

407V

Membrane non-return valve

M system

Technical Data Sheet



Description

This valve is designed for installations that generate significant water hammer. It is very reliable and quiet (no mechanical moving parts, anti-incrustation closing system and seat). Ideal for booster pumps, sprinkler systems, motor or electric pump units and compressed air circuits. Alternating operation. On membrane check valves, the opening set by the elasticity and the thickness of the membrane is very progressive and can be obtained as a result of a few centimeters of W/C. Because of this, this check valve is particularly suitable for variable flow pumps and pulsatory operation.

- Operates in any position
- Low head loss
- Does not generate hammering
- Sealing ensured by membrane's self-closing
- Closing system: flexible membrane (thick elastomer disc) held in its center on a metal seat composed of a grid (flow equivalent to the nominal section)



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| DN | | PN | PFA in bar | PS in bar | | | | Cat. | Ref. | Weight Kg |
|-------|-----|-------|---------------|-----------|----|-----|----|------|------------------|--------------|
| " | mm | | | L1 | L2 | G1 | G2 | | | |
| 1 1/2 | 40 | 10/16 | 16 | 16 | 16 | 16 | 16 | I | 149B1859 | 6,9 |
| 2 | 50 | 10/16 | 16 | 16 | 16 | 16 | 16 | I | 149B15239 | 8,9 |
| 2 1/2 | 65 | 10/16 | 16 | 16 | 16 | 15 | 16 | I | 149B1861 | 11,9 |
| 3 | 80 | 10/16 | 16 | 16 | 16 | 12 | 16 | I | 149B1832 | 15,9 |
| 4 | 100 | 10/16 | 16 | 16 | 16 | 10 | 16 | I | 149B1907 | 19,5 |
| 5 | 125 | 10/16 | 16 | 16 | 16 | 0,5 | 16 | I | 149B14916 | 25,4 |
| 6 | 150 | 10/16 | 16 | 13 | 16 | 0,5 | 16 | I | 149B14104 | 39,5 |
| 8 | 200 | 10 | 10 | 10 | 10 | 0,5 | 10 | I | 149B14922 | 81,6 |

Important notice :

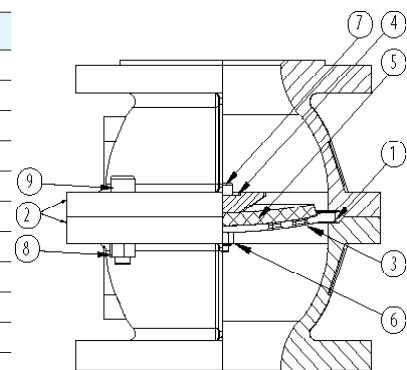
The indicated pressure for the different categories of fluids (L1/L2/G1/G2) is under no condition a guarantee of use. Therefore, it is essential to validate the use of products under given operating conditions. The operating instructions are available on our website www.socla.com or by requesting from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

Technical features

| | |
|---|--------------------------------|
| Operating temperature | -10 °C to 100 °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 | Liquides clairs, hydrocarbons |

Nomenclature and materials

| N° | Description | Materials | EURO | ANSI |
|----|-------------|-------------------|------------------------|----------------|
| 1 | O-ring | FKM | | |
| 2 | Body | Cast iron / Epoxy | EN-GJL-250 | ASTM A 48 35 B |
| 3 | Seat | DN 40 to 80 | Stainless steel | |
| | | DN 100 to 200 | Polyamide coated steel | |
| 4 | Cup | DN 40 to 65 | X6Cr17 | AISI 430 |
| | | DN 80 to 200 | Brass | CuZn39Pb3 |
| 5 | Membrane | FKM | | |
| 6 | Nut | Stainless steel | X5Cr-Ni18-10 | AISI 304 |
| 7 | Screw | Stainless steel | X5Cr-Ni18-10 | AISI 304 |
| 8 | Nut | Galvanised steel | | |
| 9 | Screw | Stainless steel | X5Cr-Ni18-10 | AISI 304 |



Approvals



International construction Standards :
Directive 2014/68/UE
Flange drilling according to EN1092-2

