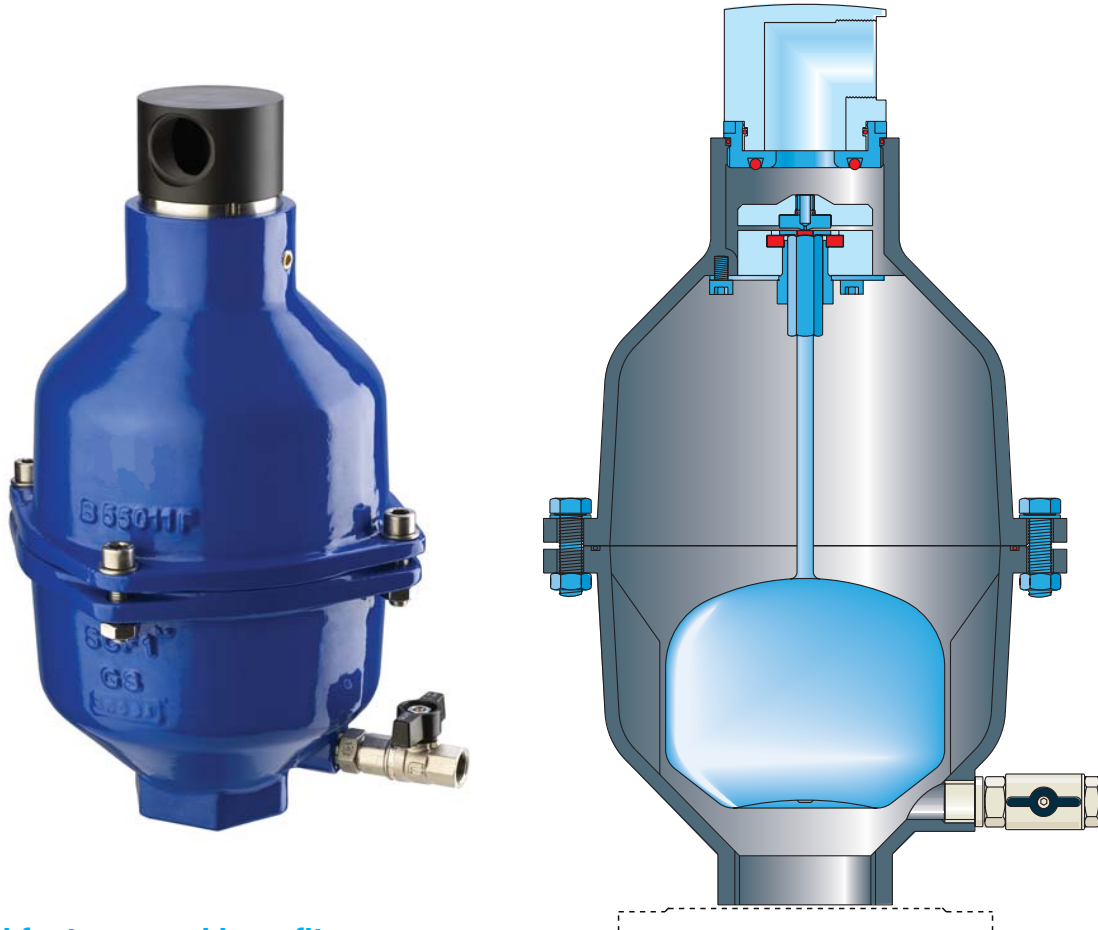


Combination air valve for sewage DNS SCF - 2" BSP or 50/80mm Flanged

The air valve guarantees the proper operation of sewage lines allowing the entrance of a large quantity of air in case of pipe burst or draining, the release of air pockets during working conditions and the discharge during pipe filling.



