

AIR VALVE 3 FUNCTIONS FB OR RB -A300 / AR300



SPECIFICATIONS

DN mm	DN 50 - DN 300
DN inch	2" - 12 "
Temperature	0°C to 70°C
Connection	Flanged
Application	Main transmission lines, water distribution networks, irrigation systems
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
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:

- Anti-Hammer and Overpressure Protection.
- Single Chamber Design: Engineered for optimal performance with an exceptional contour.
- Full-Bore and Reduced-Bore Body: Constructed from ductile iron and stainless steel, with a maximum capacity of 40 bar, featuring internal ribs for precise float guidance.
- Aerodynamic Airflow Path: Ensures efficient air release and intake.
- Tangential Drainage: Facilitates complete drainage.
- Cylindrical Floats: Designed to perform multiple functions.
- Easy Float Replacement: Switching between three floats and two floats can be done conveniently from the top.
- Reinforced Lower Float Plate: Made of stainless steel to eliminate the impact of overloads on floats in minimal time.
- Customizable Nozzle Sizes: Accommodates various valve model requirements.
- Standard Flat Vent Screen: Stainless steel to prevent insect entry, with an optional umbrellashaped vent screen available.



ADVANTAGES



Discharge significant air volumes

When filling the pipe, it's essential to release air while water enters. The A300 equipped with an aerodynamic full-port body and deflector, ensures the prevention of premature closures of the mobile block during this phase.



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

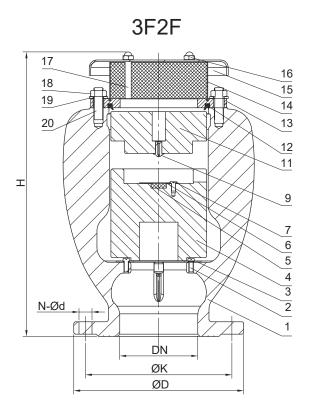
During pipeline drainage or pipe bursts, it is essential to introduce an equivalent amount of air as the outflowing water to prevent negative pressure and potential serious damage to the pipeline and the entire system.

DIMENSIONS

DN	ØD (mm)				ØK (mm)				N-Ød (mm)				Full Bore A300		Reduced Bore AR300	
DN	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	22	20	23	35	Ø1	80	Ø1	90	Ø8-19		8-Ø23		370	33	300	27
150	28	35	30	00	Ø2	40	Ø2	250	Ø8-23 8-Ø28		520	68	370	38		
200	34	40	360	375	Ø2	95	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

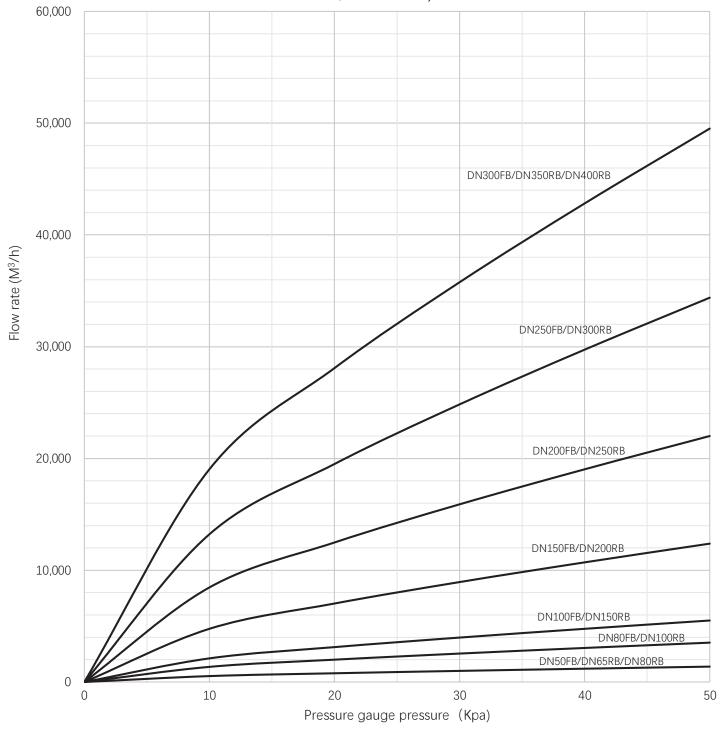


Designation	Materials	
1.Valve body	DI	
2.Screw	A2	
3.Plate Ring	SS304	
4.Lower float	PP	
5.Seal	EPDM	
6.Seal retainer	SS304	
7.Screw	A2	
8. Middle float	PP	For 4 functions model only
9.Nozzle	SS304	
10.Oring	NBR	For 4 functions model only
11.Top float	PP	
12.Seal ring	FKM	
13.Top flange	SS304	
14.Screen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



AIR PERFORMANCE

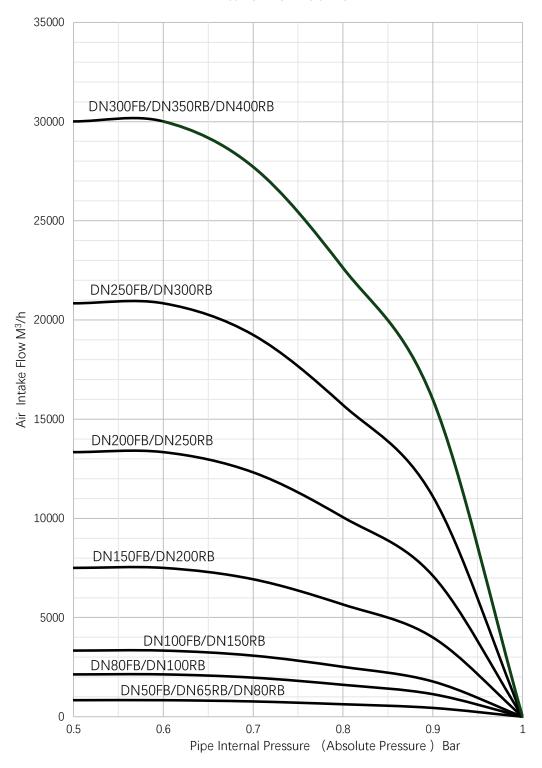
The amount of air vented from the air valve during pipe flushing (TYPE 3F2F)





AIR PERFORMANCE

Air Intake Flow Curve





INSTALLATION SUGGESTION

Vertical Vortex Pump Application Well Application Vertical vortex pump Air Valve Gate Valve Gate Valve Check Valve Check Valve Accumulator Accumulator Lift Equip Lift Equip Liquid Level Liquid Level Air Valve **Centrifugal Pump Application** Gate Valve Centrifugal Pump Check Valve Accumulator Application in a Network

