

# 812X

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 with back axial guiding and 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)



### 812X

Non-return disc valve - W system

DN		PN	PFA in bar	PS in bar				Cat.	Ref.	Weight Kg
"	mm			L1	L2	G1	G2			
1/2	15	40	40	40	40	40	40	4.3	<b>149B2420X</b>	0,10
3/4	20	40	40	40	40	40	40	4.3	<b>149B2421X</b>	0,14
3/4	20	40	40	40	40	40	40	II	<b>149B027054*</b>	0,14
1	25	40	40	40	40	40	40	4.3	<b>149B2422X</b>	0,23
1	25	40	40	40	40	40	40	II	<b>149B027055*</b>	0,23
1 1/4	32	40	40	40	40	30	40	I	<b>149B2423X</b>	0,35
1 1/4	32	40	40	40	40	40	40	II	<b>149B018819*</b>	0,35
1 1/2	40	40	40	40	40	25	40	I	<b>149B2424X</b>	0,52
1 1/2	40	40	40	40	40	40	40	II	<b>149B018820*</b>	0,52
2	50	40	40	40	40	20	40	I	<b>149B2425X</b>	0,73
2	50	40	40	40	40	40	40	II	<b>149B018821*</b>	0,73
2 1/2	65	40	40	30	40	15	40	I	<b>149B2426X</b>	1,52
2 1/2	65	40	40	40	40	40	40	II	<b>149B018822*</b>	1,52
3	80	40	40	25	40	12	40	I	<b>149B2427X</b>	2,17
3	80	40	40	40	40	40	40	II	<b>149B018823*</b>	2,17
4	100	40	40	20	40	10	40	I	<b>149B2428X</b>	3,35
4	100	40	40	40	40	40	40	II	<b>149B018824*</b>	3,35
5	125	40	40	16	40	0,5	28	I	<b>149B2429X</b>	8,55
5	125	40	40	40	40	28	40	II	<b>149B018825*</b>	8,55
6	150	40	40	13	40	0,5	23	I	<b>149B2430X</b>	12,70
6	150	40	40	40	40	23	33	I	<b>149B018826*</b>	12,70
8	200	16	16	16	16	16	16	II	<b>149B2431X(1)*</b>	23,40
8	200	25/40	40	40	40	17	25	II	<b>149B2432X(2)*</b>	23,40

\* Equipped with a discharge anti-static braid

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

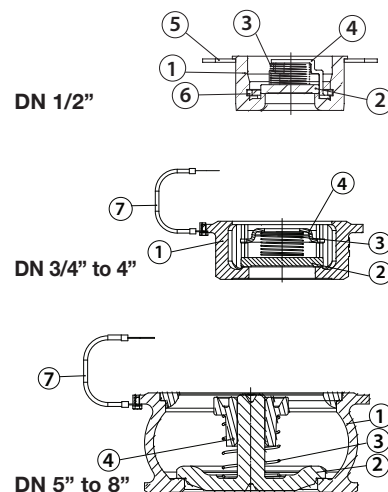
#### Important notice :

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](http://www.socla.com) or by requesting from our sales department.

Technical features	
Operating temperature	-50 °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, steam
Leakage rate	According to EN 12266-1 rate E

## Nomenclature and materials

N°	Description	Materials	EURO	ANSI	
1	Body	DN 15	Stainless steel	X2CrNiMo17-12-2	AISI 316L
		Others DN	Stainless steel	GX2CrNiMo19-11-2	AISI 316L
2	Closing system	DN 15 to 100	Stainless steel	X2CrNiMo17-12-2	AISI 316L
		DN 125 to 200	Stainless steel	GX2CrNiMo19-11-2	AISI 316L
3	Spring	Stainless steel	X2CrNiMo17-12-2	AISI 316L	
4	Stop/guide	DN 15 to 100	Stainless steel	X2CrNiMo17-12-2	AISI 316L
		DN 125 to 200	Stainless steel	GX2CrNiMo19-11-2	AISI 316L
5	Centering collar	DN 15	Stainless steel	X2CrNi18-9	AISI 304L
		Others DN	Bichromated steel		
6	Clips	Stainless steel	X2CrNiMo17-12-2	AISI 316L	
7	Discharge anti-static braid	Copper			



## Approvals



### International construction Standards :

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 F

Connection according to EN 1092.2

Overall dimensions according to EN 558.1 49 serie

## Decree of 11/01/2007

The ACS is only valid for:

- Organic materials and articles (such as pipes made of polyvinyl chloride, polyethylene, tank linings, etc.)
- Accessories and sub-assemblies of accessories consisting of at least one organic component that comes into contact with water.

