

Air valve type VENTEX - Reinforced version



The air valves protect the main:

The device evacuates great air amounts during the filling of the main:

- allows the inlet of great air amounts (in order to avoid a vacuum effect) during the emptying of the main
- evacuates small air amounts that are accumulated in the high points of the main during normal working conditions

The air valves are in conformance with EN 1074-4 and have a certificate of sanitary conformity.

Range

Air Valves **Type VENTEX** exist in a range stretching from DN50 to 200, for pressure PFA10, PFA16 and PFA25.

| DN Air valve | E | F | H | h1 | a | s |
|--------------|-----|-----|-----|-----|----|------|
| mm | mm | mm | mm | mm | mm | mm |
| 65 | 390 | 200 | 258 | 165 | 20 | 15,3 |
| 80-100 | 467 | 244 | 300 | 215 | 20 | 15,3 |
| 150 | 656 | 405 | 492 | 285 | 24 | 18,5 |
| 200 | 737 | 448 | 580 | 330 | 29 | 20,7 |

Nozzle diameter

| | | | |
|-----------------------------------|-----|-----|-----|
| Working pressure (bar) | 10 | 16 | 25 |
| Diameter (mm) for DN Air valve 65 | 2.2 | 1.7 | 1.4 |

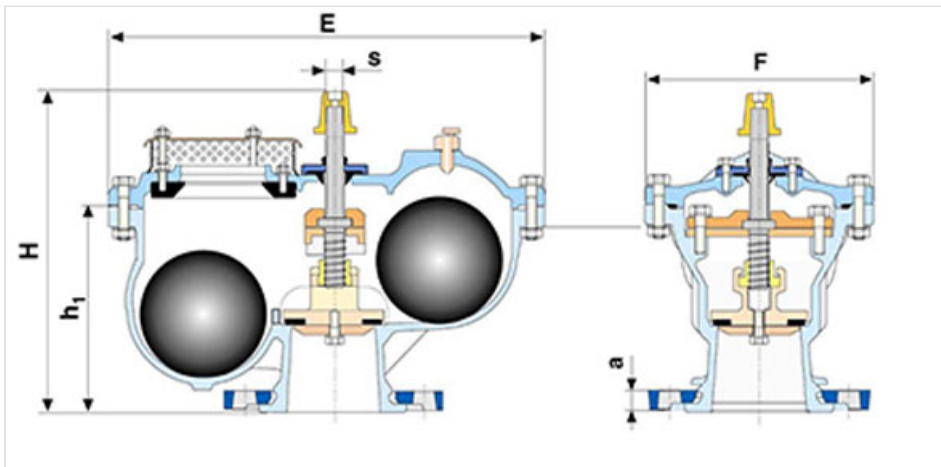
| | | | |
|--|---|-----|-----|
| Diameter (mm) for DN Air valve 80 to 200 | 3 | 2.4 | 1.9 |
|--|---|-----|-----|

Connecting flange: 65 type double air valve is fitted with an ISO PN10-16 or ISO PN25 DN60 rotatable flange

Other flanges available:
ISO PN10-16 or ISO PN25 rotatable DN65 flange
DN50 fixed flange.

| DN (mm) | Version | PN 10 | | PN 16 | | PN 25 | |
|---------|-----------|-----------|------------|-----------|------------|-----------|------------|
| | | Mass (kg) | References | Mass (kg) | References | Mass (kg) | References |
| 50 | Handwheel | 25.00 | * | 25.00 | * | 25.00 | 179067 |
| 60 | Handwheel | 25.00 | * | 25.00 | * | 25.00 | * |
| 65 | Handwheel | 27.00 | 236358 | 27.00 | 236357 | 27.00 | * |
| 80 | Handwheel | 40.00 | 181725 | 40.00 | 181726 | 40.00 | 181727 |
| 100 | Handwheel | 40.00 | 178928 | 40.00 | 178930 | | |
| 150 | Handwheel | 115.00 | 178944 | 115.00 | 178945 | 115.00 | 178946 |
| 200 | Handwheel | 186.00 | 178947 | 186.00 | 178948 | | |

