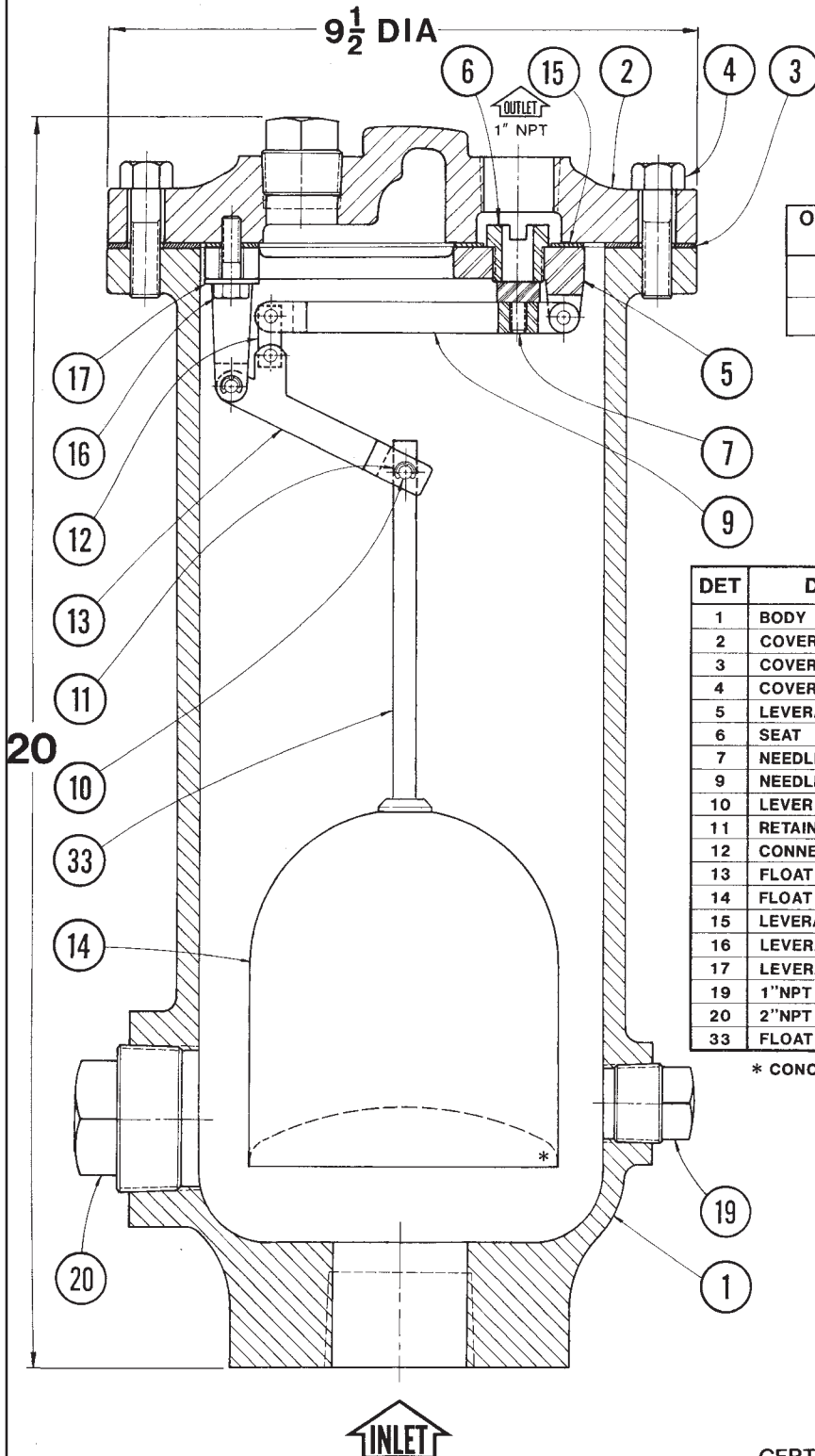


SEWAGE AIR RELEASE VALVE



INLET - ORIFICE SELECTION CHART

OPERATING PRESSURE psi.	ORIFICE DIA., in.	INLET SIZE		
		2" NPT	3" NPT	4" NPT
0-150	1/2	STD.		
151-300	7/16			

DET	DESCRIPTION	MATERIAL
1	BODY	CAST IRON ASTM A126 Gr. B
2	COVER	CAST IRON ASTM A126 Gr. B
3	COVER GASKET	LEXIDE (NON-ASBESTOS)
4	COVER BOLT	STEEL ASTM A307 Gr. B
5	LEVERAGE FRAME	STAINLESS STEEL ASTM A296 T316
6	SEAT	STAINLESS STEEL ASTM A581 T316
7	NEEDLE	BUNA-N
9	NEEDLE LEVER	STAINLESS STEEL ASTM A296 T316
10	LEVER PIN	STAINLESS STEEL ASTM A581 T303
11	RETAINING RING	STAINLESS STEEL PH15-7MO
12	CONNECTING LINK	STAINLESS STEEL ASTM A276 T316
13	FLOAT LEVER	STAINLESS STEEL ASTM A296 T316
14	FLOAT *	STAINLESS STEEL ASTM A240 T304
15	LEVERAGE FRAME GASKET	LEXIDE (NON-ASBESTOS)
16	LEVERAGE FRAME BOLT	STAINLESS STEEL 18-8
17	LEVERAGE FRAME WASHER	STAINLESS STEEL 18-8
19	1" NPT PIPE PLUG	MALLEABLE IRON
20	2" NPT PIPE PLUG	MALLEABLE IRON
33	FLOAT STEM	STAINLESS STEEL ASTM A581 T303

* CONCAVE FLOAT PATENTED

CERTIFIED BY: _____

DATE: _____

DATE
09-01-03

APCO *Willamette*
VALVE AND PRIMER CORPORATION

DRWG. NO.
S-450

SPECIFICATIONS OTHER SIDE



SPECIFICATIONS

MODEL 450 SEWAGE AIR RELEASE VALVE

The Sewage Air Release Valve shall have an elongated body and CONCAVE* FLOAT TO OPERATE (open) while pressurized allowing entrained air in a sewage force main line, sewage pump or waste water system to escape thru the air release orifice without spillage or spurt. After entrained air escapes thru the air release orifice, the valve orifice shall be closed by a needle mounted on compound lever mechanism, actuated by a CONCAVE* FLOAT to prevent sewage media from escaping. The air release orifice will then remain closed until more air accumulates and the opening cycle repeats automatically.

