

North American 1837D Needle Valves with Fixed Orifice Bypass

Sheet 1837D

1837D Valves are placed in a regulator's external downstream pressure sensing line to dampen regulator response time. If regulator pulsates (pulsations in regulated gas pressure), the valve can be closed to reduce flow rate into and out of the regulator bottom main diaphragm chamber which results in dampening or elimination of pulsation.

An 1837D Valve is a modified 1837 Valve with a 5/64" bypass hole to prevent tight shutoff.

A fixed orifice (8699A-0-295 or smaller) may be used in place of the 1837D which will eliminate operator adjustment.

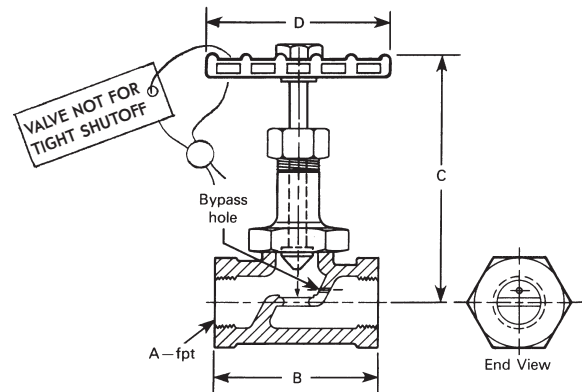
Adjustment: Start with the 1837D Valve wide open. After burner air/fuel ratio is adjusted, slowly increase firing rate. If pulsations in gas pressure occur, reduce valve opening until they stop. Changes in air flow rate must be immediately followed by matching changes in gas flow. If gas flow lags air flow, open gas valve to permit faster regulator response.

NOTE: Many regulators have internal downstream pressure sensing lines and an 1837D Valve cannot be used.

WARNINGS

Do not use the 1837D Valve for any other purpose. The valve is labeled "Valve not for tight shut-off."

Do not use ordinary valves that do not have a bypass orifice. Complete closing of the impulse line will result in locking the regulator position and loss of gas pressure control.



Designation	A pipe size	B	C	D	Wt, lb
1837D-02	3/8"	1 13/16	2 3/4	1 3/4	1/2
1837D-01	1/2"	2 1/16	3 1/8	2 1/16	3/4
1837D-0	3/4"	2 5/16	4	2 9/16	1