STAINLESS STEEL AIR VALVES 4 FUNCTIONS FB OR RB - A400X / AR400X

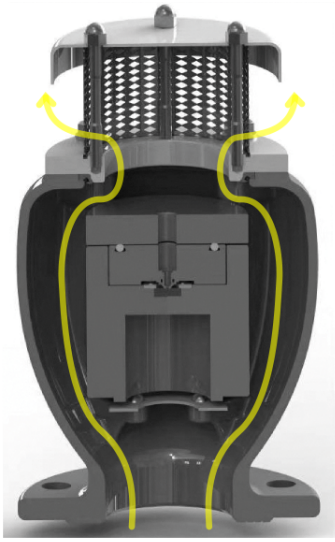
Specifications

DN mm	DN 50 - DN 300
DN inch	2” - 12 “
Temperature	0°C to 70°C
Type of body	Flanged
Application	• Water distribution networks. • Irrigation or fire systems. • Used at high points on slope changes in pipelines.
Flange	PN10, PN16, PN25, PN40
Flange standard	BS EN1092-2 PN10-16-25-40, ANSI Class 125-150-250
Design and Test Standard	Designed in compliance with EN-1074/4 and AWWA C-512 epoxy painting applied through fluidized bed technology blue RAL 5005
Medium	Clear water
Pressure	Minimum 0.2 bar (lower on request) - maximum 40 bar
Option	Customized changes on the flanges and painting on request.

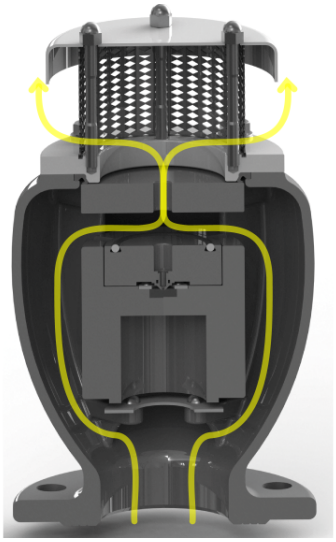
Advantages

Triple-function combined air valve: air discharge, air intake, and automatic air venting.
- **Single chamber with optimized design for better air flow.**
- **Ductile iron body with full passage, stainless steel cap, precise float guidance, maximum admissible pressure of 40 bar.**
- **Air flow calculations for optimal intake or discharge.**
  Tangential drainage for quick and complete emptying.
- **Cylindrical floats performing high-flow functions and maintaining pressure during operation.**
- **Float replacement can be easily carried out through the cap.**
- **Stainless steel plate beneath the float to eliminate the impact of surges or water hammer on the floats.**
- **Adaptable and interchangeable stainless steel nozzle according to the valve model.**
- **Standard stainless steel protection grid to prevent the entry of foreign objects (insects, etc.). Optional umbrella-shaped ventilation grid.**

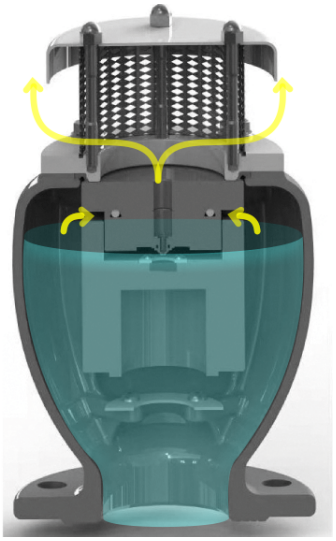
Advantages



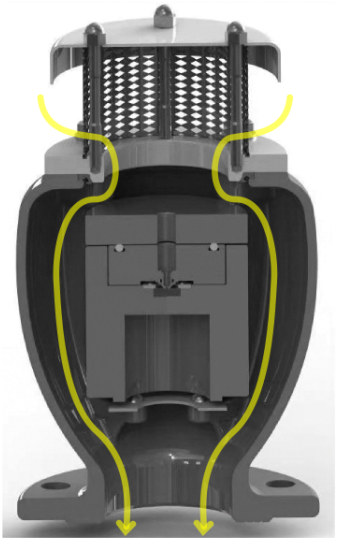
Discharge significant air volumes
When filling the pipe, it's essential to release air while water enters. The A500 equipped with an aerodynamic full-port body and deflector, ensures the prevention of premature closures of the mobile block during this phase.



