

Disc Check Valve

PrimeDisc SL | CSL

The Disc Check Valve PrimeDisc SL | CSL has been consequently designed for energy efficiency.

Disc Check Valve PrimeDisc SL | CSL



Benefits

The new **PrimeDisc SL | CSL** outstands with remarkable benefits for system integrators and endusers:

IECO ENERGY-SAVING

The **minimal pressure loss** reduces the **energy consumption** up to 50 % and therefore provides an excellent economical advantage.

MULTI FLANGE FITTING

The multiform of the body is designed for an **easy and error free** mounting between flanges of the **most common international pressure rates** like EN PN 10-40, ASME Class 150/300 & JIS 10K

SECURE

Thanks to abstinence of small parts the valve is **poor of dead leg, maintenance free and long-lasting**. The **secure design** reacts very sensibly on flow changes which provides a positive effect on water hammers.

Technical Data

Nominal diameters:
DN 15-300 / ½" up to 12"

Flange connections:

- EN 1092-1 PN 10-40
- ASME Class 150/300
- JIS 10K
- other connections on request

Maximal admissible working pressure:

- 52 bar
- up to 160 bar possible

Temperature range:

- -200° C up to +300° C

Face-to-face length:

- DN 15-100 EN 558-2, Raw 52
- DN 125-300 EN 558-2, Raw 14

Materials:

- DN 15-100: 1.4408/1.4404/1.4401
- DN 125-300: 1.4404/1.4401

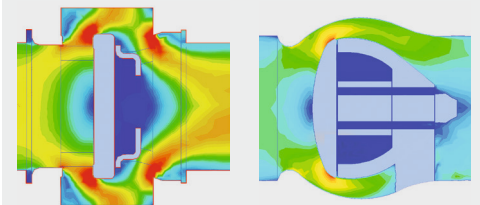
Pressure tests:

- EN 12266-1, leakage rate C for metal sealing,
- EN 122661-1, leakage rate A for soft sealings

Nominal dia.	Flowrate & pressure loss		
DN [mm/inch]	Kv ¹ [m³/h]	Zeta	
15	½"	5,5	2,7
20	¾"	9,2	3,0
25	1"	12,6	3,9
32	1¼"	21,2	3,7
40	1½"	31,0	4,2
50	2"	48,3	4,3
65	2½"	69,8	5,9
80	3"	110,9	5,3
100	4"	164,6	5,9
125	5"	347,0	3,2
150	6"	474,6	3,6
200	8"	814,0	3,9
250	10"	1149,9	4,7
300	12"	1733,5	4,3

¹acc. to DIN EN 60534-2-3

Fluid Flow Comparison



Conventional PrimeDisc SL | CSL

Case Study DN 50

1. Flowrate & Pressure Loss

	Conventional	PrimeDisc SL CSL
Kv [m³/h] / Zeta	41,3 / 5,9	48,3 / 4,3

2. Working Conditions

Medium	Water
Flow velocity	4 m/s
Energy costs	0,15 € / kWh
Operating time	220 day/year 16 hour/day

3. Results

	Conventional	PrimeDisc SL CSL
Energy consumption [kWh / year]	1313	937
Energy costs	197 €	141 €
Yearly savings		56 €

4. Conclusion

The **Disc Check Valve PrimeDisc SL | CSL** reduces substantially the energy consumption and lowers the running costs accordingly.

