

SEWAGE COMBINATION AIR VALVE with ATTACHMENTS

SEWAGE AIR/VACUUM VALVE

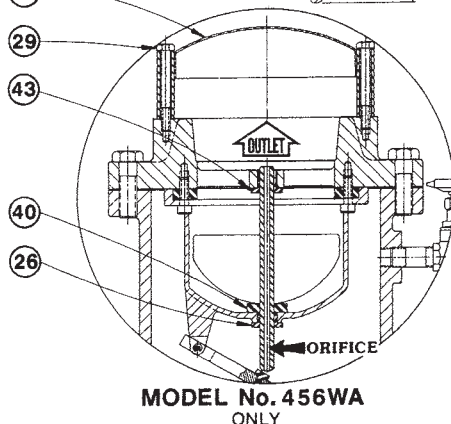
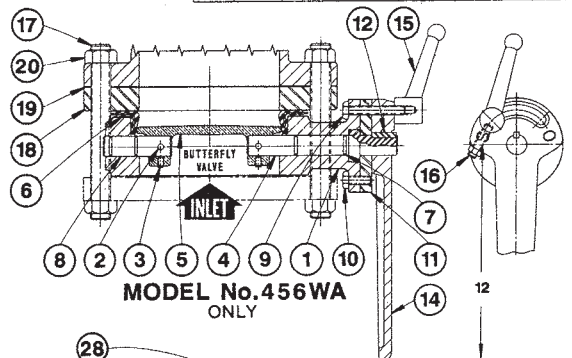
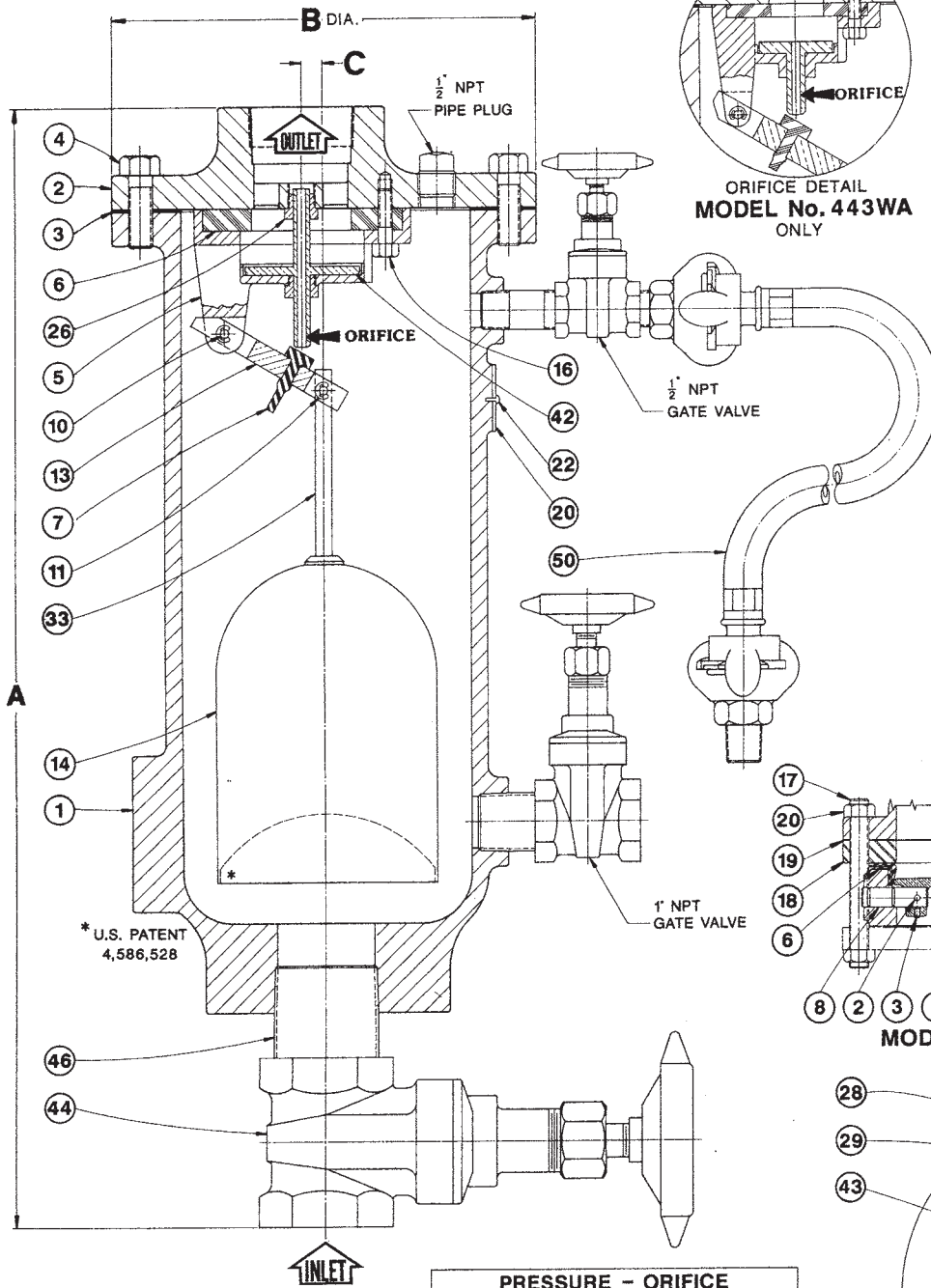
DET.	DESCRIPTION	MATERIAL
1	BODY	CAST IRON ASTM A126 Gr. B.
2	COVER	CAST IRON ASTM A126 Gr. B.
3	COVER GASKET	LEXIDE (Non-Asbestos)
4	COVER BOLTS	STEEL ASTM A307 Gr. B.
5	LEVERAGE FRAME ¹	CAST IRON ASTM A126 Gr. B.
6	SEAT	BUNA-N
7	NEEDLE	BUNA-N
10	LEVER PIN	STAINLESS STEEL ASTM A581 T303
11	RETAINING RING	STAINLESS STEEL PH16-7Mo
13	FLOAT LEVER	BRASS ASTM B16
14	CONCAVE FLOAT *	STAINLESS STEEL ASTM A240 T304
16	FRAME SCREW	STAINLESS STEEL 18-8
20	IDENTIFICATION PLATE	ALUMINUM
22	PLATE RETAINER	STEEL
26	GUIDE BUSHING	BRASS ASTM B16
28	HOOD ³	STEEL AISI 1010
29	HOOD SCREW ³	STEEL ASTM A307 Gr. B.
33	FLOAT STEM	STAINLESS STEEL ASTM A581 T303
40	BUMPER ³	BUNA-N
42	PLUG ³	BRASS ASTM B124
43	TOP GUIDE BUSHING ³	STAINLESS STEEL ASTM A276 T316
44	ISOLATION VALVE	BRASS
46	CLOSE NIPPLE	STEEL
50	QUICK DISCON. HOSE ASSY.	COMMERCIAL

