

402

Axial guided non-return valves
System 02

Technical Data Sheet



Description

The O2 system offers the best compromise between hydraulic performance, ruggedness, sealing-tightness and price for use with clear liquids : pumping, supply, distribution, general circuits. This range extends from 40 to 500 mm for both non-return valves and foot valves, thereby suiting a large number of applications, especially where there may be a risk of water hammer.

- **Internal and external Epoxy coating** of 250µm minimum increasing resistance to corrosion
- **Hydraulic shape** means very little energy loss
- Excellent sealingtightness ensured by **seal EPDM**
- **Bronze guide ring** enables a better movement of the closing system and preventing premature wear
- **Stainless steel spring** allowing system to function in any position
- **Bosses drilled** on request for by-pass or controlled evacuation
- **Passage for cables** of submersible pumps



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 web site www.socla.com or by requesting from our sales department.

402

Axial guided non-return valves - System O2

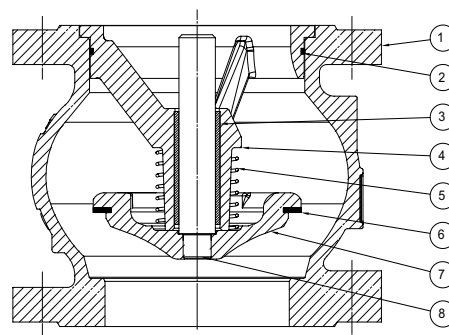
DN in mm	PN	PFA in bar	PS in bar				Cat	Ref.	Weight Kg
			L1	L2	G1	G2			
40	10/16	16	16	16	16	16	I	149B2281	4,2
50	10/16	16	16	16	16	16	I	149B2282	5,8
60	10/16	16	16	16	16	16	I	149B1176	8,1
65	10/16	16	16	16	15	16	I	149B2283	8,1
80	10/16	16	16	16	12	16	I	149B2284	10,2
80	10/16	16	16	16	16	16	II	149B2284C2	10,2
100	10/16	16	16	16	10	16	I	149B2285	14,5
100	10/16	16	16	16	16	16	II	149B2285C2	14,5
125	10/16	16	16	16	0,5	16	I	149B2226	24
125	10/16	16	16	16	16	16	II	149B2226C2	24
150	10/16	16	13	16	0,5	16	I	149B2227	32
150	10/16	16	16	16	16	16	II	149B2227C2	32
200	10	10	10	10	10	10	II	149B2229	53
250	10	10	10	10	10	10	II	149B2230	94
300	10	10	10	10	10	10	II	149B2231	140
350	10	10	10	10	0,5	10	II	149B2232	225
400	10	10	10	10	0,5	10	II	149B2233	312
500	10	10	10	10	0,5	10	II	149B2235	540

Technical features

Operating temperature	-10 °C at 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	Liquids not loaded, gas

Nomenclature and materials

N° Description		Materials	EURO	ANSI
1	Body	DN 40-400 Cast iron/Epoxy	EN 1561 EN-GJL-250	ASTM A 48 35 B
	DN 500	Cast iron/Epoxy	EN 1563 EN-GJS-400-15	ASTM A 536 65-45-12
2	O-ring seal	DN 40-250	EPDM	
3	Ring		Bronze	EN 1982 CuSn5Zn5Pb2-C GS
			Bronze	EN 1982 CuSn5Zn5Pb2-C GS
4	Guide	DN 50 DN 40 & 60-400 Cast iron/Epoxy	EN 1561 EN-GJL-250	ASTM A 48 35 B
		DN 500	Cast iron/Epoxy	EN 1563 EN-GJS-400-15
5	Spring		Stainless steel	EN 10270-3 X10CrNi18-8
6	Seal		EPDM	AISI 302
	DN 40	Brass	EN 12164 CuZn40Pb2 R360 mini	
	DN 50-65	Bronze	EN 1982 CuSn5Zn5Pb2-C GS	
7-8 Closing system		Stem	Bronze	EN 1982 CuSn5Zn5Pb2-C GS
	DN 80-400	Check-valve	Cast iron/Epoxy	EN 1561 EN-GJL-250
				ASTM A 48 35 B
		Stem	Bronze	EN 1982 CuSn12-C GS
	DN 500	Check-valve	Cast iron/Epoxy	EN 1563 EN-GJS-400-15
				ASTM A 536 65-45-12



Approvals

ACS CE PED 2014/68/UE



WRAS kiwa

International construction Standards :

CE Conformity Directive 2014/68/UE
Flange drilling according to EN1092-2

Application

The non-return valve 402 SOCLA is the most universal for water supply, protection of pump, general circuits, boosters and water distribution. It can be installed in any position with liquids not loaded and gas.

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.

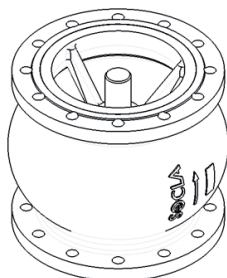
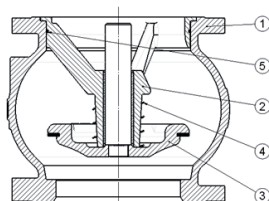
During a prolonged stoppage, a change in the state of the fluid may result in damage when the installation is brought back into service (solidification...).

Establish an adequate procedure program for cleaning the system.

