

Sewage Combination Air Valve - Series 440 SCAV

- First in a single body
- No spills
- No spurts
- Shorter
- Patented Concave float

Now, APCO brings you the latest state of the art Sewage Air Valve design: a single body, double orifice "Sewage Combination Air Valve." Generation II...a new generation of air valve design.

Field tested under actual operating conditions. Incorporating all features that have made the 400 Sewage Air Release Valves and 401 Sewage Air/Vacuum Valves the world's finest...Now in a single body-plus a new concave float – to give even greater performance and reliability.

You no longer need to dig deeper trenches or build deeper vaults because the 440 series is at least 30% shorter than other models!

Valves that won't spill or spurt before shutting off. No more messy waste flooded valve vaults to pump out – or pump station floors to mop up – it shuts off drop tight.

Take a serious look at Generation II – APCO Sewage Valves. Manufactured to our industry's highest standards providing the highest efficiency and reliability of any sewage air valve available in the market today.



Series 440 SCAV

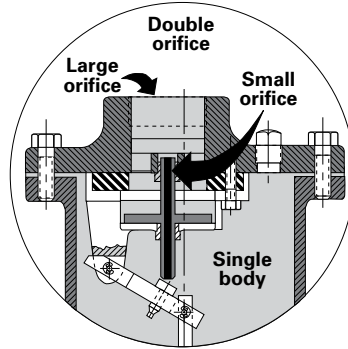
Model	Size	Inlet	Outlet	Height		Dia.	Weight	
				Valve	w/Attachments		Plain	w/Attachments
443	1" 25	2" NPT 50	1" NPT 25	19.5" 495	24.5" 622	9.5" 241	87 39	95 43
445	2" 50	2" NPT 50	2" NPT 50	20.5" 521	27" 686	9.5" 241	93 42	100 45
447	3" 80	3" NPT 80	3" NPT 80	23.5" 597	29.5" 749	11" 279	147 67	157 71
449	4" 100	4" NPT 100	4" NPT 100	23.5" 597	30" 762	11" 279	150 68	175 79
456	6" 150	6" 125 lb. Flange 150	6" 150	35" 889	39" 991	13.75" 349	242 110	297 135

Inch Pounds
Millimeter Kilograms

Sewage Combination Air Valve (Single Body) With Two Independent Orifices Series 440 SCAV

- Large orifice [for air out and in] (Air/Vacuum Valve function)
- Small orifice [for air release] (Under pressure function)
- Concave float

Two major complaints now remedied with APCO's introduction of the concave float.



1. Spillage

People easily tolerate and are reasonable about water spillage from valves but sewage is cause for some engineers and users alike to avoid use of Sewage Air Valves, regardless of need to a system.

During the past 30 years, the single most highly objectional complaint about the Sewage Air Valve is, "it spills" or "it spurts sewage."

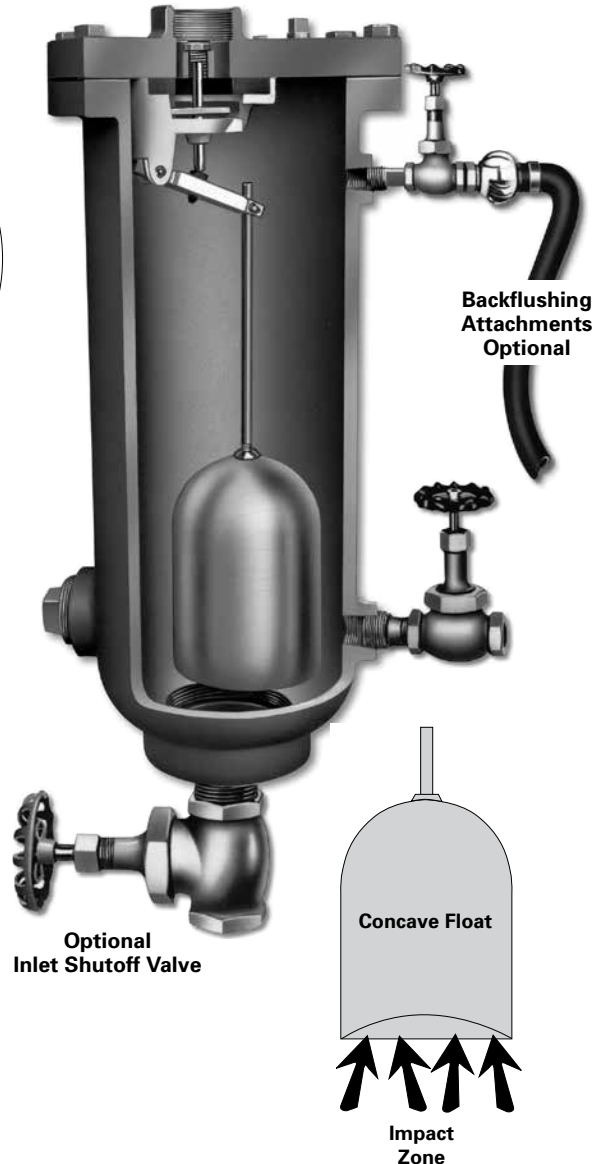
The concave float eliminates this complaint because of the unique impact zone which is extremely sensitive to sewage media entering the Sewage Air Valve. The impact zone causes instantaneous and upward movement of the float to shut-off the discharge orifice as soon as media contacts the float.

No spilling or spurting occurs even with low pressure (below 20 psi, 138 kpa).

2. Height

The second most objectional complaint has been height. Sewage Air Release Valves of standard design have been too tall, requiring deeper pipeline trenches and bigger valve vaults. These are costly requirements.

Now, the concave float with an impact zone allows fast action closure to create a greater air trap inside the Sewage Air Valve body than possible with the hemispherical style float. This new design is also 30% shorter in height.



Small Orifice		
Operating Pressure psi/kpa	Small Orifice Diameter	Venting Capacity CFAM
0-150 0-1034	.219" 6	68
0-300 0-2068	.156" 4	95

Inch
Millimeter

Higher operating pressures available

Specifications

Specify APCO With Confidence

Sewage Combination Air Valve Series 440 SAVV

Sewage Combination Air Valve (single body, double orifice) allows large volumes of air to escape or enter through the larger diameter orifice when filling or draining a pipeline.

When the pipeline is filled and pressurized the large air/vacuum orifice shall stay closed, but the smaller diameter air release orifice shall remain operative and open to allow small pockets of air accumulation to escape automatically and independently of the large orifice.

The large air/vacuum orifice shall shut off when the free floating-center guided plug is raised into the orifice by the lifting force of the concave - bottom float. The large orifice shut-off shall be "without spilling."

The Buna-N seat must be fastened to the valve cover, without distortion, for drop-tight shut-off.

The overall height and width shall not exceed the dimensions shown on the table on page 3.

Optional - Inlet and blow off valves, quick disconnect couplings and minimum 5' (1.5m) hose for flushing. Engineer to specify.

Materials of construction shall be certified the following ASTM specifications:

Body & Cover	Cast Iron	ASTM A126 GR.B
	Ductile Iron	ASTM A536 GR 65-45-12
Patented Concave Float	Stainless Steel	ASTM A240 T304
Stem	Stainless Steel	Series T300
Needle and Seat	Buna-N	Nitrile Rubber
Plug (1"-4")(25-102mm)	Brass	ASTM B124
(6" size)(152mm)	Stainless Steel	ASTM A240 T304
Leverage Frame (1"-2")(25-51mm)	Delrin or Cast Iron (3"-4"-6")	ASTM D4181/ASTM A126 GR.B
Exterior Paint	Universal Metal Primer	FDA Approved for Potable Water