

SEWAGE AIR RELEASE VALVE WITH ATTACHMENTS

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 T303
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
33	FLOAT STEM	STAINLESS STEEL ASTM A581 T303
34	ISOLATION VALVE	BRASS
35	CLOSE NIPPLE	STEEL
36	1" NPT DRAIN VALVE	BRASS
37	1" NPT CLOSE NIPPLE	STEEL
38	1/2" NPT NIPPLE	STEEL
39	1/2" NPT SHUTOFF VALVE	BRASS
40	QUICK DISCONT. HOSE ASSY.	COMMERCIAL
41	REDUCING BUSHING	STEEL
42	1" NPT PIPE PLUG	MALLEABLE IRON
43	2" NPT PIPE PLUG	MALLEABLE IRON

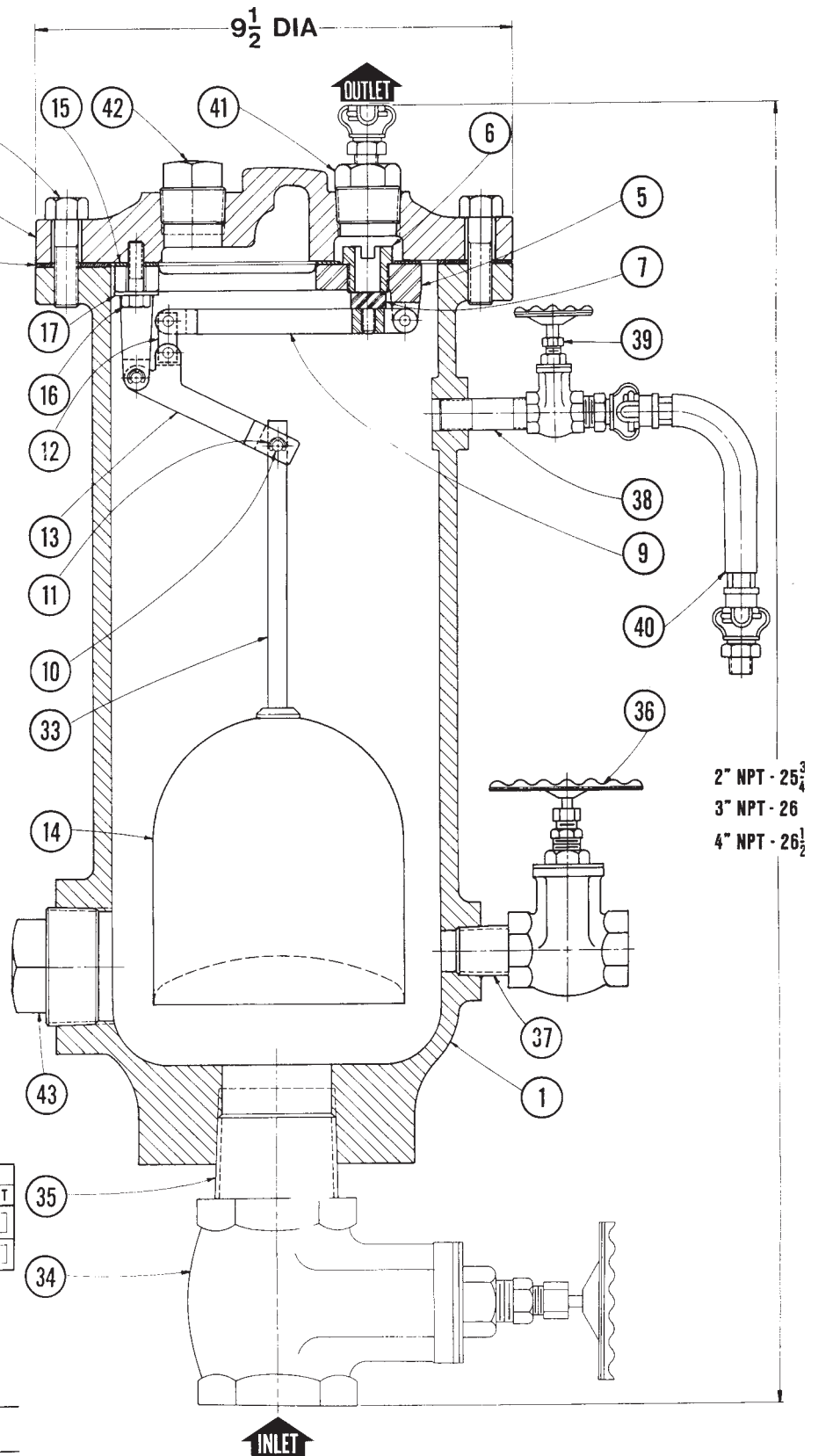
* CONCAVE FLOAT
PATENT PENDING

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			

CERTIFIED BY: _____

DATE: _____



2" NPT - 25 3/4
3" NPT - 26
4" NPT - 26 1/2

DATE
09-01-03

APCO *Willamette*
VALVE AND PRIMER CORPORATION

DRWG. NO.
S-450WA

SPECIFICATIONS OTHER SIDE

APCO[®] SPECIFICATIONS

MODEL 450WA SEWAGE AIR RELEASE VALVE WITH ATTACHMENTS

The Sewage Air Release Valve shall have an elongated body and designed 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. After entrained air escapes thru the air release orifice, the valve orifice shall be closed by a needle mounted on compound lever mechanism. The valve is actuated by a Concave float and will shut off without spilling sewage media. 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 (hermitically sealed) having a concave bottom impact area to provide immediate resistance to flow and instant upwards movement to shut off the large orifice "WITHOUT SPILLING".

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

The lever mechanism shall be fitted with a rod, having a concave stainless steel float threaded on the opposite end. The float shall hang inside the valve body, slightly above the inlet, 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.

The Sewage Air Valve shall be fitted with (1) inlet 2" - 3" or 4" Bronze Gate Valve to isolate from the force main. (1) Blow-off valve. (1) Flush valve and minimum 5' Rubber hose with quick disconnect couplings for back-flushing.

The maximum overall heights shall not exceed 26 1/2"

All materials of construction shall be certified to conform to A.S.T.M. specifications:

Body and cover	Cast iron	ASTM A126 Gr. B
Internal linkage & float	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 450WA Sewage Air Release Valve with attachments, as manufactured by Valve & Primer Corporation, Schaumburg, Illinois, U.S.A.