

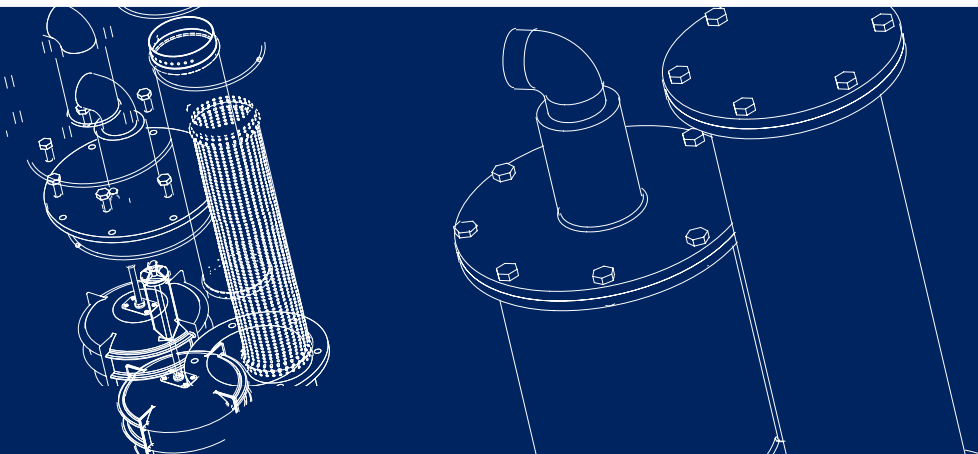
THE COMPLETE VALVE

DNS-TC-VS4-AV



Combination Air Release Valve
for all Sewage
and Potable Water Mains

ADVANCED AIR RELEASE VALVE TECHNOLOGY



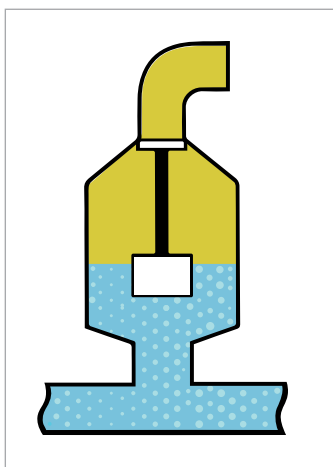
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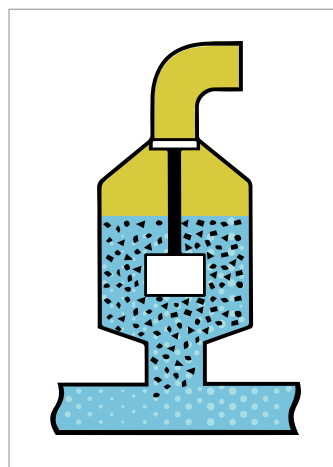
Comparisons

	Single Chamber Valves	Double Chamber Valves
Floats and seals protected from solids	NO	YES
Seals at atmospheric pressure	NO	YES
Easily serviced on-site	NO	YES
Guaranteed anti-hammer air chamber	NO	YES
Multiple valve ports to a single upstand	NO	YES
Built-in surge protection (adjustable)	SOME	YES
316 stainless steel construction	SOME	YES
Extra long service intervals	NO	YES

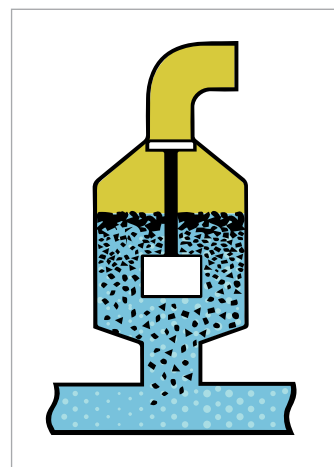
Faults of single chamber air valves



Inflow float closes



When water pressure compresses the air, water and rubbish rises above float.



Fats & rubbish accumulate at high point.

