

# IN

Antipollution insert checkvalve - EB type  
System 01

## Technical Data Sheet



## Description

IN checkvalves are compliant with the regulation of NF Antipollution brand.

According to the EN 1717, these EB type checkvalves are incorporated in a device, and guarantee a drinking water protection against a risk of pollution from a fluid of category 2.

The design of IN checkvalve is an advantage for OEM application with side-connection (as gauge connection). The O'ring can be mounted first and secondly the checkvalve itself. In this way the O'ring will not be damaged by sharp edges of the side-connection.

- Minimum head loss
- Noiseless operation due to a split obturator
- Does not generate hammering
- Compact and easy to fit
- Axial guidance obturator with return spring
- Absolute sealing at high or low back pressure ensured by an especially designed lip-seal
- Meets the requirements of all europeans approvals



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| DN |       | PFA<br>in bar | PS in bar |    |     |    | Cat. | Ref.              | Weight<br>Kg |
|----|-------|---------------|-----------|----|-----|----|------|-------------------|--------------|
| C  | "     |               | L1        | L2 | G1  | G2 |      |                   |              |
| 15 | 1/2   | 10            | 10        | 10 | 10  | 10 | 4.3  | <b>149B043320</b> | 0,0017       |
| 20 | 3/4   | 10            | 10        | 10 | 10  | 10 | 4.3  | <b>149F043489</b> | 0,0030       |
| 25 | 1     | 10            | 10        | 10 | 10  | 10 | 4.3  | <b>149F043490</b> | 0,0072       |
| 32 | 1 1/4 | 10            | 10        | 10 | 0,5 | 10 | 4.3  | <b>149F043491</b> | 0,0150       |
| 40 | 1 1/2 | 10            | 10        | 10 | 0,5 | 10 | 4.3  | <b>149F043492</b> | 0,0230       |
| 50 | 2     | 10            | 10        | 10 | 0,5 | 10 | 4.3  | <b>149F043493</b> | 0,0560       |

### Important notice :

The temperature and pressure indications given for the various categories of fluids (L1/L2/G1/G2) are under no circumstances a guarantee that they are suitable for your system. Therefore, it is essential to validate the use of the products under given operating conditions with our technical department.

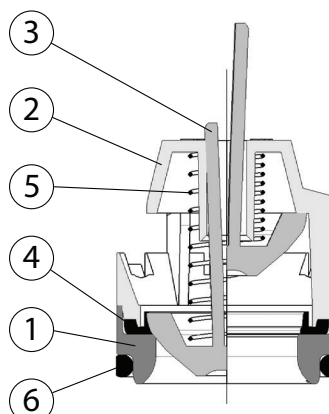
In addition, the operating instructions are available on our website [www.socla.com](http://www.socla.com) or by simply asking our sales department.

### Technical features

|                                                 |                                                                                      |
|-------------------------------------------------|--------------------------------------------------------------------------------------|
| Operation temperatures                          | Continuous -10°C up to 65°C / Maxi. : 85°C (in case of an accidental peak during 1h) |
| Permissible operating pressure (PFA) in water   | See table above                                                                      |
| Maximum permissible pressure (PS) other mediums | See table above                                                                      |
| Connection                                      | Incorporation in a device                                                            |
| Mediums                                         | Clear liquids, drinking water, neutral gaz                                           |

### Nomenclature and materials

| N° | Description | Materials        |
|----|-------------|------------------|
| 1  | Body        | POM (Polyacetal) |
| 2  | Guide       | POM (polyacetal) |
| 3  | Obturator   | POM (polyacetal) |
| 4  | Seal        | EPDM             |
| 5  | Spring      | Stainless steel  |
| 6  | O'ring      | EPDM             |



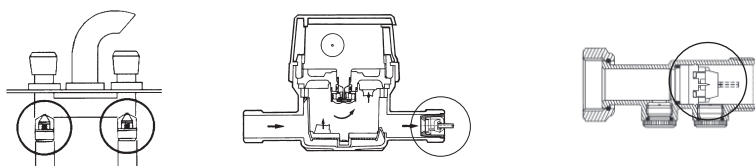
## Approvals



### International Construction Standards :

Specific NF brand regulation (technical doc. n°6 : antipollution checkvalve)  
NF EN 13959

## Application



IN checkvalves are incorporating in :

