

## Non-return Flap

**Description:** FEROPLAST NK Non-return flap is irreversible (repulsive) valve which allows the fluid flow in the pipeline in one direction which is determined by the project, but prevents the flow in the opposite, illegal direction. It works automatically without auxiliary devices and mechanisms as soon as the flow stops in a certain direction, the shutter (flap) goes down onto the seat and thus closes and prevents flow in the opposite direction. Starting the closure (of flap) from the open position to the closed one is carried out by the weight of the shutter and the seal in a closed position improves the pressure of the fluid in the opposite direction.

Non-return flap is envisaged for mounting between the flanges with standard dimensions directly below the circle of screws, which ensures a central position of flap. During installation, it is not necessary to set the seal on the flange because the body of flap have embedded o-rings, which are used as seals of the compound. Built length (width) of the flap is minimal so it does not affect the length of the pipeline.

During installation, one should take into consideration that the damper is opened by the intended direction of fluid flow.

In addition, it is necessary to provide a free part of the pipeline with a length of at least one size DN on the opening side of the shutter.

**Advantages of construction:** The body of non-return flap and the shutter (flap) are made by machining of structural steel. The outer diameter of the flap corresponds to the bottom diameter of the screw holes of standard flanges. Diameter shutter (flap) is adapted to the internal diameter of standard pipes with appropriate wall thickness. Due to the eccentricity of the center of the closure, the flap, in the open position, creates minimal resistance to flow whereas the tilt flap allows its safe landing in case of interruption of the flow. Sealing o-rings are built into recess in the shape of dovetail, which prevents them from falling out during operation and installation.

Screw with eyelet on top of the non-return flap facilitates its installation while also determines the proper mounting position (vertical position) for horizontal installation. The outer diameter of the o-rings on the body has been set for each standard diameter of sealing surface type B for PN 10 and PN 16.

### Working conditions:

- Installation:  
  
connecting to the standard flanges of pipeline,
- Nominal sizes:  
  
DN 20 ... DN 500,

## Feroplast

(Srpski) Proizvodnja i promet procesne opreme  
<http://feroplast.com/en>

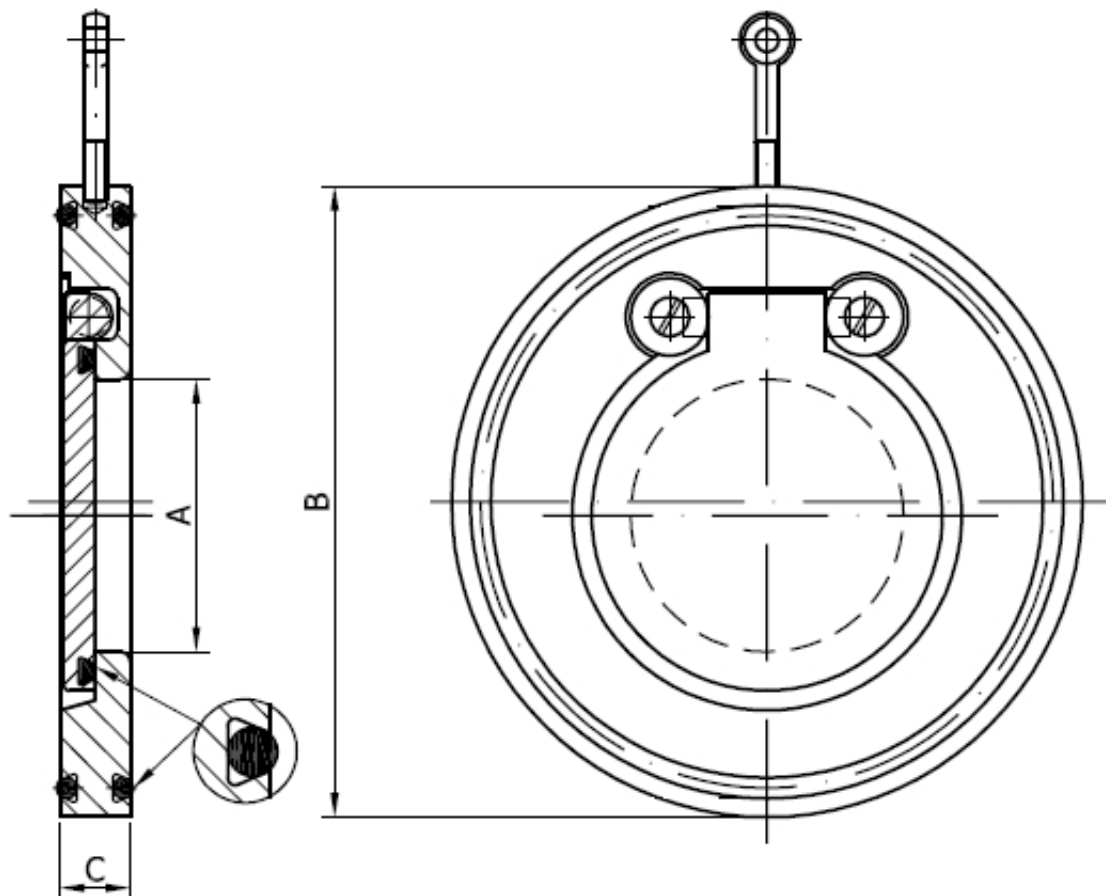
---

- Nominal pressure:  
  
PN 10 and PN 16,
- Temperature:  
  
for the EPDM seal, -30°C ... +140°C
- Operating fluid:  
  
water or other fluid not aggressive to carbon steel and EPDM,
- Installation:  
  
installation in horizontal pipelines with the shaft shutter in the upper position, in vertical pipelines in the way that the shutter opens in the flow direction.

**Testing:** Each non-return flap are final tested according to standard EN 12266-1, P12 penetration level A (sealing seats).

**Materials:** In the basic version, the body of non-return valves and the shutter (shutter) are made of carbon steel, shaft shutter is made of stainless steel. Seal on closure and seals on the body for connection to the flanges (o-rings within the profiled cam opening) are made of EPDM elastomers. All metal parts are protected against corrosion by powder coating, with a layer thickness of at least 250 microns.

**On-demand:** All metal parts may be made of other material, seals (o-rings) may be made of other types of elastomers.



**Basic dimensions**

dimensions in mm

<b>DN</b>	<b>A</b>	<b>B</b>	<b>C</b>
20	18	70	15
25	20	80	15
40	22	95	15
50	34	109	15
65	40	129	15
80	54	144	15
100	68	164	18
125	90	195	18
150	108	220	20
200	150	275	22
250	190	330	26
300	230	380	32
350	270	440	38
400	323	488	44
500	455	595	56

*The manufacturer has the right to make changes, please contact us for a quote!*