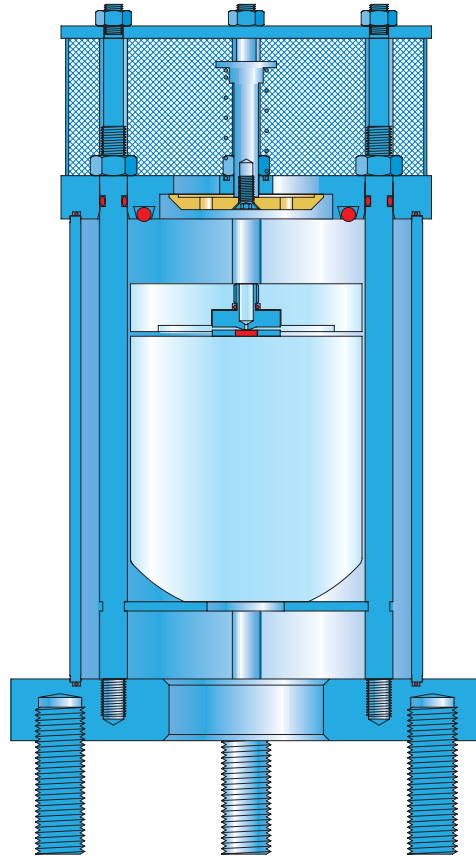




# Anti-shock water combination air valve Mod. GOLIA 3F- AS

The air valve will ensure the proper operation of the pipeline networks allowing the air release during working conditions, the entrance of large amounts of air in case of draining or pipeline burst, and the discharge with controlled speed.



## Construction and advantages

- **Body** completely made in stainless steel AISI 316 / AISI 304.
- **Flange** supplied with studs in stainless steel
- **Drainage valve** for chamber control and draining.
- **Mobile block** group formed by a full polypropylene cylindrical float (\*\*) and an upper disk in polypropylene.
- Nozzle and gasket holder (pat. pending) wear resistant thanks to **gasket compression control**.
- **Anti Shock automatism** composed of a metallic disk with 2 or more small orifices, a guide bar and a counteracting spring in stainless steel.
- **Maintenance** can be easily performed from the top without removing the air valve from the pipe.
- **Mesh** and cap in stainless steel

## Operating principle

### 1) Entrance of large volumes of air

The GOLIA 3F-AS is provided with a mechanism called AS. This is composed of a metallic flat with holes and a counteracting spring which, during vacuum conditions, is pulled down to open the passage through the main orifice allowing the entrance of large volumes of air.

### 2) Controlled air discharge

Once the negative pressure ends the flat comes up thanks to the spring, with the purpose of reducing the section during the discharge phase therefore slowing down the velocity of the approaching water column.

### 3) Air release during working conditions.

During operation, an air pocket is accumulated in the upper part of the valve, little by little it is compressed and its pressure arrives to water pressure, its volume increases pushing the water downwards. Following Archimedes's principle the float, no longer sustained by water thrust, will fall down to free the nozzle hole helping the release of the air pocket, while the upper disk will close the main orifice due to internal pressure.