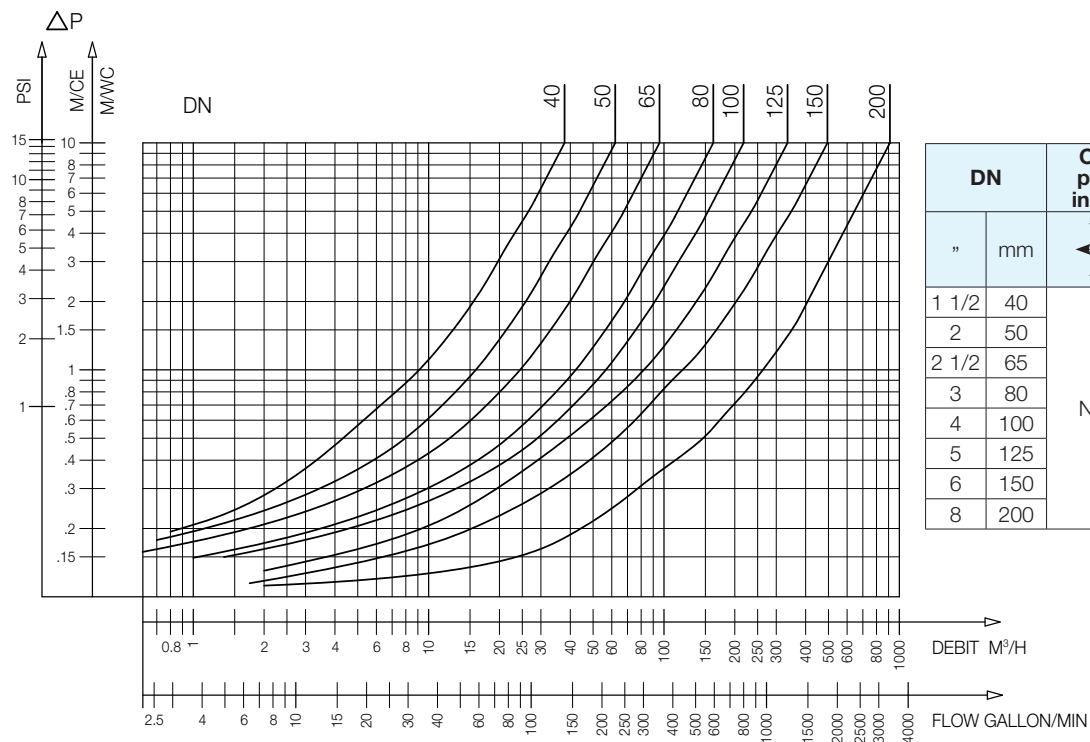
Application

Compressed air circuits, vacuum pumps, hydrocarbons.

Operation

Direction for use :

- Solid line: Valve completely open

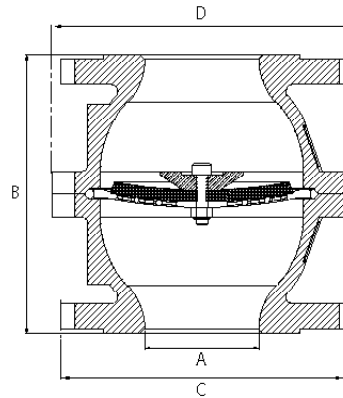


| DN | | Opening pressure in mm/CE | Kv m³/H | ζ |
|-------|-----|---------------------------|------------|------|
| " | mm | | | |
| 1 1/2 | 40 | Near to 0 | 37,8 | 2,86 |
| 2 | 50 | | 61,15 | 2,67 |
| 2 1/2 | 65 | | 95,3 | 3,14 |
| 3 | 80 | | 162 | 2,49 |
| 4 | 100 | | 218,7 | 3,34 |
| 5 | 125 | | 335,3 | 3,47 |
| 6 | 150 | | 495 | 3,3 |
| 8 | 200 | | 912,4 | 3,07 |

407V - Headloss chart

Sizing

| | A | B | C | D |
|-------|-----|-----|-----|-----|
| " | mm | mm | mm | mm |
| 1 1/2 | 40 | 148 | 150 | 140 |
| 2 | 50 | 158 | 164 | 159 |
| 2 1/2 | 65 | 176 | 183 | 169 |
| 3 | 80 | 196 | 200 | 212 |
| 4 | 100 | 213 | 220 | 234 |
| 5 | 125 | 228 | 250 | 250 |
| 6 | 150 | 266 | 285 | 324 |
| 8 | 200 | 439 | 340 | 426 |



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