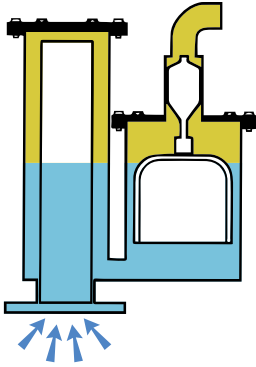


Negative flow rubbish 'bird nest' caught in valve. Blocked and/or leaking

Double chamber DNS-TC-VS4 advantages

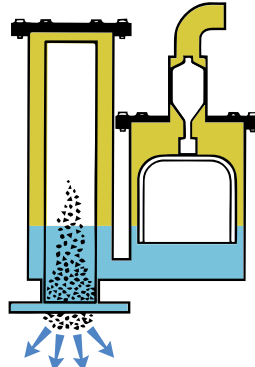


Designed Network Solutions



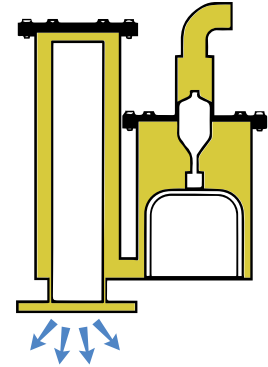
STAGE 1

- I. Air and water enter the DNS-TC-VS4-AV complete valve.
- II. Only filtered water reaches the float assembly.
- III. Valve is closed: rubbish is confined in the cylindrical filter.
- IV. Valve is ready for more air.



STAGE 2

- I. When more air enters, it first displaces the water and contaminants downward and back to the main.
- II. This primary air compression chamber holds air at all times for best anti-hammer and shock control.
- III. The two stage seals maintain correct valve operation at all times unhindered by solid contaminants.



STAGE 3

- I. At times of negative pressure, the primary compression chamber helps expel rubbish back to the mains.

The DNS-TC-VS4 overcomes previously experienced faults found in all single chamber valves (see page 2 Comparisons).

Reduce your maintenance and **save** money

Reduced Maintenance

With its tubular fine mesh screen, solids are excluded from the float and seal chamber.

Cost Savings

Reducing short and long term maintenance costs are an important consideration. By virtue of DNS-TC-VS4-AV's anti-hammer design, pipe fatigue is greatly reduced. The complete valve guarantees an anti-slam pressure chamber of air at all times.

All things considered, DNS-TC-VS4 Is the smarter choice!

DNS-TC-VS4-S-AV Standard

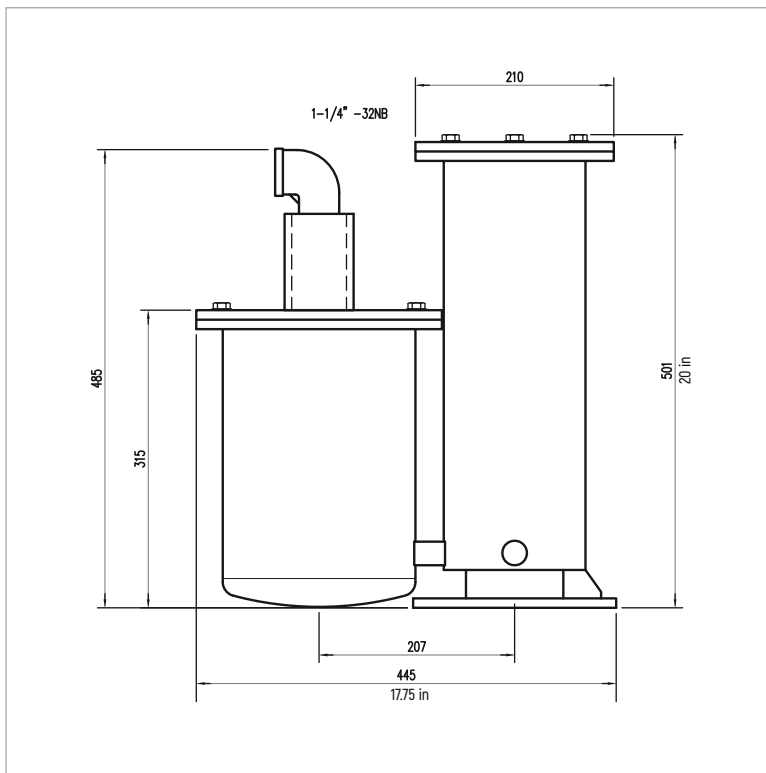
Combination Air Release Valve
A Breakthrough in Sewage Main Valve Technology