- STANDARD MATERIAL FOR LEVERAGE FRAME FOR SIZES 1" AND 2" IS ASTM A126 Gr. B AND GUIDE BUSHING NOT REQUIRED ON THE FRAME.
- STANDARD MATERIAL FOR PLUG FOR SIZE 6" IS STAINLESS STEEL ASTM A240
- AVAILABLE ONLY ON SIZE 6" - OPTIONAL ON SMALLER SIZES

MODEL No. 456WA ONLY

6" ISOLATION BUTTERFLY VALVE

DET.	DESCRIPTION	MATERIAL
1	BODY	CAST IRON ASTM A126 Gr. B.
2	DISC PIN	STAINLESS STEEL ASTM A582 T303
3	DISC SET SCREW	STAINLESS STEEL 18-8
4	TOP PIVOT PIN	STAINLESS STEEL ASTM A582 T303
5	DISC	BRONZE ASTM B564 C92200
6	DISC SEAT	BUNA-N
7	PIVOT PIN SEAL	BUNA-N
8	BOTTOM PIVOT PIN	STAINLESS STEEL ASTM A582 T303
9	LOCKING SCREW	STEEL ASTM A307 Gr. B.
10	ADAPTER PLATE SCREW	STEEL ASTM A307 Gr. B.
11	ADAPTER PLATE	STEEL
12	HAND LEVER KEY	STEEL ASTM A108 C10180
14	HAND LEVER	CAST IRON ASTM A126 Gr. B.
15	LOCK LEVER	CAST IRON ASTM A126 Gr. B.
16	DISC STOP	STEEL ASTM A307 Gr. B.
17	STUD	STEEL ASTM AISI 1018
18	RETAINING PLATE	STEEL
19	GASKET	LEXIDE (Non-Asbestos)
20	NUT	STEEL ASTM A563



PRESSURE - ORIFICE SELECTION CHART

VALVE SIZE	MODEL No.	INLET	OUTLET	A	B	C	OPERATING PRESSURE, psi.	
							0 TO 150	151 TO 300
							ORIFICE DIAMETER, in.	
1"	443WA	2" NPT	1" NPT	24 1/2	9 1/2	1 1/2	7/32	5/32
2"	445WA	2" NPT	2" NPT	27	9 1/2	1 1/2		
3"	447WA	3" NPT	3" NPT	29 1/2	11	0		
4"	449WA	4" NPT	4" NPT	30	11	0		
6"	456WA	6" 125 lb. FLANGE	6"	39	13 3/4	0		

CERTIFIED BY: _____

DATE: _____

DATE
05-02-06



DRWG. NO.
S-440WA

SPECIFICATIONS OTHER SIDE



SPECIFICATIONS

SERIES 440WA SEWAGE COMBINATION AIR VALVE WITH ATTACHMENTS

Sewage Combination Air Valves (single body, double orifice) are used to allow large volumes of air to escape or enter thru the larger diameter air and vacuum orifice when filling or draining a pipeline.

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

The large air and vacuum orifice shall close when the free floating center guided plug is raised into the orifice by the lifting force of the concave bottom float. The large orifice closure shall be "WITHOUT SPILLING".

The float shall be heavily constructed of 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 large orifice "WITHOUT SPILLING".

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

The Sewage Combination Air Valve shall be fitted with backflush valves consisting of: Gate Valve or 6" isolation Butterfly Valve to isolate from the force main, one drain valve, one flush valve, and a minimum of 5' of rubber hose with quick-disconnect couplings for backflushing.

The overall height & width shall not exceed the dimensions shown on this table.

Valve Size	Model No.	INLET	OUTLET	A	B	C
1"	443WA	2" NPT	1" NPT	24½	9½	1½
2"	445WA	2" NPT	2" NPT	27	9½	½
3"	447WA	3" NPT	3" NPT	29½	11	0
4"	449WA	4" NPT	4" NPT	30	11	0
6"	456WA	6" 125 lb. FLANGE	6"	39	13¾	0

Valve exterior to be painted with Universal Metal Primer for high resistance to corrosion.

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

Body & Cover	Cast Iron	ASTM A126 GR. B
Concave Float* Patented	Stainless Steel	ASTM A240 T304
Float Stem	Stainless Steel	ASTM A581 T303
Needle & Seat	Buna-N	
Plug (1", 2", 3", 4") (6" Size)	Brass	ASTM B124
	Stainless Steel	ASTM A240 T304
Leverage Frame	Cast Iron	ASTM A126 GR. B.

Note: Other materials available.

Valve to be APCO Series 440 Sewage Combination Air Valve, as manufactured by Valve and Primer Corporation, Schaumburg, Illinois, U.S.A.



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