

402 X

Non-return axial guided valve
02 System

Technical Data Sheet



A non-return valve is compatible with many types of fluids and can be adapted to a wide range of installations. However, each of these installations comes with their own particular constraints : mechanical, hydraulic, physical or chemical. The O2 system offers the best compromise between hydraulic performance, ruggedness, sealing-tightness and cost effectiveness with any kind of liquids (subject to a validation of our recommendation service).

Our valves meet the requirements of the Pressure Equipment Directive 2014/68/UE. This range extends from 40 to 500 mm. By its technology, it operates in any position for a lot of applications. It's compact and it doesn't generate hammering.

- **Hydraulic shape** means very little energy loss
- **Stainless steel spring** allowing system to function in any position
- Excellent sealing tightness ensured by a FKM seal
- **Passage for cables** of submersible pumps
- **Bronze guide ring** enables a better movement of the closing system and preventing premature wear
- 2 undrilled bosses



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Axial guided non-return valve - O2 System

DN	PN	PFA in bar	PS in bar				Cat.	Ref.	Weight Kg
			L1	L2	G1	G2			
1 1/2	40	10/16	16	16	16	16	I	149F016092	4,2
2	50	10/16	16	16	16	16	I	149B95002	5,8
2 1/2	65	10/16	16	16	16	15	I	149B97270	8,1
3	80	10/16	16	16	16	16	II	149B94084	10,2
4	100	10/16	16	16	16	16	II	149F016328	14,5
5	125	10/16	16	16	16	16	II	149B14977	24
6	150	10/16	16	16	16	16	II	149F017723	32
8	200	10	10	10	10	10	II	149B24101	53
10	250	10	10	10	10	10	II	149F020389	94
12	300	10	10	10	10	10	II	149B24682	140
14	350	10	10	10	10	10	II	149B97276	225
16	400	10	10	10	10	0,5	II	149B97277	312
20	500	10	10	10	10	0,5	II	(consult us)	520

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. In addition, the operating instructions are available on our web site www.socla.com or by requesting from our sales department.

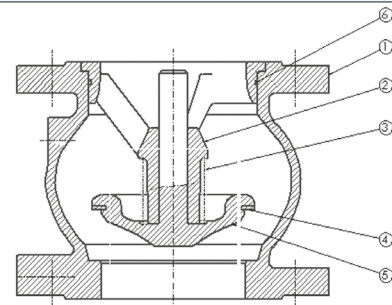
Technical features

Operating temperature	-20 °C to 140 °C
Permissible operating pressure (PFA) in water	See table above (other, consult us)
Maximum permissible pressure (PS) other mediums	See table above (other, consult us)
Connection	Flanges drilled, PN see table (other, consult us)
Mediums	Gas, corrosive mediums, consult us

*Optional : inox 316L, Super Duplex,... Consult us

Nomenclature and materials

N°	Description	Materials	EURO	ANSI
1	Body	Stainless steel	EN10213 GX5CrNi19-10+AT	AISI 304
2	Guide	Stainless steel	EN10213 GX5CrNi19-10+AT	AISI 304
3	Spring	Stainless steel	EN10088-3 X2CrNiMo17-12-2	AISI 316Z
4	Seal	FKM		
5	Closing system	Stainless steel	EN10213 GX5CrNi19-10+AT	AISI 304
6	Seal	FKM		



Approvals



International construction Standards :

Directive 2014/68/UE

Flange drilling according to EN1092-2

Application

Chemical applications, corrosive products, hydrocarbons, industry.
Other, consult us

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.

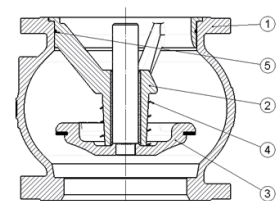
During a prolonged stoppage, a change in the state of the fluid may result in damage when the installation is brought back into service (solidification...).

Establish an adequate procedure program for cleaning the system.

Maintenance

• Removing :

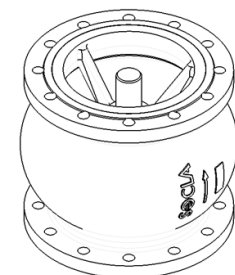
1. Remove guide assembly (N°2)
2. Remove the o-ring seal (N°5) from its groove (DN40 up to DN250)
3. Remove the spring (N°4)
4. Remove all the closing system (N°3)
5. Remove the flat seal



• Reassembly :

Make sure that the seal is in a good condition before reassembly the valve.
Clean and lubricate it if necessary with a suitable product or change.

1. Put all the closing system (N°3) into the casing (N°1)
2. Insert the spring (N°4)
3. Put the o-ring seal (N°5) in its groove (guide)
4. Insert the guide assembly (N°2). This step may require to use a press.

