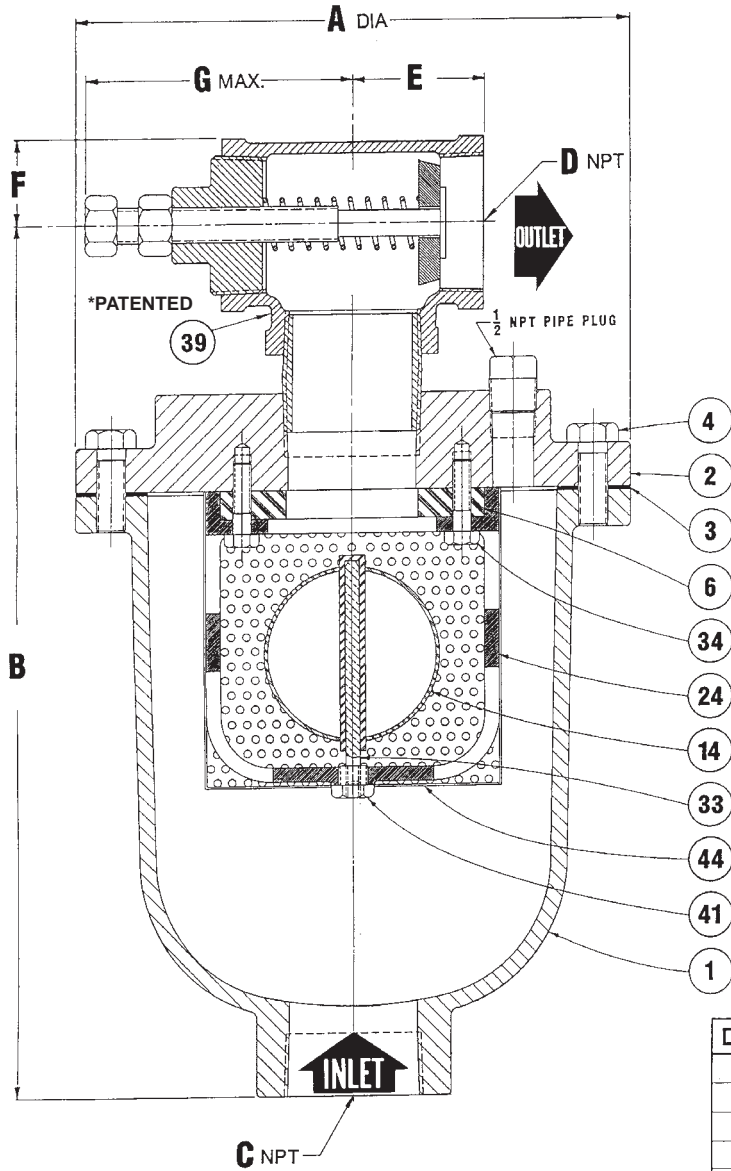


AIR / VACUUM VALVE

with DOUBLE ACTING THROTTLING DEVICE AND WATER DIFFUSER

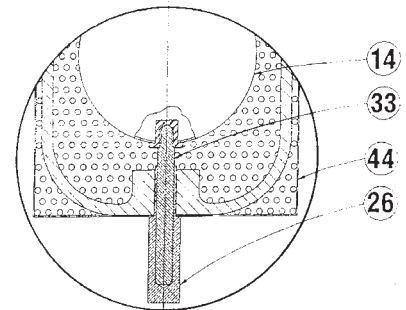


DESIGN FOR: 125 LB. CLASS RATING
200 PSI MAX. NON-SHOCK SERVICE.

SPECIFY WORKING PRESSURE _____ PSI

AVAILABLE WITH 125 LB. FLANGE INLET.

ALSO AVAILABLE FOR 150 LB., 250 LB., 300 LB.,
AND 600 LB. CLASS RATING.



