DUCTILE IRON

DUAL PLATE CHECK VALVE

INTRODUCTION

Leader Ductile Dual Plate Check Valves are automatic, quick-acting valve designed to prevent the reversal of flow in a piping system. The two valve discs, eccentrically embedded, have springs which force the valve to close in case no pressure is available. The pressure of the fluid passing through the system opens the valve discs, while any reversal of flow will close the valve discs. Closure is accomplished by the spring action and by back pressure.

PRINCIPAL FEATURES

- Design Standard: API 594.
- Retainer-less Construction ensures that they do not drill entirely into the valve body to allow the hinge-pin and the stop-pin to be fitted with a dual-plate check valve. The feature ensures high integrity & tamper-proof design, ensures no leakage from the body.
- Body & Disc castings made of superior Ductile Iron ASTM A395 grade to ensure additional strength.
- Wafer type design, to take lesser space than the Reflux / Swing Check Valve.
- Being light in weight, has more rugged construction than the standard Swing Type Check Valve, which needs expensive foundation and special supports.
- Less wear and tear of seat surface due to resilient integrally moulded body seating face.
- Stopper pin prevents the discs from coming into contact with each other and thus prevents disc damage. The stopper pin also prevents spring failure by ensuring that the discs don't travel beyond the full-open position.
- Low cracking pressure design (operable at low pressures).
- Independent spring design feature also available which gives less scrubbing of disc & independents movement of discs.
- Inherently non-slamming, no external devices / attachment required.
- Water hammering effect is minimized in this design, since the closing of valve does not depend upon any back pressure or flow.
- Either vertically (only upwards) or horizontally installed.
- Lifting eyebolt option is provided.

END CONNECTION

Wafer type Suitable for clamping between flanges
as per ASME B16.5 Class -150.
Suitability for insertion between other flange standards also available upon request.

UTILISATION & SERVICE

Best suited for water, HVAC, fire-fighting, compressed air application.

WORKING PRESSURE & TEMPERATURE LIMITS

Maximum Working Pressure: 20 Bar.
Maximum Working temperature: 120ºC.
See Pressure / Temperature Diagram.

Item Code:	DI0083,	DI083B
Disc:	Ductile Iron,	SS(CF8)
Pressure Rating:	PN-20	
Testing Standard:	API 598	
Size Range:	50mm to 600mm	

