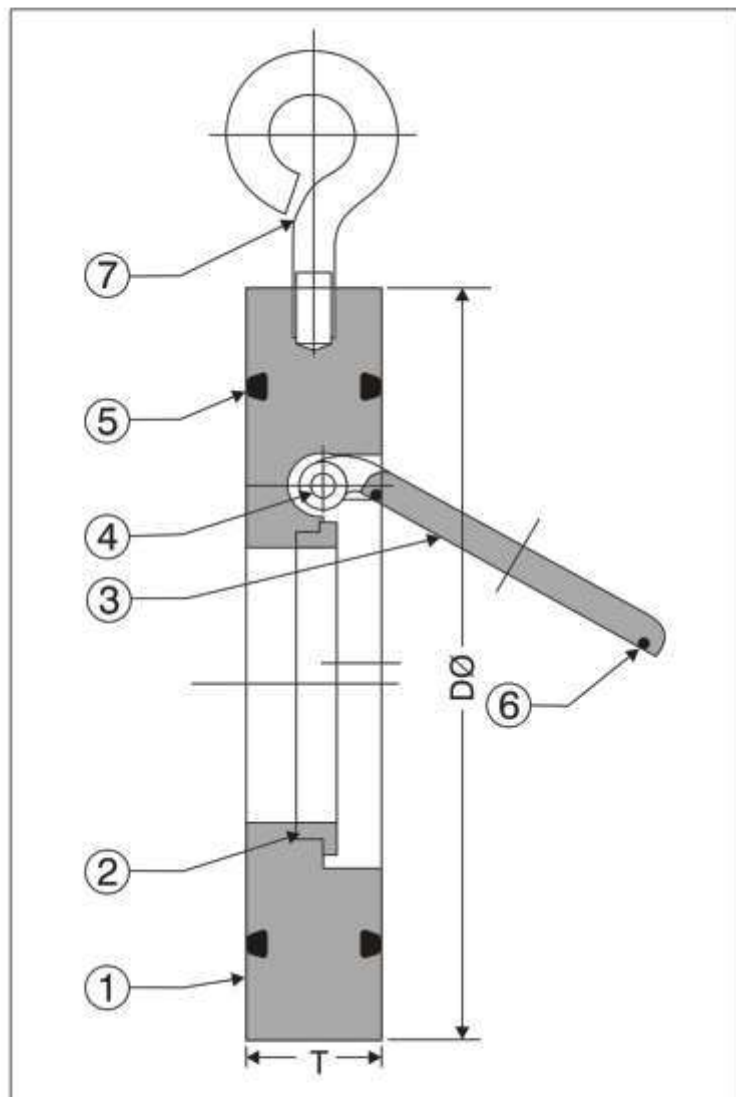
Body Test Pressure : 15 Bar Gauge (HYD.)

Seat Test Pressure : 11 Bar Gauge (HYD.)

SALIENT FEATURES :

1. Suitable for Horizontal and Vertical Installation.
2. Shorter over all Length Requires Minimum Space.
3. Low Pressure Drop through the Valve.
4. Easy to Install.
5. Has Less Weight.





DIMENSIONS		
Nominal Size	D	T
40 mm (1½")	102	22
50 mm (2")	107	22
65 mm (2½")	128	22
80 mm (3")	142	25
100 mm (4")	160	25
125 mm (5")	---	---
150 mm (6")	220	30
200 mm (8")	257	30
250 mm (10")	---	---
300 mm (12")	---	---

MATERIALS			
PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	Cast Iron	IS : 210 FG 200
2.	Body Seat Ring	G.M.	IS : 318 Gr. LTB2
3.	Valve Disc.	Cast Iron	IS : 210 FG 200
4.	Pin	S.S.	AISI-410
5.	"O" Ring	Nitrile/Neoprene/EPDM	----
6.	"O" Ring	Nitrile/Neoprene/EPDM	----
7.	Eye - Bolt	M.S.	----

CAST IRON

SLUICE VALVE

(IS : 14846-2000)

DESIGNED TO WORK UNDER VARIED CONDITIONS

DESCRIPTION :

'WJ' Cast Iron Sluice Valves Bolted Bonnet. Inside screw and non rising stem with renewable leaded Tin Bronze working parts and stainless steel stem. Flanged ends. Hand wheel operated conforming to IS : 14846-2000 PN-10.

