CAST IRON

SWING CHECK VALVE

INTRODUCTION

Leader Swing Check Valves are designed with high sensitivity to pressure so that the valve closes immediately before significant fluid starts flowing backward. Fluid reversing backward causes damage to equipment like boilers or pumps. The valve is activated by the flowing material in the pipeline. The pressure of the fluid passing through the system opens the valve, while any reversal of flow will close the valve. Closure is accomplished by the weight of the check mechanism, by back pressure. Entirely automatic in action, depending upon differential pressure and velocity of flow within the line to perform their functions of opening and closing.

PRINCIPAL FEATURES

- Design Std.: DIN EN 12334.
- Bolted Cover, Swing Disc design.
- Metal to Metal seating.
- Gun Metal Body & Disc rings.
- Design Prohibits Galling or Scoring of Seating Surfaces.
- One-Piece Disc Construction Designed to Withstand Severe Service Conditions.
- Large Bolted-On Cover Provides Easy Access to Interior for Routine Maintenance.
- Rigid & Sturdy design.
- Long service life as wear is minimal which makes it highly reliable.
- Valve is mechanically automatic and thus it does not need an actuator or valve operator.
- A horizontal or vertical duct can be used, easy to install.
- The valve must be installed in the direction of the flow arrow.
- Flanged ends as per ASME B16.1 CL-125 (FF).
- Valves are available with IBR Certification upto size 200mm.
- Widely applied for low-pressure and ambient-temperature utility services such as water supply, power plants, gas supply, district heating piping, irrigation projects, air conditioning systems, as well as food processing industry, chemical and petrochemical industry, Boiler industry, pharmaceutical and powder industry to prevent the back flow.

END CONNECTION

Flanged ends as per ASME B16.1 CL-125 F.F.
Flange drilling as per other standards also available upon request.

UTILISATION & SERVICE

Best suited for potable water, treated fresh water, neutral liquids Steam & some gases.

WORKING PRESSURE

Maximum Working Pressure: 12.54 Bar.
See Pressure / Temperature Diagram.

TEMPERATURE LIMITS

Maximum Working temperature: 220ºC.
See Pressure / Temperature Diagram.

Item Code:	CI0017
Pressure Rating:	CL-125
Testing Standard:	Mfg. Standard
Size Range:	25mm to 600mm
Product Standard:	DIN EN 12334

