

DESDE 1946

# **OPERATION MANUAL**



# **TRIPLE FUNCTION AIR VALVE**



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#### 1. DESCRIPTION

The *Triple Function Air Valve* is an air valve for evacuation of large air flow, permanent expulsion of air and air inlet in case of depression on the pipe.

It consists in two chambers: one with a hole (A) which allows large exhaust air and work at low pressures, and the other with a small hole (B), which eliminates the air accumulated in the pipelines.

The air valve allows the full protection at a high point of a pipeline section, being habitual its assembly be done on vertical perforations practiced in high points of the pipeline, to the top of this.

This kind of air valves cup is equipped with an isolation valve, allowing their disassembly for service maintenance.



#### 2. RISK IDENTIFICATION

Throughout its development, sale and post-sales, were not been identified any potential risks in the assembly and operation.



### 3. HANDLING

Handling should be carried out by persons duly qualified for the purpose.

During the filling of the pipe, the water volume increases slowly. The air (F) exits by the orifice (A).



During emptying or by a depression on the pipe, the float ball (C) falls under its own weight action, releasing the air inlet (F) through to the hole (A).



The following table permits selection of the air valve, considering a filling of the pipe at a speed of 0.5 m/s.

DN	pipe diameter - DN
50 a 65	65 a 350
80/100	400 a 600
150	700 a 900
200	1000 a 1200



# 4. TECHNICAL CHARACTERISTICS FOR DIMENSIONING



Flow capacity – small orifice (control purger) DN50 – DN200



## Flow capacity – large orifice





#### 5. MAINTENANCE

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Under normal operating conditions, is maintenance free, however there may be the possibility of waste accumulation inside the valve due to its assembly be performed at the highest point of the pipe. In this situation it is recommended the total close of the isolation valve to disassembling the cover and carry out the cleaning of their components. It shall be used pressurized water or compressed air to remove any encrustation that may be present in the components.