No ACS can be required as proof of sanitary compliance for conformity for other groups of materials or articles intended to come into contact with water intended for human consumption. Where regulatory provisions do not provide for the issue of an ACS, a CLP or CAS, certification of compliance with regulatory provisions is the responsibility of the person responsible for first marketed for the first time. The 812 and 812X ranges are 100% metallic (there are no organic components in these values). ACS is therefore not in force for these ranges.

## Application

Industry, chemical applications, high pressure, high temperature, steam service.

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

Within an ATEX area, please check that the network is connected to the braid, do not use isolating pipes (PVC).

## 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.

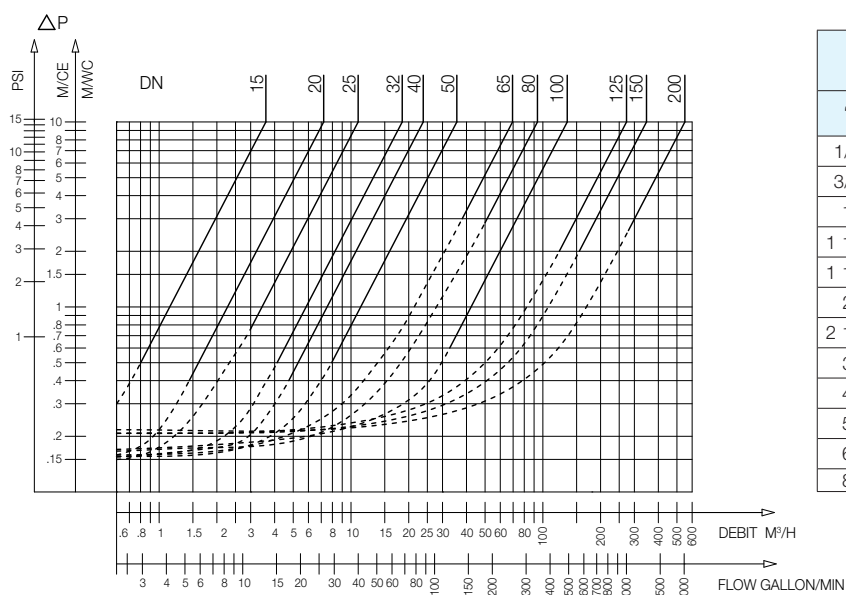
Make sure that when flow stops the valve maintains pressure well and that there is no water-hammer which might damage the valve or installation.

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.

## Operation

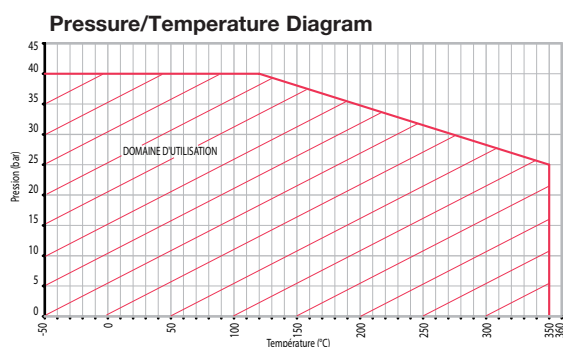


812X - Headloss chart

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

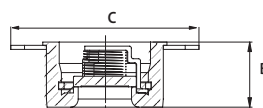
### Direction for use :

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

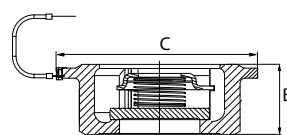


## Sizing

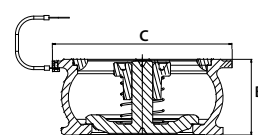
DN	B	C - PN6	C - PN10/16 ASA150	C - PN25/40 ASA300
"	mm	mm	mm	mm
1/2	15	44	53	53
3/4	20	54	63	63
1	25	64	73	73
1 1/4	32	78	84	84
1 1/2	40	88	94	94
2	50	98	109	109
2 1/2	65	118	129	129
3	80	134	144	144
4	100	154	162	170
5	125	-	192	192
6	150	-	218	224
8	200	262	273	-
8	200	-	-	284



812X - DN 1/2"



812X - DN 3/4" to 4"



812X - DN 5" to 8"

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