(*) contact us



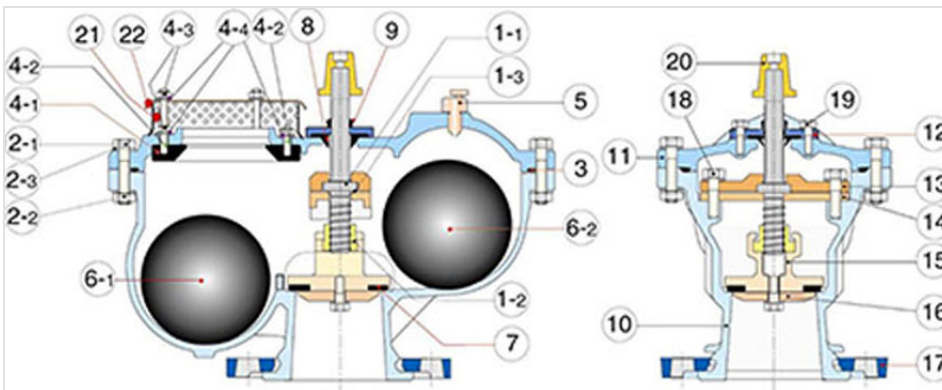
Fast choice of Ventex

Allows during the emptying of the main with a speed 1m/s

| Main | DN ≤ 250 | DN300-600 | DN700-900 | DN1000-1200 | DN1200-1800 |
|-----------|--------------|-----------|-----------|-------------|-------------|
| Air Valve | DN50, 60, 65 | DN80,100 | DN150 | DN200 | 2 DN200 |

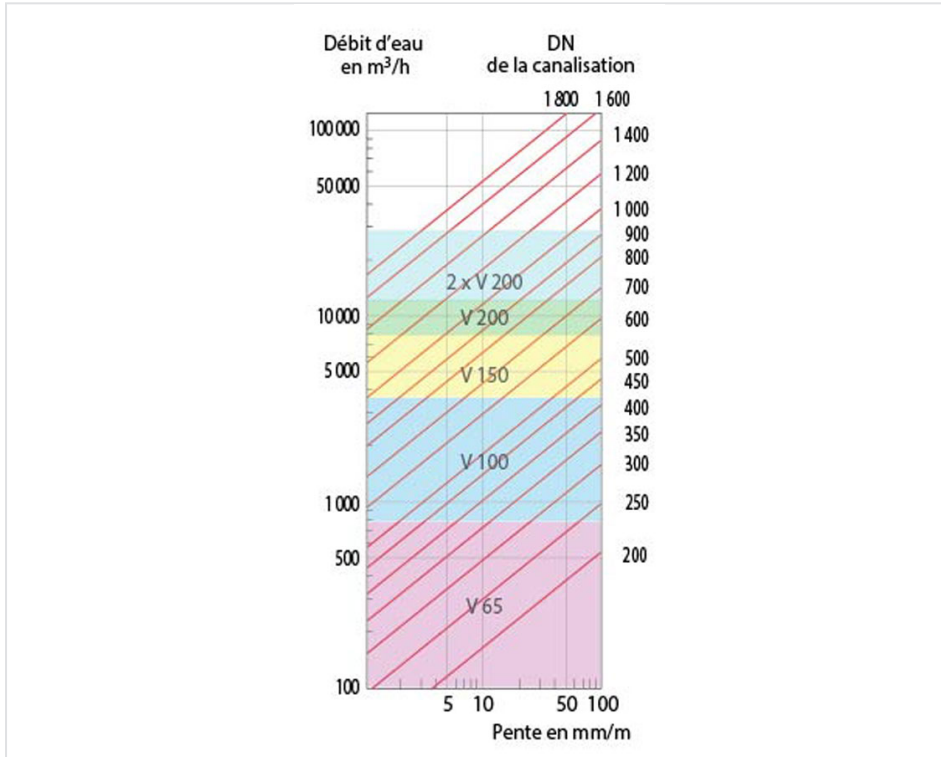
This Ventex choice allows, in case of break main, to limit maximal pressure drop 0,3 Bar for a flow rate with a part full gravity pipeline on a given slope: See paragraph Performances.

Material and coating



| Item | Designation | Material |
|--------------------------------|--|---|
| 10, 11, 12, 13, 14, 15, 16, 17 | Body, Bonnet , Fixing Flanges, Shutter | FGS 400/15 or 500-7 coated epoxy 300 μ mini |
| 1-1 | Operating stem | Stainless steel X5CrNiCuNb 16-4 type |
| 1-2 | Operating nut | Cu Zn 39 Pb2 bronze type |
| 1-3 | Locked wash | Polyamide type 6-6 |
| 2-1 ; 2-2 , 2-3 | Body-bonnet: bolts and washers | Stainless steel A4 |
| 3 | Body-bonnet gasket | EPDM Rubber |
| 4-1 | Large orifice seat | NBR rubber encapsulated SG 400/15 ductile iron |
| 4-2+4-3+4-4 | Seat: bolts and washers | Stainless steel A4 |
| 5 | Nozzle and nozzle control | Cu Al 10 Ni3 Fe2 alu-bronze type |
| 6-1 and 6-2 | Float balls | EPDM rubber encapsulated Core in steel DC03 or DC04 to EN 10130 and DD11 or DD13 to EN 10111 steel type |
| 7 | Shutter gasket | EPDM Rubber |
| 8 | Ring VAN O FRA | EPDM Rubber G 7005 |
| 9 | V Ring | NBR Rubber |
| 18 | Operating system bolts and washers | Stainless steel A4 |
| 19 | | Stainless steel A4 |
| 20 | Operating square (or hand wheel) | FGS 400/15 coated polyurethane |
| 21 | Baffle | Stainless Steel Z6 CN 18-8 type |
| 22 | Baffle cover | Steel S235JR type coated Epoxy 300 μ |