SUITABLE FOR

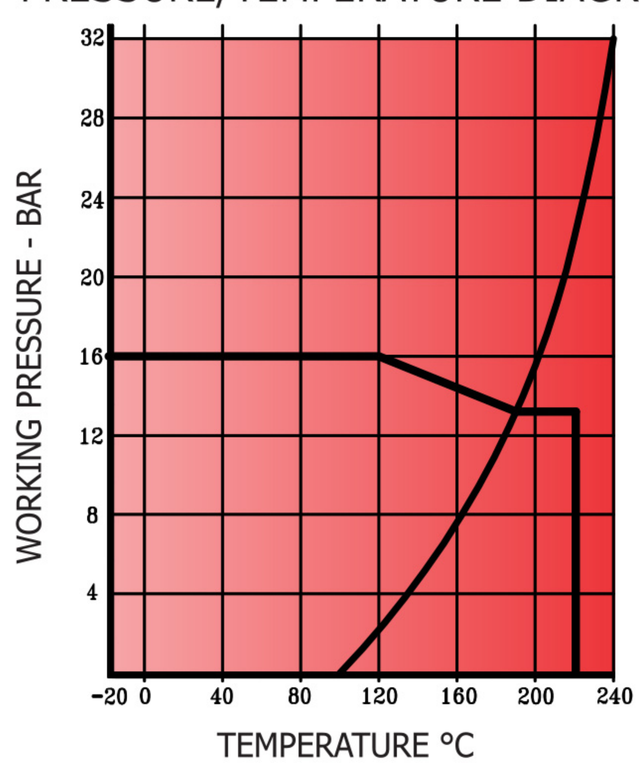
Water	Oil	Air (#)	Gases	Steam
✓	✓	✓	✓	✓

(#) Recommended with soft seating for tight sealing

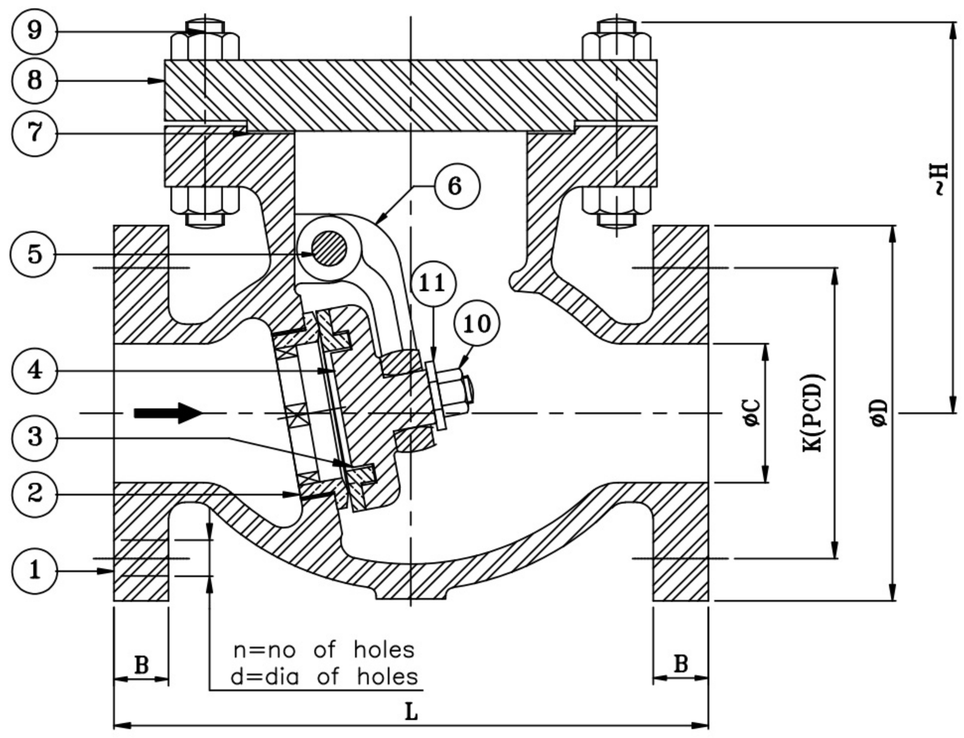
TEST PRESSURE (Hydrostatic)

Rating	CL-125
Body (Hyd.)	24.1 Bar
Seat (Hyd.)	13.8 Bar

PRESSURE/TEMPERATURE DIAGRAM



Note : The above data is subject to change without notice due to our continuing product improvement program.



MATERIAL SPECIFICATION

P.No.	NAME OF PART	MATERIAL	SPECIFICATION
1	BODY	CAST IRON	IS 210 Gr. FG200
2	BODY SEAT RING	G.M. / S.S.	BSEN 1982 CC491K / 13% Cr. STEEL
3	DISC FACING RING	G.M. / S.S.	BSEN 1982 CC491K / 13% Cr. STEEL
4	DISC	CAST IRON	IS 210 Gr. FG200
5	HINGE	C.C.S. / CAST IRON	ASTM A216 Gr. WCB / FG 200
6	HINGE PIN	HT BRASS / S.S.	BSEN 1982 CC491K / 13% Cr. STEEL
7	GASKET	C.N.A.F.	BS 1832
8	COVER	CAST IRON	IS 210 Gr. FG200
9	STUDS & NUTS	CARBON STEEL	BS 916
10	NUTS	HT BRASS	BS 2872 Gr. CZ114
11	WASHER	BRASS / G.M.	BS 2872 / BSEN1982 CC491K

DIMENSIONAL DATA

SIZE (mm)	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600
L	$152^{\pm1.6}$	$180^{\pm1.6}$	$165^{\pm1.6}$	$203^{\pm1.6}$	$216^{\pm1.6}$	$241^{\pm1.6}$	$292^{\pm1.6}$	$330^{\pm1.6}$	$356^{\pm1.6}$	$495^{\pm1.6}$	$622^{\pm1.6}$	$698^{\pm3.2}$	$787^{\pm3.2}$	$914^{\pm3.2}$	$965^{\pm3.2}$	$1067^{\pm3.2}$	$1295^{\pm3.2}$
~H	95	112	110	115	135	135	190	192	200	265	335	365	415	470	495	600	680
ØC	25.4	32	38	51	63.5	76	101.5	127	152	203	254	305	355.5	406.5	457	508	600
ØD	110	115	127	152	178	191	229	254	279	343	406	483	533	597	635	698.5	812.8
B	11.1	12.7	14.3	15.9	17.5	19	23.8	23.8	25.4	28.6	30.2	31.8	34.9	36.5	39.7	43	47.8
K	79	88.9	98	121	140	152	191	216	241	299	362	432	476	540	578	635	749.3
n	4	4	4	4	4	4	8	8	8	8	12	12	12	16	16	20	20
d	15.9	15.9	15.9	19	19	19	19	22.2	22.2	22.2	25.4	25.4	28.6	28.6	31.8	31.8	35

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