

825

Non-return valves with double plate
System 05

Technical Data Sheet



Description

The 825 non-return valve is watertightness ensured by the spring which pushes against the two plates, maintaining pressure on the valve seat seal.

- Operating position : horizontal and vertical
- Minimum occupation of space
- Very low head loss
- For pumping, water supply, general industry
- Closing system : double plate with return spring
- Sealing : metal on elastomere seat
- FKM seal
- Using these check valves on networks equipped with piston pumps or compressors is not recommended



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DN	PN	PFA in bar	PS in bar				Cat.	Ref.	Weight Kg
			L1	L2	G1	G2			
2	50	25	25	25	20	25	I	149B3170	2,5
2 1/2	65	25	25	25	15	25	I	149B3171	3,2
3	80	25	25	25	12	25	I	149B3172	3,4
4	100	25	25	20	25	10	I	149B3173	5,6
5	125	25	25	16	25	0,5	I	149B3174	8,1
6	150	25	25	13	25	0,5	I	149B3175	10,4
8	200	25	25	10	25	0,5	I	149B3176	18,5
10	250	25	25	10	25	0,5	I	149F020384	29,5
12	300	25	25	10	25	0,5	I	149F020386	44,1
14	350	25	25	10	25	x	I	149B2669	78

Important notice :

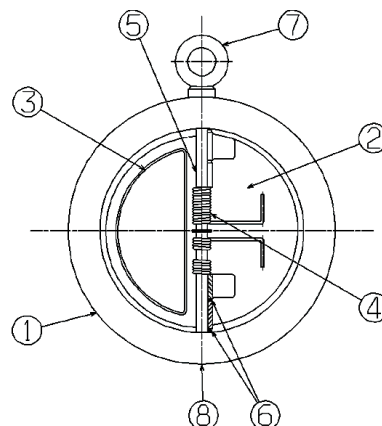
The indicated pressure for the different categories of fluids (L1/L2/G1/G2) is under no condition a guarantee of use. Therefore, it is essential to validate the use of products under given operating conditions.

Technical features

Operating temperature	-10 °C at 130 °C
Permissible operating pressure (PFA) in water	See table above
Maximum permissible pressure (PS) other mediums	See table above
Connection	Mounting between flanges, PN see table
Mediums	Clear liquids, gas, hydrocarbons

Nomenclature and materials

N°	Description	Materials	EURO	ANSI
1	Body	Stainless steel	X5CrNiMo17-12-2	AISI 316
2	Plates	Stainless steel	X5CrNiMo17-12-2	AISI 316
3	Seal	FKM		
4	Spring	Stainless steel	X5CrNiMo17-12-2	AISI 316
5	Stem	Stainless steel	X5CrNiMo17-12-2	AISI 316
6	Bearings	PTFE		
7	Eye bolt	Steel XC15		
8	Plug	Stainless steel	X5CrNiMo17-12-2	AISI 316



Approvals



International construction Standards :

CE conformity directive 2014/68/UE
Flange drilling according tot EN 1092-2
Size according to EN558-1 series 50

Application

Pumping, water distribution, general industry.

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

• Removing :

1. Unscrew the 4 plugs (N° 5) and remove the 4 seals (N° 4).
Tip over the body (N° 1) if necessary
2. Remove the upper stem (N° 3)
3. Use this to remove the lower stem (N° 3)

WARNING: Keep the springs (N° 8 and 8*) in compression during this operation.

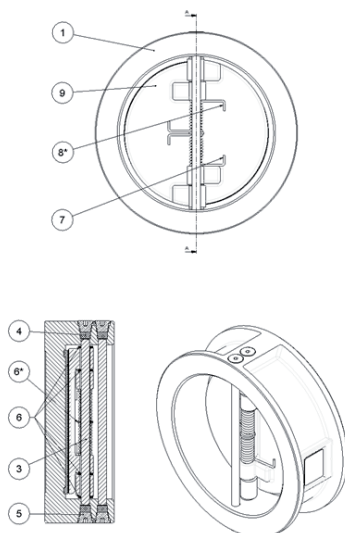
Remove the 2 plates (N° 9) and the bearings (N° 6 and 6*)

• Reassembly :

Before reassembling the valve, check the condition of the seal. If necessary, clean and grease it by using appropriate grease.

