

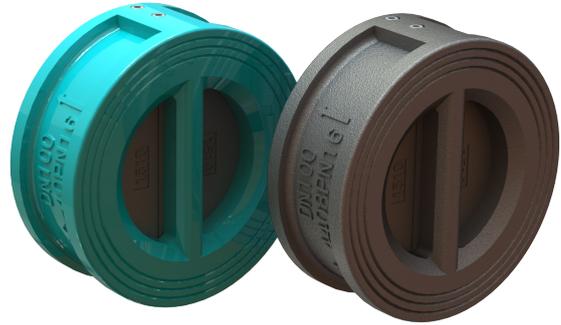
NEPTUNIA N1V - DUO check valve DN50 - 300

Description

DUO check valve, for mounting directly between flanges according to DIN. Maintenance not required. For liquids and gases in general services and water treatment. Not suitable for media with solid components.

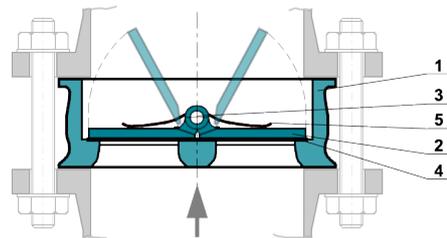
Product features

- Body construction Wafer
- Max. working pressure 16 bar
- Rating PN10 / PN16, other ratings on request
- Face to face dimension according to DIN EN 558-1
- Temperature range -10°C to +120°C

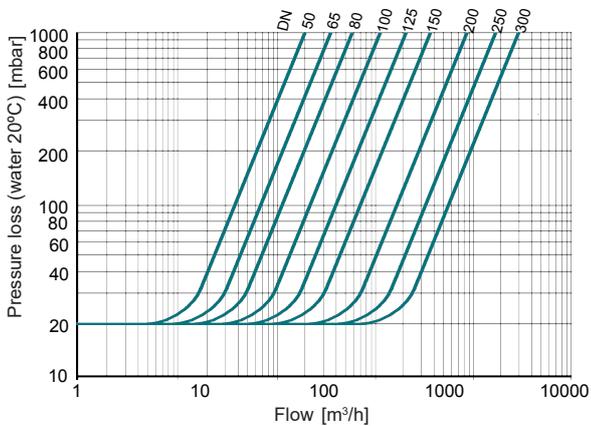


Construction

1	Body
2	Plate
3	Stem
4	Seals
5	Spring



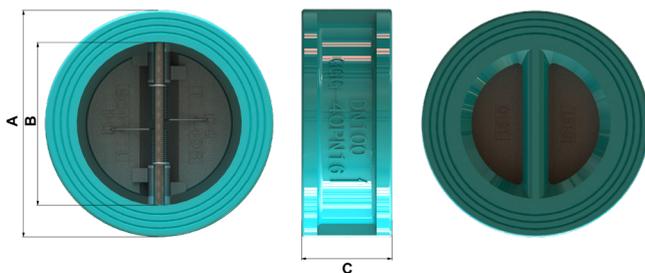
Hydraulic characteristics



DN [mm]	Kv-value [m³/h]	Min. opening pressure [mbar]
50	36	20
65	64	20
80	123	20
100	208	20
125	353	20
150	670	20
200	1.467	20
250	2.494	20
300	3.351	20

$$c_v = K_v \times 1,16$$

Dimensions



DN [mm]	A PN10/16	B	C	Weight [kg]
50	107	65	43	1,5
65	127	80	46	2,3
80	142	94	64	3,6
100	162	117	64	4,4
125	192	145	70	6,0
150	218	170	76	8,6
200	273	224	89	15
250	328	265	114	24
300	378	310	114	35



Type code

N1V	100	. 3	3 -	2AE	. 4C0	. E
1	2	3	4	5	6	7

1 Type	N1V	DUO check valve - wafer type	DN50-300
2 Nominal diameter	50 - 300	mm	
3 Working pressure	3	16 bar	
4 Rating	3	PN 10 and PN 16	
5 Body	2AE	GGG40, Epoxy (Resicoat®) coated	
	4C0	Stainless steel 1.4408	
6 Plate	2AN	GGG40 Nickel coated	
	4C0	Stainless steel 1.4408	
7 Seals	E	EPDM (WRAS approved)	

WRAS approved valid for seal

Other executions see Neptunia N1C or on request!

Operating instructions

Appropriate use in accordance to designed capabilities:

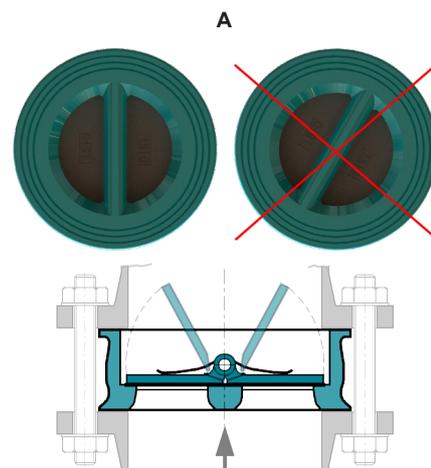
NEPTUNIA N1V check valves are designed to block media on one side of the pipe within allowable pressure and temperature limits and to be installed in a pipe system only. **They may be used only with media, which the material and the seals are resistant to.** They are not suitable for media with solid components.

Storage:

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

Installation:

- Possible damages to the check valve and O-rings are to be checked prior to installation. Check if the plates can be moved. Damaged parts must not be installed.
- Make sure that only those check valves are being 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 in front of and behind the check valve.
- Do not install the valves directly onto a pump flange.
- Avoid pulsation and pressure impact.
- In a horizontal pipe, the check valve must always be installed with its hinge pin in the vertical position (A).
- Watch flow direction (see arrow on the plate) !
- The check valves are put in their central position according to the outer diameter of the case and the flange screw inner side.
- Tighten the flange screws crosswise.
- After the installation is finished, check the tightness of the connections by a pressure check.



Special risks:

Before the 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.