

# 457

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
- 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 "	mm	PN	PFA in bar	PS in bar				Cat.	Ref.	Weight Kg
				L1	L2	G1	G2			
2 1/2	65	10/16	16	16	16	15	16	I	<b>149B2925</b>	11,9
3	80	10/16	16	16	16	12	16	I	<b>149B2926</b>	16,5
4	100	10/16	16	16	16	10	16	I	<b>149B2927</b>	26,3
5	125	10/16	16	16	16	0,5	16	I	<b>149B2928</b>	33,2
6	150	10/16	16	13	16	0,5	16	I	<b>149B2929</b>	49,8
8	200	10	10	10	10	0,5	10	I	<b>149B2930</b>	87,3

#### Important notice :

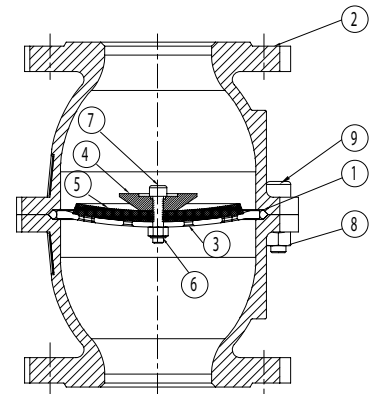
The indicated pressure for the different categories of fluids (L1/L2/G1/G2) is under no condition a guarantee of use. Therefore, it is essential to validate the use of products under given operating conditions. The operating instructions are available on our website [www.socla.com](http://www.socla.com)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

#### Technical features

Operating temperature	-10 °C to 60 °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	Water, clear liquids

#### Nomenclature and materials

N°	Description	Materials
1	O-ring	EPDM
2	Body	Cast iron / Epoxy GJL-250
3	Seat	DN 40-200 mm Stainless steel
4	Cupel	DN 65 mm Stainless steel 430
5	Membrane	DN 80-200 mm EPDM
6	Nut	Stainless steel 304
7	Screw	Stainless steel 304
8	Nut	Galvanised steel
9	Screw	Stainless steel 304



# Approvals

**ACS**  PED 2014/68/UE

**International construction Standards :**  
 CE conformity Directive 97/23/UE  
 Flange drilling according to EN1092-2  
 Length according to EN558-1 48 serie

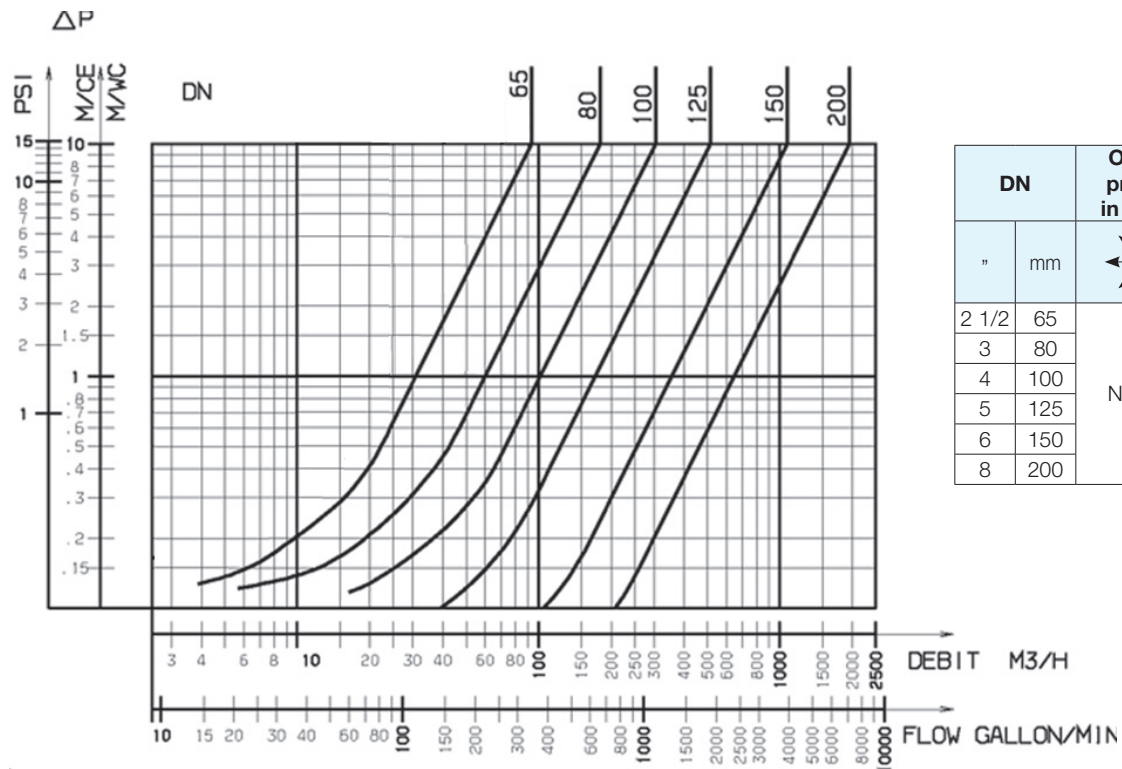
# Application


water network. variable flow

# Operation

**Direction for use :**

- Solid line: Valve completely open

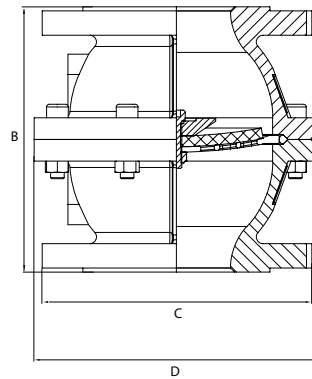


DN		Opening pressure in mm/CE	Kv	ζ
"	mm		m³/H	
2 1/2	65	Near to 0	78,4	4,55
3	80		157,0	2,60
4	100		255,0	2,40
5	125		448,9	1,90
6	150		966,4	0,85
8	200		2044,8	0,60

457 - Headloss chart

## Sizing

DN		B	C	D
"	mm	mm	mm	mm
2 1/2	65	240	185	169
3	80	260	200	212
4	100	300	220	234
5	125	350	250	250
6	150	400	285	324
8	200	500	340	426



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