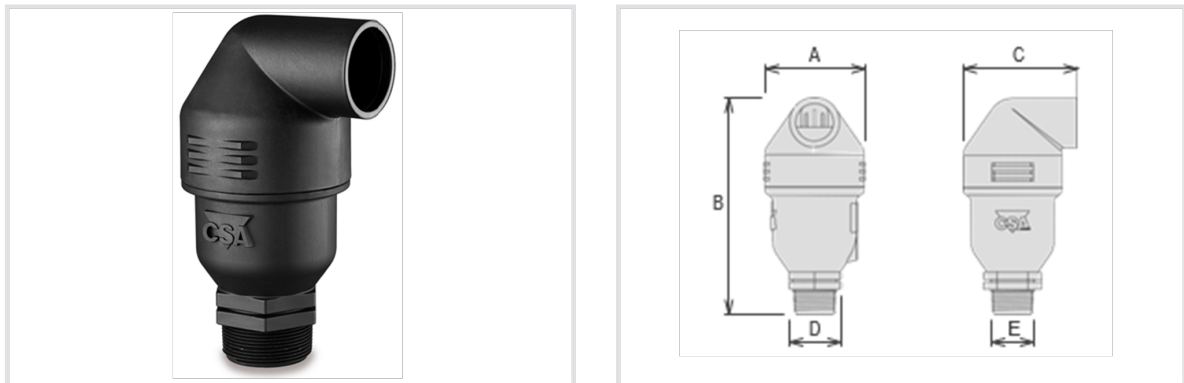


Air Valve Triple Functions TYPE PP-R with quick anti-fill device - Threaded connection



The automatic triple-function air valve with anti-rapid filling device with 1" and 2" gas thread in glass fiber reinforced polypropylene has been designed to allow the release of air pockets accumulated in working conditions, the entrance of large volumes of air in case of pipe draining or bursts and to prevent pipeline damages coming from pressure transients, associated with high air outflow velocities.

DN (E)	Type	A (mm)	B (mm)	C (mm)	D (mm)	Mass (kg)	References
1" (24/36)	PP-R	80	167	92	CH 41	0.30	293285
2" (50/60)	PP-R	110	226	135	CH 65	0.70	293293
1" (24/36)	PP-R/EO	80	167	92	CH 41	0.30	295348
2" (50/60)	PP-R/EO	110	226	135	CH 65	0.70	295349

It can be fitted with the following option:

EO: Air outlet only device when the air valve is located at points where the piezometric line may drop below the pipe profile, or for installations where air introduction must be avoided (suction pumps, syphon pipes).

Application

- Irrigation systems
- Water distribution networks
- Cooling systems, process and industrial installations

Main characteristics

- Single chamber body in glass fiber reinforced polypropylene PN16, provided with internal ribs for accurate guiding of the float.
- The aerodynamic full-bore body prevents premature closure of the moving assembly at high air intake and outlet velocities.
- Fitted with dynamic seals to prevent leaks at low pressures.
- Maintenance can be easily performed from the top without removing the air valve from the pipe.
- Compact and reliable structure whose parts are fully corrosion and chemical resistant. Lower maintenance.
- Male BSPT or NPT threaded connection.

Technical data

Working conditions

- Fluid: drinking water, treated water, cooling water. Temperature range: 0°C ... 60°C.
- Maximum pressure: 16 bar.
- Min. pressure: 0.3 bar, lower on request.

Standards

- Certified in compliance with EN-1074/4.
- ACS
- Male BSPT (standard) or NPT threaded connection to be specified at the time of ordering.