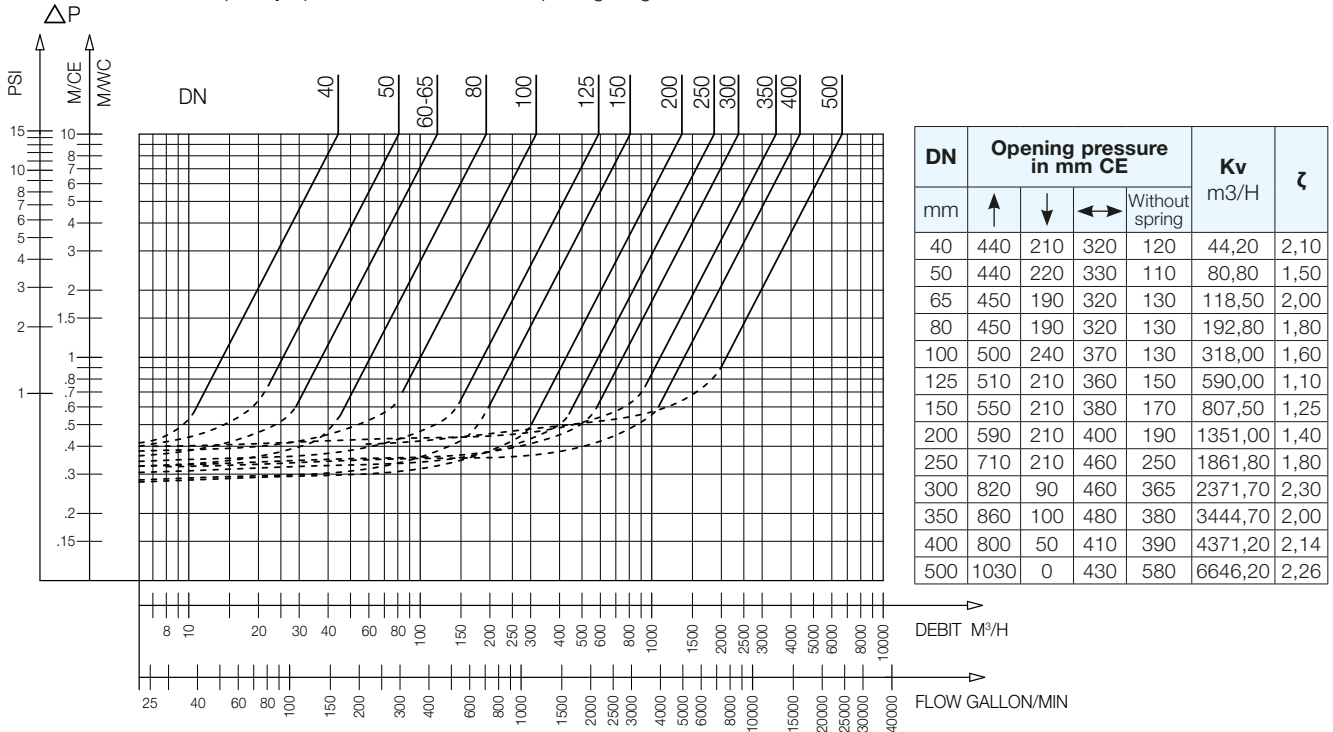


Once the reassembly done, test the device in order to check its sealing.

Operation

Direction for use :

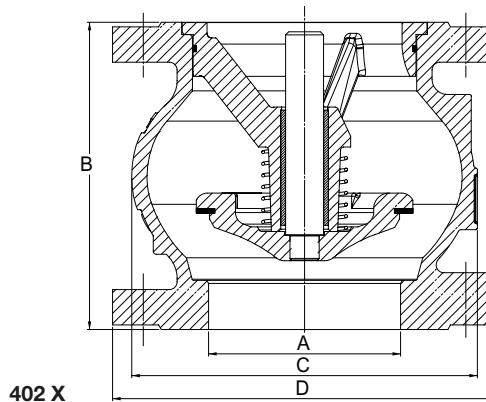
- Solid line : Valve completely open
- Dotted line : opening stage of valve



402 X - Headloss chart

Sizing

	A	B	C	D
"	mm	mm	mm	mm
1 1/2	40	85	80	150
2	50	100	97	165
2 1/2	65	120	125	185
3	80	140	150	200
4	100	170	187	220
5	125	200	220	250
6	150	230	250	285
8	200	289	340	340
10	250	354	420	405
12	300	396	490	460
14	350	473	586	533
16	400	560	680	597
20	500	750	880	670



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The descriptions and photographs contained in this product specification sheet are supplied by way of information only and are not binding.

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