LEHRY VALVES
Where flow and pressure meets quality
SINCE-1950

NON SLAM CHECK VALVE

LEHRY offers disc check valve (wafer type) especially for chemical, Food processing, Pharmaceuticals, Pulp and Paper, Textiles, Power generation, Refrigeration & Air Conditioning etc. The valves are used in Oil lines, Processing line, Hot and cold water systems, steam and condensates, Gas lines etc.

Silent Features

- ❖ Disc Check Valve is an advanced design which gives full flow and occupies very less space than other type of Non Return Valve. This also available with IBR Certificate in Form I!! C.
- ❖ Disc Check Valves are simple to fit between two pipe flanges.
- ❖ Spring loaded disc to prevent reverse flow in pipe lines.
- ❖ Stronger, lighter and smaller than conventional swing check valves, hence less expensive to install and maintain.
- ❖ Compact Design of valves flexibly accommodates various types of flange selection.
- ❖ The valves can be fitted in any plane/direction in pipelines.
- ❖ Available in 15mm to 100mm sizes.
- ❖ Extremely Low operating pressure. Self-Centering type design.
- ❖ Zero leakage for soft seated valves.
- ❖ Testing : As per API 598

Material of Construction

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Body Construction	ASTM A 351 Gr. CF8 / CF8M
	ASTM A 216 Gr. WCB.
Disc	AISI 304 or AISI 316 (Bar Stock).
Spring	Standard
Spring Retainer	AISI 304 or AISI 316.
Disc Seat	Metal to Metal EPDM/Nitrile - Soft Seated for water and PTFE / viton - soft seated for oil & gases.
Pressure	Maximum Operating Pressure 20 Bar
	BS 10 Table D,E & H (65NB & 80NB will not be fitted between 'E' flanges)
Flange Standard	DIN: Pn6, 10, 16, 25, 40.
	JIS 5, 10, 16, 20 (40NB, 50NB, 80NB & 100NB will not be fitted between JIS 5 flanges)

Construction : -

1) Body :
The Single Piece Investment cast body is precision machined and designed to withstand specified pressures. The lugs in the body act as a guide for the smooth movement of the disc in operation. The cam shape on the outer diameter of the body facilitates self-centering of the valve during installation.

2) Disc :
Precision machined and lapped (in case of metal seating) discs are designed to withstand the operating pressures & resist wear & tear in operation.

3) Springs :
The specially designed springs are of Stainless Steel and ensure positive closing even at low back pressure in any plane.

Operations:
The Non Slam Check Valves get opened by the pressure of the fluid and get closed by the spring as soon as the flow ceases.