The float shall be heavily constructed stainless steel (hermetically sealed) and having a concave bottom impact area to provide immediate resistance to flow and instant upwards movement to shut off the orifice "WITHOUT SPILLING".

The internal compound lever mechanism shall be all stainless steel to prevent corrosion.

The lever mechanism shall be fitted with a rod having a 5" diameter stainless steel CONCAVE FLOAT threaded on the opposite end. The CONCAVE FLOAT shall hang inside the valve body slightly above the inlet 13" from the lever mechanism, thereby maintaining an air gap between the mechanism and the waste media. The air gap shall retard waste solids from clogging the lever mechanism.

The valve inlet must be 2", 3", 4" (select one) N.P.T. and the outlet 1" N.P.T. The valve shall have a 1/2" orifice for operating (opening) pressure up to 150 psi and the venting capacity shall be 350 CFFAM or the valve shall have a 7/16" orifice for operating (opening) pressure up to 300 psi and the venting capacity shall be 270 CFFAM. (Engineer to specify one). The manufacturer shall certify venting capacity and provide installation and maintenance instruction manuals with each valve.

Materials of construction shall be certified to conform to following A.S.T.M. specifications:

Body, cover	Cast iron	ASTM A126 Gr. B
Internal linkage & Float Concave(Patented)*	Stainless steel	Series 300
Needle	Buna-N	
Exterior Paint	Universal metal primer	FDA Approved for Potable Water Contact

Note: Other materials available.

Valve to be APCO Model 450 Sewage Air Release Valve as manufactured by Valve & Primer Corporation, Schaumburg, Illinois.