CLAPET CHECK VALVE, RUBBER SEAL





## Description

The clapet check valves with N5 rubber-metal seal are single-direction devices which prevent the return of pressurised fluid.

They are suitable for use in domestic water systems, raised water systems, fire protection, central heating and boiler room systems, solar plants, and water systems for industrial and agricultural applications in general.

The internal hydraulic seal is ensured by the forces exercised by the mass of a tilting shutter and by the pressure of the liquid above a gasket which activates the seal, even when subject to minimal back pressure.

Due to the fact that these valves function via the gravitational force that acts on the tilting shutter (clapet or swing), there is no universal guideline as to where these should be positioned. The advantage of these valves is the low incidence of losses of pressure due to the rounded shape of the valve body and the large passage section which is obtained via the oscillation of the shutter; these elements also mean that they are extremely quiet.

# Versions and product codes

Product code	Size	
N5Y002	3/8"	
N5Y003	1/2"	
N5Y004	3/4"	
N5Y005	1"	
N5Y006	1 1/4"	
N5Y007	1 1/2"	
N5Y008	2"	
N5Y009	2 1/2"	
N5Y010	3"	
N5Y011	4"	

#### Technical data

- Compatible fluids: water for heating systems, domestic hot water, water containing glycol (max. 30 % glycol)
- Connections: female threaded ISO 228
- Temperature range: 5÷95 °C (110 °C for occasional peaks)
- Max. working pressure: 16 bar (from 3/8" to 3"); 10 bar (4")
- Opening pressure: 0,05 bar

#### Materials

- Valve body: brass UNI EN 12165 CW617N (3/8"÷1") brass UNI EN 1982 - CB753S (1 1/4"÷4")
- Cap: brass UNI EN 12165 CW617N
- O-ring and gasket: NBR
- Shutter: brass UNI EN 12165 CW617N

#### Losses of pressure

LOSSES OF PIESSUIC			
Size	Kv		
3/8"	2,9		
1/2″	6,5		
3/4"	10,5		
1″	17,8		
1 1/4"	19,8		

Size	Kv	
1 1/2"	26,7	
2"	42,8	
2 1/2"	61,4	
3″	103	
4"	336	

### Installation

The clapet check valves can be installed horizontally or vertically, respecting the flow direction indicated by the arrow stamped on the valve body. In the horizontal position, the valve must be installed with the inspection cap facing upwards; otherwise the valve cannot function. In the vertical position, the valve only operates if the flow direction is upwards. The valves are fitted onto the piping via threaded attachments, according to normal hydraulic practice.



# Maintenance

Check the valve periodically, in accordance with the frequency of use and the working conditions. Where there are losses linked to issues with the gasket seal, these may be caused by deposits or foreign bodies. In such cases, the inspection cap positioned on the upper part of the valve can be removed, so that the state of the shutter can be checked and the gasket can be cleaned, removing impurities with compressed air or mechanically.

This operation can be carried out having previously emptied the section of the system affected.

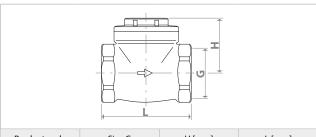
# **B**OILER ROOM COMPONENTS

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CLAPET CHECK VALVE, RUBBER SEAL



### **Dimensions**



Product code	Size G	H [mm]	L [mm]
N5Y002	3/8"	46	47
N5Y003	1/2"	46	47
N5Y004	3/4"	51	53
N5Y005	1"	61	63
N5Y006	1 1/4"	73	74
N5Y007	1 1/2"	85	87
N5Y008	2"	94	97
N5Y009	2 1/2"	107	118
N5Y010	3"	130	135
N5Y011	4"	159	164

## **Product specifications**

## N5

Clapet check valve, with rubber seal. Compatible with water for heating systems, domestic hot water, water containing glycol (max. 30 % glycol). Female threaded connections ISO 228. Valve body in brass UNI EN 12165 - CW617N (3/8"÷1") brass UNI EN 1982 CB753S (1 1/4"÷4"). Cap in brass UNI EN 12165 CW617N. O-ring and gasket in NBR. Shutter in brass UNI EN 12165 CW617N. Temperature range: 5÷95 °C (110 °C for occasional peaks). Max. working pressure: 16 bar (from 3/8" to 3"); 10 bar (4"). Opening pressure: 0,05 bar.