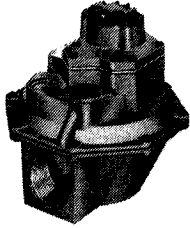


# Honeywell

## V4843A/V8843A AUTOMATIC DIAPHRAGM GAS VALVES



THE V4843A/V8843A ARE ELECTRICALLY OPERATED AUTOMATIC DIAPHRAGM VALVES FOR THE FLOW CONTROL OF NATURAL AND LP (LIQUIFIED PETROLEUM) GASEOUS FUELS. THESE VALVES ARE NORMALLY USED ON ATMOSPHERIC BOILERS, WATER HEATERS AND ROOF-TOP HEATERS.

- A line voltage, 2-wire thermostat or controller is used with the V4843A, a 24 volt thermostat is used with the V8843A.
- Valves open in less than 6 sec.
- Maximum closing time is 1.5 sec.
- Rated for ambient temperatures between -40° F and 175° F.
- Rated for 0.5 psi.
- Valve closes on power-failure, valves recommended for shutoff service.
- One model for natural and LP gases.
- Inlet and outlet pressure taps.

## SPECIFICATIONS

### MODELS:

V4843A 120 Vac electrically operated automatic diaphragm gas valve with maximum operating pressure of 0.5 psi [3.4 kPa].

V8843A 24 Vac electrically operated automatic diaphragm gas valve with a maximum operating pressure of 0.5 psi [3.4 kPa].

TYPE OF GAS: Suitable for natural, and LP (liquified petroleum) gases.

VALVE CAPACITY: See Table I.

VALVE BODY MATERIAL: Die-cast aluminum.

VALVE PATTERN: Straight through, non-offset.

VALVE OPENING TIME: Six seconds maximum at 7 in. w.c. natural gas, 14 in. w.c. LP gas inlet pressure.

VALVE CLOSING TIME: 1.5 seconds maximum (on power failure).

MAXIMUM OPERATING PRESSURE: 0.5 psi.

POWER CONSUMPTION: 24 Vac models 4.8 watts.

120 Vac models 5.8 watts.

AMBIENT TEMPERATURE RATING: -40° F to 175° F [-40° C to 70° C].

DIMENSIONS: See Fig. 1.

WEIGHT: See Table I.

MOUNTING POSITION: Upright to 90 degrees from upright.

APPROVALS:

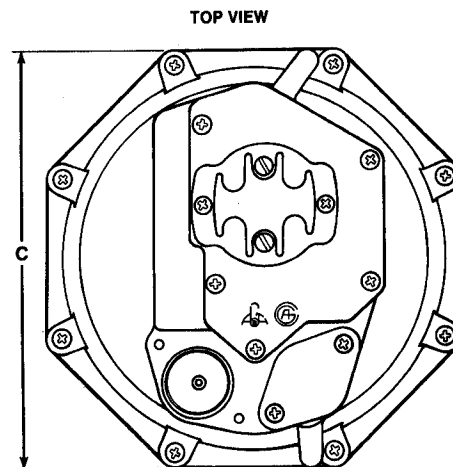
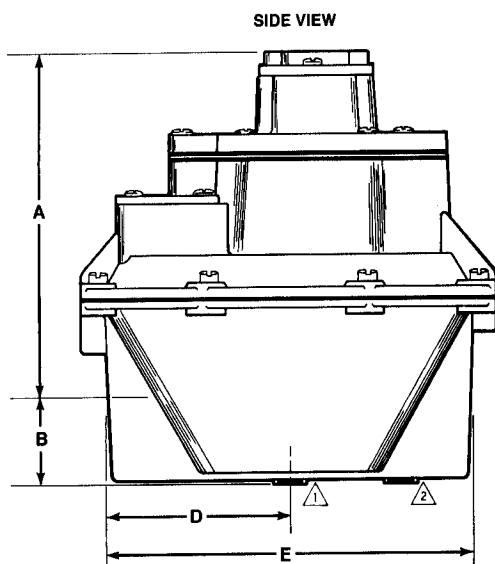
UNDERWRITERS LABORATORIES INC. LISTED: V4843A,

Recognized; V8843A File No. MH1639, Guide No. YIOZ.

AMERICAN GAS ASSOCIATION DESIGN CERTIFIED: Report No. 70-26A.

CANADIAN GAS ASSOCIATION CERTIFIED: Report No. 1301-CC-5342.