Regulated Outflow
During pipe filling, if the differential air pressure surpasses a specific threshold without control, there is a potential risk of water hammer and system damage. In such a scenario, the PP top float will automatically rise, diminishing the outflow and consequently slowing down the



Air Release in Operational Conditions
While in operation, the air generated by the pipeline accumulates in the upper section of the air valve. Gradually, it undergoes compression, and the pressure reaches the water pressure level. Consequently, its volume expands, pushing the water level downward and facilitating the release of air through the nozzle.



Inflow of Significant Air Volumes
During pipeline drainage or pipe bursts, it is essential to introduce an equivalent amount of air as the outflowing water to prevent negative pressure and potential serious damage to the pipeline and the entire system.

Dimensions

DN	ØD (mm)				ØK (mm)				N-Ød (mm)				Full Bore A400X		Reduce Bore AR400X	
	PN10	PN16	PN25	PN40	PN10	PN16	PN25	PN40	PN10	PN16	PN25	PN40	H (mm)	Weight (kg)	H (mm)	Weight (kg)
50	165				Ø125				Ø4-19				220	14	-	-
80	200				Ø160				Ø8-19				300	25	220	16
100	220		235		Ø180		Ø190		Ø8-19		8-Ø23		370	33	300	27
150	285		300		Ø240		Ø250		Ø8-23		8-Ø28		520	68	370	38
200	340		360	375	Ø295		Ø310	Ø320	8-Ø23	12-Ø23	12-Ø28	12-Ø31	650	125	520	74
250	395	405	425	450	Ø350	Ø355	Ø370	Ø385	12-Ø23	12-Ø28	12-Ø31	12-Ø34	800	180	650	135
300	445	460	485	515	Ø400	Ø410	Ø430	Ø450	12-Ø23	12-Ø28	16-Ø34	16-Ø34	980	280	800	200