1. Put in place 2 seals (N° 5) on the same side of the body (N° 1)
 2. Thread 2 plugs (N° 5) on the same side with a stop on the body (N° 1)
 3. Place the 2 wings flat (N° 9) on the body (N° 1)
 4. Engage the lower stem (N° 3) by sliding it into the body (N° 1), while positioning in the following order :
 - The first bearing (N° 6)
 - The first ear of the plate (N° 9)
 - The second bearing (N° 6)
 - The first ear of the second plate (N° 9)
 - The spring (N° 7)
 - The bearing (N° 6*)
 - The spring (N° 8*)
 - The second ear of the plate (N° 9)
 - The third bearing (N° 6)
 - The second ear of second plate (N° 9)
 - The fourth bearing (N° 6)
 5. Push the stem against the seal (N° 4) by using the second stem to complete the operation
 6. Put in place the upper stem (N° 3)
 7. Place the 2 last seals (N° 4)
 8. Screwed the 2 last plugs (N° 5)
 9. Tighten then at Nm torques
- Once the reassembly completed, test the device to verify its tightness.

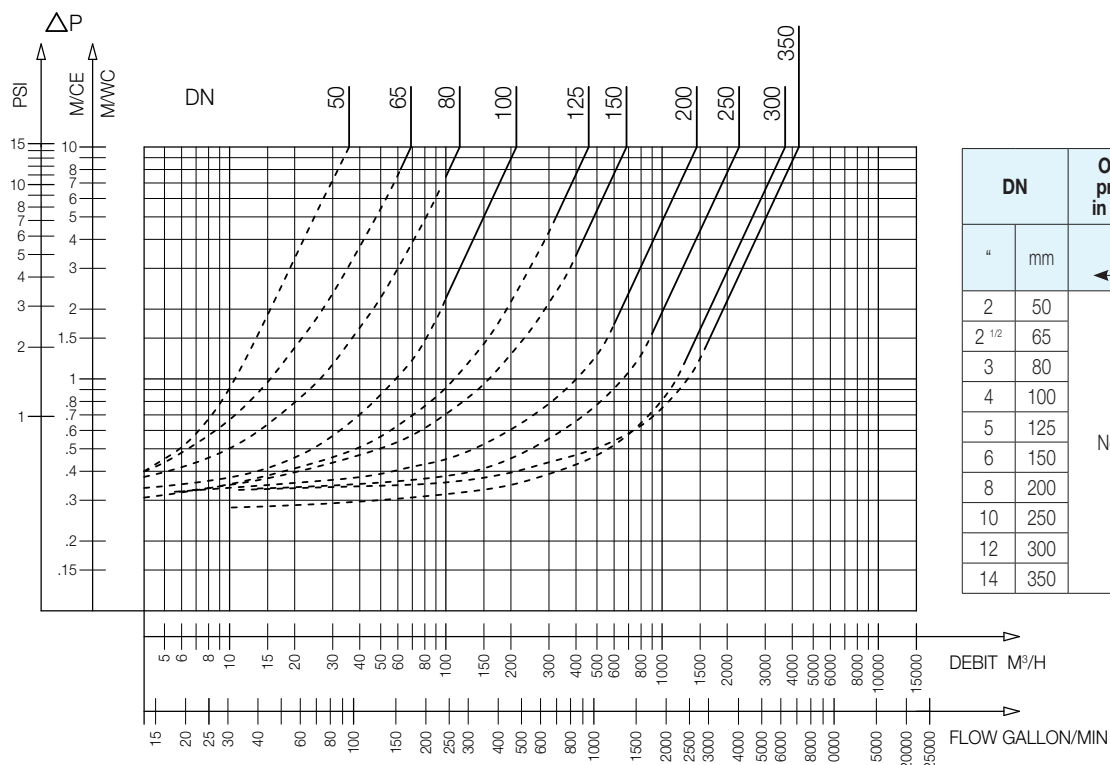
Type 825



Operation

Direction for use :

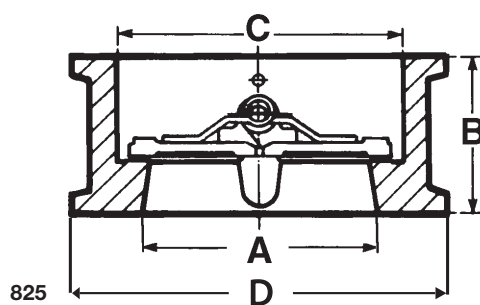
- Solid line: Valve completely open
- Dotted line: opening stage of valve



DN		Opening pressure in mm/CE	Kv	ζ
"	mm		m³/H	
2	50	Near to 0	35,7	7,81
2 1/2	65		69	5,90
3	80		116	4,80
4	100		212	3,60
5	125		458	1,90
6	150		685	1,70
8	200		1447	1,20
10	250		2271	1,20
12	300		3709	0,94
14	350		4293	1,30

Sizing

A		B	C	D
"	mm	mm	mm	mm
2	50	54	60	109
2 1/2	65	54	73	129
3	80	57	89	144
4	100	64	114	170
5	125	70	141	194
6	150	76	168	220
8	200	95	219	286
10	250	108	273	340
12	300	143	324	403
14	350	184	356	460



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ISO 9001 version 2015 / ISO 18001