VALVE SIZE (INCHES)	TYPICAL DIMENSIONS									
	A <sup>3</sup>		B		C		D		E	
	IN.	MM	IN.	MM	IN.	MM	IN.	MM	IN.	MM
1	5-3/32	129	1-1/8	29	6	152	2-19/32	68	5-3/16	132
1-1/4	5-3/32	129	1-1/8	29	6	152	2-19/32	68	5-3/16	132
1-1/2	6-3/32	155	1-1/2	38	6	152	2-5/8	67	5-1/4	133
2	6-3/32	155	1-1/2	38	6	152	2-5/8	67	5-1/4	133



- ① OUTLET PRESSURE TAP.
- ② INLET PRESSURE TAP.
- ③ DIMENSION "A" VARIES DEPENDING UPON ELECTRICAL TERMINATION, MAXIMUM 6-3/32 in. (CONDUIT COVER), MINIMUM 5-3/32 in. (TERMINAL BLOCK AS ILLUSTRATED).

E2285A

FIG. 1—MOUNTING DIMENSIONS OF V4843/V8843A DIAPHRAGM GAS VALVES.

**ELECTRICAL TERMINATIONS:**

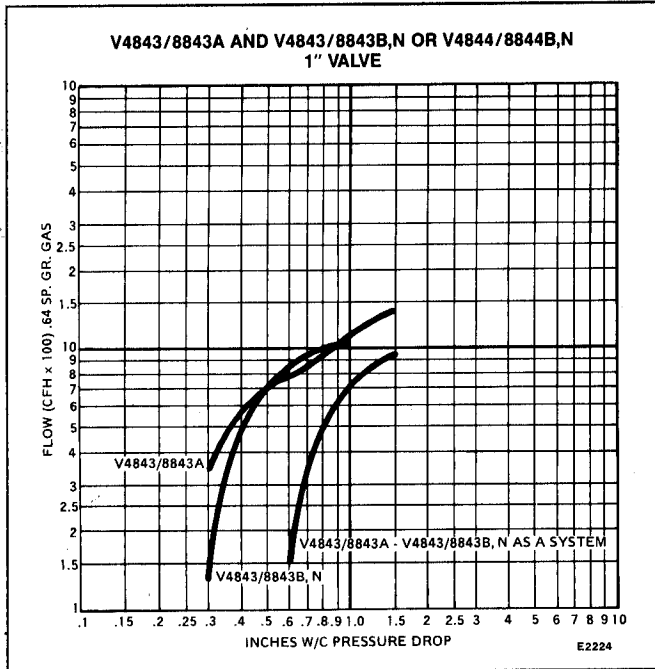
V4843A Conduit cover with 18 gauge, 220° F [105° C] leadwires,  
V8843A screw terminals.

**ACCESSORY:**

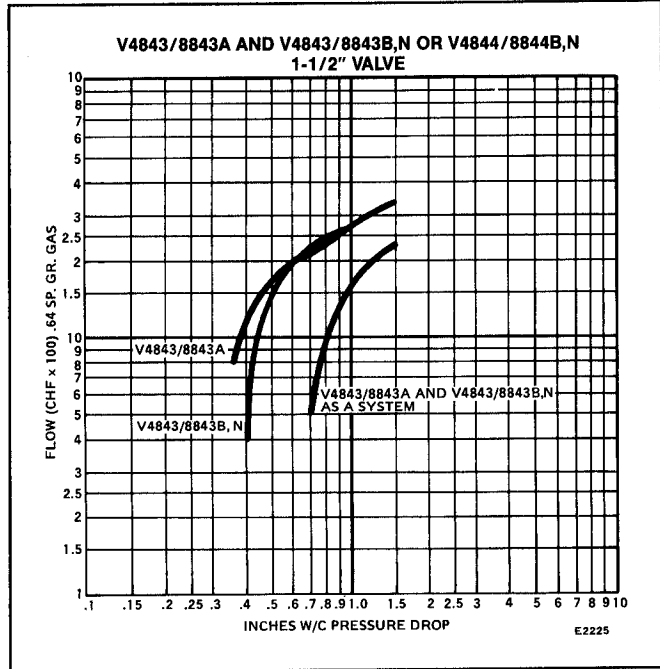
Transformer AT72D—(40 VA) for all V8843A models.