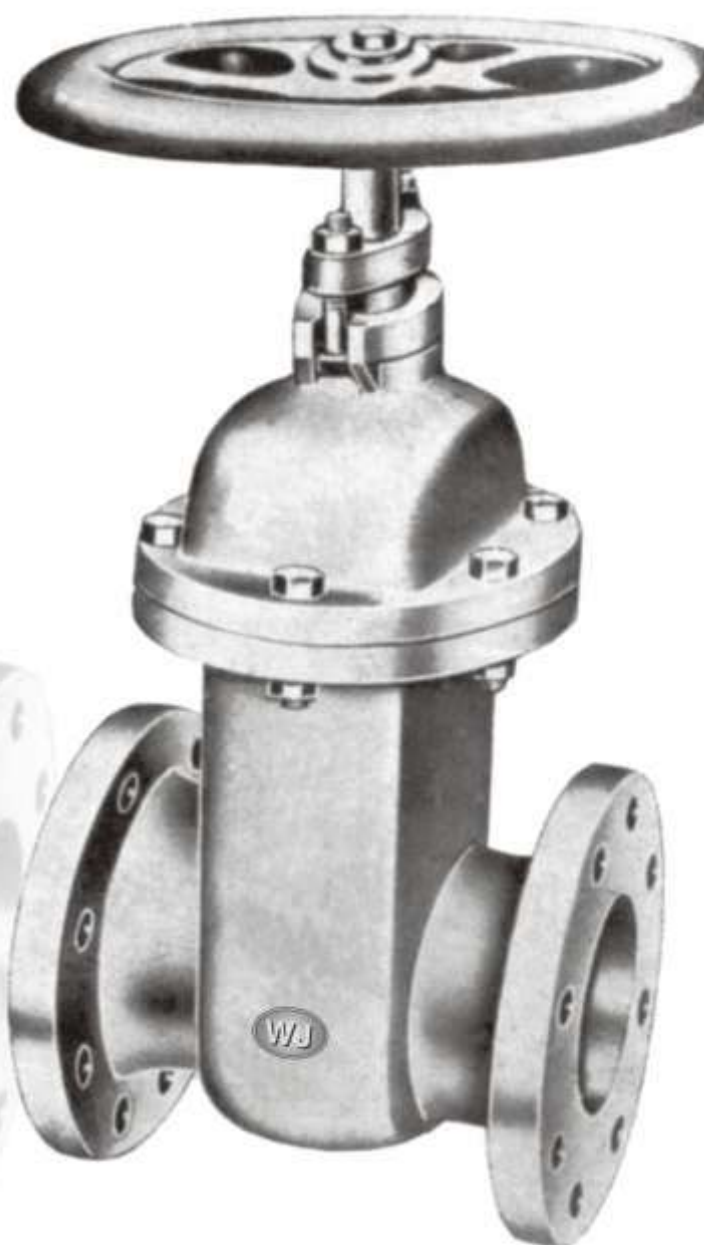
Body Tested to 1.5 MPa and seat tested to 1.0 MPa Hydraulic Test Pressure.

