

## Type 812X Non-return valve W System

### Applications and special features



- 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 (ND 125 to 200).
- Metal/metal seal (grounded trim)
- Using these check valves on networks equipped with piston pumps or compressors is not recommended.
- Within an ATEX area, please check that the network is connected to the braid, do not use isolating pipes (PVC).


### Technical description

| DN<br>"          | mm  | PN    | PFA<br>en bar | PS en bar |    |     |    | Cat. | References   | Vvs-nr |
|------------------|-----|-------|---------------|-----------|----|-----|----|------|--------------|--------|
|                  |     |       |               | L1        | L2 | G1  | G2 |      |              |        |
| 1/2              | 15  | 40    | 40            | 40        | 40 | 40  | 40 | 3.3  | 149B 2420X   |        |
| 3/4              | 20  | 40    | 40            | 40        | 40 | 40  | 40 | 3.3  | 149B 2421X   |        |
| 3/4              | 20  | 40    | 40            | 40        | 40 | 40  | 40 | II   | 149B027054*  |        |
| 1                | 25  | 40    | 40            | 40        | 40 | 40  | 40 | 3.3  | 149B 2422X   |        |
| 1                | 25  | 40    | 40            | 40        | 40 | 40  | 40 | II   | 149B027055*  |        |
| 1 <sup>1/4</sup> | 32  | 40    | 40            | 40        | 40 | 30  | 40 | I    | 149B 2423X   |        |
| 1 <sup>1/4</sup> | 32  | 40    | 40            | 40        | 40 | 40  | 40 | II   | 149B 018819* |        |
| 1 <sup>1/2</sup> | 40  | 40    | 40            | 40        | 40 | 25  | 40 | I    | 149B 2424X   |        |
| 1 <sup>1/2</sup> | 40  | 40    | 40            | 40        | 40 | 40  | 40 | II   | 149B 018820* |        |
| 2                | 50  | 40    | 40            | 40        | 40 | 20  | 40 | I    | 149B 2425X   |        |
| 2                | 50  | 40    | 40            | 40        | 40 | 40  | 40 | II   | 149B 018821* |        |
| 2 <sup>1/2</sup> | 65  | 40    | 40            | 30        | 40 | 15  | 40 | I    | 149B 2426X   |        |
| 2 <sup>1/2</sup> | 65  | 40    | 40            | 40        | 40 | 40  | 40 | II   | 149B 018822* |        |
| 3                | 80  | 40    | 40            | 25        | 40 | 12  | 40 | I    | 149B 2427X   |        |
| 3                | 80  | 40    | 40            | 40        | 40 | 40  | 40 | II   | 149B 018823* |        |
| 4                | 100 | 40    | 40            | 20        | 40 | 10  | 40 | I    | 149B 2428X   |        |
| 4                | 100 | 40    | 40            | 40        | 40 | 40  | 40 | II   | 149B 018824* |        |
| 5                | 125 | 40    | 40            | 16        | 40 | 0,5 | 28 | I    | 149B 2429X   |        |
| 5                | 125 | 40    | 40            | 40        | 40 | 28  | 40 | II   | 149B 018825* |        |
| 6                | 150 | 40    | 40            | 13        | 40 | 0,5 | 23 | I    | 149B 2430X   |        |
| 6                | 150 | 40    | 40            | 40        | 40 | 23  | 33 | II   | 149B 018826* |        |
| 8                | 200 | 16    | 16            | 16        | 16 | 16  | 16 | II   | 149B 2431X*  |        |
| 8                | 200 | 25/40 | 40            | 40        | 40 | 17  | 25 | II   | 149B 2432X*  |        |

### 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.

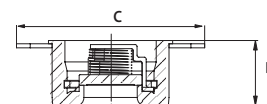
\* : Equipped with a discharge anti-static braid

- **Connections** : between flanges PN see table
- **Permissible operating pressure PFA - water** - (for supply, distribution and disposal of water) : See table
- **Maximum Permissible pressure PS - other mediums** : See table
- **θ** Mini. -50 °C  
Maxi. 350 °C
- **Mediums** : Clear liquids, steam
- **Leakage rate** : according to EN 12266-1 rate E
- **Approvals** : ACS  PED 97/23/CE (except DN15)
- **International construction Standards** :
  - CE Conformity Directive 2014/68/UE
  - CE ATEX Conformity Directive 2014/34/UE
  - Connection according to ASA B16.1 class 125RF
  - Connection according to ASA B16.5 class 150RF and 300RF
  - Connection according to EN 1092.2
  - Overall dimensions according to EN558-1 series 49

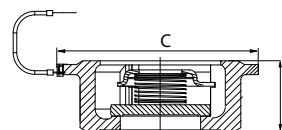
### Overall dimensions

| DN<br>"          | mm  | B<br>mm | C - PN6<br>mm | C - PN10/16/<br>ASA150<br>mm | C - PN25/40/<br>ASA300<br>mm | Weight<br>kg |
|------------------|-----|---------|---------------|------------------------------|------------------------------|--------------|
|                  |     |         |               |                              |                              |              |
| 3/4              | 20  | 19      | 54            | 63                           | 63                           | 0,14         |
| 1                | 25  | 22      | 64            | 73                           | 73                           | 0,23         |
| 1 <sup>1/4</sup> | 32  | 28      | 78            | 84                           | 84                           | 0,35         |
| 1 <sup>1/2</sup> | 40  | 31,5    | 88            | 94                           | 94                           | 0,52         |
| 2                | 50  | 40      | 98            | 109                          | 109                          | 0,73         |
| 2 <sup>1/2</sup> | 65  | 46      | 118           | 129                          | 129                          | 1,52         |
| 3                | 80  | 50      | 134           | 144                          | 144                          | 2,17         |
| 4                | 100 | 60      | 154           | 162                          | 170                          | 3,35         |
| 5                | 125 | 90      | -             | 192                          | 192                          | 8,55         |
| 6                | 150 | 106     | -             | 218                          | 224                          | 12,70        |
| 8                | 200 | 140     | 262           | 273                          | -                            | 29,50        |
| 8                | 200 | 140     | -             | -                            | 284                          | 30,00        |

