402 / 402B / 402S
UBA application

Non-return axial guided valves

System 02

Technical Data Sheet



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Description

The 02 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** 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



402 UBA / 402B UBA

Non-return axial guided valves - System 02

DN mm	PN	PFA in bar	PS in bar				Cat	Ref. 402 UBA	Ref. 402B UBA	Weight Kg
			L1	L2	G1	G2				
50	10/16	16	16	16	16	16	I	**149B2282UBA**	**149B2351UBA**	5,8
65	10/16	16	16	16	15	16	I	**149B2283UBA**	**149B2353UBA**	8,1
80	10/16	16	16	16	12	16	I	**149B2284UBA**	**149B2354UBA**	10,2
100	10/16	16	16	16	10	16	I	**149B2285UBA**	**149B2355UBA**	14,5
125	10/16	16	16	16	0,5	16	I	**149B2226UBA**	**149B2226BUBA**	24
150	10/16	16	13	16	0,5	16	I	**149B2227UBA**	**149B2227BUBA**	32
200	10	10	10	10	10	10	II	**149B2229UBA**	**149B2229BUBA**	53
250	10	10	10	10	10	10	II	**149B2230UBA**	**149B2230BUBA**	94
300	10	10	10	10	10	10	II	**149B2231UBA**	**149B2231BUBA**	140
350	10	10	10	10	0,5	10	II	**149B2232UBA**	**149B2232BUBA**	225
400	10	10	10	10	0,5	10	II	**149B2233UBA**	**149B2233BUBA**	312
500	10	10	10	10	0,5	10	II	**149B2235UBA**	**149B2235BUBA**	540

402S UBA

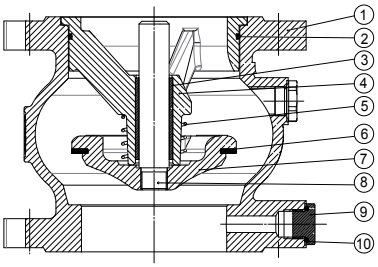
DN mm	PN	PFA in bar	PS in bar				Cat	Ref. 402S UBA	Weight Kg
			L1	L2	G1	G2			
50	25/40	40	40	40	20	40	I	**149F054124**	5,8
65	25/40	40	30	40	15	40	I	**149F054125**	8,1
80	25/40	40	25	40	12	40	I	**149F054126**	10,2
100	25/40	40	20	40	10	40	I	**149F054127**	14,5
125	25/40	40	16	40	0,5	28	I	**149B054150**	24
150	25/40	40	13	40	0,5	23	I	**149B054151**	32
200	25	25	25	25	17	25	II	**149B054152**	53
250	25	25	25	25	14	20	II	**149B054153**	94
300	25	25	25	25	11	16	II	**149B054154**	140
350	25	25	25	25	10	14	II	**149B054155**	225
400	25	25	25	25	0,5	12	II	**149B054156**	312
500	25	25	25	25	0,5	10	II	**149B054157**	540

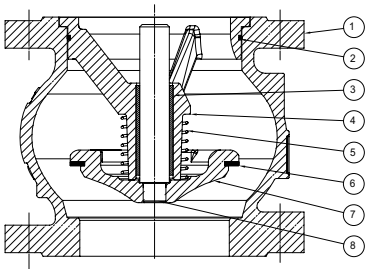
Important notice:

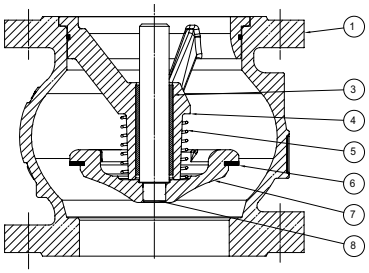
The indicated pressure for the different categories of fluids (L1/L2/G1/G2) is under no condition a guarantee of use.
Therefore, it is essential to validate the use of products under given operating conditions.
The operating instructions are available on our web site www.socla.com or by requesting from our sales department.

Technical features	
Operating temperature	-10 °C at 23 °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		Ductil iron / Epoxy	EN 1563 EN-GJS-400-15	ASTM A 536 65-45-12
		DN 50-500 (402S)		Ductil 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	
4	Guide	DN 50		Bronze	EN 1982 CuSn5Zn5Pb2-C GS	
		DN 40 & 60-400		Cast iron / Epoxy	EN 1561 EN-GJL-250	ASTM A 48 35 B
		DN 500		Ductil iron / Epoxy	EN 1563 EN-GJS-400-15	ASTM A 536 65-45-12
5	Spring			Stainless steel	EN 10270-3 X10CrNi18-8	AISI 302
6	Seal			EPDM		
7-8	Closing system	DN 50-65		Bronze	EN 1982 CuSn5Zn5Pb2-C GS	
		DN 80-400	Stem	Bronze	EN 1982 CuSn5Zn5Pb2-C GS	
			Check-valve	Cast iron / Epoxy	EN 1561 EN-GJL-250	ASTM A 48 35 B
		DN 500	Stem	Bronze	EN 1982 CuSn12-C GS	
			Check-valve	Ductil iron / Epoxy	EN 1563 EN-GJS-400-15	ASTM A 536 65-45-12
9	Plug			Brass	EN12164 CuZn38Pb2As R350	
10	Seal			EPDM		

Approvals

ACS CE PED 2014/68/UE BUREAU VERITAS

International construction Standards :
CE Conformity Directive 2014/68/UE
Flange driling according to EN1092-2
402, 402B, 402S are UBA compliant

Application

The non-return valve 402, 402B & 402S SOCLA are the most universal for protection of drinking water networks, water distribution, pumping, industry. It can be installed in any position with liquids not loaded and gas.
402S is is the most universal for high pressure.