Nomenclature

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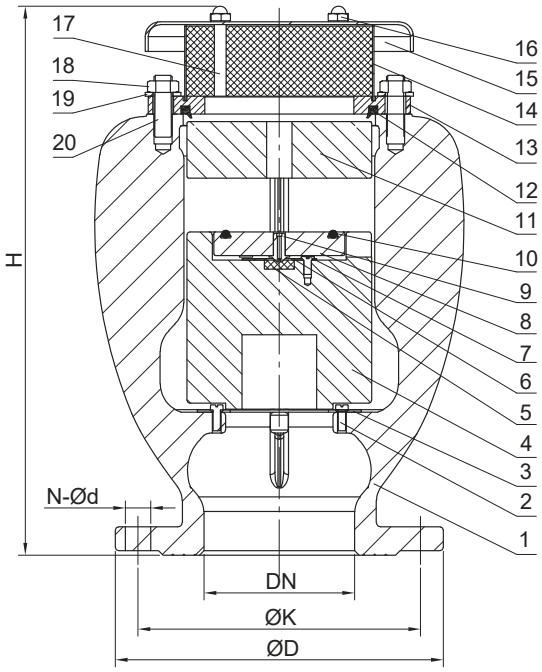
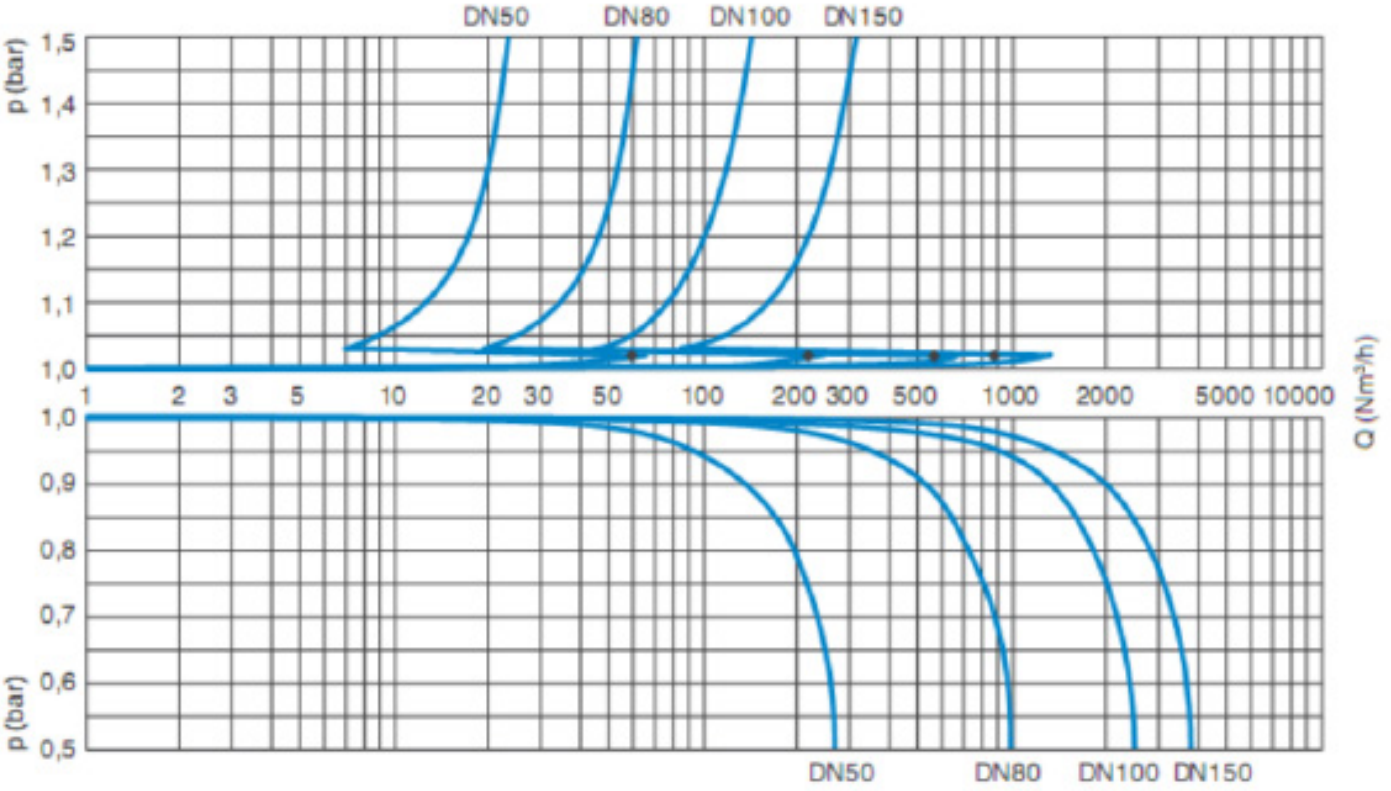


Designation	Option 1	Option 2	
1.Valve body	CF8	CF8M	
2.Screw	A2	A4	
3.Plate Ring	SS304	SS316	
4.Lower float	PP	PP	
5.Seal	FKM	FKM	
6.Seal retainer	SS304	Inox 316	
7.Screw	A2	A4	
8.Middle float	PP	PP	For 4 functions model only
9.Nozzle	SS304	SS316	
10.Oring	FKM	FKM	For 4 functions model only
11.Top float	PP	PP	
12.Seal ring	FKM	FKM	
13.Top flange	SS304	Inox 316	
14.Screen	SS304	Inox 316	
15.Cap	SS304	Inox 316	
16.Screw	A2	A4	
17.Bolt	A2	A4	
18.Nut	A2	A4	
19.Washer	A2	A4	
20.Bolt	A2	A4	

