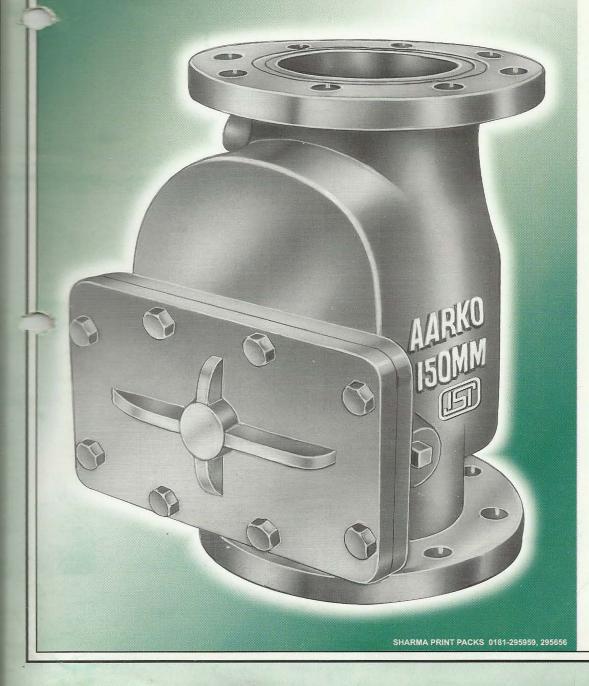


CAST IRON
NON-RETURN VALVES
(SWING CHECK TYPE)



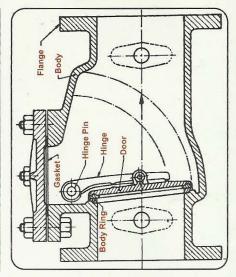
5312 CM/L/9184182 CAT/NRV/5-2K

**AARKO** Cast Iron non Return/Reflux valves are of single door, Swing check type for use in Waterworks of sizes 50mm to 600mm and are manufactured on a quality basis from high class material. Strict accuracy is observed backed with constant supervision gauging and testing by trained and qualified staff. Our valves from size 50mm to 300mm enjoy ISI marking, which is added 3rd party quality assurance. The valves are so designed that in working position the valves positively close, when the flow in the pipe comes to a stop. The wall thickness of the metal in all casting is maintained throughout any section as uniform as possible to avoid stains set up by sudden changes of crosssection. If desired valves can be supplied with integral type bypass arrangement for fig. 1 and external type bypass for Fig. 3

® Trade Mark Regd.

## **Material For Different Components Parts Of Reflux Valves**

	COMPONENTS	MATERIAL	SPECIFICATION
1.	Body, Cover, Door, Bearing Holder & Door Face Disc	Grey Cast Iron	IS- 210, 1978 FG 200
2.	Hinges	Grey Cast Iron	IS-210-1980 FG200
3.	Hing Pin, Door Pin, Door Suspension Pin	High Tensile Brass	IS-320-1980 HT2, IS-6912 FHTB2 Stainless Steel IS-1570, 91, 12GRB
4.	Bolts	Carbon Steel	IS-1393-67 Class 1363-67 4-6
5.	Nuts, Nuts for Hinge Pin	Carbon Steel	Is-1363-67 Class 4 IS-1367-67
6.	Bearing Bushes	Leaded Tin Bronze	IS-318-81 LTB2 Austenic Iron IS-2749-74
7.	Body Rings	Leaded Tin Bronze	IS-318, 81 LTB2, Stainless Steel 6603-97
8.	Door Faces	Natural/Synthetic Rubber Leaded Tin Bronze LTB	IS-318 1981 LTB2
9.	Flange Jointing Material	Natural Rubber	Is-638-79 Type B
10.	Plugs for Hinge Pins, Air release	Galvanized Malleable Iron	



### **Dimensions For Reflux Valves**

SIZE	50	65	80	100	125	150	200	250	300	350	400	450	500	600
Length over Flanges	200 ± 2	240 ± 2	260 ± 2	300 ± 2	350 ± 2	400 ± 3	500 ± 3	600 ± 3	700 ± 4	800 ± 4	900 ± 5	1000 ± 5	1100 ± 6	1300 ± 6
Flange Dia	165	185	200	220	250	285	340	395	445	505	565	615	670	780
Flange Thickness	16	16	21	22	22.5	23	24.5	26	27.5	29	30	31.5	33	36
P.C.D.	125	145	160	180	210	240	295	350	400	460	515	565	620	725
No. of Holes / Dia	4x19	4x19	4x19	8x19	8x19	8x23	8x23	12x23	12x23	16x23	16x28	20x28	20x28	20x31
Hinge Pin Dia	10	10	10	12	12	16	20	22	25	25	32	32	38	38
Size of Bypass	10	10	10	10	15	15	25	25	40	40	40	50	50	65

# **Pressure Testing**

Sizes	PN Rating		ure Gauge		on (Minutes)
		Body	Seat	Body	Seat
50mm to 125mm	1.6 MPa	2.4 MPa	1.6 MPa	5	2
150 mm to 300 mm	1.0 MPa	1.5 MPa	1.0 MPa	5	2
350mm to 600mm	0.6 MPa	0.9 MPa	0.6 MPa	5	2

### Guarantee

All valves are guaranteed against design to the extent that if any defect or defects attributable to faulty workmanship found in the valves, within a period of 6 months of installation, we shall furnish free of charge at the original points of delivery, any part or parts thereof, that prove defective, provided the valves have not been misused or abused and have been installed in the service for which they were recommended, if nay valve found defective prior to placement in service, the same shall be replaced free of cost.

