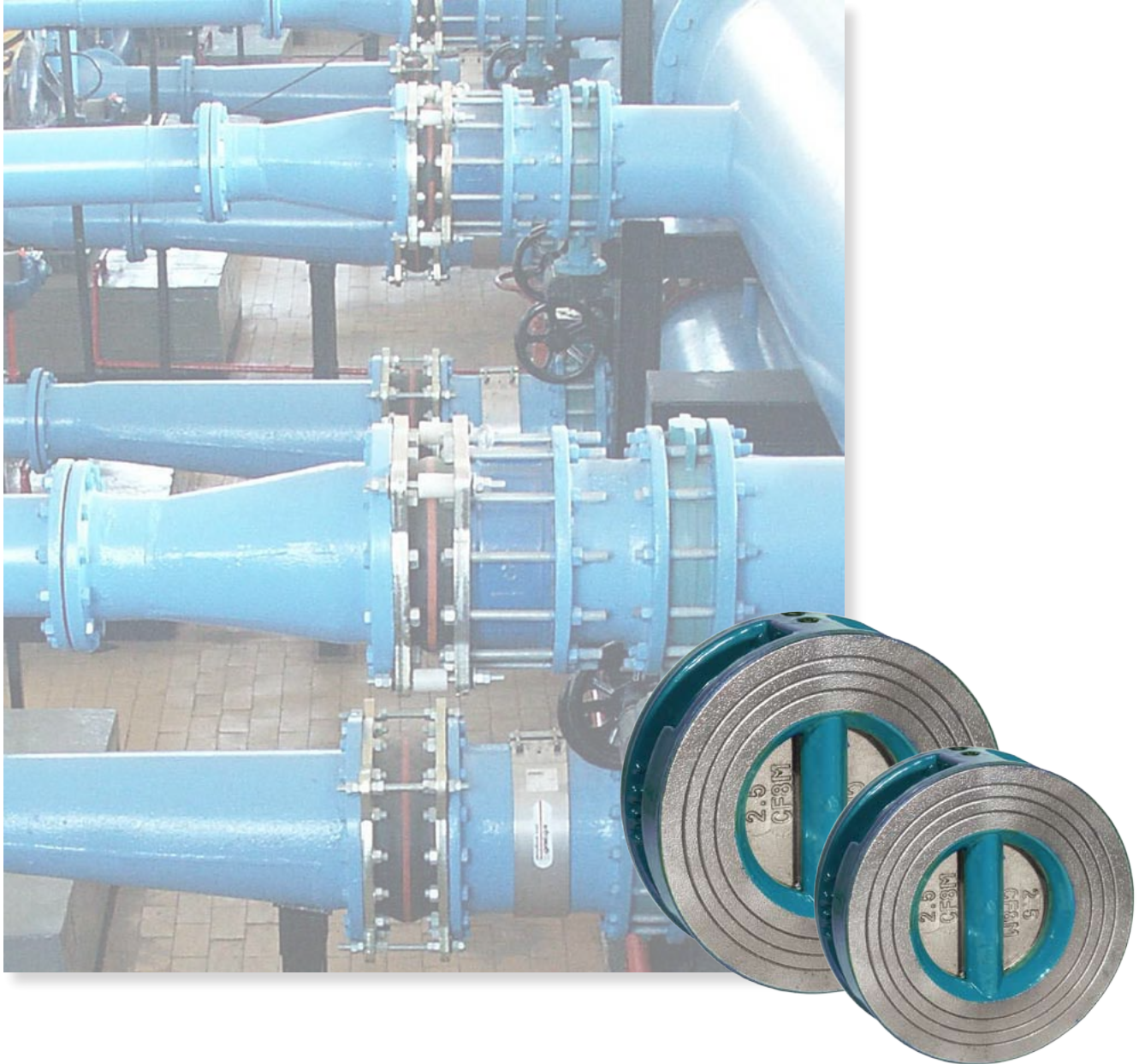




InterApp **IA**<sup>®</sup>



**DUO check valve**

**NEPTUNIA N1C**



**FLUIDS UNDER CONTROL**

**InterApp AG**  
Grundstrasse 24  
CH-6343 Rotkreuz  
Switzerland

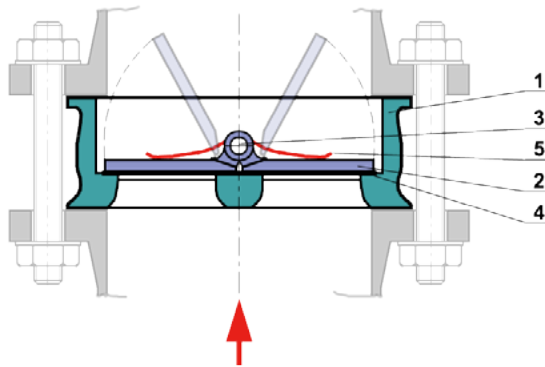
Tel. +41 (0)41 798 22 33  
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<http://www.interapp.net>  
[info@ch.interapp.net](mailto:info@ch.interapp.net)

## NEPTUNIA N1C DUO check valve DN50 - 600

### ● Characteristics:

<b>NEPTUNIA N1C</b>	DUO check valve, maintenance not required
<b>Application fields</b>	For liquids in the industrial range, general services, water treatment, ... Not suitable for media with solid components.
<b>Face to face dimension</b>	according to DIN EN 558-1
<b>Max. working pressure</b>	16 bar