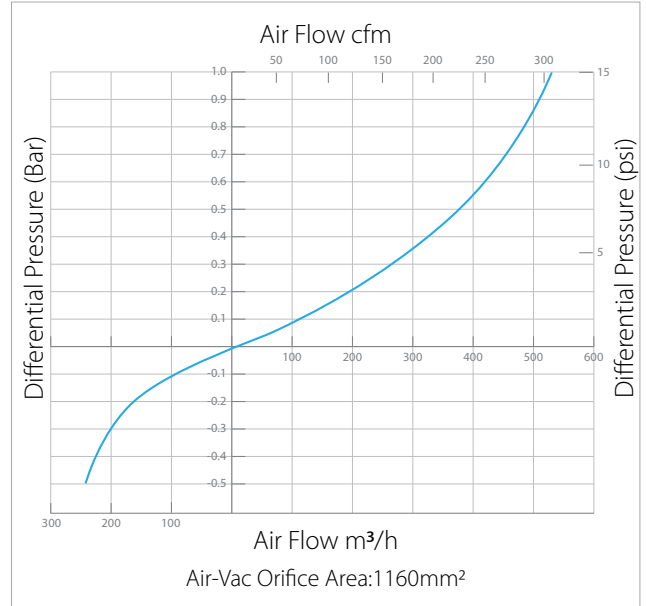
DNS-TC-VS4-S-AV Standard		
Weight	23 kg	50 lb
Air-Vac Orifice	1160 mm ²	1.75 in ²
Auto Orifice	10.2 mm ²	0.01 in ²
Anti-surge Orifice	(variable) mm ²	
Emergency Vacuum Orifice (optional)		
Single	1900 mm ²	2.85 in ²
Double	3400 mm ²	5.7 in ²
Others	Optional	

Twin valve chamber model is available. This will double all air flows.

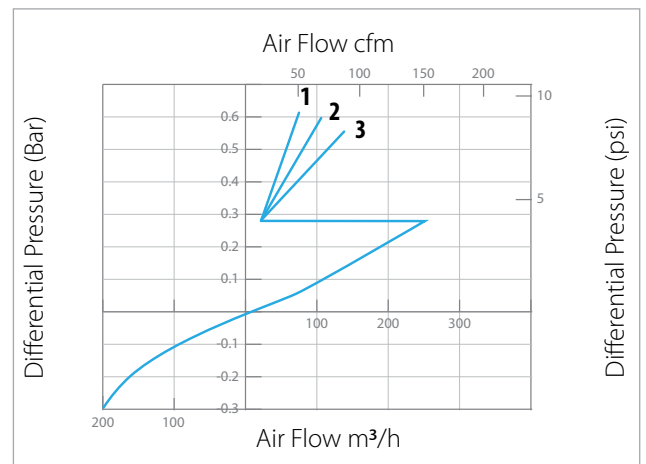
Australia	Table D 100mm (4 hole)
USA	ANSI 4" x 9" (8 hole)