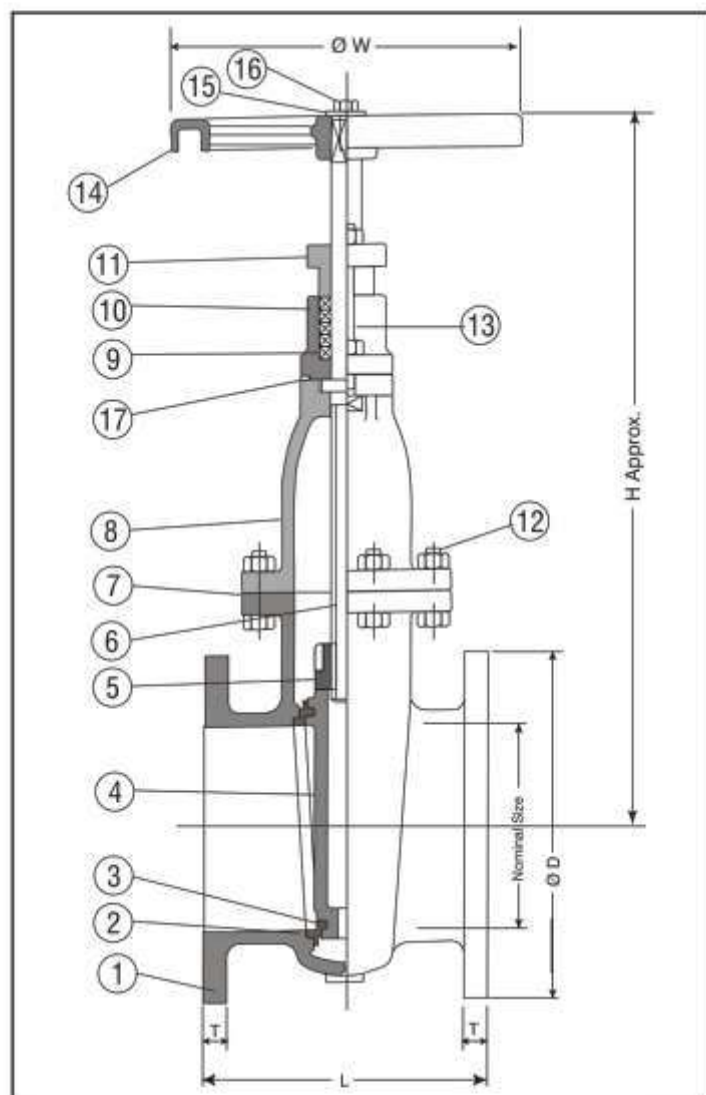
SALIENT FEATURES :

1. Sturdy hand wheel is provided for easy operation of valve.
2. Thrust bridge design is provided upto 150 mm size.
3. Guide and lugs are provided to guide the wedge through its full travel in the body.
4. Stream lined full flow area is provided in the body to minimise pressure drop.
5. Ample depth of stuffing box is provided.

TESTING AND CERTIFICATION :

All Sluice Valves are Tested at the specified Test Pressure. If required, our own Works Test Certificate can be provided.





DIMENSIONS					
Nominal Size	L	H	W	D	T
50 mm (2")	178	321	225	165	16
65 mm (2½")	190	355	225	185	16
80 mm (3")	203	385	225	200	21
100 mm (4")	229	450	320	220	22
125 mm (5")	254	480	320	250	22.5
150 mm (6")	267	530	320	285	23
200 mm (8")	292	700	360	340	24.5
250 mm (10")	330	830	400	395	26
300 mm (12")	356	905	400	445	27.5

MATERIALS

PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	Cast Iron	IS-210 FG-200
2.	Body Seat Ring	Leaded Tin Bronze	IS-318 LTB-2
3.	Wedge Facing Ring	Leaded Tin Bronze	IS-318 LTB-2
4.	Wedge	Cast Iron	IS-210 FG-200
5.	Stem Nut	Leaded Tin Bronze	IS-318 LTB-2
6.	Stem	S.S.	IS-6603
7.	Gasket	C.A.F.	IS-2712
8.	Bonnet	Cast Iron	IS-210 FG-200
9.	Packing	Jute & Hemp	----
10.	Stuffing Box	Cast Iron	IS-210 FG-200
11.	Gland	Cast Iron	IS-210 FG-200
12.	Bolts & Nuts	M.S.	----
13.	Tee Head Bolts & Nuts	M.S.	----
14.	Handwheel	Cast Iron	IS-210 FG-200
15.	Washer	M.S.	----
16.	Bolt for Handwheel	M.S.	----
17.	Gasket for Stuffing Box	C.A.F.	IS-2712

CAST IRON

GATE VALVE

STOUT & STURDY, SMOOTH PERFORMANCE

DESCRIPTION :

'WJ' Cast Iron Gate Valve, outside screw and yoke type, bolted bonnet, solid wedge with Leaded tin Bronze facing Rings Flanged ends. Face to Face of bodies will be as per IS : 14846-2000.

NOTE : These Valves can be supplied with flanges as per PN-10, PN-16 and Class-125.

Body Test Pressure 24 Kg/Cm²

Seat Test Pressure 16 Kg/Cm²

NOTE : Body seat rings and wedge facing rings can be supplied in 13% Cr. SS on request.

