

418D

Non-return ball valve

B system

Technical Data Sheet



Description

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

- Vertical ascending and horizontal operation (position of the ball above the axis of the pipe)
- Minimum head loss
- Silent, robust
- Non incrustating materials
- Sealing guaranteed by the coating of the ball
- Degassing system by lifting of the ball (under a max pressure of 1 bar)



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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	149B3140D	5,5
2 1/2	65	10/16	10	10	10	10	I	149B3141D	9,1
3	80	10/16	10	10	10	10	I	149B3142D	13,3
4	100	10/16	10	10	10	10	I	149B3143D	20,9
5	125	10/16	10	10	0,5	10	I	149B3144D	27,5
6	150	10/16	10	10	0,5	10	I	149B3145D	35,7
8	200	10	10	10	0,5	10	I	149B3146D	63,7

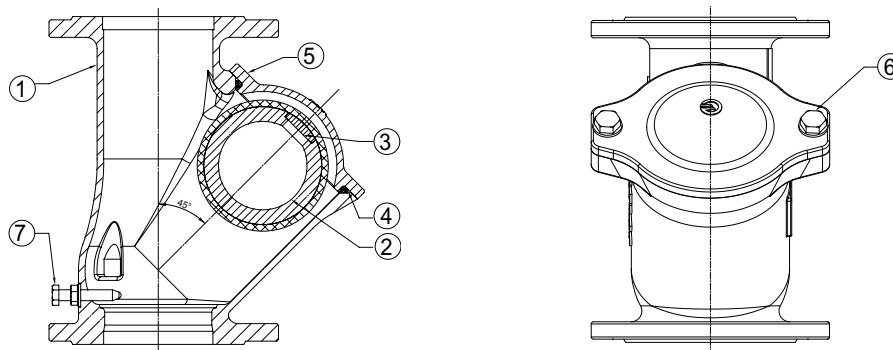
Important notice :

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. The operating instructions are available on our website www.socla.com or by requesting from our sales department.

Technical features

Operating temperature	-10 °C to 80 °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	Wasted water, loaded liquids

Nomenclature and materials



N°	Description	Materials	EURO	ANSI
1	Body	Epoxy coated cast iron	EN-GJS-400.15	ASTM A 536 60-40-18
2	Ball	DN 50 to 100	FKM coated aluminium	
		DN 125 to 200	FKM coated cast iron	
3	Plug	Steel	E295	
4	Seal	NBR		
5	Cover	Epoxy coated cast iron	EN-GJS-400.15	ASTM A 536 60-40-18
6	Screw-washer (cover)	Stainless steel	X5Cr-Ni18-10	AISI 304
7	Bleeding screw	Stainless steel	X5Cr-Ni18-10	AISI 304

Approvals



International construction Standards :

Directive 2014/68/UE
Regulation 305/2011/UE, EN12050-4
Flange drilling according to EN 1092-2
Length according to EN558 48 serie

Application

Degassing, wasted water, loaded 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 :

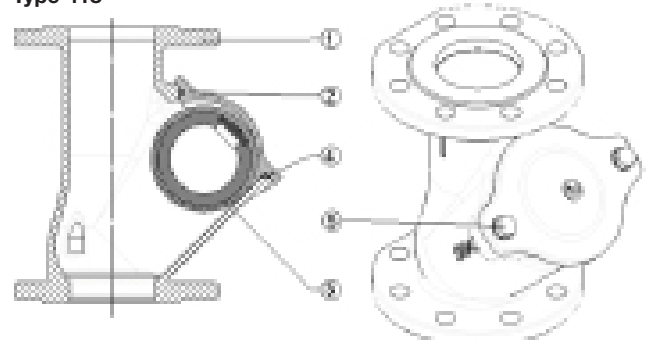
1. Unscrew the support screw assembly (N°5)
2. Remove the cover (N°2)
3. Remove the O-ring (N°4)
4. Tip over the body (N°1) for remove the ball (N°3)

• 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

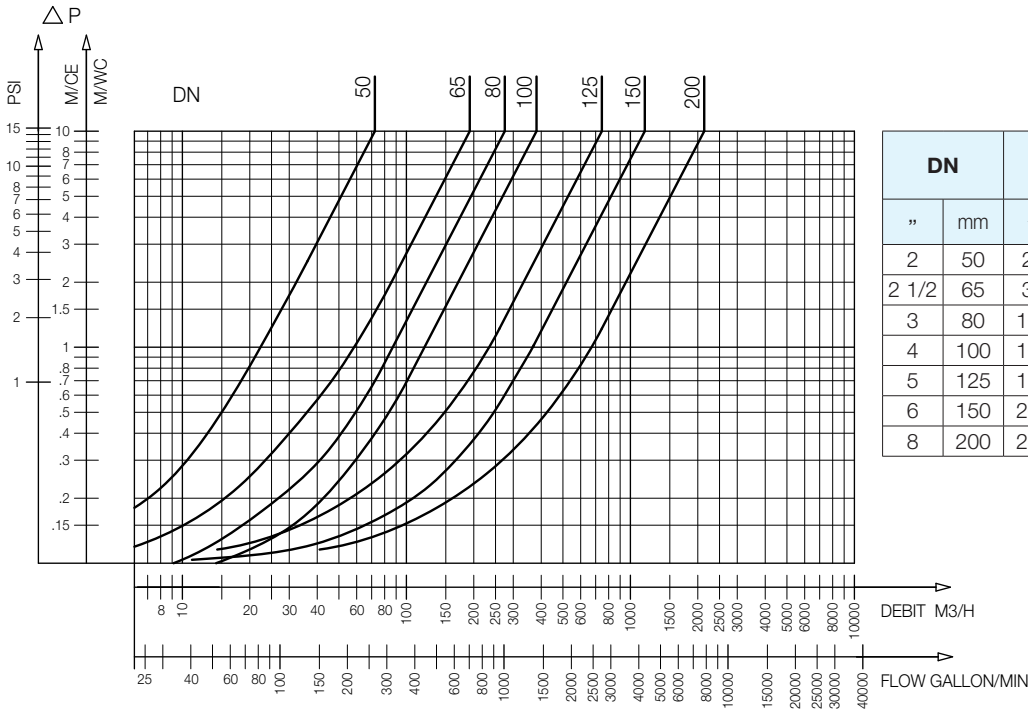
Type 418



Operation

Direction for use :

- Solid line: Valve completely open

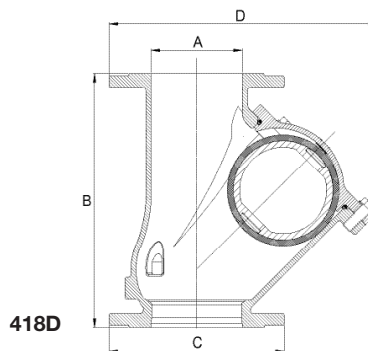


DN		Opening pressure in mm/CE		Kv	ζ
"	mm	↑	↔	m ³ /H	
2	50	25	Near to 0	72,3	1,90
2 1/2	65	30		192,4	0,77
3	80	160		275,8	0,86
4	100	160		381,0	1,10
5	125	170		746,4	0,70
6	150	200		1161,0	0,60
8	200	250		2136,3	0,56

418D - 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



418D

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