

812

Non-return disc valve
W System



Description

- High performances in pressure and temperature
- Operates in any position
- Easy to install and dismantle, space-saving
- Minimum head loss
- Does not generate hammering

- Closing system : disc with parabolic edges with return spring ; lateral guiding by 3 or 4 ribs (DN 15 to 100)
- Closing system with back axial guiding and return spring (DN 125 to 200)
- Metal/metal tightness (obturator on machined seat)



812

Non-return disc valve - W system

DN	PN	PFA in bar	PS in bar				Cat.	Ref.	Weight Kg
			L1	L2	G1	G2			
1/2	15	40	40	40	40	40	4.3	149B2420	0,10
3/4	20	40	40	40	40	40	4.3	149B2421	0,14
3/4	20	40	40	40	40	40	II	149B2421C2*	0,14
1	25	40	40	40	40	40	4.3	149B2422	0,23
1	25	40	40	40	40	40	II	149B2422C2*	0,23
1 1/4	32	40	40	40	30	40	I	149B2423	0,35
1 1/4	32	40	40	40	40	40	II	149B2423C2*	0,35
1 1/2	40	40	40	40	25	40	I	149B2424	0,52
1 1/2	40	40	40	40	40	40	II	149B2424C2*	0,52
2	50	40	40	40	20	40	I	149B2425	0,73
2	50	40	40	40	40	40	II	149B2425C2*	0,73
2 1/2	65	40	40	30	40	15	40	149B2426	1,52
2 1/2	65	40	40	40	40	40	II	149B2426C2*	1,52
3	80	40	40	25	40	12	40	149B2427	2,17
3	80	40	40	40	40	40	II	149B2427C2*	2,17
4	100	40	40	20	40	10	40	149B2428	3,35
4	100	40	40	40	40	40	II	149B2428C2*	3,35
5	125	40	40	16	40	0,5	28	149B2429	8,55
5	125	40	40	40	40	28	40	149B2429C2*	8,55
6	150	40	40	13	40	0,5	23	149B2430	12,70
6	150	40	40	40	40	23	33	149B2430C2*	12,70
8	200	16	16	16	16	16	II	149B2431(1)*	23,40
8	200	25/40	40	40	17	25	II	149B2432(2)*	23,40

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.

* Equipped with a discharge anti-static braid

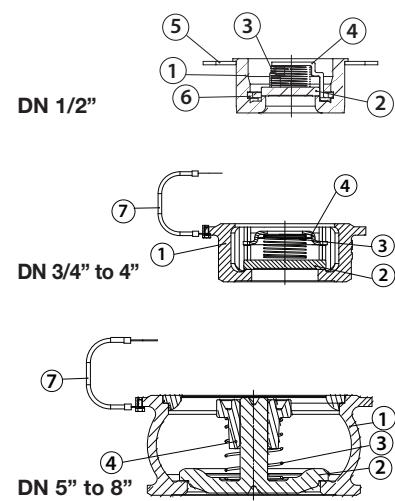
(1) PN16-ASA150
(2) PN25/40 -ASA300

Technical features

Operating temperature	-10 °C to 350 °C
Permissible operating pressure (PFA) in water	See table above
Maximum permissible pressure (PS) other mediums	See table above
Connection	Between flanges, PN (see table)
Mediums	Clear liquids
Leakage rate	According to EN 12266-1 rate E

Nomenclature and materials

N°	Description	Materials	EURO	ANSI
1	Body	DN 15	Stainless steel	X5CrNi18-10 AISI 304
		DN 20 to 65	Stainless steel	GX5CrNi19-10 AISI 304
		DN 80 + 100	Stainless steel	GX2CrNiMo19-11-2 AISI 316L
2	Closing system	DN 125 to 200	Stainless steel	GX5CrNi19-10 AISI 304
		DN 15 to 100	Stainless steel	X2CrNiMo17-12-2 AISI 316L
3	Spring	DN 125 to 200	Stainless steel	GX5CrNi19-10 AISI 304
4	Stop / Guide	Stainless steel	X10CrNi18-8 AISI 302	
5	Centering collar	DN 15 to 150	Stainless steel	X2CrNiMo17-12-2 AISI 316L
		DN 200	Stainless steel	GX5CrNi19-10 AISI 304
6	Clips	DN 15	Stainless steel	X2CrNi18-9 AISI 304L
7	Discharge anti-static braid	Others DN	Bichromated steel	
			Tinned copper	



Approvals



International construction Standards :

CE conformity directive 2014/68/UE
CE ATEX conformity directive 2014/34/UE
Connection ASA B16.1 125RF class

Connection ASA B16.5 150RF class and 300RF class
Connection according to EN 1092.2
Overall dimensions according to EN 558.1 49 serie

Application

Industry, corrosive fluids, high pressure and high temperature.

Use of these valves on circuits equipped with piston pump or piston compressor is not recommended.

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

Maintenance and repair work must be carried out by qualified personnel. During opening and closing tests, the operator must be careful not to put fingers or any other object in the trajectory of the closing system. Manipulate the valve and its components carefully to avoid damage.

Removing the valve from the installation :

The pipe must be depressurised and purged (emptied of its fluid) in order to avoid any danger to the operator. If the installation has carried fluids which are dangerous in themselves if in contact with the outside atmosphere (inflammable, corrosive, toxic, explosive..) it must be thoroughly cleaned to eliminate all risks. All fluid remaining in the valve must be removed.