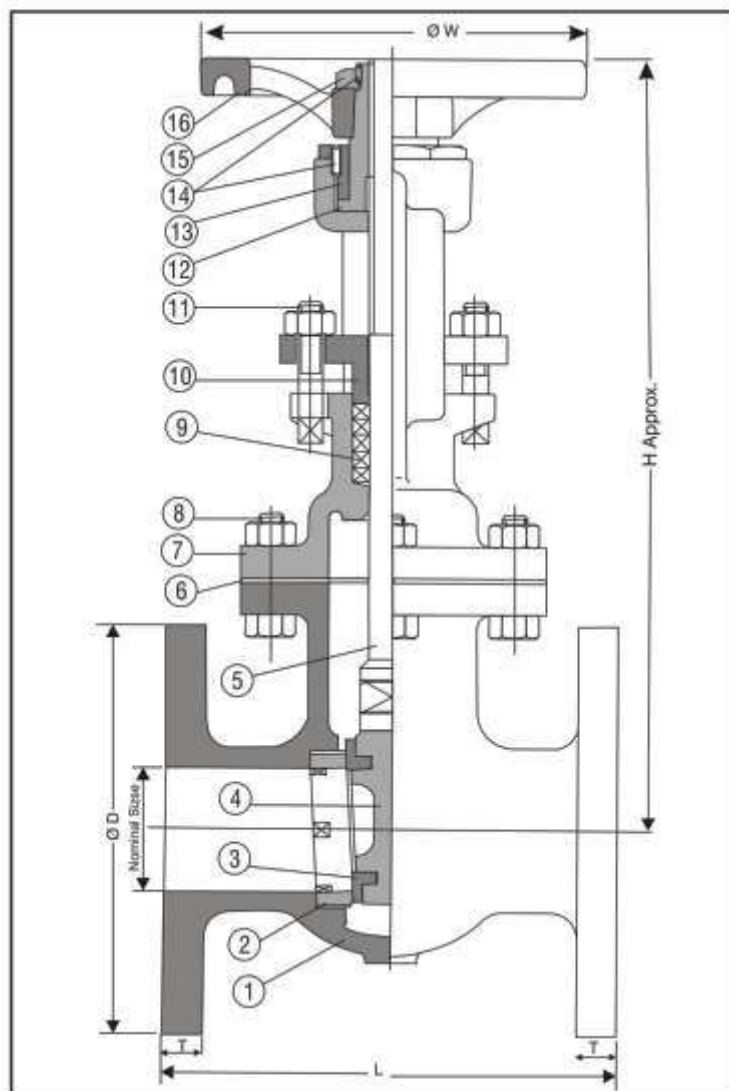
SALIENT FEATURES :

1. Stream lined full flow area is provided in Body to minimum pressure drop.
2. Renewable leaded Tin Bronze Body Seat Ring and disc facing rings are provided.
3. Back Seat Provision is provided to facilitate on line replacement of gland packing under pressure when valve is fully open.
4. Ample depth of stuffing box is provided.
5. Sturdy hand wheel is provided for easy operation of the valve.

TESTING AND CERTIFICATION :

All Valves are tested hydraulically at the specified Test Pressure. Our own works Test Certificate can be supplied on request.





DIMENSIONS					
Nominal Size	L	H	W	D	T
50 mm (2")	178	370	200	165	20
65 mm (2½")	190	400	200	185	20
80 mm (3")	203	440	250	200	22
100 mm (4")	229	560	250	220	24
125 mm (5")	254	650	300	250	26
150 mm (6")	267	705	300	285	26
200 mm (8")	292	880	350	340	30
250 mm (10")	330	970	400	405	32
300 mm (12")	356	1120	400	460	32

MATERIALS			
PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	C.I.	IS-210 FG-200
2.	Body Seat Ring	G.M.	IS-318 LTB-2
3.	Wedge Facing Ring	G.M.	IS-318 LTB-2
4.	Wedge	C.I.	IS-210 FG-200
5.	Stem	S.S.	AISI-410
6.	Gasket	C.A.F.	----
7.	Bonnet	C.I.	IS-210 FG-200
8.	Bolts and Nuts	M.S.	----
9.	Packing	Graphited Asbestos	----
10.	Gland	C.I.	IS-210 FG-200
11.	Tee Head Bolts & Nuts	M.S.	----
12.	Yoke Sleeve	S.S.	AISI-410
13.	Yoke Sleeve Retaining Nut	G.M.	IS-318 LTB-2
14.	Locking Screw	M.S.	----
15.	Head Wheel Nut	G.M.	IS-318 LTB-2
16.	Hand Wheel	M.I.	----

CAST IRON

BUTTERFLY VALVE

DESIGNED TO WORK UNDER VARIED CONDITIONS

DESCRIPTION :

'WJ' Cast Iron Butterfly Valves. Wafer Type (Without Lugs) with Nitrile Rubber Lined Sleeve are manufactured with Malleable Iron or Stainless Steel Seat and Stainless Steel Spindle.