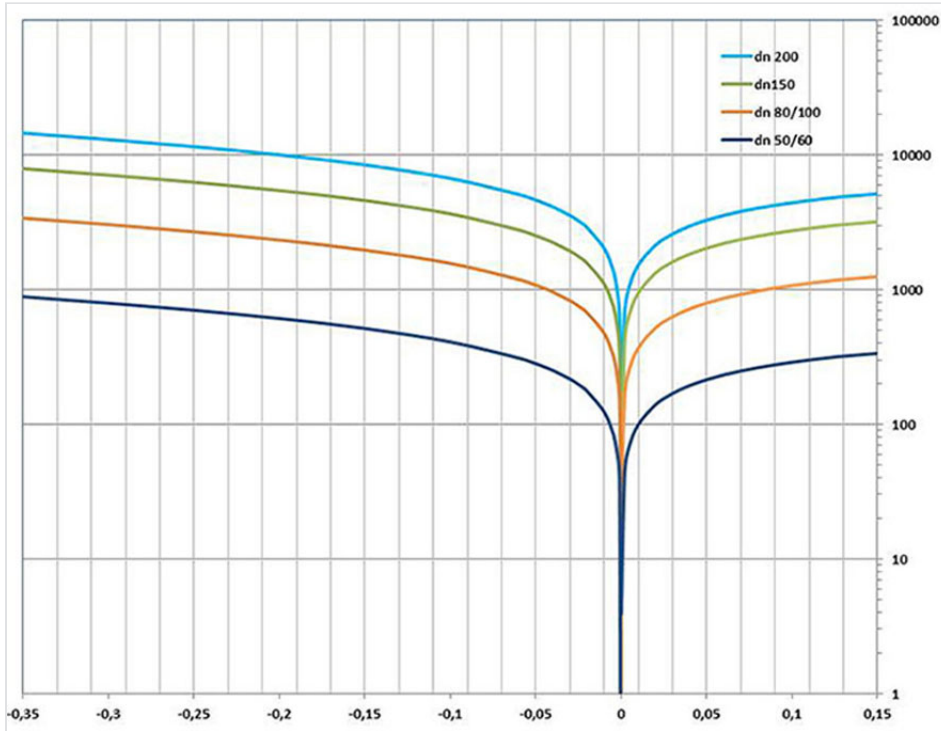
Performances



Water flow in case of break main

Examples of Use: for a main DN600 laid inclined 4mm/m flow water around 1800 m³/h , flow which will not create a depression higher than 0,3b according to graph air flow large orifice below

Air flow large orifice



Air Flow output by large orifice in m³/h (with the pressure of main: air flow = water flow) - Air Flow input by large orifice in m³/h (with the pressure of main: air flow = water flow)

Nozzle air flow

Constant Flow from 1 bar (10MCE)

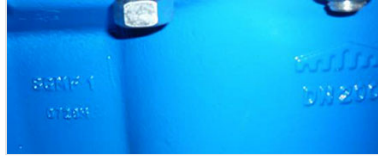
| PFA in Bar | 10 | | 16 | | 25 | |
|---------------------------|-------|--------|-------|--------|-------|--------|
| DN in mm | 50-65 | 80-200 | 50-65 | 80-200 | 50-65 | 80-200 |
| Ø nozzle in mm | 2,2 | 3 | 1,7 | 2,4 | 1,4 | 1,9 |
| Flow in m ³ /h | 2,7 | 5 | 1,6 | 3,2 | 1,1 | 2 |