The temperature of the valve must be lower than 35°C to avoid all risk of burning.

If necessary, perform the operation using suitable protection (clothing, gloves, mask...)

WARNING : In the case of use in an ATEX zone, electrostatic charges may be present in the internal parts of the valve. These electrostatic charges created by the flow of the fluid may present a risk of explosion. The user is responsible for taking all possible precautions against this risk.

• Maintenance of the valve :

All spare parts must be genuine Socla. All the parts in the maintenance kit must be used.

The list of spare parts are given in the technical datasheets.

The reference number of the valve and the manufacture serial number indicated on the identification plate must be quoted in any request for spare parts and during any claim or return of parts.

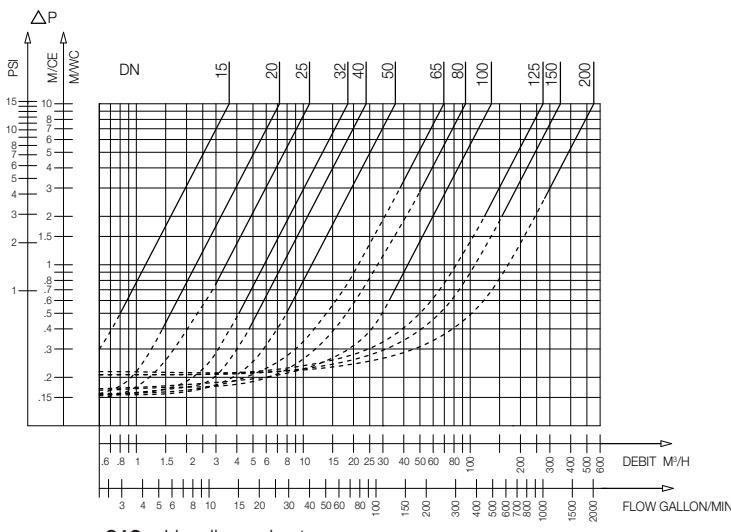
Using grease is not permitted in a « silicone-free » environment. Grease must be compatible with the fluid being carried and the constraints of the installation.

After maintenance, it is recommended that the valve be re-tested by a trial under pressure at 1.5 X PMA (test P11 according to the standard EN12266-1).

In the case of use in an ATEX zone this test is compulsory.

- Check the continuity between the closing system and the free end of the braided wire using an ohmmeter (test according to the standard EN 12266-2 annexe B, point B. 2.2.2. and B.2.3.1). In the case of use in an ATEX zone this test is compulsory.

Operation

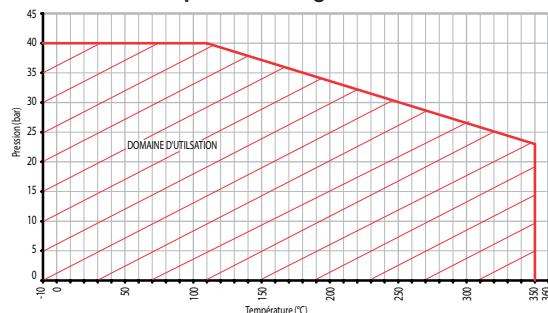


DN		Opening pressure in mm/CE				Kv	ζ
"	mm	↑	↓	↔	Without spring	m³/H	
1/2	15	160	120	140	20	3,60	6,15
3/4	20	165	125	145	20	7,20	4,95
1	25	165	115	140	25	10,90	5,30
1 1/4	32	190	130	160	30	18,50	4,90
1 1/2	40	200	120	160	40	23,80	7,25
2	50	210	110	155	50	35,60	7,90
2 1/2	65	210	100	155	55	69,50	5,90
3	80	226	95	160	65	93,70	7,45
4	100	235	75	205	80	134	8,90
5	125	335	75	205	130	273,85	5,20
6	150	360	70	215	145	347,40	6,70
8	200	515	105	310	205	549,70	8,50

Direction for use :

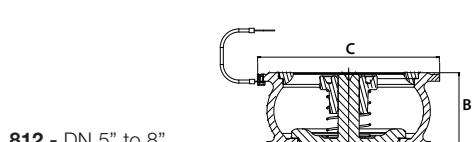
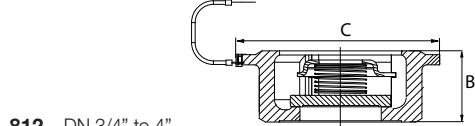
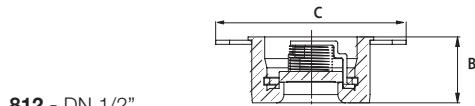
- Solid line: Valve completely open
- Dotted line: opening stage of valve

Pressure/Temperature Diagram



Sizing

DN		B	C - PN6	C - PN10/16 ASA150	C - PN25/40 ASA300
"	mm	mm	mm	mm	mm
1/2	15	16	44	53	53
3/4	20	19	54	63	63
1	25	22	64	73	73
1 1/4	32	28	78	84	84
1 1/2	40	31,5	88	94	94
2	50	40	98	109	109
2 1/2	65	46	118	129	129
3	80	50	134	144	144
4	100	60	154	162	170
5	125	90	-	192	192
6	150	106	-	218	224
8	200	140	262	273	-
8	200	140	-	-	284



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