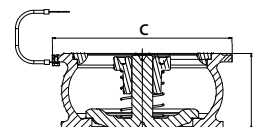
DN 1/2



DN 3/4 to 4"



DN 5 to 8"

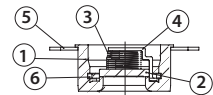


# Technical data sheet Type 812X - Non-return valve

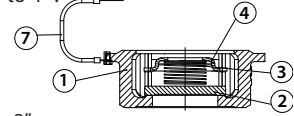
## Spare parts list and materials

| Nb | Description                        | Materials                            | EURO             | ANSI      |
|----|------------------------------------|--------------------------------------|------------------|-----------|
| 1  | CASING DN15                        | Stainless steel                      | X2CrNiMo17-12-2  | AISI 316L |
|    | Other DN                           | Stainless steel                      | GX2CrNiMo19-11-2 | AISI 316L |
| 2  | CLOSING SYSTEM DN15 to 100         | Stainless steel                      | X2CrNiMo17-12-2  | AISI 316L |
|    | DN125 to 200                       | Stainless steel                      | GX2CrNiMo19-11-2 | AISI 316L |
| 3  | SPRING                             | Stainless steel                      | X2CrNiMo17-12-2  | AISI 316L |
| 4  | STOP / GUIDE DN15 to 100           | Stainless steel                      | X2CrNiMo17-12-2  | AISI 316L |
|    | DN125 to 200                       | Stainless steel                      | GX2CrNiMo19-11-2 | AISI 316L |
| 5  | CENTERING COLLAR DN 15<br>Other DN | Stainless steel<br>Bichromated steel | X2CrNi18-9       | AISI 304L |
| 6  | CLIPS                              | Stainless steel                      | X2CrNiMo17-12-2  | AISI 316L |
| 7  | DISCHARGE ANTI-STATIC BRAID        | Copper                               |                  |           |

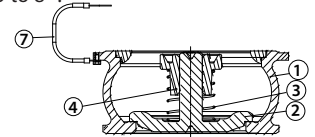
• DN 1/2 :



• DN 3/4 to 4" :



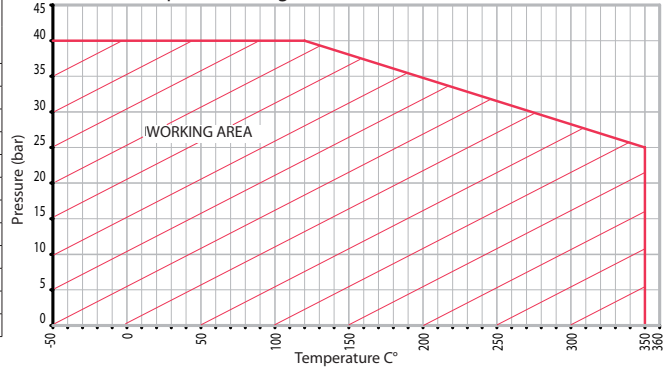
• DN 5 to 8" :



## Working principle

| DN               | Opening pressure mm/WC |     |     |                |                   | Kv     | ζ   |
|------------------|------------------------|-----|-----|----------------|-------------------|--------|-----|
|                  | ↑                      | ↓   | ↔   | without spring | m <sup>3</sup> /H |        |     |
| 1/2              | 15                     | 160 | 120 | 140            | 20                | 4,24   | 4,4 |
| 3/4              | 20                     | 165 | 125 | 145            | 20                | 7,80   | 4,1 |
| 1                | 25                     | 165 | 115 | 140            | 25                | 12,40  | 4,0 |
| 1 <sup>1/4</sup> | 32                     | 190 | 130 | 160            | 30                | 18,00  | 5,0 |
| 1 <sup>1/2</sup> | 40                     | 200 | 120 | 160            | 40                | 28,00  | 5,1 |
| 2                | 50                     | 210 | 110 | 155            | 50                | 40,10  | 6,1 |
| 2 <sup>1/2</sup> | 65                     | 210 | 100 | 155            | 55                | 72,50  | 5,3 |
| 3                | 80                     | 226 | 95  | 160            | 65                | 111,00 | 5,2 |
| 4                | 100                    | 235 | 75  | 205            | 80                | 182,00 | 4,7 |
| 5                | 125                    | 335 | 75  | 205            | 130               | 302,00 | 4,2 |
| 6                | 150                    | 360 | 70  | 215            | 145               | 370,00 | 5,8 |
| 8                | 200                    | 515 | 105 | 310            | 205               | 546,00 | 8,4 |

Pressure/Temperature Diagram



### Direction for use :

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