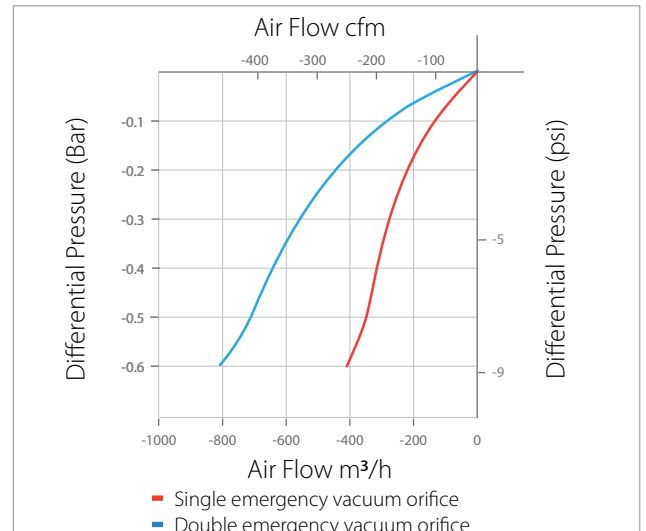
Air-Vacuum Graph



Optional Adjustable Anti-Surge



Optional Emergency Air In Vacuum Control





Designed Network Solutions

DNS-TC-VS4-LP-AV Low Profile

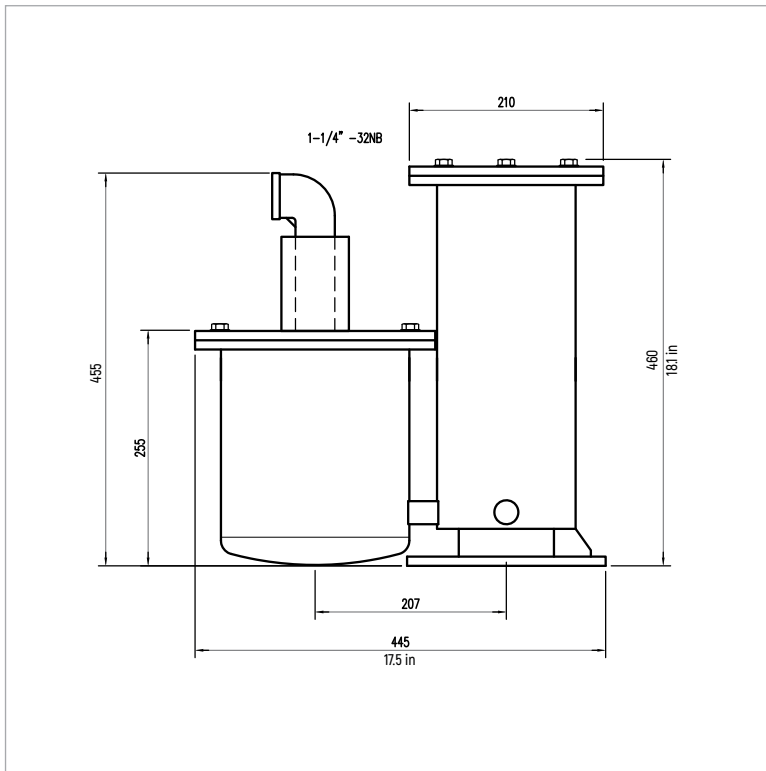
Combination Air Release Valve for Sewage
and Potable Water Mains



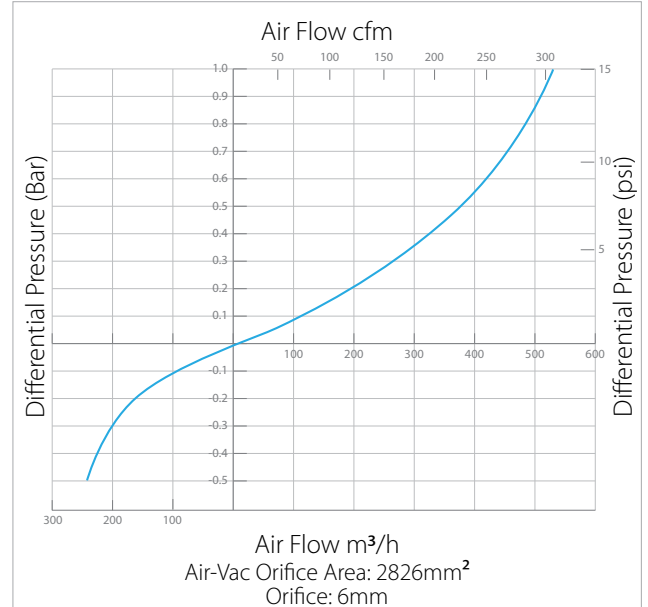
DNS-TC-VS4-LP-AV Low Profile		
Weight	23 kg	50 lb
Air-Vac Orifice	1160 mm ²	1.75 in ²
Auto Orifice	10.2 mm ²	0.01 in ²
Anti-surge Orifice	(variable) mm ²	
Emergency Vacuum Orifice (optional)		
Single	1900 mm ²	2.85 in ²
Double	3400 mm ²	5.7 in ²
Others	Optional	

Twin valve chamber model is available. This will double all air flows.

