



SERIES SCAV AWWA C512 SEWAGE COMBINATION AIR VALVE 2"

DESCRIPTION

The VSI Series SCAV Combination Air Valve features both a large and small orifice in a single elongated body to effectively vent air and gases from sewage forcemains. The large piston orifice allows large amounts of air to vent from the system as it is being filled. Once filled, the small orifice allows accumulation and residual air and gases to be released while the system is in operation. When the system is drained or negative pressure is experienced in the forcemain the large orifice opens to allow free inflow of air to prevent pipe collapse.

The Series SCAV should be installed at system high points, in places where accumulation of air and gases are expected during filling, would collect during normal operation, or where vacuums would form.

The long body design ensures an air gap between the sewage and the sealing mechanisms ensuring a long leak free life. The SCAV features all stainless internals and sewage resistant epoxy coating on the inside and outside as standard.



(Shown with optional backflush accessories)

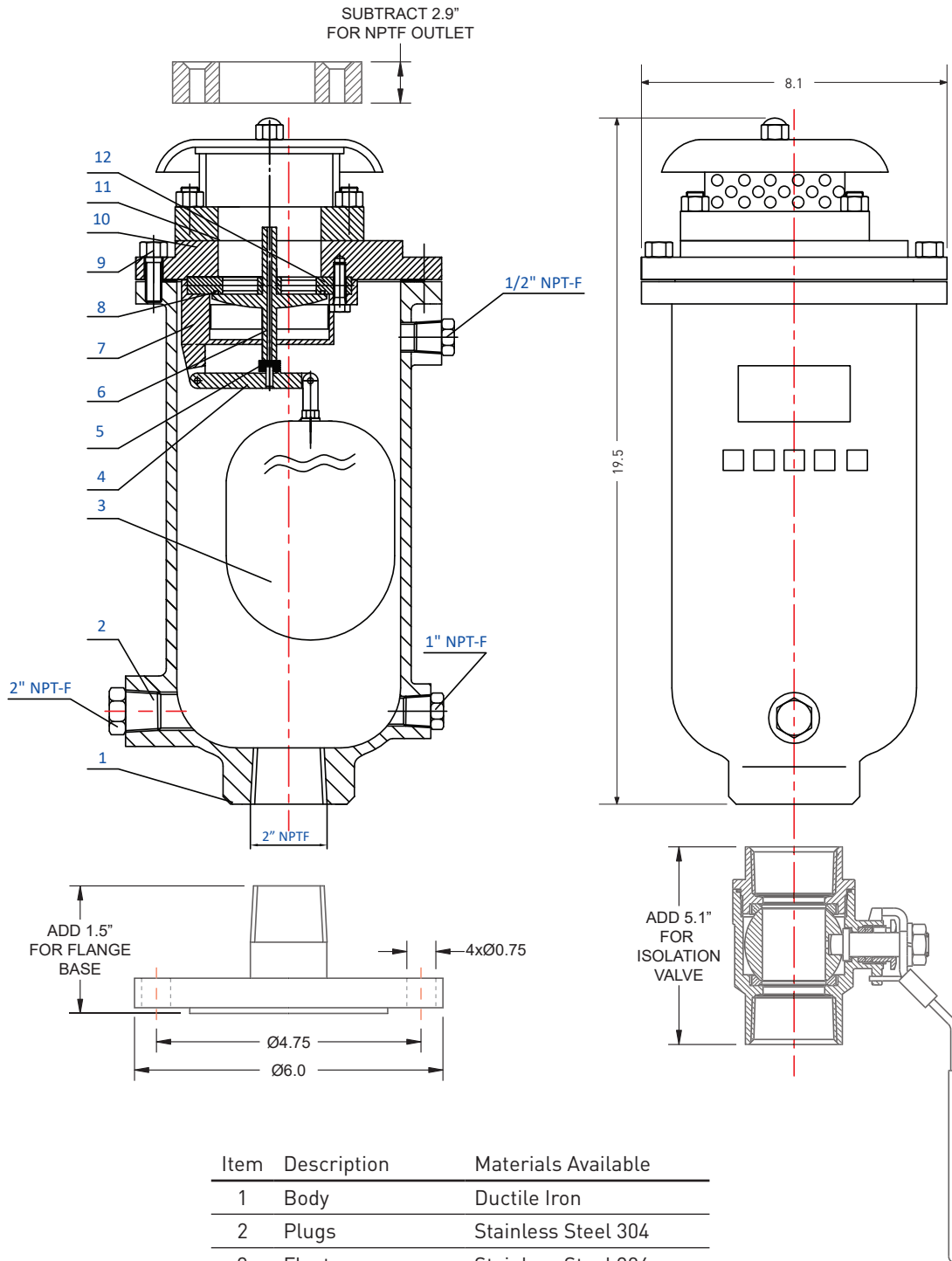
SPECIFICATIONS

Construction	AWWA C512
Size Range	2" NPTF Inlet 2" Flanged CL150 Inlet
Outlet	Hooded Screen 2" NPTF (Optional) 1" NPTF (Optional)
Coatings	AWWA C550 Epoxy Internal/External
Working Pressure	10-150 PSIG
Rated Pressure	250 PSIG
Test Pressure	300 PSIG
Cleanout Port	2" NPTF Plugged
Acc. Ports	1x 1/2" NPTF and 1x 1" NPTF Plugged
Small Orifice	0.079" Diameter (0.0049 in ² area)
Large Orifice	0.715 in ² area (0.95" Effective Diameter)

OPTIONS

- NPTF Outlet in 1" or 2"