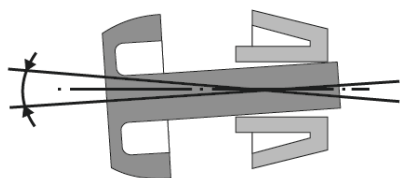
- Sanitary taps
- Thermostatic mixing valve
- Water meter
- EA antipollution devices ( Basic CC, EA 251, EA 271, EA 291...)
- CA antipollution device

## Fonctionnement

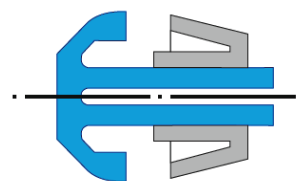
Some vibrations can occur at low flow rates. These vibrations are generated by possible lateral movements of the valve. Until now it was impossible to avoid this effect without affected hydraulic characteristics.

Thanks to the unique guide system by slotted stem that eliminates the possibility of movements and optimal hydraulic profile, vibration are eliminated.

By providing this guidance without the possibility of movements avoids calcareous deposits and vibration, ensuring a flowless and quiet operation for years.



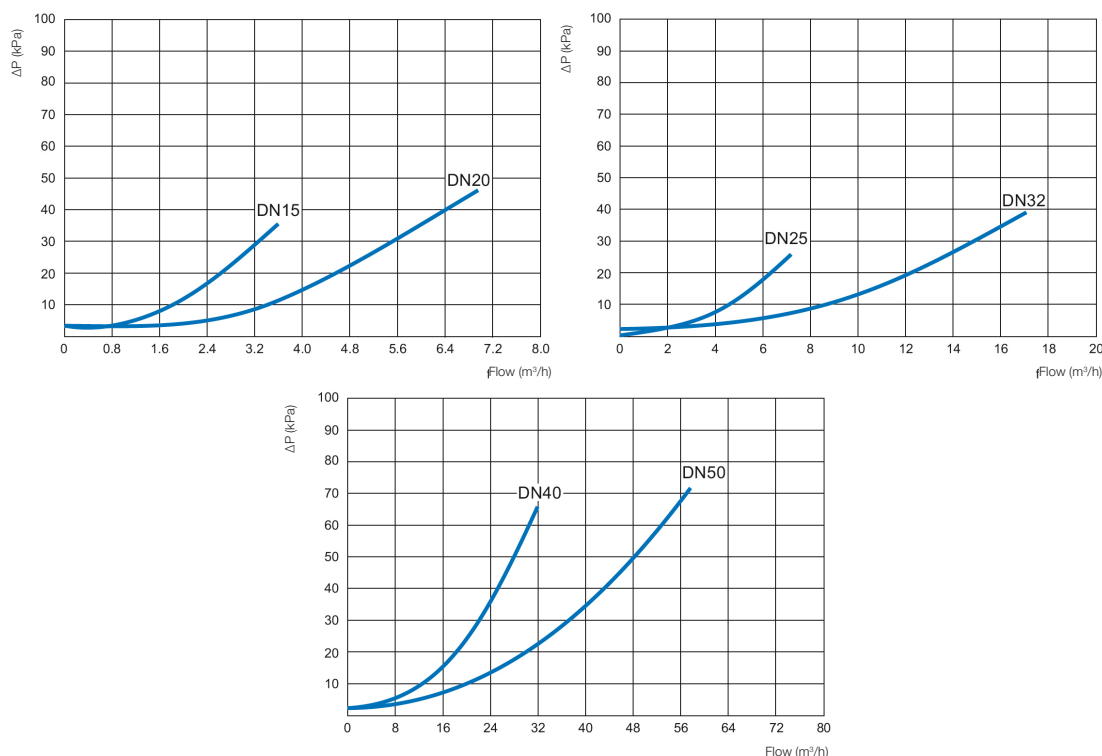
**Classic obturator guidance**



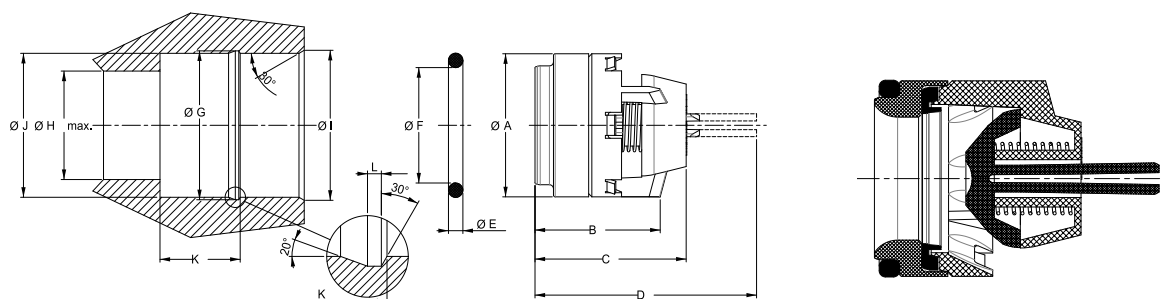
**WATTS obturator guidance**

# Operation

## IN - Headloss chart



# Sizing



| Ref.       | DN | $\varnothing A$                     | B          | C          | D          | $\varnothing E$ | $\varnothing F$ | $\varnothing G$ | $\varnothing H$                   | $\varnothing I$ | $\varnothing J$                    | K                                  | L                                |
|------------|----|-------------------------------------|------------|------------|------------|-----------------|-----------------|-----------------|-----------------------------------|-----------------|------------------------------------|------------------------------------|----------------------------------|
|            | mm | mm                                  | mm         | mm         | mm         | mm              | mm              | mm              | mm                                | mm              | mm                                 | mm                                 | mm                               |