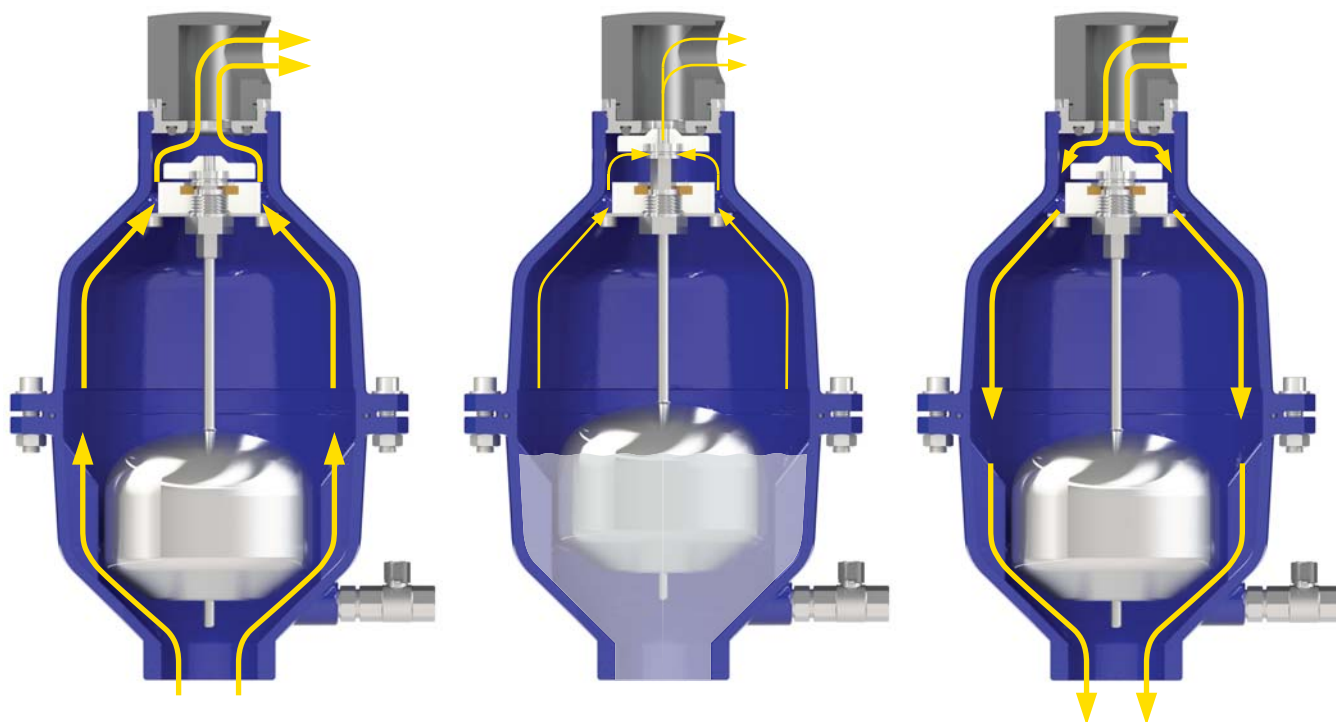
Technical features and benefits

- Lower body designed with strongly sloped high walls to avoid deposit of grease and/or other material, it contains four ribs to guide the stainless steel float.
- Upper body containing the air release device which is protected against projections, during rapid filling phases, by a stainless steel diffuser.
- Mobile block, including a large AISI 316 stainless steel float, placed on the lower body and connected through a stainless steel rod to the air release mechanism.
- Compact and light, the SCF 2" features an innovative technology making it suitable even to the most demanding environments.
- Drainage valve for chamber control and draining.
- Maintenance can be easily performed from the top without removing the air valve from the pipe.
- Evacuation bend suitable for flooded environments with 1" threaded outlet.

Applications

- Sewage main transmission lines.
- Treatment plants.
- Irrigation systems in presence of solids/debris in suspension.
- Whenever the technology of air valves for treated water can't be used for the risk of clogging and damages to the internal components.

Operating principle



Discharge of large volumes of air

During the pipe filling it is necessary to discharge air as water flows in. The SCF 2", thanks to an aerodynamic full port body and deflector, will make sure to avoid premature closures of the mobile block during this phase.

Air release during working conditions

During operation the air produced by the pipeline is accumulated in the upper part. Little by little it is compressed and its volume increases, pushing the liquid level downwards allowing the air release through the nozzle.

Entrance of large volumes of air

During pipeline draining, or pipe bursts, it is necessary to bring in as much air as the quantity of outflowing water. This is to avoid negative pressure and serious damages of the pipeline and the entire system.

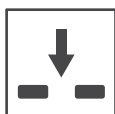
Optional



■ **Vacuum breaker version SCF 2" 2F**, to allow the entrance and discharge of large volumes of air only. This model is normally recommended in changes in slope ascending, long ascending segments, and wherever the air release won't be required.



