

Air valve type VENTEX - Standard 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 mm	E mm	F mm	H mm	h1 mm	a mm	s 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 DN65	2.2	1.7	1.4
Diameter (mm) for DN80 to 200	3	2.4	1.9

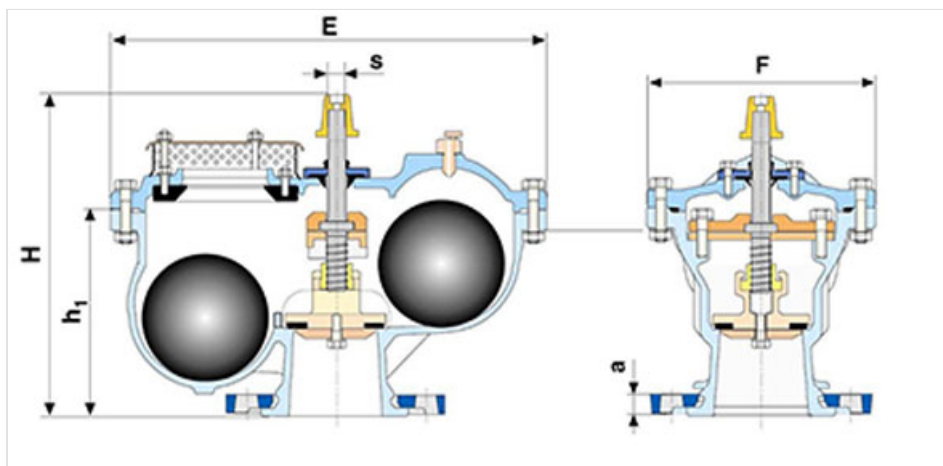
Connecting flange: 65 type double air valve is fitted with an ISO PN10-16 or ISO PN25 DN60 rotatable flange

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	RCA50CSAHV	25.00	RCA50CSDHV
50	Cap	25.00	RCA50CSBH	25.00	RCA50CSAH	25.00	RCA50CSDH
60	Handwheel	27.00	RCA60CSBHV	27.00	RCA60CSAHV		
60	Cap	24.00	RCA60CABH	27.00	RCA60CAAH	32.00	RCA60CADH
65	Handwheel	27.00	RCA65CSBHV	27.00	RCA65CSAHV	27.00	RCA65CSDHV
65	Cap	27.00	RCA65CSBH	27.00	RCA65CSAH		
80	Handwheel	40.00	RCA80CSBHV	31.00	RCA80CSAHV	42.00	RCA80CSDHV
80	Cap	40.00	RCA80CABH	41.00	RCA80CAAH	42.00	RCA80CADH
100	Handwheel	40.00	RCB10CSBHV	40.00	RCB10CSAHV	44.00	RCB10CSDHV
100	Cap	41.00	RCB10CABH	40.00	RCB10CAAH	42.00	RCB10CADH
150	Handwheel	115.00	RCB15CSBHV	115.00	RCB15CSAHV	115.00	RCB15CSDHV
150	Cap	115.00	RCB15CABH	135.00	RCB15CAAH	115.00	RCB15CADH
200	Handwheel	186.00	RCB20CSBHV	186.00	RCB20CSAHV		
200	Cap	170.00	RCB20CABH	180.00	RCB20CAAH	182.00	RCB20CADH