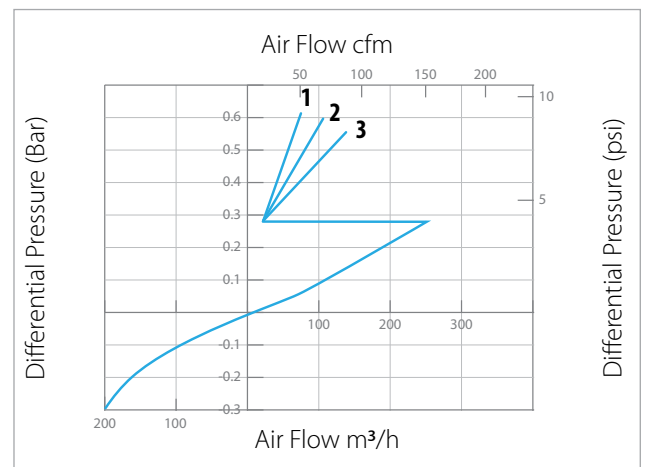
Australia	Table D 100mm (4 hole)
USA	ANSI 4" x 9" (8 hole)



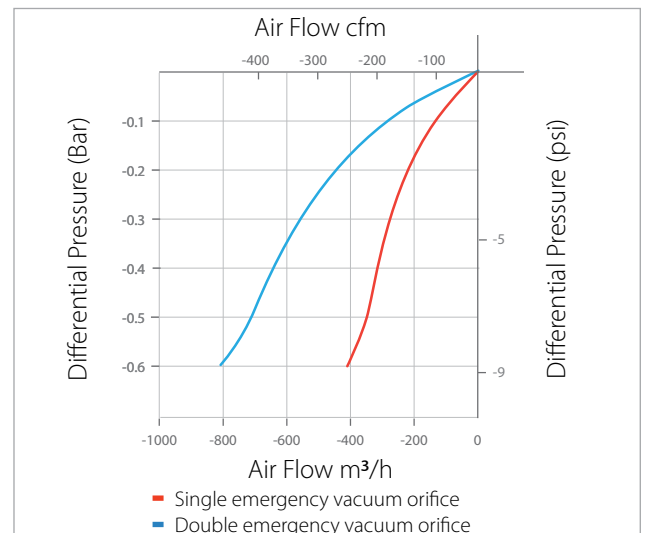
Air-Vacuum Graph



Optional Adjustable Anti-Surge



Optional Emergency Air In Vacuum Control



DNS-TC-VS4-S-HF-AV High Flow

Combination Air Release Valve
A Breakthrough in Sewage Main Valve Technology

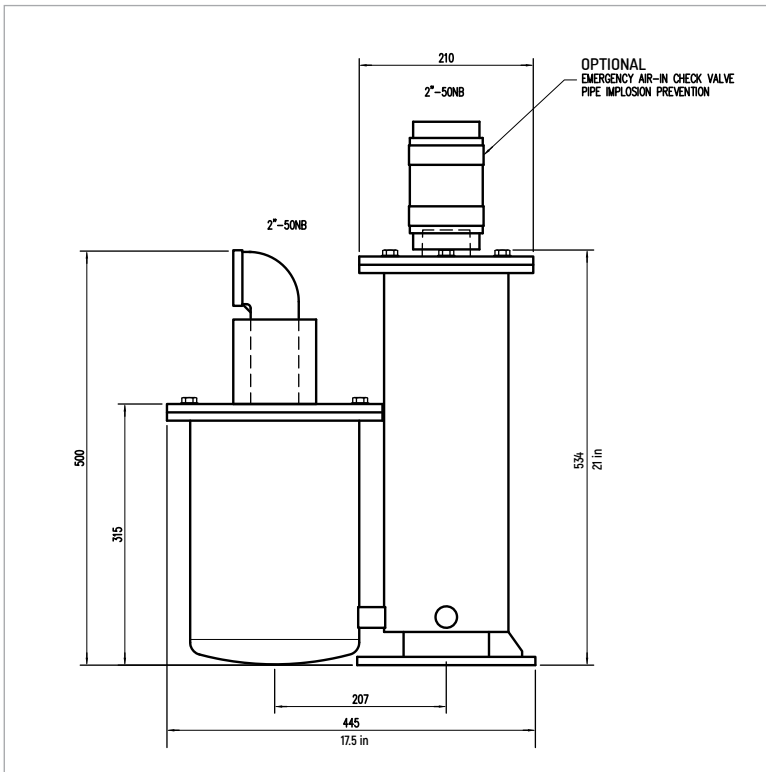
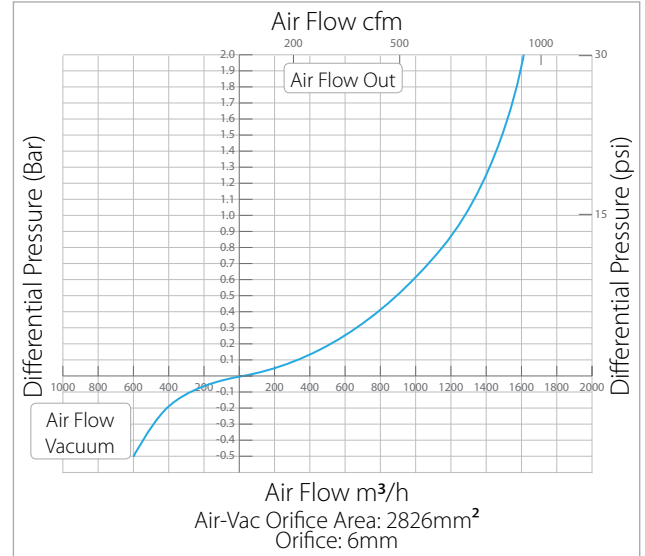


DNS-TC-VS4-S-HF-AV High Flow		