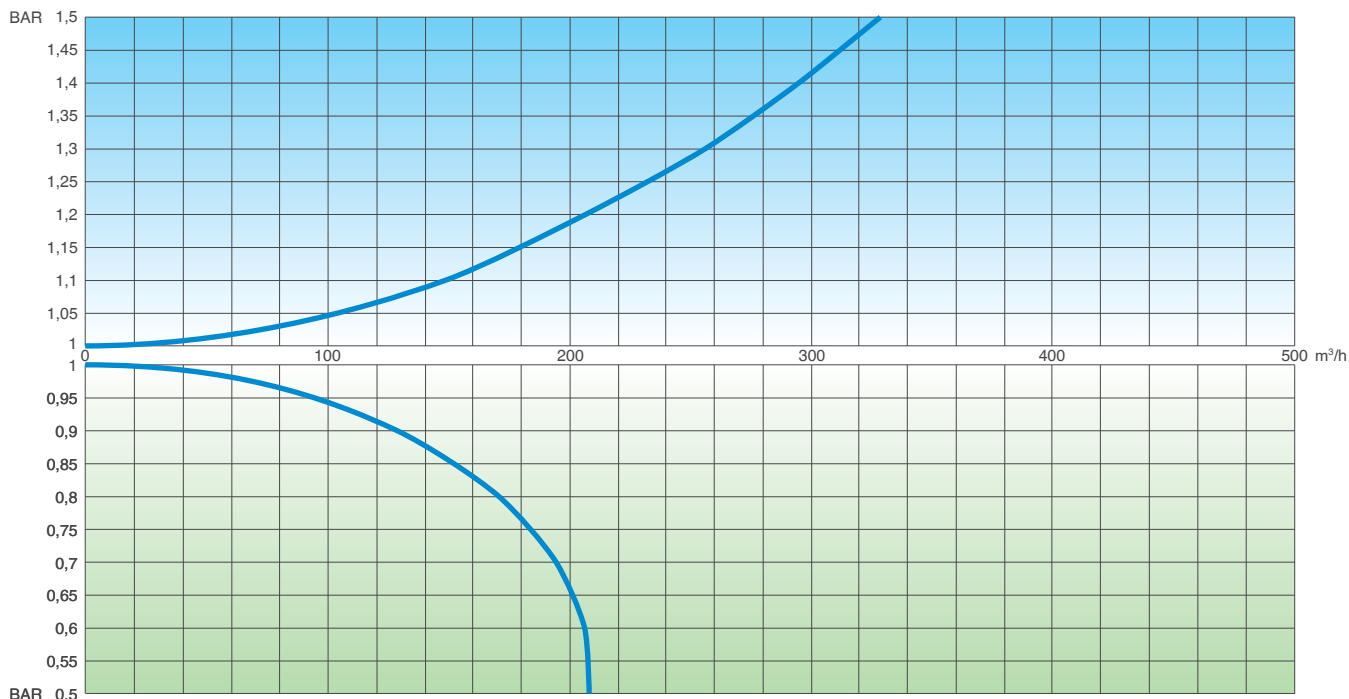
■ **Version for air discharge only SCF 2" EO series (on request)**, available both for SCF 2" and SCF 2" 2F models. The most important application of EO is to allow the air valve installation in those locations of the system where HGL may drop below the pipe profile, and to any other node where for project requirements air entrance must be avoided.



■ **Version for air entrance only SCF 2" IO series**, available for vacuum breaker model only. The most important application of IO is to allow the air valve installation in those locations of the system where, for project requirements, air discharge and release must be avoided.

Air flow performance charts

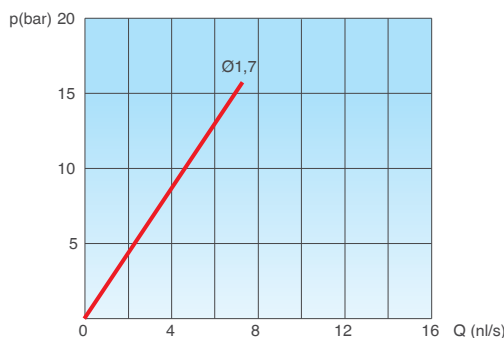
AIR DISCHARGE DURING PIPE FILLING



AIR ENTRANCE DURING PIPE DRAINING

Working conditions

Waste water 70° C max.;
 Maximum pressure 16 bar;
 Minimum pressure 0,2 bar as standard.
 (With low pressure sealing kit 0.05 bar)