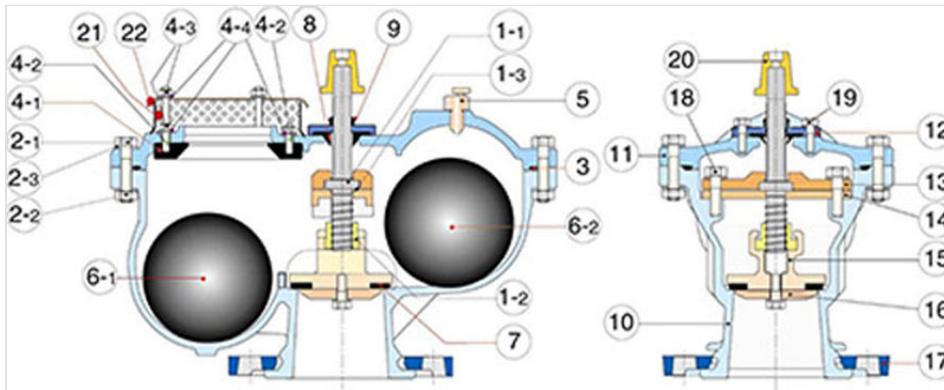
Fast choice of Ventex

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

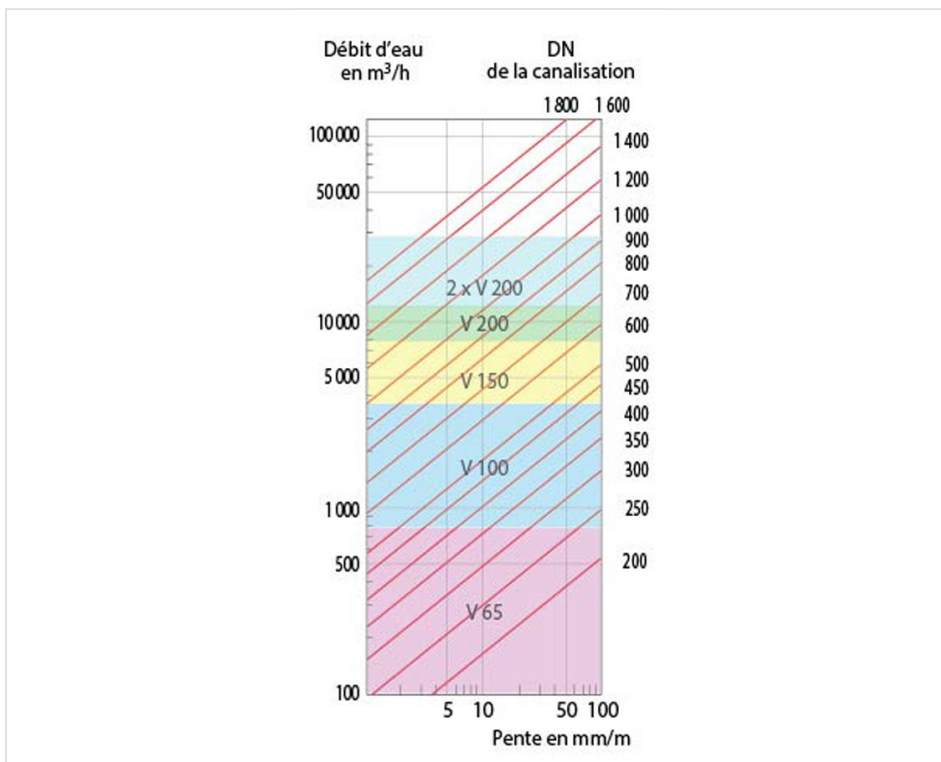
Material and coating



Item	Designation	Material
10, 11, 12, 13, 14, 15, 16, 17	Body, Bonnet , Fixing Flanges, Shutter	FGS 400/15 or 500-7 coated epoxy 250 μ mini
1-1	Operating stem	Stainless steel Z20 C13 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	Zinc coated class 8-8 steel
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	Zinc coated class 8-8 steel
5	Nozzle and nozzle control	Cu Zn 39 Pb2 bronze rod 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

Item	Designation	Material
18	Operating system bolts and washers	Stainless steel class A2
19		Zinc coated class 8-8 steel
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 250 μ

