

# 418V

Non-return valves with ball  
System B

## Technical Data Sheet



## Description

The non-return valves with ball 418V consists of a self-cleaning ball lifted by the fluid and guided to a lateral seat, completely out of the way. This system provides a full bore, even with loaded fluids, without any risk of blockage.

- Vertical ascending and horizontal position (position the ball housing above the axis of the pipe)
- Minimum head loss
- Silent, robust
- Non incrustating materials
- Sealing guaranteed by the coating of the ball



### 418V

Non-return valves with ball - System B

DN	PN	PFA in bar	PS in bar				Cat.	Ref.	Weight Kg
			L1	L2	G1	G2			
2	50	10/16	10	10	10	10	I	<b>149B3140V</b>	5,5
2 1/2	65	10/16	10	10	10	10	I	<b>149B3141V</b>	9,1
3	80	10/16	10	10	10	10	I	<b>149B3142V</b>	13,3
4	100	10/16	10	10	10	10	I	<b>149B3143V</b>	20,9
5	125	10/16	10	10	0,5	10	I	<b>149B3144V</b>	27,5
6	150	10/16	10	10	0,5	10	I	<b>149B3145V</b>	35,7
8	200	10	10	10	0,5	10	I	<b>149B3146V</b>	63,7

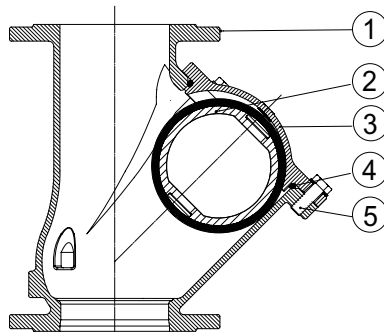
#### Important notice :

The indicated pressure for the different categories of fluids (L1/L2/G1/G2) is under no condition a guarantee of use. Therefore, it is essential to validate the use of products under given operating conditions.

#### Technical features

Operating temperature	-10 °C to 100 °C
Permissible operating pressure (PFA) in water	See table above
Maximum permissible pressure (PS) other mediums	See table above
Connection	Flanges drilled PN (see table)
Mediums	Waste water , viscous liquids, loaded liquids

#### Nomenclature and materials



N°	Description	Materials	EURO	ANSI
1	Body	Ductile iron / Epoxy	EN-GJS-400.15	ASTM A 536 60-40-18
2	Ball	DN 50 to 100	Aluminium / FKM	
		Others DN	Cast iron / FKM	
3	Cover	Ductile iron / Epoxy	EN-GJS-400.15	ASTM A 536 60-40-18
4	Seal	FKM		
5	Screw-washer	Stainless steel	X5Cr-Ni18-10	AISI 304

## Approvals



### International construction Standards :

Directive 2014/68/UE  
CE conformity regulation 305/2011/UE Standard EN12050-4  
Flange drilling according to EN1092-2  
Length according to EN558 series 48

## Application

Waste water, viscous and loaded liquids, purification of very aggressive liquids.

## Installation

### Installation :

Before putting valve into operation, check that:

- the working conditions are compatible with the details given on the identification plate, the instruction notice and the manufacturer's detail,
- the valve works effectively when tried (carry out a few opening and closing operations of the closing system),
- the valve is free-pollution inside.

On a new installation or after maintenance, the circuit must be rinsed with the valve completely open in order to remove solid matter which may damage the internal parts of the valve.

### Commissioning :

The installation should be put under pressure progressively to avoid damage which might occur to internal components.

Make sure that when flow stops the valve maintains pressure well and that there is no water-hammer which might damage the valve or installation.

If there is water-hammer, an anti-water hammer system must be added to the installation.

During a prolonged stoppage, a change in the state of the fluid may result in damage when the installation is brought back into service (solidification...).

Establish an adequate procedure program for cleaning the system.

## Maintenance

### • Removing :

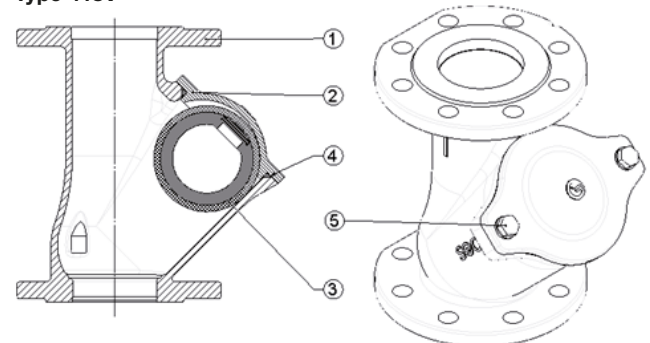
1. Unscrew the support screw assembly (N°5)
2. Remove the cover (N°2)
3. Remove the O-ring (N°4)
4. Tip over the body (N°1) for remove the ball (N°3)

### • Reassembly :

Before reassembling the valve, check the condition of the seal. If necessary, clean and grease it by using appropriate grease.