<b>Rating</b>	PN10, PN16, other ratings on request
<b>Temperature range</b>	-10°C ÷ 90°C with Nitrile (NBR) O-ring -10°C ÷ 120°C with EPDM O-ring, -10°C ÷ 150°C with Viton® (FPM) O-ring,

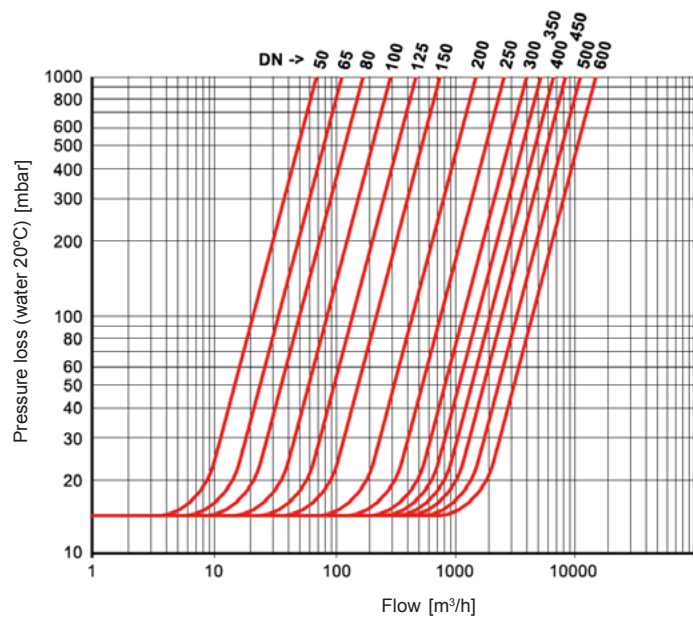
### ● Construction:



1	Body
2	Plate
3	Stem
4	Seals
5	Spring

### ● Hydraulic characteristics:

DN [mm]	Kv-value [m³/h]	min. opening pressure [mbar]
50	55	15
65	85	15
80	145	15
100	290	15
125	460	15
150	800	15
200	1.550	10
250	2.880	10
300	4.100	10
350	5.350	10
400	8.250	10
450	10.550	10
500	14.500	10
600	24.000	10



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

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## NEPTUNIA N1C DUO check valve DN50 - 600

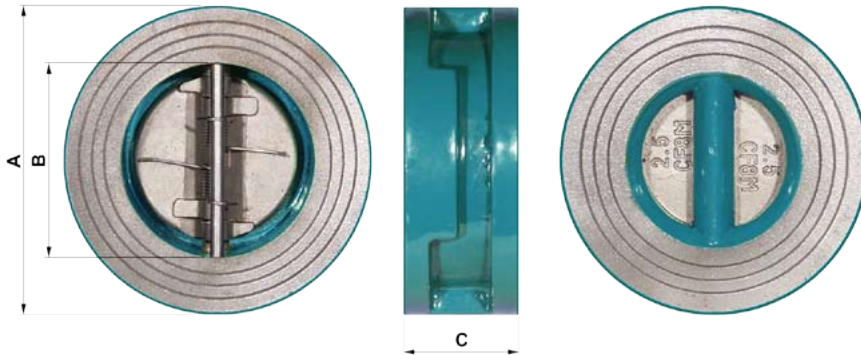
• Code key:

**N1C** **100** . **33** - **4C0** . **4C0** . **N**  
 ① ② ③④ ⑤ ⑥ ⑦

① Type	<b>N1C</b>	DUO check valve - wafer type	DN50-600
② Nominal diameter	<b>050-600</b> mm		
③ Working pressure	<b>2</b>	10 bar	
	<b>3</b>	16 bar	
④ Rating	<b>2</b>	PN10	
	<b>3</b>	PN16	
		andere Normen auf Anfrage	
⑤ Body	<b>2AE</b>	GGG40, Epoxy coated	
	<b>4C0</b>	Stainless steel 1.4408	
⑥ Plate	<b>2AN</b>	GGG40, nickled	
	<b>5D0</b>	C 954 Alubronze	
	<b>4C0</b>	Stainless steel 1.4408	
⑦ O-Ring	<b>N</b>	Nitrile (NBR)	
	<b>E</b>	EPDM	
	<b>V</b>	Viton® (FPM)	

Other executions on request !

• Dimensions:



DN	A PN10	A PN16	B	C	[kg]
50	107	107	65	43	1,5
65	127	127	80	46	2,4
80	142	142	94	64	3,6
100	162	162	117	64	5,7
125	192	192	145	70	7,3
150	218	218	170	76	9,0
200	273	273	224	89	17
250	328	328	265	114	26
300	378	384	310	114	42
350	438	444	360	127	55
400	489	495	410	140	75
450	539	555	450	152	101
500	594	617	505	152	111
600	695	734	624	178	172

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## NEPTUNIA N1C DUO check valve DN50 - 600

### ● Operating instructions:

#### Appropriate use in accordance to designed capabilities:

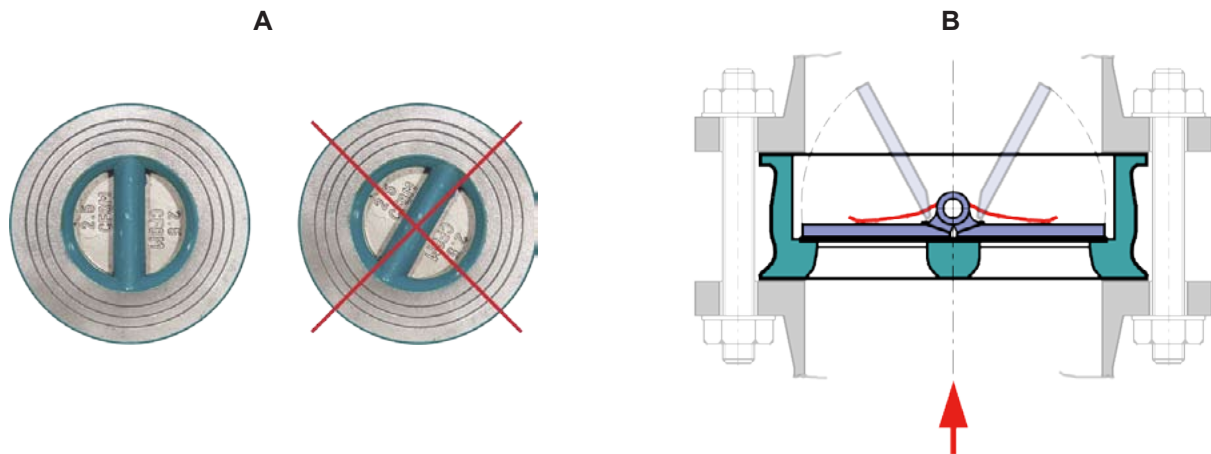
NEPTUNIA N1C swing check valves are designed to block media on one side of the pipe within allowable pressure and temperature limits and to be installed in a pipe system only. They may be used only with media, which the material and the seals are resistant to. They are not suitable for media with solid components.

#### Storage:

Swing 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 swing 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 swing 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).
- Vertical throughput is allowable only if the valve can open at the top (B).
- 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 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.