NOTE :

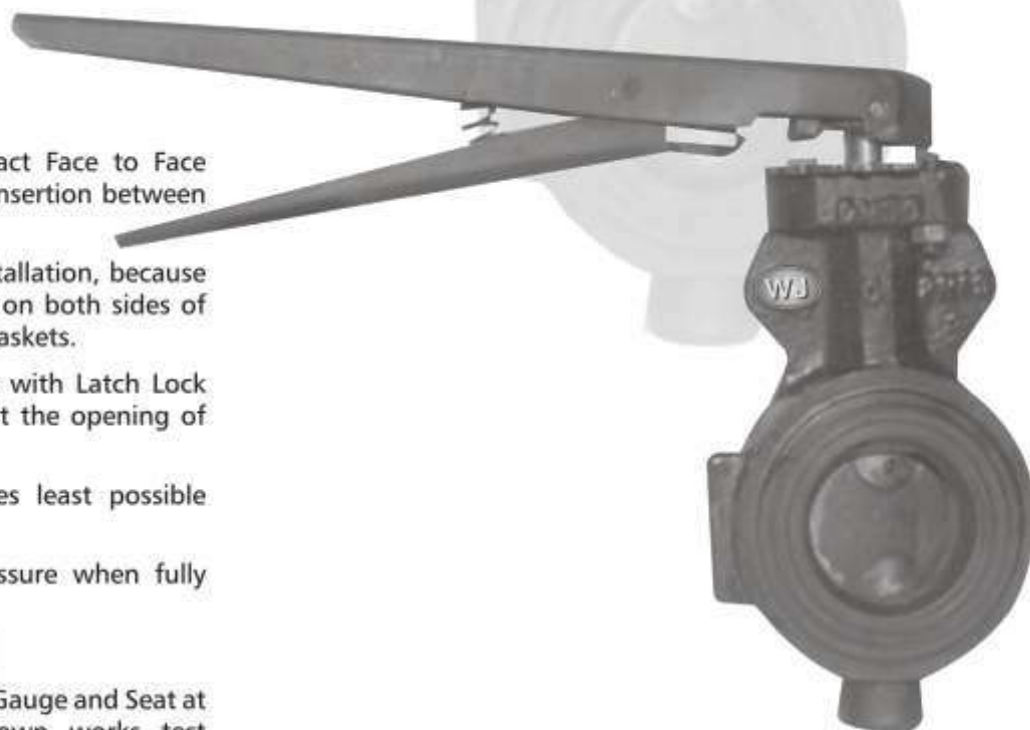
If required these valves can be supplied with EPDM Sleeve.