- Inlet isolation valves (Brass or Stainless, Ball or Gate type)
- Backflush accessories (Isolation Valves, Cam/groove couplings and flushing hose)
- SS316 Internals and Hardware

DIMENSIONS



Item	Description	Materials Available
1	Body	Ductile Iron
2	Plugs	Stainless Steel 304
3	Float	Stainless Steel 304
4	Linkage Rod	Stainless Steel 304
5	Small Orifice Seat	NBR
6	Piston	Stainless Steel 304
7	Linkage Bracket	Stainless Steel 304
8	Large Orifice Seat	NBR
10	Cover	Ductile Iron
11	Exhaust Cover	Steel
12	Seat	Stainless Steel 304

FLOW DATA

LARGE ORIFICE AIR RELEASE

INLET PRESSURE	VENT RATE (SCFM)
1 PSI	217
2 PSI	307
3 PSI	378
4 PSI	439
5 PSI	493
6 PSI	543
7 PSI	590

SMALL ORIFICE AIR RELEASE

INLET PRESSURE	VENT RATE (SCFM)
10 PSI	1.7
15 PSI	2.1
25 PSI	2.9
50 PSI	4.7
75 PSI	6.6
100 PSI	8.4
150 PSI	12.1

LARGE ORIFICE IN VACUUM

INLET PRESSURE	VENT RATE (SCFM)
-1 PSI	221
-2 PSI	314
-3 PSI	386
-4 PSI	448
-5 PSI	504
-6 PSI	555
-7 PSI	603

Note: Flow data is for common air at 60°F air temperature. Exhaust piping and restrictions may reduce flow rate.

PART NUMBERS

AV02-SCAV-NH: Base Valve, NPT with Hooded Outlet

AV02-SCAV-N1: 2" NPTF Inlet with 1" NPTF Outlet

AV02-SCAV-N2: 2" NPTF Inlet with 2" NPTF Outlet

AV02-SCAV-FH: 2" Flanged Inlet with Hooded Outlet

AV02-SCAV-F1: 2" Flanged Inlet with 1" NPTF Outlet

AV02-SCAV-F2: 2" Flanged Inlet with 2" NPTF Outlet

COMMON ADDERS/ACCESSORIES

BF-KIT01: Backflush Kit

2"S8000-S2H: 2" NPT SS Isolation Ball Valve

AV02-SCAV-SMOR-1: Replacement Small Orifice Seal

AV02-SCAV-LGOR-1: Replacement Large Orifice Seal

AV02-SCAV-CVSL-1: Replacement Cover Seal

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