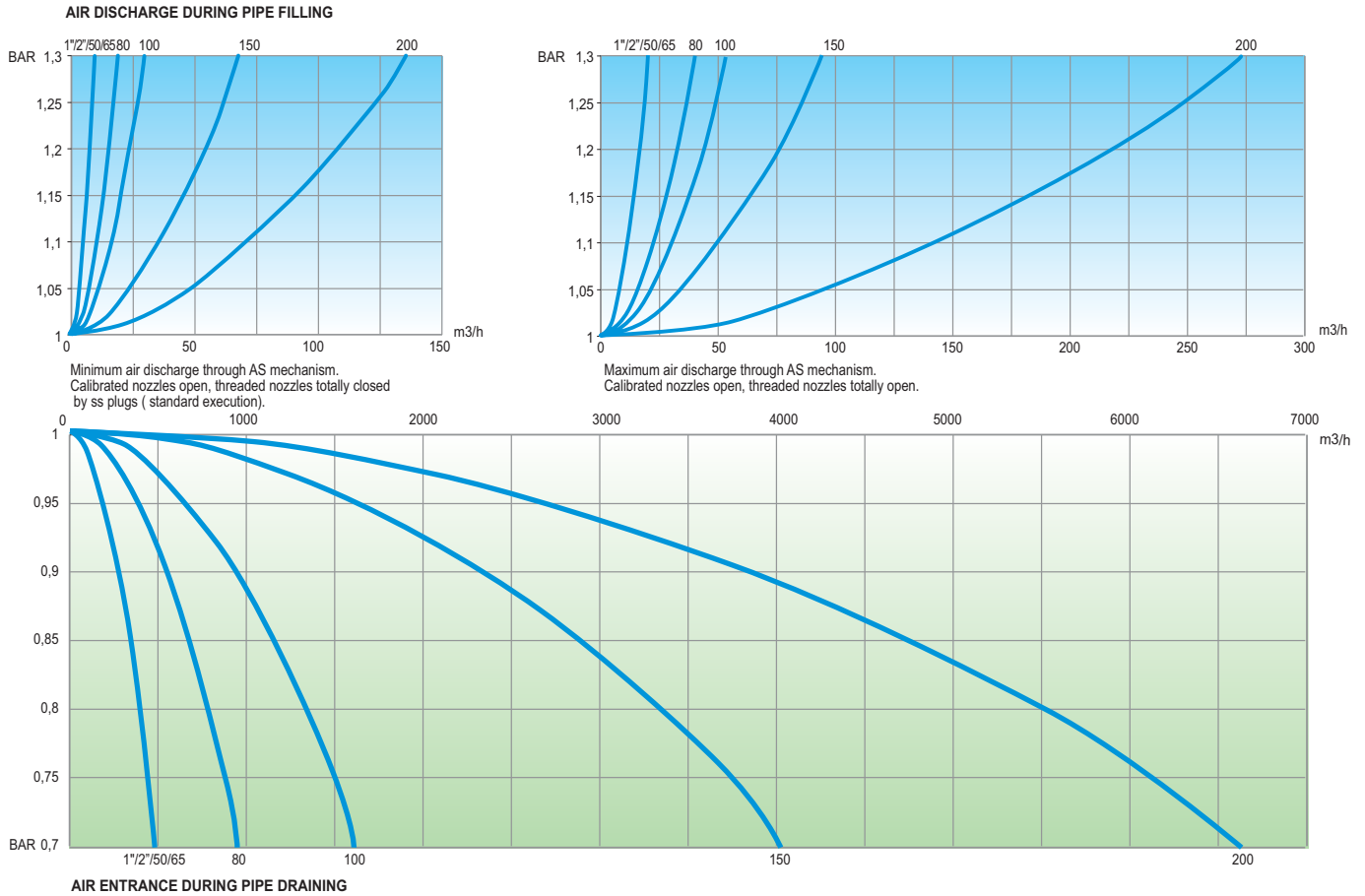
For air flow performances of GOLIA 3F- AS please refer to the chart depicted on the next page.

(\*\*) Full polypropylene cylindrical floats to avoid deforming phenomena at high pressure and lathe shaped to guarantee:

a) a greater sliding precision inside the body processed ribs;  
b) a perfectly vertical thrust;



## Air flow performance charts.



### Working conditions

Potable water 70°C Max; Minimum pressure 0.5 bar

### Technical features

**Body, cap and flanges** completely made in stainless steel

AISI 316/304

**Mesh** in stainless steel AISI 304

**Seat** in stainless steel AISI 304/316

**AS stem and spring** in stainless steel

**AS disk** in brass

**Upper flat** in polypropylene

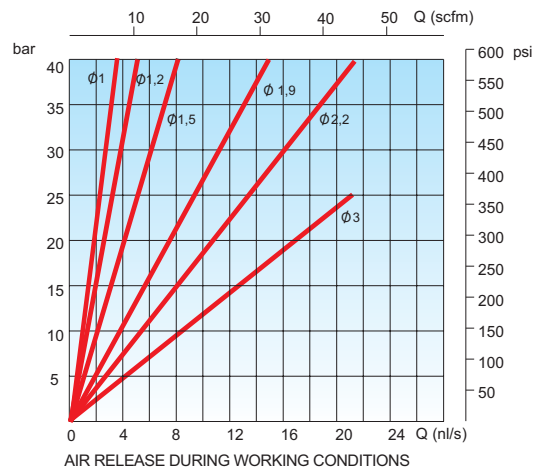
**Nozzle** in stainless steel AISI 316

**Float** in polypropylene

**Nuts and bolts** in stainless steel

**Gaskets** in NBR

**Drainage valve** in stainless steel.



EXECUTION	A	B	C	D	Weight Kg.
Threaded 1"	165	240	=	CH45	3,3
Threaded 2"	165	240	=	CH75	6,4
Flanged 50	165	240	40	=	8,0
Flanged 65	185	240	40	=	8,0
Flanged 80	200	265	50	=	12,0
Flanged 100	235	334	50	=	17,0
Flanged 150	300	440	70	=	45,0
Flanged 200	360	515	70	=	62,0