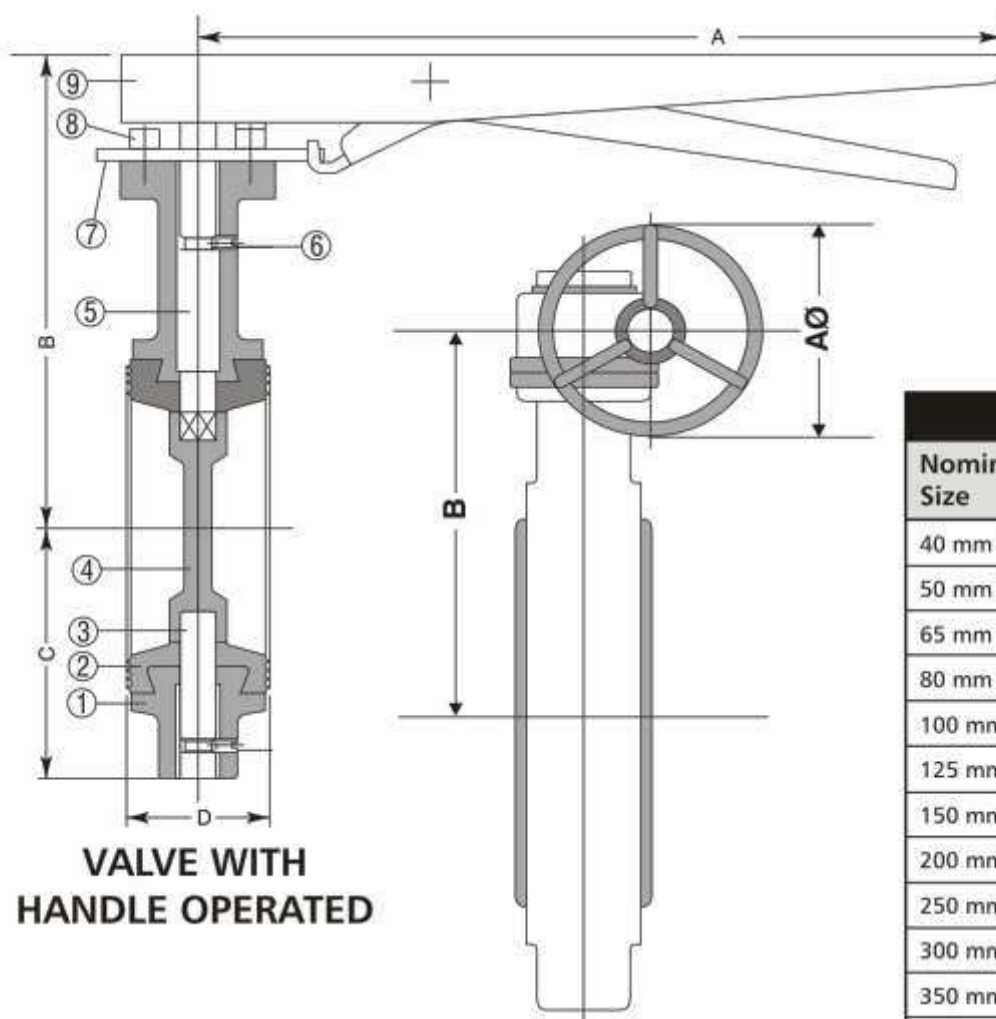
SALIENT FEATURES :

1. Butterfly Valves are of compact Face to Face Distance and are suitable for insertion between Pipe Flanges.
2. No Gaskets are needed for installation, because Rubber Sleeves Projecting out on both sides of the Body serve the purpose of Gaskets.
3. Sturdy construction of handle with Latch Lock Arrangement enables to adjust the opening of Seat in any position.
4. Full Opening ($87^{\circ} \pm 3^{\circ}$) gives least possible Pressure Drop.
5. Perfectly Leaktight under pressure when fully closed.

TESTING AND CERTIFICATION :

Each Valve Body is tested at 15 Bar Gauge and Seat at 11 Bar Gauge Hydraulic. Our own works test certificate can be furnished with each valve.





**VALVE WITH
HANDLE OPERATED**

**Size : 300mm to 500mm
VALVE : WITH GEAR UNIT**

DIMENSIONS				
Nominal Size	A	B	C	D
40 mm (1½")	270	135	60	33
50 mm (2")	270	140	63	43
65 mm (2½")	270	150	76	46
80 mm (3")	270	155	83	46
100 mm (4")	270	175	105	52
125 mm (5")	270	200	120	56
150 mm (6")	270	210	135	56
200 mm (8")	350	310	165	60
250 mm (10")	360	320	220	68
300 mm (12")	250	345	260	78
350 mm (14")	300	415	290	92
400 mm (16")	300	435	320	102
500 mm (20")	300	520	415	127

MATERIALS			
PART No.	NAME OF PART	MATERIAL	SPECIFICATION
1.	Body	C.I.	IS : 210 FG 200
2.	Body Liner	Nitrile Rubber	----
3.	Lower Stem	S.S.	AISI-410
4.	Disc	M.I. / S.S.	IS : 210 FG 200 / AISI-410
5.	Upper Stem	S.S.	AISI-410
6.	Grub Screw	M.S.	----
7.	Cover Plate	M.S. / C.I.	----
8.	Bolts & Nuts	M.S.	----
9.	Handle	M.S. / M.I.	----