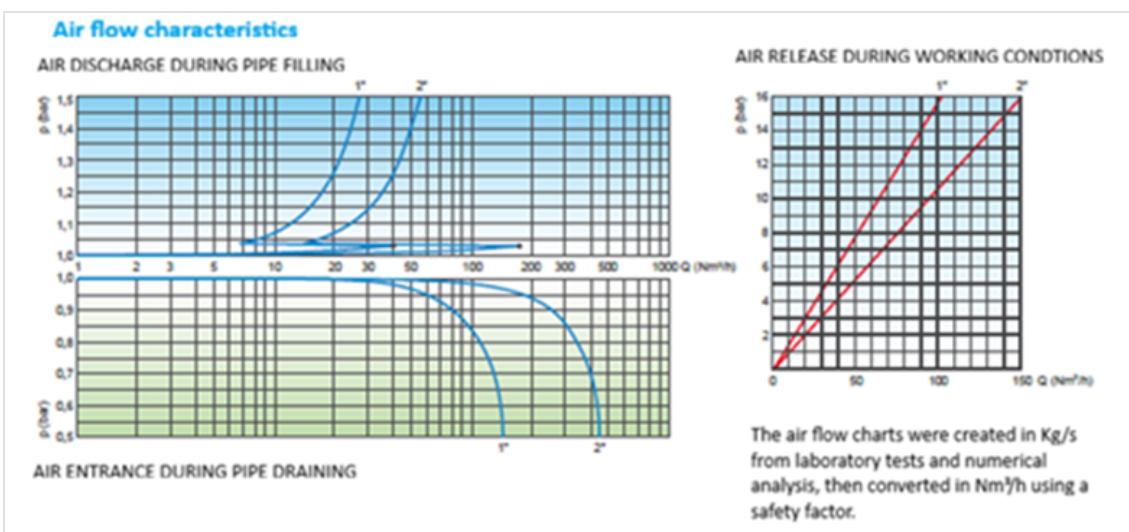
Operating principle - PP-R Version

Discharge of large volumes of air
During the pipe filling it is necessary to discharge air as water flows in. The ARGO 3F RFP, thanks to the aerodynamic body and float, will make sure to avoid premature closures of the mobile block during this phase.

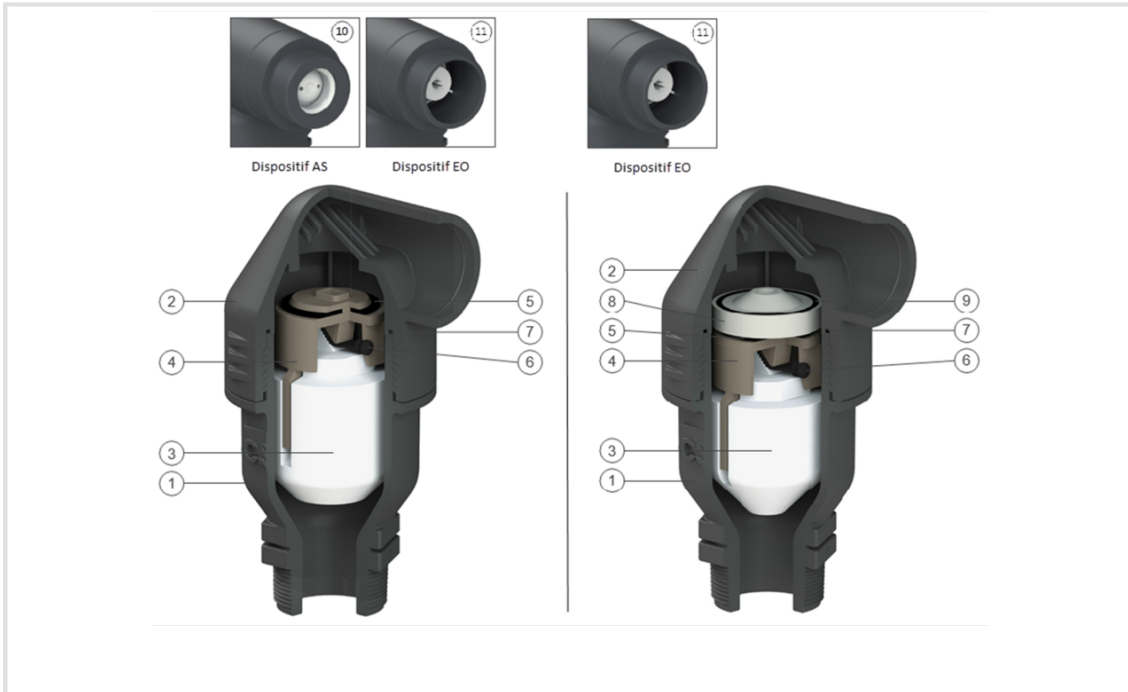
Controlled outflow
If the differential pressure of air, during pipe filling, increases above a certain value without control there is the risk of water hammer and damages to the system. Should that happen the RFP upper float will rise automatically, reducing the outflow and consequently the velocity of the approaching water column.

Pressurized air release
During operation, the air produced by the pipeline is accumulated in the upper part of the air valve. Little by little it is compressed and the pressure arrives to water pressure, therefore its volume increases pushing the water 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 to avoid negative pressure and serious damages to the pipeline, and to the entire system.



Material



N°	Component	Standard material	Option
1	Body	Glass fiber reinforced polypropylene	
2	Cover	Glass fiber reinforced polypropylene	
3	Float	Polypropylene	
4	Kinetic shutter	Glass fiber reinforced polyamide	
5	O-ring	EPDM	
6	O-ring	EPDM	
7	O-ring	EPDM	
6	RFP plate with O-ring	Polypropylene	
7	Upper plate with nozzle	Polypropylene	
8	Device RFP	Stainless steel AISI 304	PP-R series only
9	O-ring	EPDM	PP-R series only
10	Device IO	Polypropylene - 2" BSP threaded fitting	PP Series (optional)
11	Device EO	Polypropylene - 2" BSP threaded fitting	PP series and PP-R (optional)

The list of materials and components may be changed without notice.

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.