| 149B043320 | 15 | 15,18 <sup>0</sup> <sub>-0,05</sub> | 12,2 ±0,4  | 15,2 ±0,5  | 22,80 ±0,5 | 1,5             | 12              | 15,8 ±0,1       | 11,5 <sup>0</sup> <sub>-0,1</sub> | 16,1 ±0,1       | 15,2 <sup>+0,1</sup> <sub>0</sub>  | 7,4 <sup>+0,2</sup> <sub>0</sub>   | 0,2 <sup>+0,2</sup> <sub>0</sub> |
| 149F043489 | 20 | 19,78 <sup>0</sup> <sub>-0,05</sub> | 16,60 ±0,4 | 21,7 ±0,5  | 32,20 ±0,5 | 2,0             | 16              | 20,6 ±0,1       | 15,2 <sup>0</sup> <sub>-0,1</sub> | 21,1 ±0,1       | 19,8 <sup>+0,1</sup> <sub>0</sub>  | 10,8 <sup>+0,2</sup> <sub>0</sub>  | 0,4 <sup>+0,2</sup> <sub>0</sub> |
| 149F043490 | 25 | 24,90 <sup>0</sup> <sub>-0,07</sub> | 21,50 ±0,4 | 26,0 ±0,5  | 35,90 ±0,5 | 2,5             | 20              | 25,8 ±0,1       | 18,8 <sup>0</sup> <sub>-0,1</sub> | 26,0 ±0,1       | 24,95 <sup>+0,1</sup> <sub>0</sub> | 13,9 <sup>+0,2</sup> <sub>0</sub>  | 0,6 <sup>+0,2</sup> <sub>0</sub> |
| 149B04391  | 32 | 31,70 ±0,07                         | 26,65 ±0,4 | 34,45 ±0,5 | 51,45 ±0,5 | 2,95            | 26,61           | 32,9 ±0,1       | 24,2 <sup>0</sup> <sub>-0,1</sub> | 33,1 ±0,1       | 31,90 <sup>+0,1</sup> <sub>0</sub> | 17,0 <sup>+0,2</sup> <sub>0</sub>  | 0,8 <sup>+0,2</sup> <sub>0</sub> |
| 149B04392  | 40 | 39,30 ±0,10                         | 33,30 ±0,4 | 40,75 ±0,5 | 61,10 ±0,5 | 3,53            | 32,92           | 41,2 ±0,1       | 30,1 <sup>0</sup> <sub>-0,1</sub> | 41,2 ±0,1       | 39,5 <sup>+0,1</sup> <sub>0</sub>  | 20,15 <sup>+0,2</sup> <sub>0</sub> | 1,0 <sup>+0,2</sup> <sub>0</sub> |
| 149B04393  | 50 | 49,40 ±0,10                         | 45,8 ±0,4  | 54,10 ±0,5 | 75,30 ±0,5 | 4,0             | 42              | 51,9 ±0,1       | 37,7 <sup>0</sup> <sub>-0,1</sub> | 51,1 ±0,1       | 49,6 <sup>+0,1</sup> <sub>0</sub>  | 24,3 <sup>+0,2</sup> <sub>0</sub>  | 1,2 <sup>+0,2</sup> <sub>0</sub> |

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A WATTS Brand

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