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.

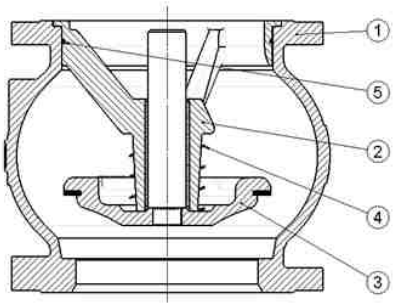
Make sure that when flow stops the valve maintains pressure well and that there is no water-hammer which might damage the valve or installation.

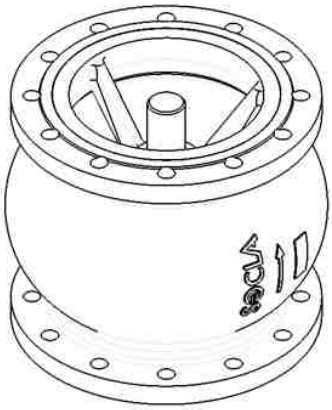
If there is water-hammer, an anti-water hammer system must be added to the installation.

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.

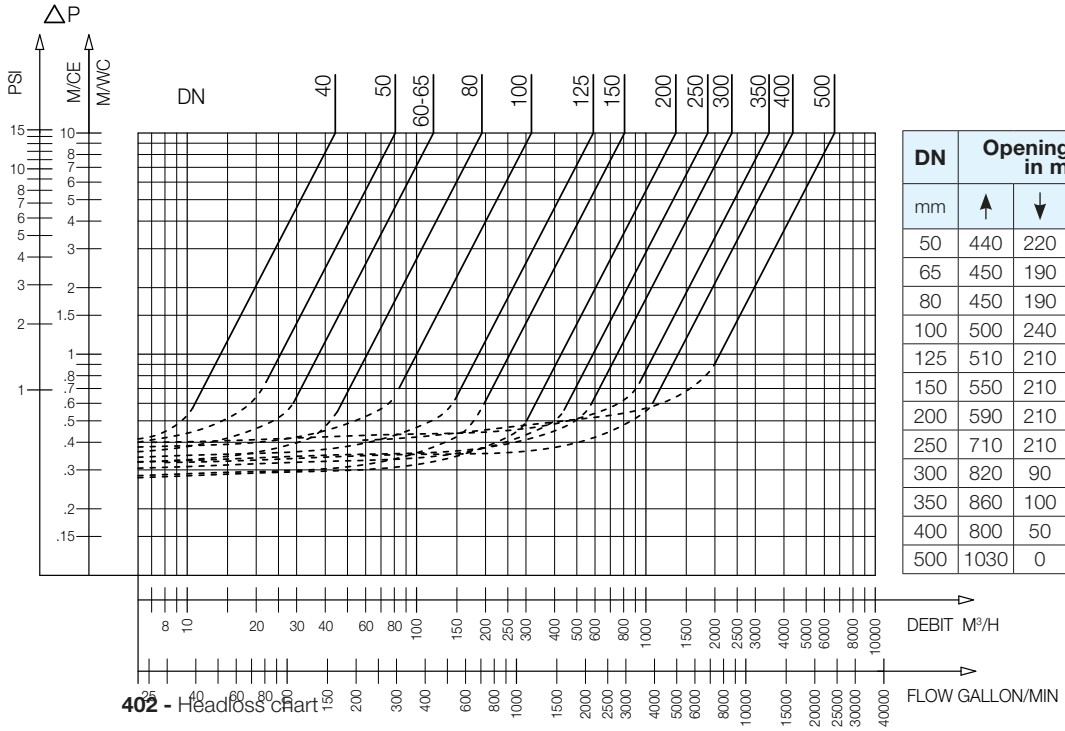
1. Put all the closing system (N°3) into the casing (N°1)
2. Insert the spring (N°4)
3. Put the o-ring seal (N°5) in its throat
4. Insert all the closing system (N°2). This step may require use a press.

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



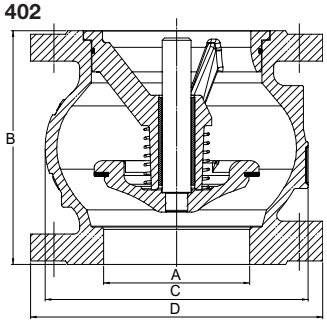
402 - Headloss chart

DN	Opening pressure in mm CE				Kv	ζ
mm	↑	↓	↔	Without spring	m³/H	
50	440	220	330	110	80,80	1,50
65	450	190	320	130	118,50	2,00
80	450	190	320	130	192,80	1,80
100	500	240	370	130	318,00	1,60
125	510	210	360	150	590,00	1,10
150	550	210	380	170	807,50	1,25
200	590	210	400	190	1351,00	1,40
250	710	210	460	250	1861,80	1,80
300	820	90	460	365	2371,70	2,30
350	860	100	480	380	3444,70	2,00
400	800	50	410	390	4371,20	2,14
500	1030	0	430	580	6646,20	2,26

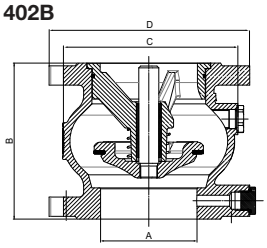
Sizing

A	B	C	D
mm	mm	mm	mm
50	100	97	165
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

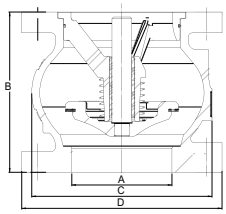
402



402B



402S



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