

DCV 930 - Disco check valves (stainless steel) DN 15 - 100

Description

Disco check valves are suitable for liquids and gases in the industrial range as well as in systems where much higher demands are made on the material. Not suitable for media with solid components.

Product features

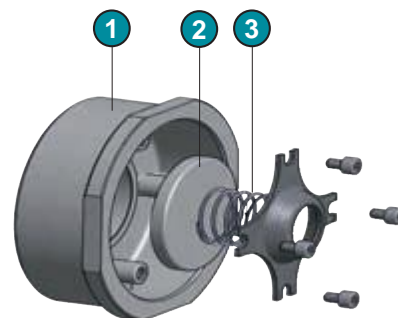
- Max. working pressure 40 bar (stainless steel)
- Rating PN 6 to 40 other ratings on request
- Face to face dimension DIN EN 558-1, series 49
- Temperature range up to 300°C according to materials
- Flange DIN EN 1092-1 B1 / ASME B16.5



The disco check valves 930 meet the safety requirements of the pressure Equipments Directive 97/23/EC (PED) appendix 1 for fluids of the groups 1 and 2.

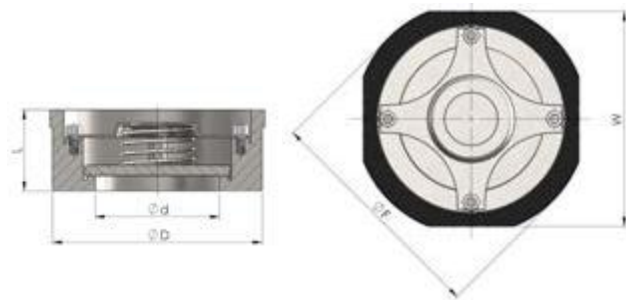
Construction

| | |
|---|--------|
| 1 | Body |
| 2 | Disc |
| 3 | Spring |



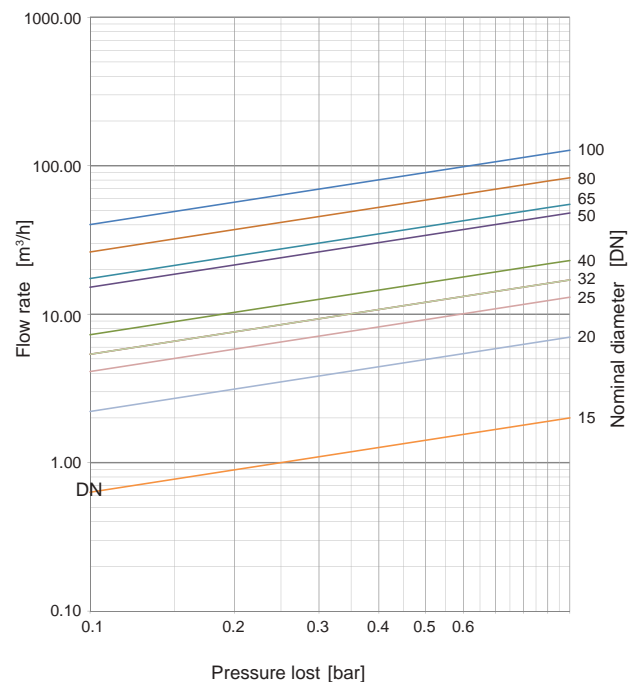
Dimensions

| | Ød | ØD | ØF | L | W | kg |
|-----|----|-----|-----|----|-----|------|
| 15 | 15 | 43 | 53 | 16 | 43 | 0.10 |
| 20 | 20 | 53 | 63 | 19 | 53 | 0.16 |
| 25 | 25 | 63 | 73 | 22 | 63 | 0.28 |
| 32 | 30 | 75 | 84 | 28 | 75 | 0.52 |
| 40 | 38 | 86 | 94 | 32 | 86 | 0.70 |
| 50 | 47 | 95 | 107 | 40 | 95 | 1.10 |
| 65 | 62 | 115 | 126 | 46 | 115 | 1.58 |
| 80 | 77 | 131 | 145 | 50 | 131 | 1.78 |
| 100 | 96 | 150 | 164 | 60 | 150 | 3.30 |



| DN [mm] | kv [m³/h] | opening pressure [mbar] | | | without spring |
|------------|--------------|-------------------------|----|----|----------------|
| | | ↔ | ↑ | ↓ | |
| 15 | 2 | 25 | 30 | 20 | 2.5 |
| 20 | 7 | 25 | 30 | 20 | 2.5 |
| 25 | 13 | 25 | 30 | 20 | 3 |
| 32 | 17 | 25 | 30 | 20 | 3.5 |
| 40 | 23 | 25 | 30 | 20 | 3.5 |
| 50 | 48 | 25 | 30 | 20 | 4 |
| 65 | 55 | 25 | 30 | 20 | k.W. |
| 80 | 83 | 25 | 30 | 20 | k.W. |
| 100 | 127 | 25 | 30 | 20 | k.W. |

Pressure loss diagram



Type code

| | | | | | | | | | | |
|-----|-----|---|---|---|---|-----|---|-----|---|---|
| DCV | 100 | . | 6 | 6 | . | 4C0 | . | 4K0 | . | T |
| ① | ② | | ③ | ④ | | ⑤ | | ⑥ | | ⑦ |

| | | |
|--------------------|---------|---|
| ① Type | DCV 930 | disco check valves |
| ② Nominal Diameter | 015-100 | mm |
| ③ working pressure | 6 | 40 bar |
| ④ Rating | 6 | PN6/10/16/25/40 |
| ⑤ Body | 4C0 | Stainless steel 1.4408 (A 351 CF8M) |
| ⑥ Disc | 4K0 | Stainless steel 1.4436 (AISI 316), Spring Stainless steel 1.4436 (AISI 316) |
| ⑦ Seal | N | NBR -10°C ÷ 90°C |
| | E | EPDM -10°C ÷ 120°C |
| | V | FKM -10°C ÷ 200°C |
| | T | PTFE -10°C ÷ 200°C |
| | M | metal seated (without O-ring) -10°C ÷ 200°C |
| ⑧ Options | FF | free of oil and grease |
| | KTW | Seal with KTW approval |
| | FDA | Seal with FDA approval |

Other executions on request !

Operating instructions

Appropriate use in accordance to designed capabilities:

DCV 930 disco check valves are designed to block media on one side of the pipe within allowable pressure and temperature limits and to be installed in a pipe system only. They have only to be used on fluids, to which the material and the seals are resistant. They are not suitable for fluids with solid content.

Storage:

Disco check valves have to be transported in their original packaging and to be stored in a clean location. They include sealing elements consisting of organic material, that reacts to environmental effects. Therefore, they have to be stored in a place, which has also to be kept as cool, dry and dark as possible. The front and back sides of the disco check valves must not be mechanically damaged.

Installation:

- Possible damages to the disco check valves and o-rings have to be checked prior to installation. Check if the valve can be moved. Damaged parts must not be installed.
- Make sure that only those disco check valves are installed, that meet the operational requirements regarding pressure category, chemical resistance, connection and dimensions.
- Make sure to install a minimum of 5 x nominal diameter of straight pipeline upstream and downstream the valve.
- Do not install the valves directly onto a pump flange.
- Avoid pulsation and pressure impact.
- Watch flow direction (see arrow on the plate) !



Special risks:

Before the swing check valve is being removed, pressure has to be completely taken off the plant to avoid media escaping from the pipe. Fluid being left in the pipe must be drained off. Fluid, which has remained in the valve and comes out during removal, is to be collected. If hazardous fluids or gases are left in the valves, the safety measurements required must be taken.