Hydraulic

Small and large Float balls: External leakage

No leakage in low pressure from 0,3 bars

Marking

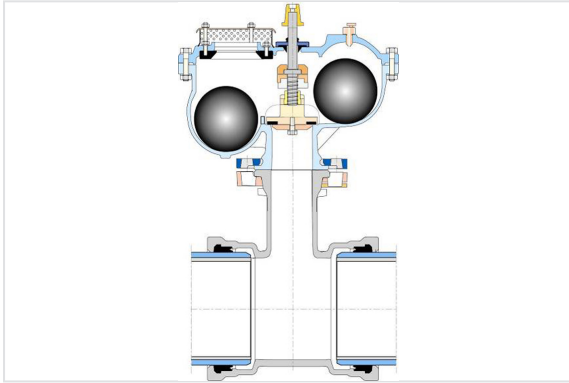


The marking of the valves manufactured by Saint-Gobain refers to the EN 1074-2 and EN 19 international standards.

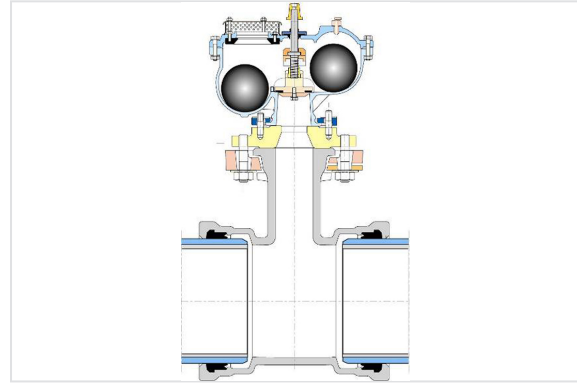
Markings are either integral markings, cast in the body, or markings made on plates, securely fixed to the body, in accordance with the EN 19 standard specifications.

| EN 19 Specifications | | | Saint-Gobain valves process |
|--------------------------|----------------------------------|---|-----------------------------|
| Table 1 - Valve markings | | Requirements | |
| 1 | DN | EN 19 § 4.2.1 Mandatory markings Shall be integral markings or on a marking plate | Integral |
| 2 | PN | | Integral |
| 3 | Material | | Integral |
| 4 | Manufacturer's name or trademark | | Plate |
| 11 | Reference to Standard | EN 19 § 4.3 Supplementary markings Items 7 to 21 in Table 1 are optional | Plate |
| 12 | Melt identification | | Integral |
| 16 | Quality test | | Printed on body |
| 18 | Manufacturing date | | Plate |
| 21 | Closing direction | | Plate + sticker on body |

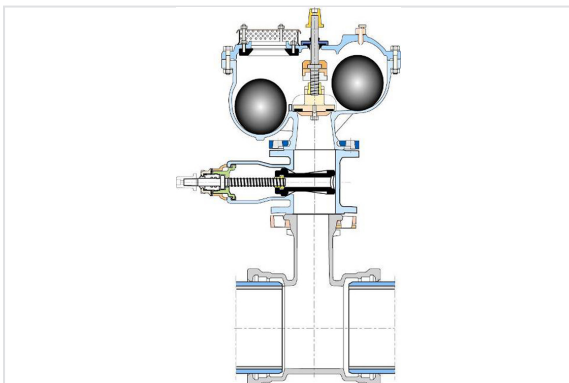
Installation



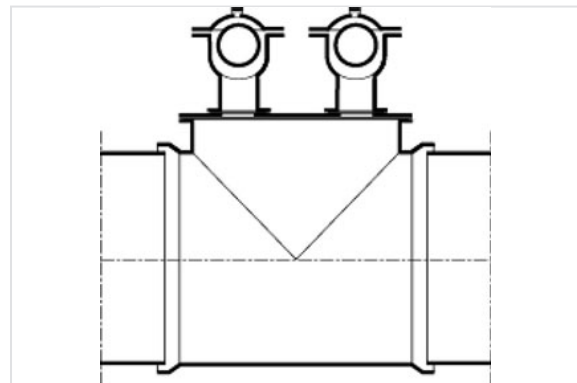
1.



2.



3.



4.

1. Mounting on tee: central operating system allows, without water cut of sector, the regular maintenance of Ventex in particular change of the floats ball
2. Mounting with reducing flange
3. Mounting with gate valve: only for a repairing without water cut: operating system or shutter gasket insert gate valve
4. Mounting with two air valves DN200: for pipes DN1400 up to DN1800: to realize according to sketch on a tee 3 equal socket and a special Blank flange

The information on this sketch is, to the best of our knowledge correct at the time of printing. However Saint-Gobain are constantly looking at ways of improving their products and services therefore reserve the right to change without prior notice, any of the data shown. Any orders placed will be subject to our Standard Conditions of Sale, available on request.