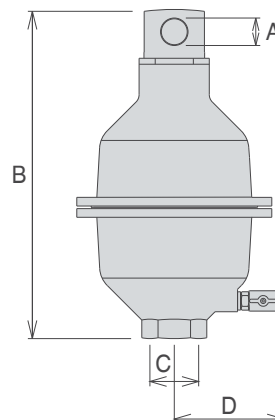


AIR RELEASE DURING WORKING CONDITIONS

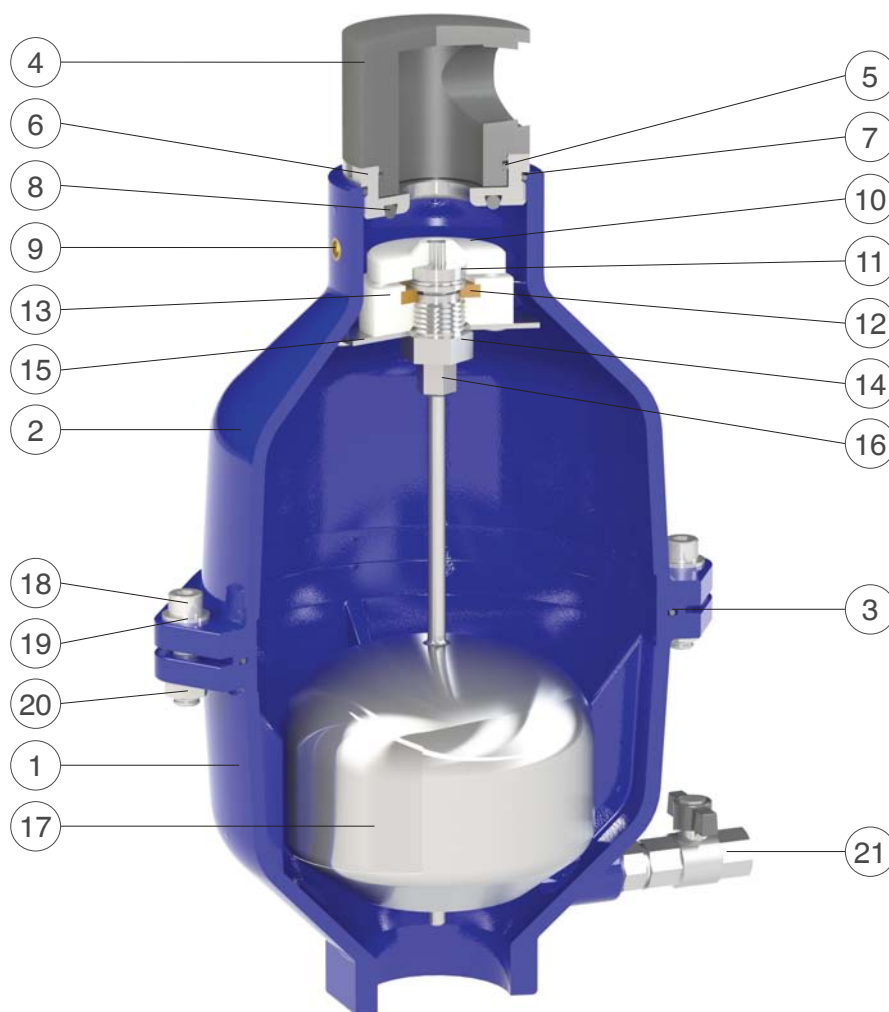
Standard

Designed in compliance with EN-1074/4.
 Manufactured with 2" outlet; supplied on request with flanges according to EN 1092/2 / ANSI.
 Epoxy painting applied through fluidized bed technology blue RAL 5005.
 Changes and variations on the flanges and painting details available on request.