**TABLE I**

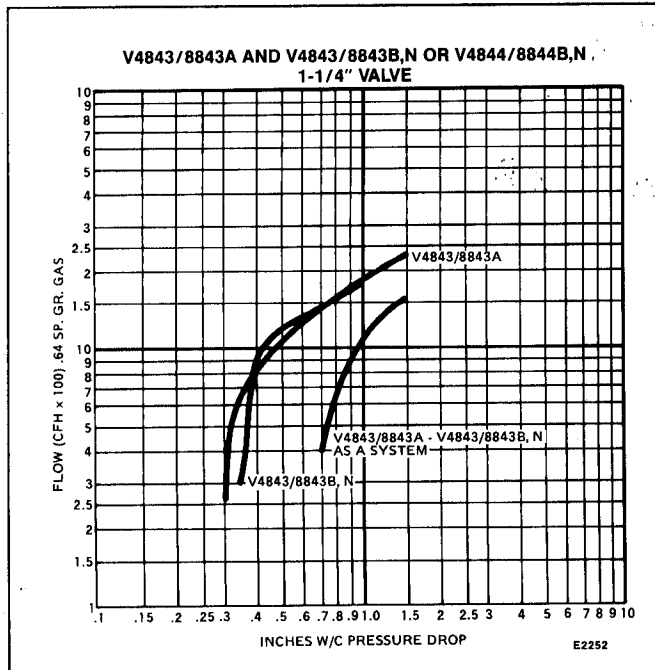
MODEL	PIPE SIZE (INCHES)	VOLTAGE/FREQUENCY	THREAD TYPE	MAXIMUM OPERATING PRESSURE		AGA RATING FOR 0.64 S.P. GR. GAS AT 1.0" w.c. DP	WEIGHT	
				psi	kPa		lbs	kg
V4843A	1	120/60	NPT	0.5	3.4	1000CFH	4.0	1.8
V4843A	1 1/4	120/60	NPT	0.5	3.4	1600 CFH	3.8	1.7
V4843A	1 1/2	120/60	NPT	0.5	3.4	2500 CFH	4.8	2.2
V4843A	2	120/60	NPT	0.5	3.4	3000 CFH	4.4	2.0
V8843A	1	24/60	NPT	0.5	3.4	1000 CFH	4.0	1.8
V8843A	1 1/4	24/60	NPT	0.5	3.4	1600 CFH	3.8	1.7



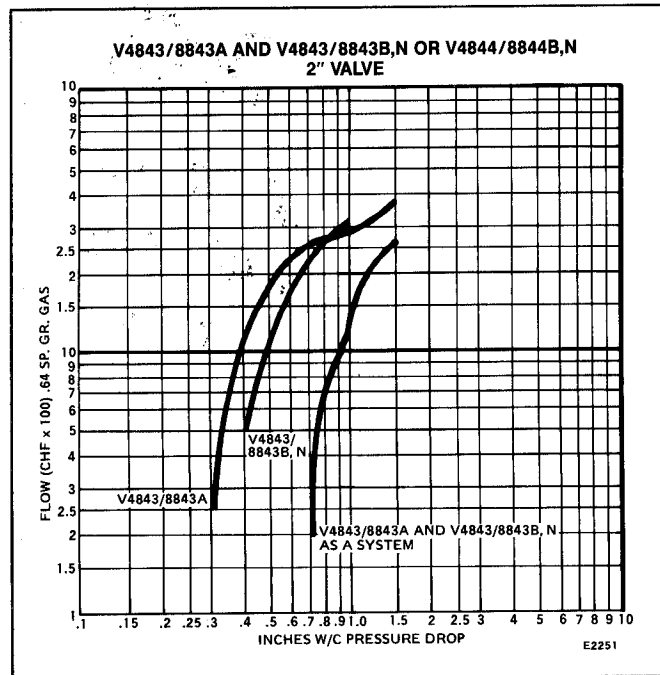
**FIG. 2—CAPACITY VS. PRESSURE DROP (ΔP) 1 IN. VALVE.**



**FIG. 4—CAPACITY VS. PRESSURE DROP (ΔP) 1-1/2 IN. VALVE.**



**FIG. 3—CAPACITY VS. PRESSURE DROP (ΔP) 1-1/4 IN. VALVE.**



**FIG. 5—CAPACITY VS. PRESSURE DROP (ΔP) 2 IN. VALVE.**