Weight	24 kg	53 lb
Air-Vac Orifice	2826 mm ²	4.2 in ²
Auto Orifice	15mm ²	0.02 in ²
Anti-surge Orifice	(variable) mm ²	
Emergency Vacuum Orifice (optional)		
Single	1900mm ²	2.85 in ²
Double	3800mm ²	5.7 in ²
Others	Optional	

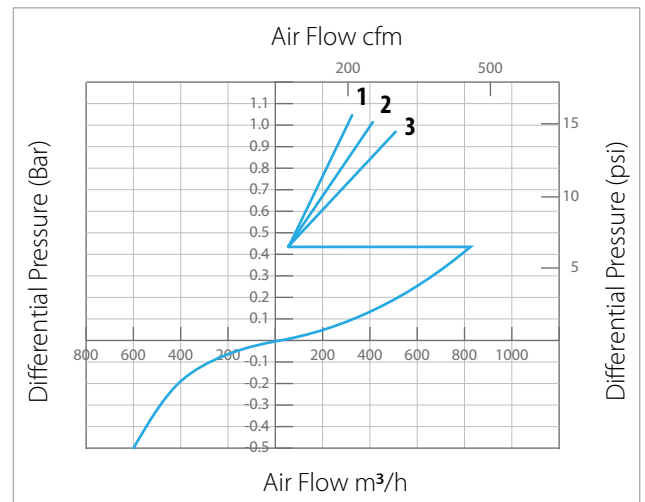
Twin valve chamber model is available. This will double all air flows.

Australia	Table D 100mm (4 hole)
USA	ANSI 4" x 9" (8 hole)

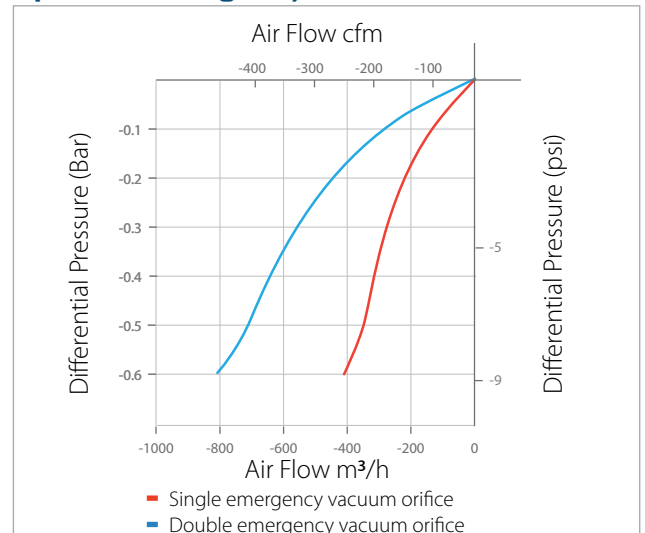
Air-Vacuum Graph (Hi Flow)