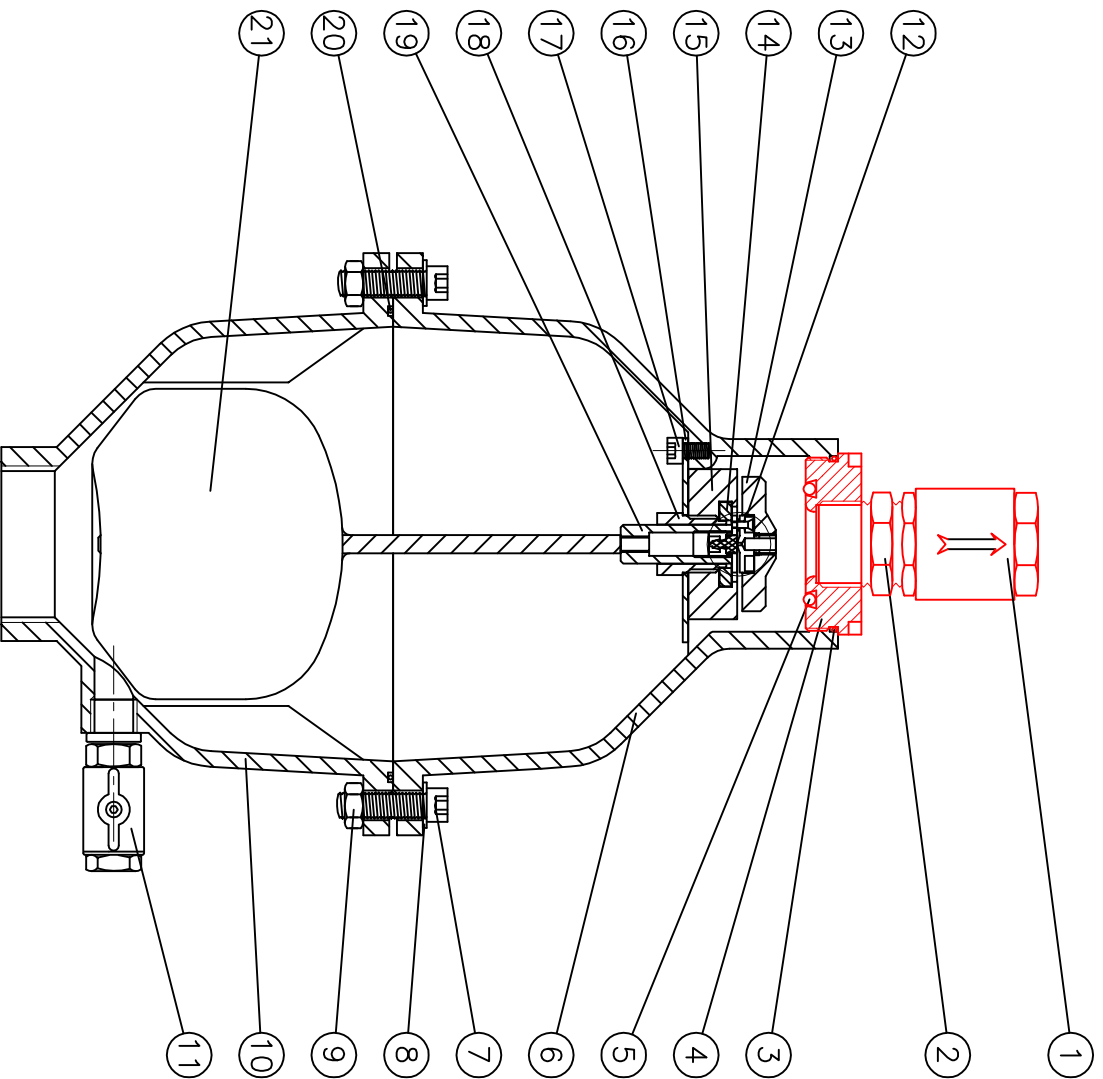
DN (C) mm	A mm	B mm	D mm	Main orifice mm ²	Nozzle mm ²	Weight Kg
2"	1"	380	137	490	1,7	10,5



Technical details



N.	Component	Material	Standard
1	Lower body	ductile cast iron	GJS 500-7
2	Upper body	ductile cast iron	GJS 500-7
3	O-ring	NBR	
4	Cap	PVC	
5	O-ring	NBR	
6	Seat	stainless steel	AISI 316
7	O-ring	NBR	
8	Seat gasket	NBR	
9	Plug	brass/stainless steel	OT58/AISI 316
10	Obturator	polypropylene	
11	Nozzle subset	stainless steel	AISI 316
12	Plane gasket	NBR/Polyurethane	
13	Lower gasket holder	polypropylene	
14	Diffuser	stainless steel	AISI 316
15	Guiding nut	stainless steel	AISI 316
16	Upper gasket holder	stainless steel	AISI 316
17	Float	stainless steel	AISI 316
18	Screws	stainless steel	AISI 316
19	Washers	stainless steel	AISI 316
20	Nuts	stainless steel	AISI 316
21	Drain valve	stainless steel	AISI 316



POS.	COMPONENT	MATERIAL
1	Check valve	BRONZE/AISI
2	Nipples	BRONZE/AISI
3	O-ring	NBR
4	Seeding seat	S.S. AISI 316
5	O-ring	NBR
6	Upper body	GJS 500-7
7	Screw	S.S. AISI 316
8	Washer	S.S. AISI 316
9	Nut	S.S. AISI 316
10	Lower body	GJS 500-7
11	Ball valve 3/8 with nipple	AISI 316/OT58
12	Nozzle	AISI 316
13	Obturator	POLYPROPYLENE
14	Protection rubber	NATURAL RUBBER
15	Protection bush	POLYPROPYLENE
16	Diffuser	S.S. AISI 316
17	Screw	S.S. AISI 316
18	Driving sleeve	S.S. AISI 316
19	Gasket holder	S.S. AISI 316
20	O-ring	NBR
21	Float	S.S. AISI 316
Spare part list		
2-3-5-12-13-20		



Designed Network Solutions

Data sheet

SCF 2"-E0