- **Product Standard:** API 594

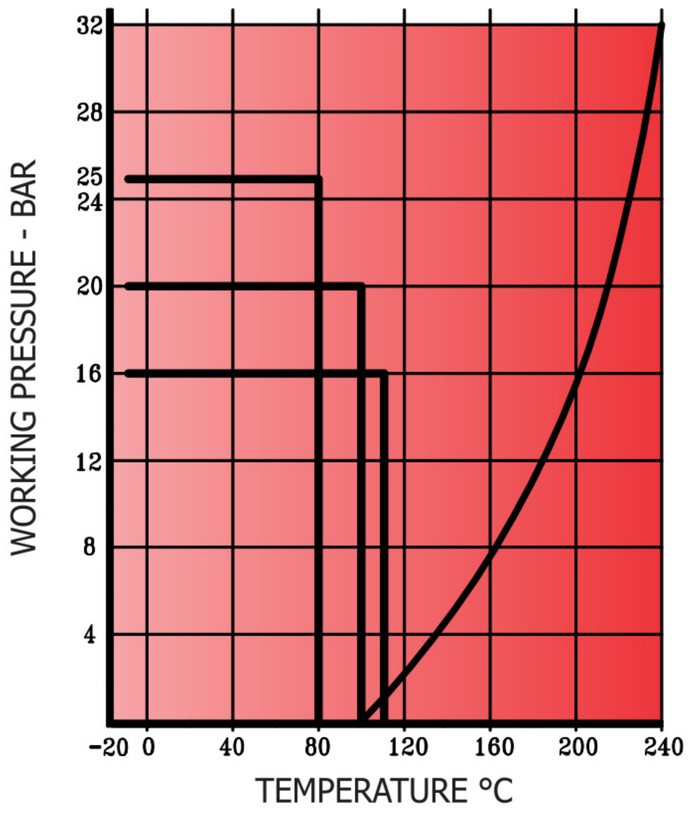
SUITABLE FOR

Water	Oil	Air	Gases	Steam
✓		✓		

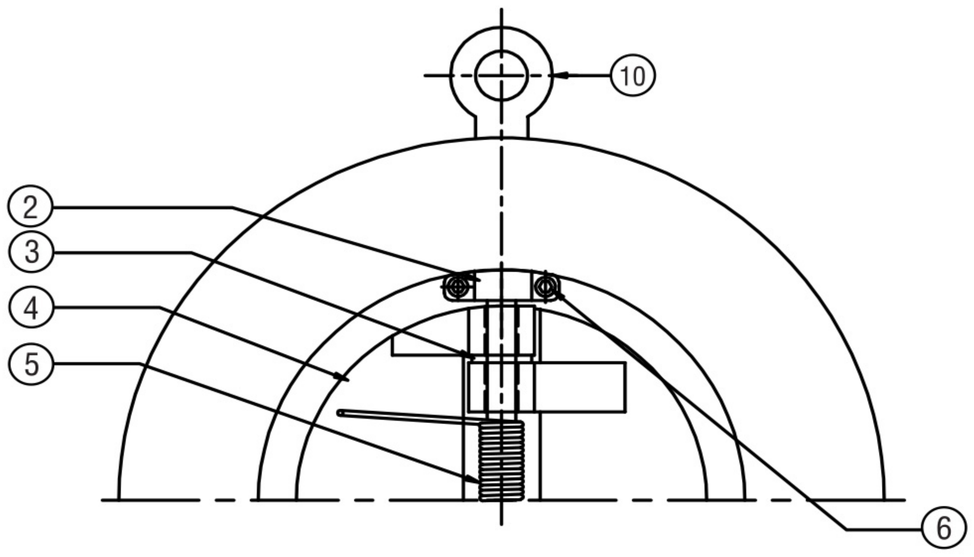
TEST PRESSURE (Hydrostatic)

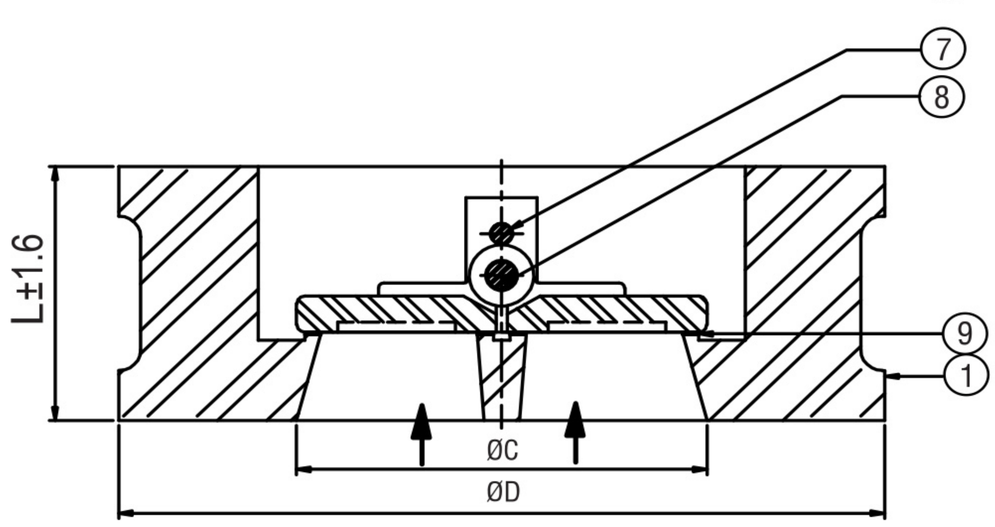
Rating	PN-20
Body (Hyd.)	30 Bar
Seat (Hyd.)	22 Bar

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	DUCTILE IRON	ASTM A395
2	DISC HOLDING PLATE	DUCTILE IRON	ASTM A395
3	BUSH	STAINLESS STEEL	ASTM A276 TYPE 410
4	DISC	D.I. / S.S.	ASTM A395 / ASTM A351 Gr. CF8
5	SPRING	STAINLESS STEEL	TYPE 316
6	L-KEY BOLT	STAINLESS STEEL	TYPE 304
7	STOPPER PIN	STAINLESS STEEL	ASTM A276 TYPE 410
8	DISC HOLDER PIN	STAINLESS STEEL	ASTM A276 TYPE 410
9	SEAT	EPDM FACING	
10	EYE BOLT	CARBON STEEL	ANY GRADE

DIMENSIONAL DATA CLASS

SIZE (mm)	50	65	80	100	125	150	200	250	300	350	400	450	500	600
$L^{\pm 2}$	54	60	67	67	83	95	127	140	$181^{\pm 3.2}$	184	191	203	213	222
ØC	50	65	75.2	99	125	152.4	200	250	300	350	400	450	500	600
ØD	101	119	130	171	192	216	273	334	400	446	510	540	602	713

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