

TRI-FUNCTION AIR VALVE

Air release, vent & vacuum valve - model B200

Valve Function

The Avarus Valves model B200 tri-function air valve has 3 functions.

Function 1: The large orifice will vent large volumes of air from the system when it is being filled.

Function 2: The large orifice will allow large volumes of air to re-enter the system when being emptied.

Function 3: When function 1 is completed, the small orifice will automatically release any accumulation of air from the pressurised system.

Application

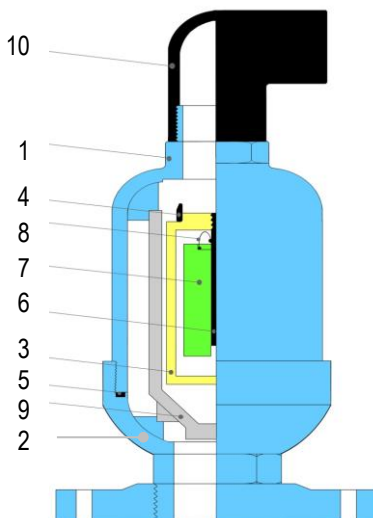
For potable or filtered water, working pressure 0.4 to 16 bar. Operating temperature -10 to +80°C, insulate at 0°C & below. For higher pressures PN25 & PN40 rated valves are available. Materials in contact with media are WRAS approved.

Standard

To BSEN1074-4:2000



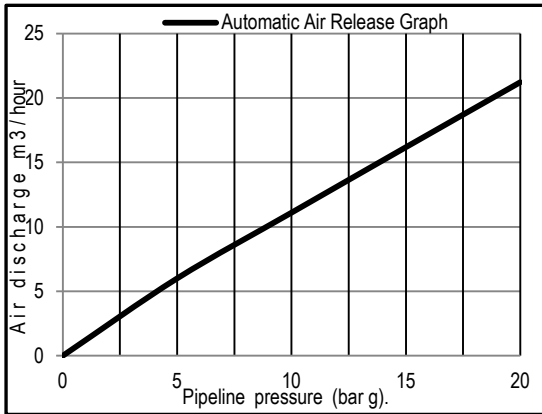
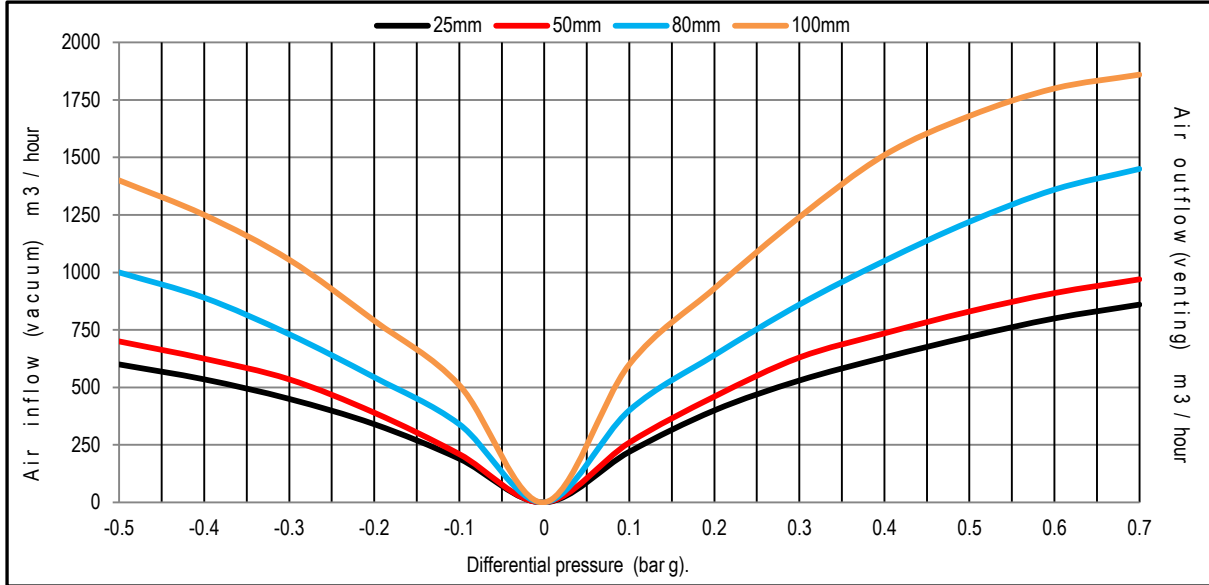
Valve size (inlet)	1" screwed	2" screwed	3" screwed	DN50 flanged	DN80 flanged	DN100 flanged	For larger sizes see data sheet AVPT2 -A200
Width (mm)	116	116	128	116	128	128	
Height (mm)	260	230	231	233	235	236	
Weight (kg)	6	6	7	7	10	11	
Inlet connection flanged PN16 EN1092-2 or screwed BSP male							



#	Materials of Construction		WRAS approval number
1	Body Upper	Ductile Iron DIN1693 GGG50	-
2	Body Lower	Ductile Iron DIN1693 GGG50	-
3	Large Orifice Float	Polyacetal	1203510
4	Large Orifice Seat	EPDM	1401524
5	O-ring	Nitrile	1111537
6	Float Guide Shaft	Polyamide	1312527
7	Small Orifice Float	Polypropylene	1209500
8	Small Orifice Seat	EPDM	1401524
9	Float Casing	Polyacetal	1203510
10	Outlet Bend	Polypropylene / PVC	-
WRAS approved Resicoat R4 ES HJ601R			1701509

Sizing

Air valves should be sized according to the pipeline diameter or air flow rate. For sizing the large orifice, the Air Valve Sizing Table can be used. If air flow figures are available, then the flow graph can be used.



Air Valves Sizing table				
Valve size (mm)	DN 25 (1")	DN 50 (2")	DN 80 (3")	DN 100 (4")
Recommended maximum pipeline diameter (mm)	250	400	600	800
For larger diameter pipelines see data sheet AVPT1-A200 or consult Avarus Valves				

Options

- Isolation valve – it is recommended that air valves are fitted with an isolation valve. **(Note on 100mm size: due to the design of the air valve, if you are fitting an isolation butterfly valve please consult us, as a spacer may be required).**
- Adjustable throttle device – allows manual adjustment of the venting orifice size, can be easily done whilst installed.
- Surge arrestor – automatically reduces high venting velocity, therefore decreasing the pressure surge on valve closure.
- Inflow check device – allows air venting only.
- Outflow check device – allows air inflow only (under vacuum).
- Vented non-return device – allows restricted air venting and un-restricted air inflow.
- Consult Avarus Valves if application is for sea water or corrosive application.

Global Designation

- Air valves types can have a different designation throughout the world, for example;
- Tri-function air valve can be known as – double orifice, combination, triple function, air release/vacuum.
- Bi-function air can be known as – single large orifice, vent/vacuum valve, double function.
- Air release valve can be known as – single small orifice, purge, bleed, automatic.

If you have any questions please feel free to ask us!