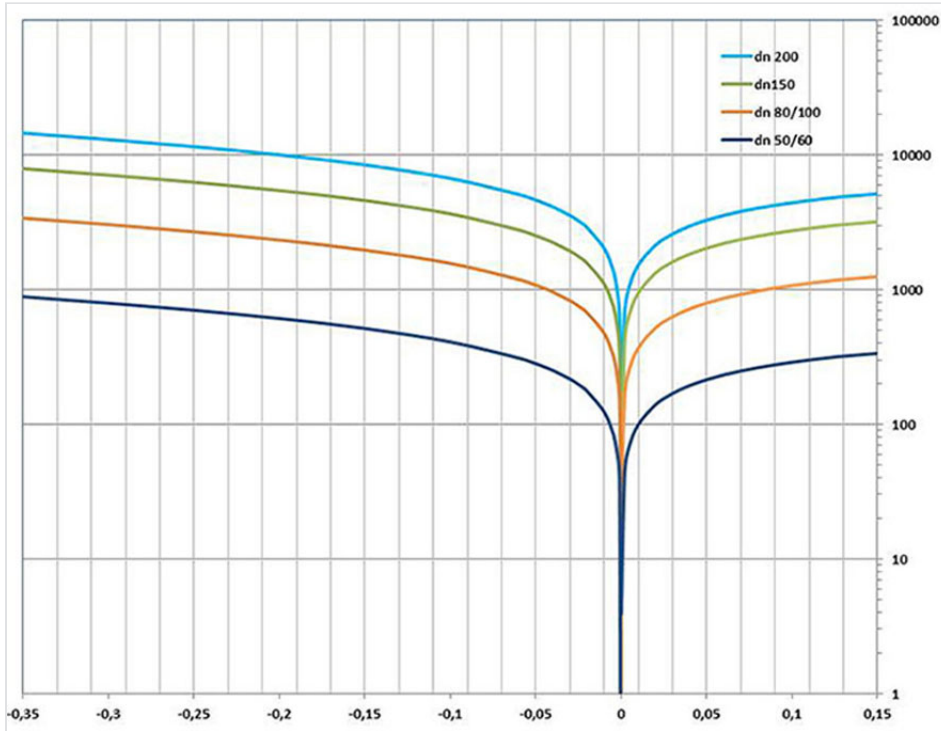
Performances



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

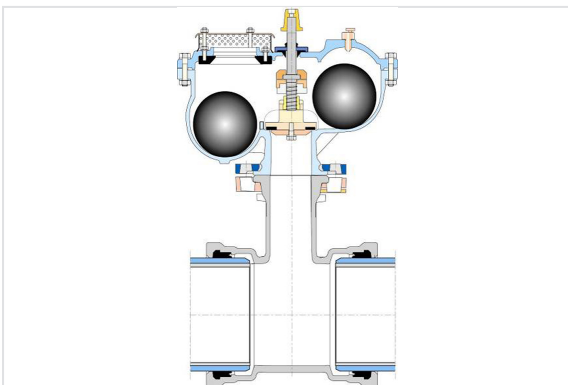


The marking of the valves manufactured by Saint-Gobain refers to the EN 1074-2 and EN 19 international standards.

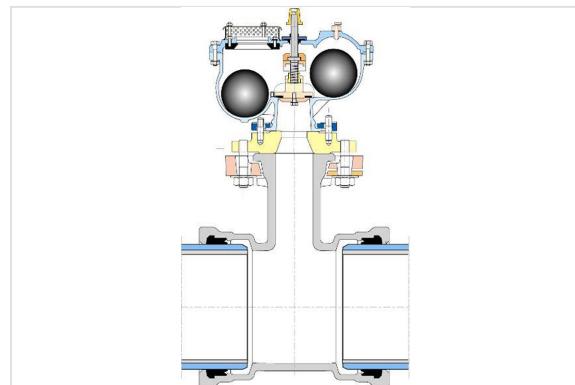
Markings are either integral markings, cast in the body, or markings made on plates, securely fixed to the body, in accordance with the EN 19 standard specifications.

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

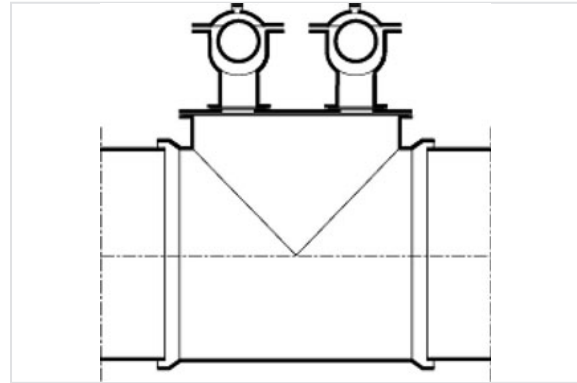
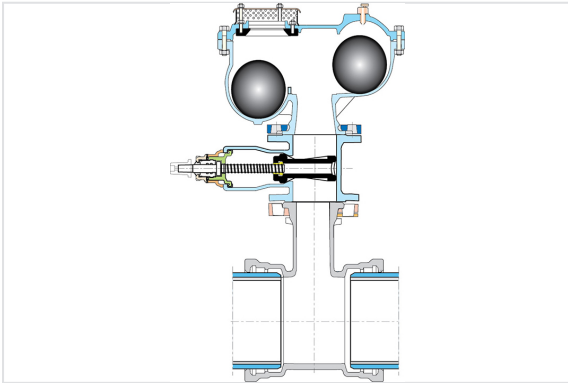
Installation



1.



2.



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.