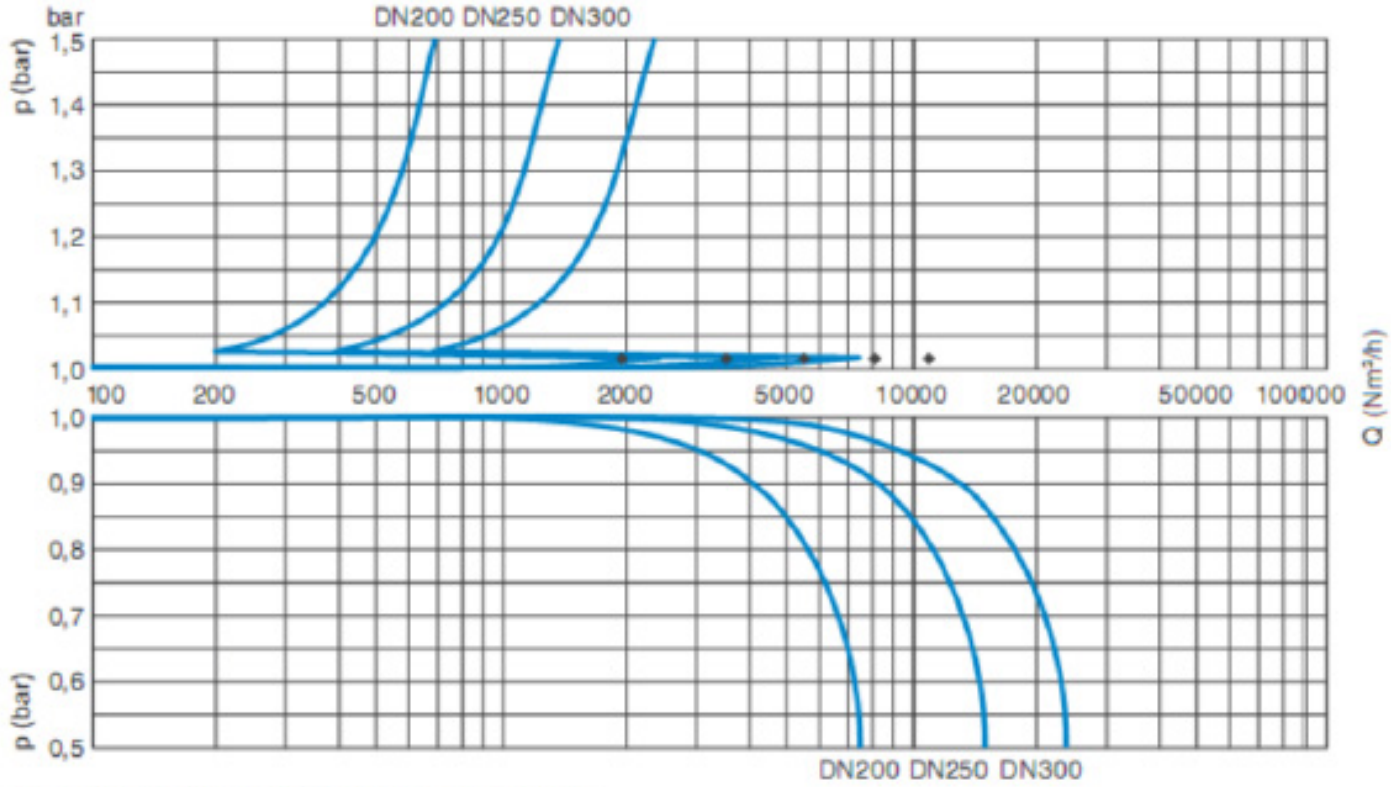
Air Performance

AIR DISCHARGE DURING PIPE FILLING



AIR ENTRANCE DURING PIPE DRAINING

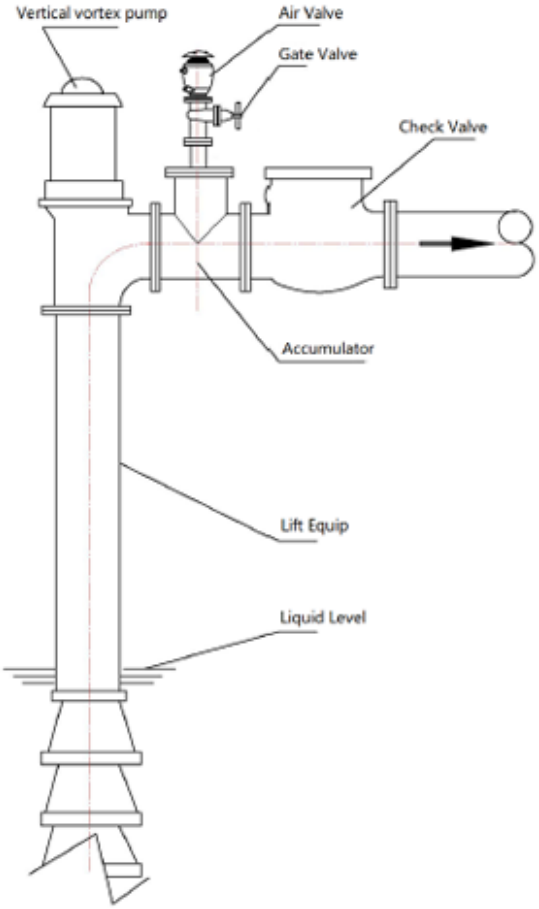
AIR DISCHARGE DURING PIPE FILLING



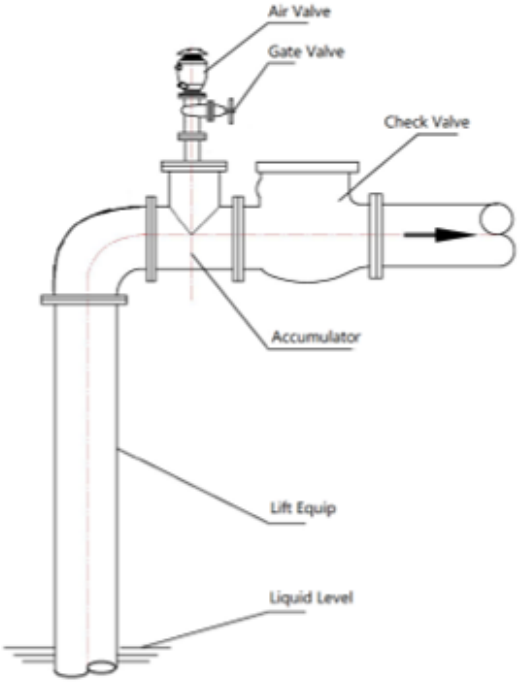
AIR ENTRANCE DURING PIPE DRAINING