3" 146DAT DETAIL

SIZE	1/2"	1"	2"	3"
MODEL No.	141DAT	142DAT	144DAT	146DAT
A DIA	5 1/4	7	9 1/2	9 1/2
B	8 1/2	11	15 1/2	16 3/4
C NPT	1/2	1	2	3
D NPT	1/2	1	2	3
E	1 1/8	1 1/2	2 1/4	3 1/16
F	5/8	7/8	1 1/2	2 1/8
G	4	6	6 3/4	8 1/2

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
6	SEAT	BUNA-N
14	FLOAT	STAINLESS STEEL ASTM A240 T304
24	BAFFLE ¹	DELFIN ASTM D4181
26	FLOAT STEM BUSHING ²	BRASS ASTM B16
33	FLOAT STEM	BRASS ASTM B16
34	SEAT RETAINING SCREW	STAINLESS STEEL 18-8
39	THROTTLING DEVICE *	MALLEABLE IRON
41	FLOAT STEM GUIDE ³	BRASS ASTM B16
44	WATER DIFFUSER	BRASS (commercial)

* DOUBLE ACTING THROTTLING DEVICE (PATENTED)

¹ STANDARD MATERIAL ON SIZE 3" IS CAST IRON ASTM A48 CL.30

² FLOAT STEM BUSHING IS REQUIRED ON SIZE 3"

³ FLOAT STEM GUIDE IS NOT REQUIRED ON SIZE 3"

CERTIFIED BY: _____

DATE: _____

DATE
09-01-03

APCO *Willamette*
VALVE AND PRIMER CORPORATION

DRWG. NO.
S-140DAT

SPECIFICATIONS OTHER SIDE

APCO[®] SPECIFICATIONS

SERIES 14ODAT AIR / VACUUM VALVE WITH DOUBLE ACTING THROTTLING DEVICE AND WATER DIFFUSER

Air Valves for Vertical Turbine Pumps shall vent large quantities of air out thru the orifice when pump starts and close tight when liquid enters then permit large quantities of air to re-enter thru the orifice when pump stops to prevent vacuum forming in the pump suction column.

The main valve parts shall be a body, cover, baffle, float and seat. The baffle shall shield the float from direct impact of air and water to prevent premature float closure. The seat shall slip fit into the baffle or cover and lock in place without any distortion, but easily removable.

Sizes ½" thru 3" - entire float and baffle assembly must be shrouded with a water diffuser to prevent water slamming the float shut. All outlets to be threaded or flanged.

The float shall be stainless steel center guided (not free floating) for positive seating and rated 1000 psi non-shock service (static).

The discharge orifice shall be fitted with a DOUBLE-ACTING THROTTLING DEVICE, Patented, to regulate and restrict air venting and to establish a pressure loading on the rising suction column of water to eliminate damaging shock to the pump, controls and check valve on pump start. On pump stop, the DOUBLE ACTING THROTTLING DEVICE shall automatically open, allowing full line unrestricted air re-entry to prevent vacuum from forming in the suction column.

Valve exterior to be painted with Universal Primer Paint as accepted by the FDA for use in contact with Potable Water.

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

Body, cover	Cast iron	ASTM A126 Gr.B
Baffle [½", 1" & 2"]	Delrin	ASTM D4181
Baffle [3"]	Cast iron	ASTM A48 CL-30
Float*	Stainless steel	ASTM A240
Seat	Buna-N	
Water Diffuser	Brass	ASTM B16
Double Acting Throttling Device	(Patented)	
Housing	Malleable iron	ASTM A47
Adj. Screw & Nut	Stainless Steel	ASTM A276 T304
Spring	Stainless Steel	ASTM A313 T316
Plug	Teflon	AMS 3651
Exterior paint	Universal Primer	FDA Approved for Potable Water Contact

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

Note: Other materials available.

Valve to be APCO Series 14ODAT Air / Vacuum Valve with Double Acting Throttling Device & Water Diffuser, as manufactured by Valve & Primer Corporation, Schaumburg, Illinois, U.S.A.