Optional Adjustable Anti-Surge



Optional Emergency Air In Vacuum Control





Designed Network Solutions

DNS-TC-VS4-XLP-AV Extra Low Profile

Combination Air Release Valve for Sewage and Potable Water Mains

DNS-TC-VS4-PW-AV Potable Water

Combination Air Release Valve for potable, raw water and sea water

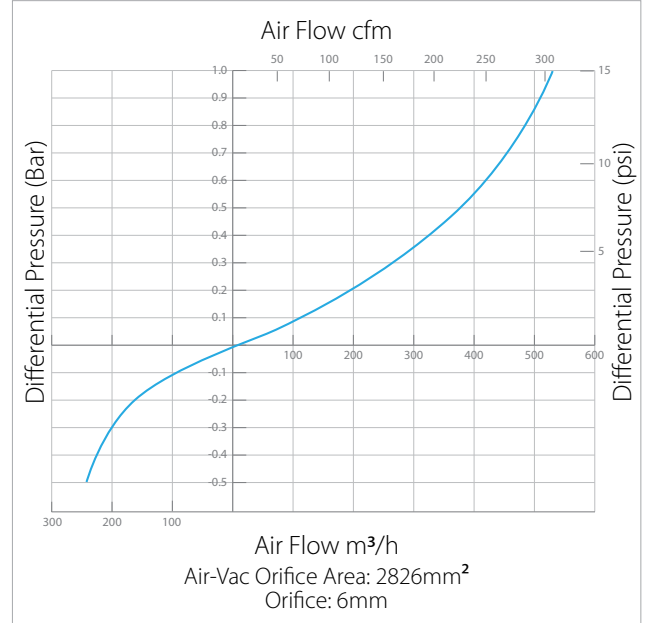


DNS-TC-VS4-XLP-AV Extra Low Profile

Weight	18 kg	40 lb
Air-Vac Orifice	1160 mm ²	1.75 in ²
Auto Orifice	10.2 mm ²	0.01 in ²
Anti-surge Orifice	(variable) mm ²	
Height	300 mm	12 in



Air-Vacuum Graph



DNS-TC-VS4-PW-AV Potable Water

Weight	11 kg	24 lb
Air-Vac Orifice	1160 mm ²	1.75 in ²
Auto Orifice	10.2 mm ²	0.01 in ²
Height	440 mm	17.3 in
Width	260 mm	10.2 in

DNS-TC-VS4-PW-AV for potable and non solids contaminated waters.

316 stainless steel. PN 16. All DNS-TC-VS4 models are CE certified. Spin on or flanged to suit customer requirements. Seals at atmospheric pressure and rated to 16 Bar. This is a combination air valve with built-in anti-slam and anti hammer. All parts are rated food safe. The Standard orifice is 1160mm² and a super high flow model is available to order with a 2826mm² orifice. Water and air flow are horizontal to the float base to stop premature closing. There is also a screen to stop fish, frogs, eels etc from entering the valve chamber. This potable water valve is bred from the extremely reliable DNS-TC-VS4 range of sewer trunk main valves.

The DNS-TC-VS4-PW air valve is not suitable for sewer mains as it is liable to clog with solids as happens to other single chamber air valves. For contaminated mains please refer to the 'Double Chamber' DNS-TC-VS4 range.



Maintenance Cost Savings

Easy **ON-SITE IN-SITU** servicing from above with one 17mm spanner.



Minimal amounts of emulsified fats may pass through the screens with little effect.
Testimonials and references are available.



Designed Network Solutions

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