\*AARKO Manufacturing Company JALANDHAR - 144 004.

<sup>\*</sup> Owners and registered users of trade mark "AARKO"







CAT/SV/01-02

AARKO Cast Iron Sluice Valves are being manufactured in a modern plant fully backed with well equipped laboratory and technically trained staff. The Sluice Valves are manufactured from finest raw material available in market and as per Bureau of Indian Standard guidelines. The flanges and their dimensions and drilling are as per parts IV and VI or V of IS - 1538, unless otherwise specified by the purchaser. The valves are available from 50mm to 300mm double flanged with ISI marking in PN.-1 and PN. 1.6 pressure designation, Plain ended or Socket ended are also manufactured, All Valves are recommended for liquids at ambient temperature. All Valves are fitted with double faced cast iron wedge made in one piece. The body and wedge having each two machined facing rings securely fixed into machined recesses in the wedge and body. The Valves are so designed that it is possible to insert or remove the wedge nut without removing the valve from pipe line. The stem and wedge nut have machine cut ISO metric, Singlestart/trapeziodal threads confirming to IS-7008 (part III & IV). The Valves can also be suppled with anticlockwise operation.

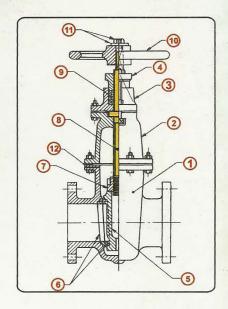
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**®** Registered Trade Mark

## **Material For Different Components Parts Of Sluice Valves**

	COMPONENTS	NO. OFF	PREFERRED MATERIAL	SPECIFICATION/GRADE
1.	Body	1	Grey Cast Iron	IS-210 FG200
2.	Bonnet/Cap/Dome	1	Grey Cast Iron	IS-210 FG200
3.	Stuffing Box (Integral with Cap upto 150mm)	1-1-	Grey Cast Iron	IS-210 FG200
4.	Gland	1	Grey Cast Iron	IS-210 FG200
5.	Wedge	_1	Grey Cast Iron	IS-210 FG200
6.	Body Seat Rings, Wedge Facing Rings	2x2	Leaded Tin Bronze	IS-318 LTB2
7.	Wedge Nut	1 1	Leaded Tin Bronze	IS-318 LTB2
8.	Stem	1.1	Stainless Steel	IS-6603
9.	Gland Packing	As per requirement	Jute and Hemp	IS-5414
10.	Hand Wheel/Cap	1.2	Grey Cast Iron	IS-210 FG200
11.	Washer & Set Screw	1x1	Carbon Steel	IS-1367
12.	Gasket	As per requirement	Rubber	IS-638 Type B



## **Dimensions Of Sluice Valves**

SI	Nominal		1	BODY		1150	STEM	WH	IEEL
No.	Size		Length over Flanges		Width	Overall Height	Dia of Stem	100 miles	ze of Wheel
		PD	ALT-I	ALT-II	Max.	Max.	Min.	PN 1.0	PN 1.6
1.	50	178	250	215	160	365	22	225	280
2.	65	190	270	230	215	380	22	225	280
3.	80	203	280	230	220	425	22	225	280
4.	100	229	300	255	250	470	27	320	360
5.	125	254	325	266	310	485	27	320	360
6.	150	267	350	280	330	595	27	320	360
7.	200	292	400	318	460	725	32	360	450
8.	250	330	450	355	495	835	36	400	640
9.	300	356	500	380	585	910	36	400	640

#### NOTES:

1. PD:- Preferred Dimensions (Short Body) 2. ALT-I:- Alternate Dimensions (Long Body) 3. ALT-II:- Alternate Dimensions (IS: 780 Pattern) 4. Tolerances on Length: (a) Upto and Including 300 = ± 2mm (b) Above 300 and Including 600mm = ± 3mm

# **Hydrostatic Test**

PN RATING	BODY	SEAT	DURATION	(Minutes)
			Body	Seat
PN 1.0	1.5 MPa	1.0 MPa	5	2
PN 1.6	2.4 MPa	1.6 MPa	5	. 2

\*AARKO Manufacturing Company ( AN ISO - 9002 COMPANY ) INDIA

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