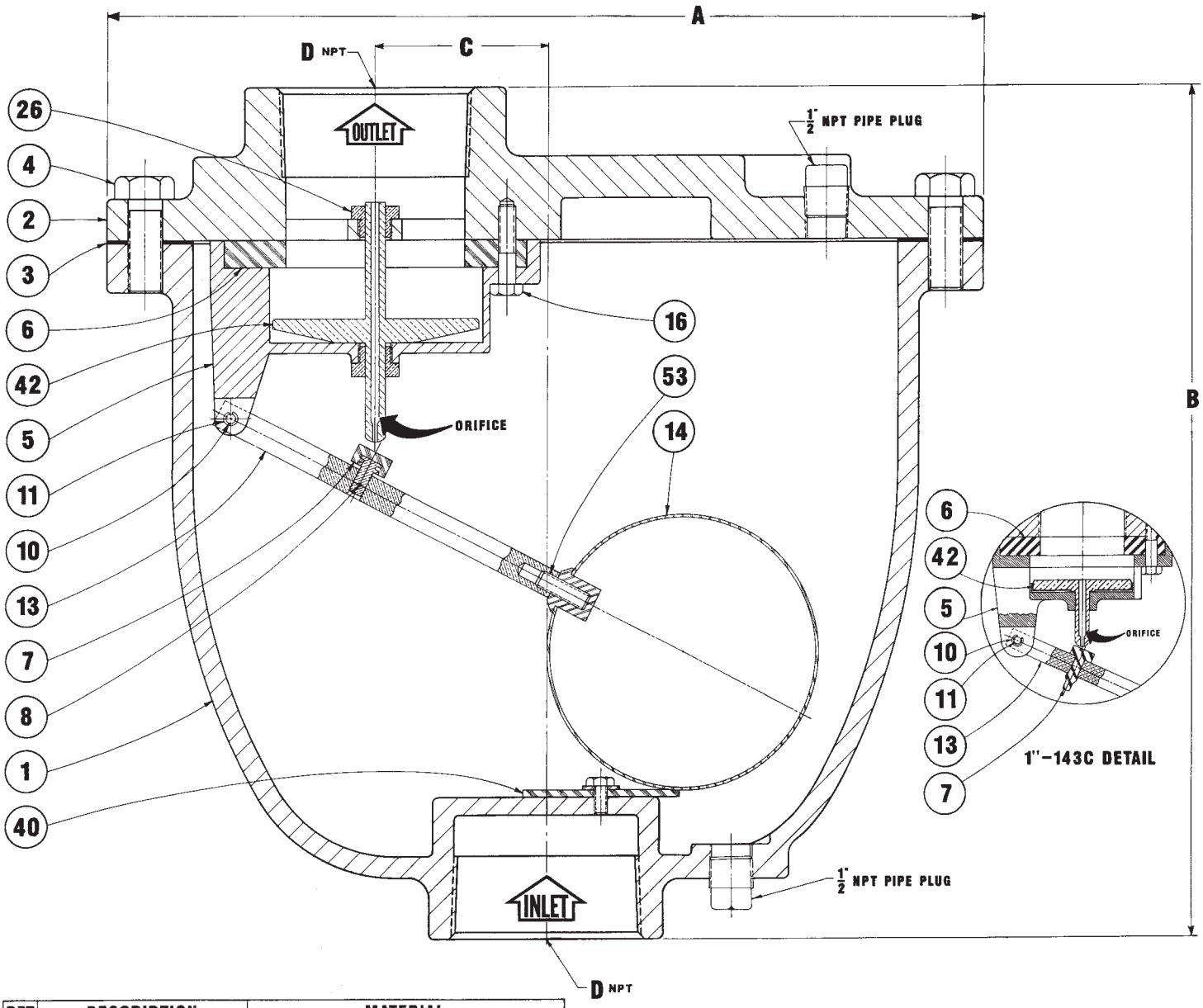
COMBINATION AIR VALVE



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
8	NEEDLE PIN[2]	STAINLESS STEEL ASTM A581 T416 H.T.
10	LEVER PIN	STAINLESS STEEL ASTM A581 T303
11	RETAINING RING	STAINLESS STEEL PH15-7Mo
13	FLOAT LEVER	BRASS ASTM B16
14	FLOAT	STAINLESS STEEL ASTM A240 T304
16	LEVERAGE FRAME SCREW	STAINLESS STEEL 18-8
26	GUIDE BUSHING	BRASS ASTM B16
40	BUMPER ASSEMBLY	BUNA-N
42	PLUG	BRASS ASTM B124
53	FLOAT RETAINING SCREW	STAINLESS STEEL 18-8

1 STANDARD MATERIAL ON SIZE 1" AND 2" IS DELRIN ASTM D2133 AND GUIDE BUSHING IS NOT REQUIRED ON THE FRAME.
2 NEEDLE PIN IS NOT REQUIRED ON SIZES 1" AND 2".

AVAILABLE WITH 125 LB. OR 250 LB. FLANGE INLET
SPECIFY WORKING PRESSURE_____PSI
DESIGN FOR 300 PSI MAX. NON-SHOCK SERVICE

SIZES	MODEL No	A	B	C	D	WIDTH	LARGE ORIFICE	SMALL ORIFICE	APPROX. WT., LB.
1"	143C	11	10	$2\frac{1}{2}$	1	7	1	$\frac{5}{64}$	35
2"	145C	14	$12\frac{3}{16}$	3	2	8	2	$\frac{3}{32}$	75
3"	147C	16	$15\frac{7}{16}$	$3\frac{1}{8}$	3	10	3	$\frac{3}{32}$	100
4"	149C	18	$17\frac{1}{16}$	$3\frac{3}{4}$	4	11	4	$\frac{3}{32}$	170

CERTIFIED BY: _____

DATE: _____

DATE
09-01-03

APCO Willamette
VALVE AND PRIMER CORPORATION

DRWG. NO.
S-140C

SPECIFICATIONS OTHER SIDE

September 1, 2003

SPECIFICATIONS

SERIES 140C COMBINATION AIR VALVES

Combination Air Valve (single body, double orifice) allows large volumes of air to escape out the larger diameter air vacuum orifice when filling a pipeline and closes water tight when the liquid enters the valve. During large orifice closure, the smaller diameter air release orifice will open to allow small pockets of air to escape automatically and independently of the large orifice.

The large air & vacuum orifice shall also allow large volumes of air to enter through the orifice during pipeline drainage to break the vacuum. The body inlet must be baffled to protect the lower float from direct contact of the rushing air and water to prevent premature valve shut-off. The top large orifice plug must be protected in similar manner for the same purpose.

The Buna-N seat must be fastened to the valve cover without distortion, for drop tight shut-off. The float shall be heavy stainless steel, hermetically sealed, designed to withstand a minimum of 1000 psi (static). The top plug shall be center guided thru hex bushings for positive shut-off.

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

The cross sectional area of the discharge orifice must be equal to the cross sectional area of the valve inlet size.

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
Float*	Stainless Steel	ASTM A240 T304
Needle & Seat	Buna-N	
Plug	Brass	ASTM B124
Leverage Frame [1”&2”]	Delrin	ASTM D4181
[3”&4”]	Cast iron	ASTM A126 Gr. B

*** Float design may vary on certain sizes**

Note: Other materials available.

Valve to be APCO Series 140C Combination Air Valve, as maunufactured by Valve & Primer Corporation, Schaumburg, Illinois, U.S.A.

APCO Willamette
VALVE AND PRIMER CORPORATION

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