Maintenance

• Removing :

1. Remove all guide (N°2)
2. Remove the o-ring seal (N°5) from its throat
3. Remove the spring (N°4)
4. Remove all the closing system (N°3)



• Reassembly :

Make sure that the seal is a good condition before assembly the valve.

Clean and lubricate it if necessary with a suitable product.

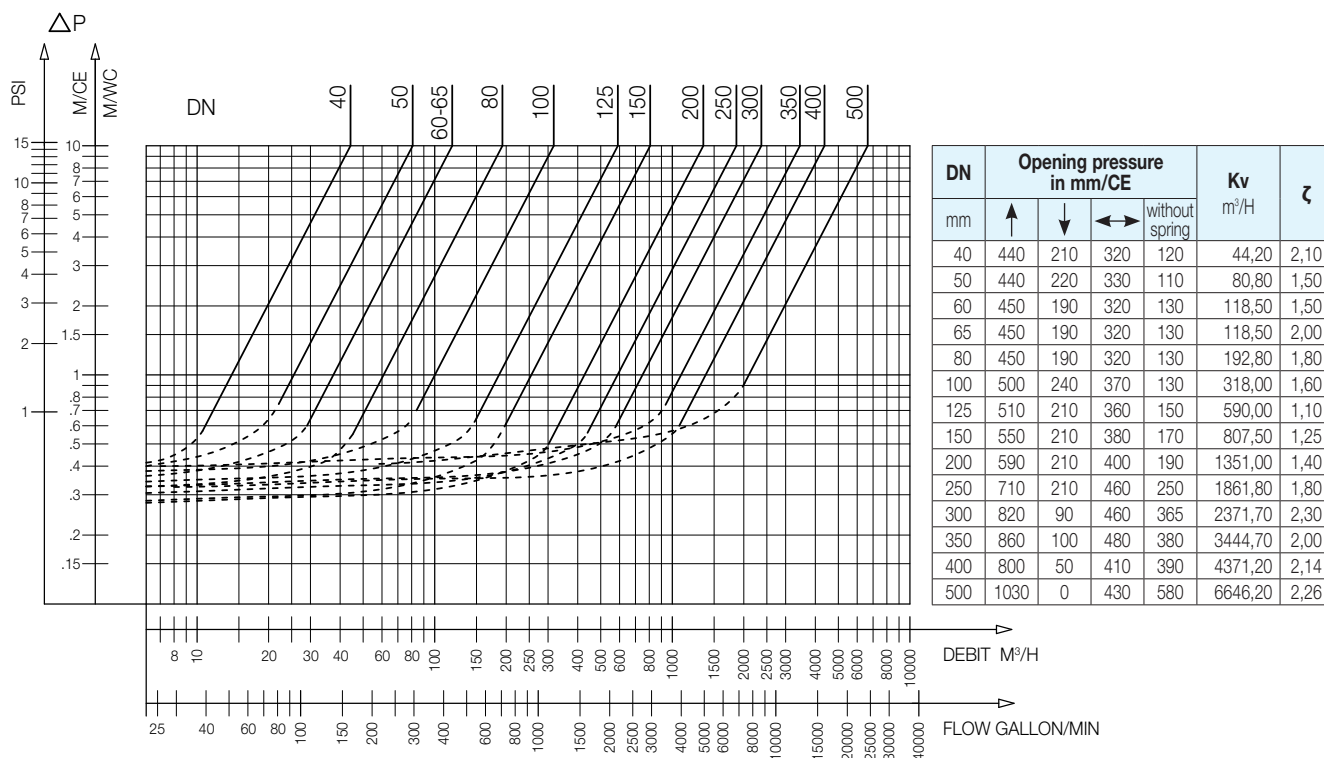
1. Put all the closing system (N°3) into the casing (N°1)
2. Insert the spring (N°4)
3. Put the o-ring seal (N°5) in its throat
4. Insert all the closing system (N°2). This step may require use a press.

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

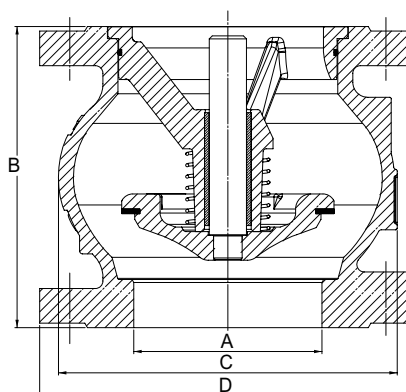


402 - Headloss chart

Sizing

A	B	C	D
mm	mm	mm	mm
40	85	80	150
50	100	97	165
60	120	125	185
65	120	125	185
80	140	150	200
100	170	187	220
125	200	220	250
150	230	250	285
200	289	340	340
250	354	420	405
300	396	490	460
350	473	586	533
400	560	680	597
500	750	880	670

402



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

Socla reserves the right to carry out any technical and design improvements to its products without prior notice. Warranty : All sales and contracts for sale are expressly conditioned on the buyer's assent to Socla terms and conditions found on its website at www.socla.com. Socla hereby objects to any term, different from or additional to Socla terms, contained in any buyer communication in any form, unless agreed to in a writing signed by an officer of Socla.



A WATTS Brand

Socla sas

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 • www.socla.com

ISO 9001 version 2015 / ISO 18001