1. Place the ball (N°3) in the body (N°1)
2. Put in place the O-ring (N°4) on the cover (N°2)
3. Put in place the cover (N°2) on the body (N°1)
4. Tighten the screw assembly (N°5) to the contact and then :
  - a. Tighten to the couple of 35 Nm for the FIG.418 up to DN100 included
  - b. Tighten with a suitable tool for the others references

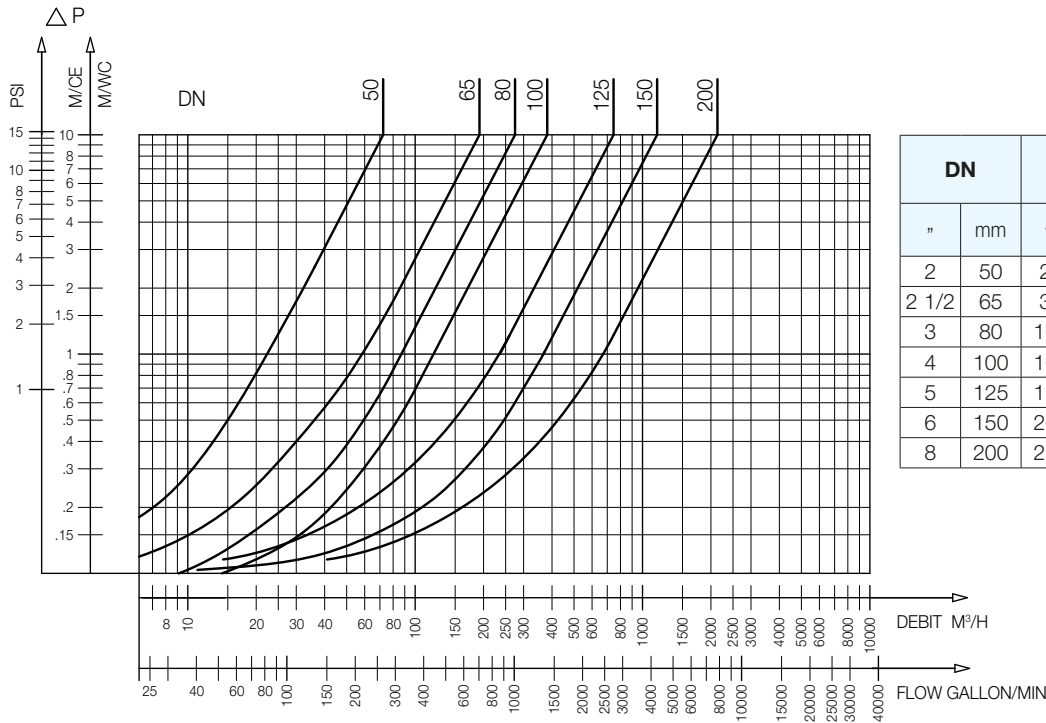
Type 418V



# Operation

## Direction for use :

- Solid line: Valve completely open

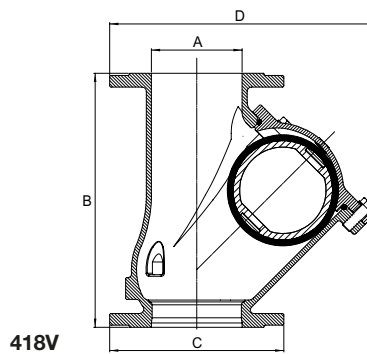


DN		Pression d'ouverture en mm/CE		Kv	ζ
"	mm	↑	↔		
2	50	25	Near to 0	72,3	1,90
2 1/2	65	30		192,4	0,77
3	80	160		275,8	0,86
4	100	160		381,0	1,10
5	125	170		746,4	0,70
6	150	200		1161,0	0,60
8	200	250		2136,3	0,56

418V - Headloss chart

# Sizing

A	B	C	D
mm	mm	mm	mm
50	200	165	173
65	240	185	214
80	260	200	252
100	300	220	289
125	350	250	368
150	400	285	424
200	500	340	509



418V

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365 rue du Lieutenant Putier • 71530 Virey-Le-Grand • France  
 Tel. +33 03 85 97 42 00 • Fax +33 03 85 97 42 42  
[contact@wattswater.com](mailto:contact@wattswater.com) • [www.socla.com](http://www.socla.com)  
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