To Install:
1. Clean the surfaces
2. Place the bolts on lower half of the flange
3. Check the flow direction
4. Place the Valve between the two flanges to rest on the bolts
5. Centering is achieved by means of the cam shape of the body diameter.
6. Place gaskets between the valve and flanges on the both sides.
7. Place the bolts on the upper half of the flange
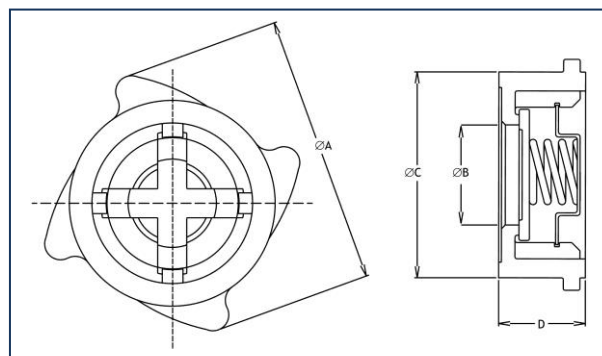8. Tighten the bolts to secure the valve in position.
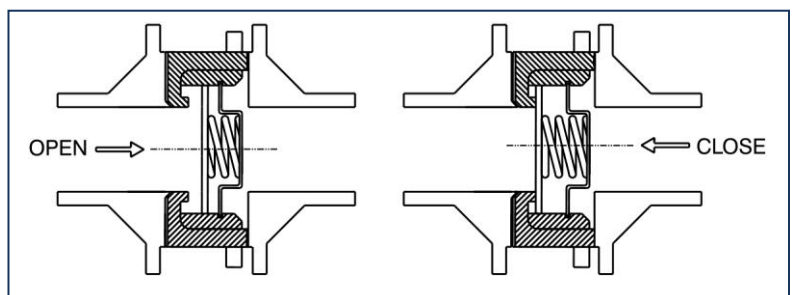
Standards:
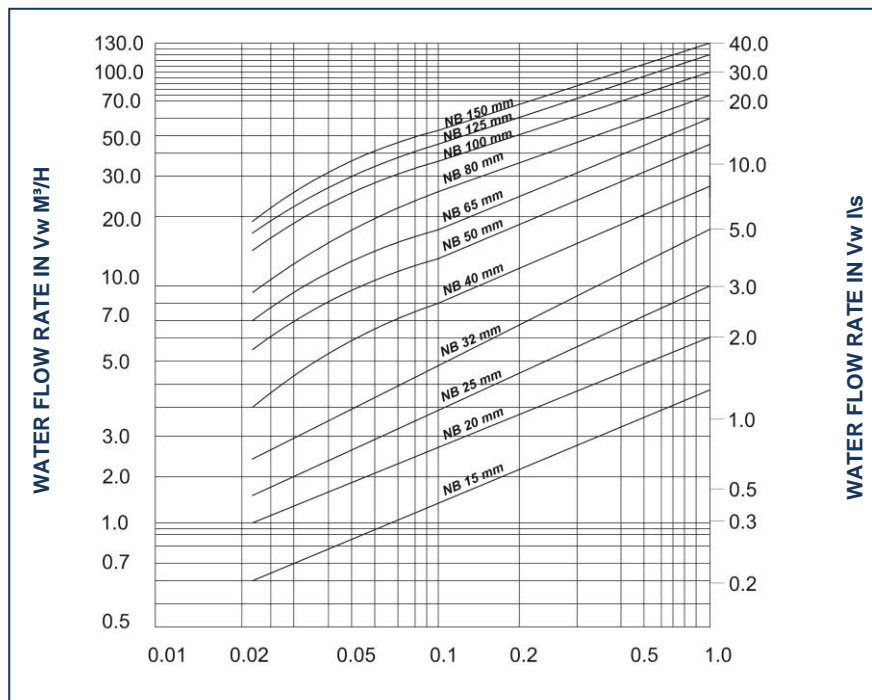Designed and Manufactured in accordance with BS 7438

Dimensions (All Dimensions are in mm)

Size	15	20	25	32	40	50	65	80	100	125	150
A	60	70	80	91	101	115	142	154	184	194	230
B	15	20	25	32	40	50	65	80	100	125	150
C	38	47	55	67	76	93	109	128	148	172	202
D	16	20	22	28	32	40	46	50	60	70	74

Pressure Loss Diagram

Pressure Loss in **Bar**

At 20°C

$$Vw = \frac{\sqrt{Q}}{1000} \times V$$

Vw = Equivalent Water Volume flow in l/s or m³/h

Q = Density of fluid Kg/m³

V = Volume of fluid l/s or m³/h

NON SLAM CHECK VALVE		
Size	Cracking Pressure mbar ↑	Cracking Pressure mbar →
40	17.5	1.05
50	12.4	0.75
65	8.8	0.53
80	10.4	0.62
100	9.6	0.58
125	10.5	0.63
150	10.8	0.65

Opening Pressure in mbar.

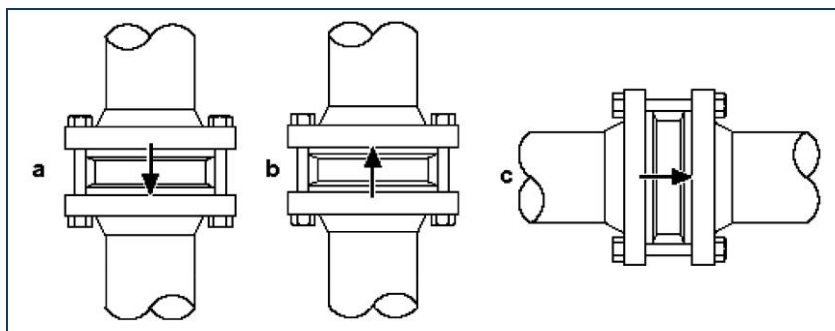Differential pressures with zero flow for standard and high temperature springs.

Flow Direction
A - Down ward,   B - Up ward,   C – Horizontal

Direction	DN15	DN20	DN25	DN40	DN50	DN65	DN80	DN100	DN125	DN150
A	20	20	20	20	20	20	20	20	21	22
B	25	25	25	28	29	30	31	33	34	34
C	22.5	22.5	22.5	24	24.5	25.5	25.5	26.5	27.5	28.5