Installation Suggestion

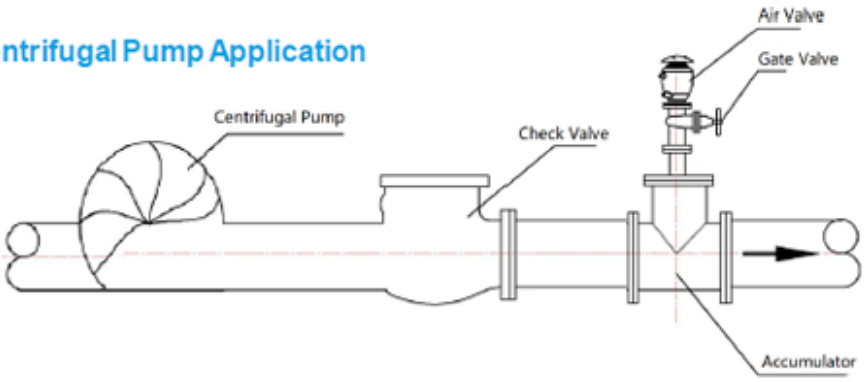
Vertical Vortex Pump Application



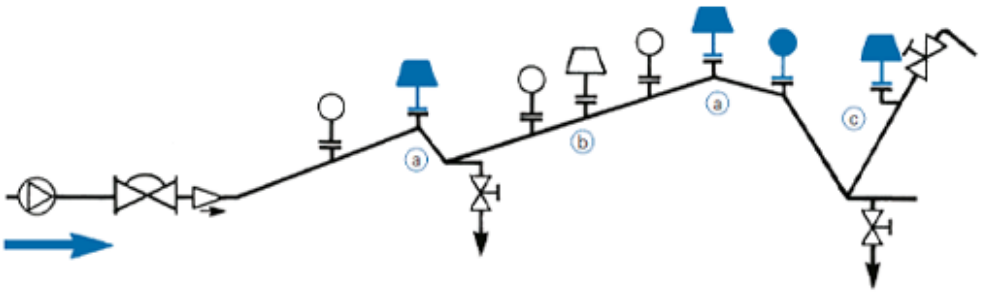
Well Application



Centrifugal Pump Application



Application in a Network



Pump
Pump valve
Air valve
OCA
Air valve
Check valve