Wastewater combination underground air valve Mod. SCF 2"

The underground air valve has been designed to provide the proper solution for those locations requiring cost saving, frost protection, installation under roads, pavements, buildings. The air valve will ensure the operation of the pipeline networks allowing the release of air pockets during working conditions, the evacuation and the entrance of large volumes of air during filling and draining operations.

Technical features and benefits

- The model is designed to provide an alternative solution to conventional air valves installations avoiding chambers, structures, pits and sectioning devices between the air valve and the pipeline.
- Stand pipe in PVC with drain port in the lower part which avoids accumulation of water inside the pipe.
- Different heights available.
- Various sizes and drilling of the flange.
- FCC wastewater combination air valve automatically operated by the flow medium, available in different versions.
- Thanks to the flushing pipe and the sectioning device included in the base, with maneuvering rod operable from the top, maintenance can be carried out without interrupting the flow in the main pipe or digging.

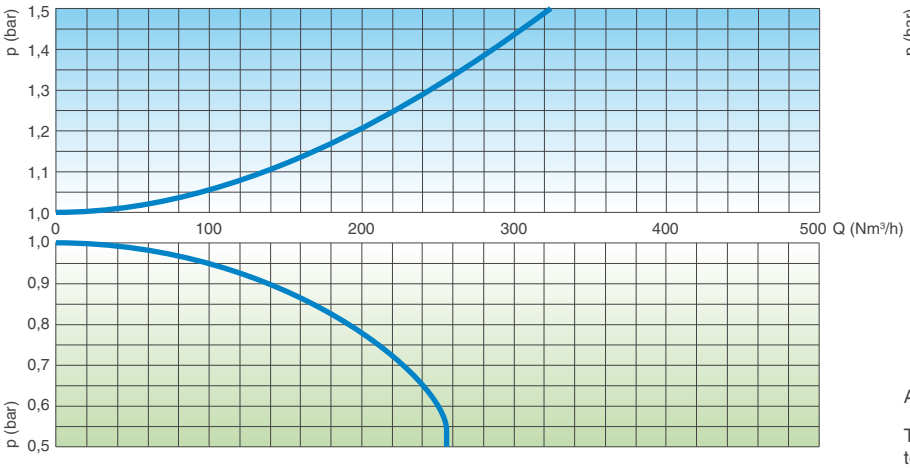
Applications

- At high points and changes in slope.
- Pressurized sewage systems.
- In areas exposed to frost, under the roads, buildings.

Technical data

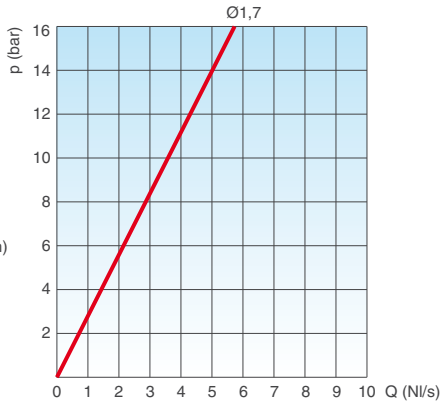
Air flow performance charts

AIR DISCHARGE DURING PIPE FILLING



AIR ENTRANCE DURING PIPE DRAINING

nozzle diameter (mm)



AIR RELEASE DURING WORKING CONDITIONS

The air flow charts were created in Kg/s from laboratory tests and numerical analysis, without the screen, then converted in Nm³/h using a safety factor.

Working conditions

Water and waste water max. 60°C.
Maximum pressure 16 bar.
Minimum pressure 0,2 bar. Lower on request.

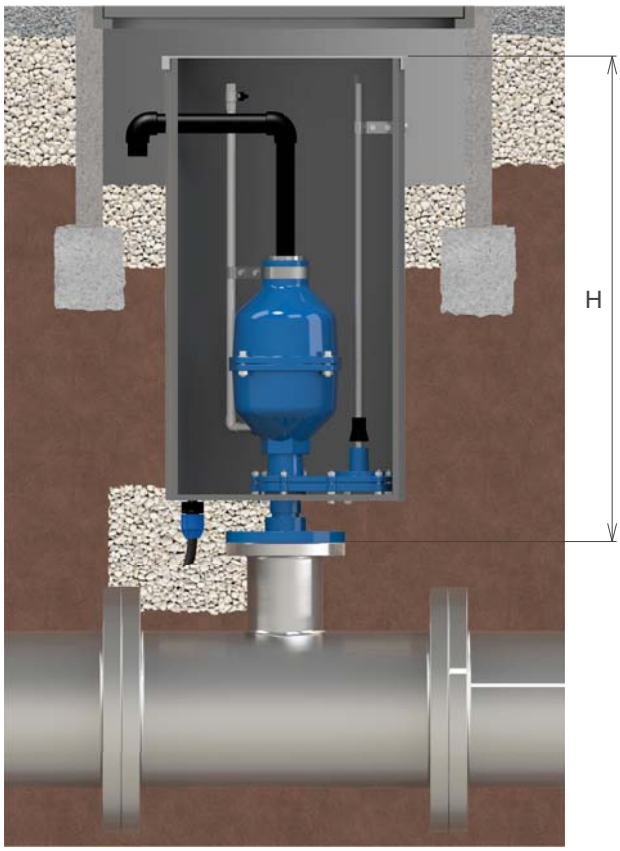
Nozzle choice

Nozzle diameter in mm according to the size of the air valve and the PN.

PN 10	PN 16
1,7	1,7

Standard

Certified and tested in compliance with EN-1074/4.
Flanges according to EN 1092/2 / ANSI.
Different heights available.
Epoxy painting applied through fluidized bed technology blue RAL 5005.
Changes on the flanges and painting details available on request.



Installation

The installation simply requires a derivation from the main pipe, a manhole on top to allow for maintenance operations. The picture depicts the proper installation where the drain port plays a fundamental role, allowing for water discharge from the stand pipe. The drain should be located on a layer of gravel or crushed rock.

Technical details

N.	Component	Standard material
1	Cover	polyethylene
2	Stand pipe	PVC
3	Air valve SCF 2"	in different executions (see SCF 2" technical details)
4	Conveyance pipe	polypropylene
5	Pipe for flushing	zinc-plated steel/stainless steel
6	Sectioning device	ductile cast iron GJS 450-10, stainless steel, NBR
7	Maneuvering rod	zinc-plated steel/stainless steel
8	Flange	painted steel
9	Drain	polypropylene

The list of materials and components is subject to changes without notice.

Flow Control Company Ltd, Cooper Drive, Springwood Industrial Estate, Braintree, Essex, CM7 2RF