



Algas-SDI™

...Innovative liquid vaporizing and gas mixing solutions

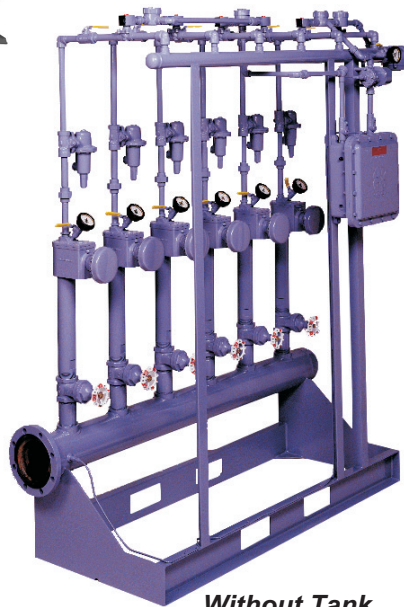
ISO 9001
Certified

Vaporaire®

Venturi LPG/Air mixer; Models V7.0 through V250.0



With Tank



Without Tank

- *Provides an LPG/Air mixture to supplement or replace natural gas.*
- *Connects directly to existing natural gas fuel lines.*
- *Mixed gas delivery pressures available up to 15 psig for propane and 8 psig for butane without air assist.*
- *Mixed gas delivery pressures available up to 40 psig with air assist.*
- *Available with or without accumulator tank.*
- *No modifications to your burner equipment are necessary.*
- *No orifices to change and no sooting or fouling of combustion equipment.*
- *Complies with Class I, Division 1, Group D requirements.*
- *Compact and easy to service.*
- *100% Turndown.*

Specifications

| Capacity [†] Million BTU/Hr. | Delivery Pressure ^{††} | | | | | | LPG Vapor Inlet (FNPT) | Outlet with tank | Outlet without Tank |
|--|---------------------------------|------------------------|-----------------------|-------------------------|-----------------------|-------------------------|---------------------------|---------------------|------------------------|
| | 5 psig | 8 psig | 10 psig | 12 psig | 15 psig*** | 15-40 psig [▲] | | | |
| 7 | V7-5 ^{†††} | V7-8 ^{†††} | | V7-12 ^{†††} | | | 1" | 4"-150# FLG | 6"-150# FLG |
| 10.5 | V10.5-5 ^{†††} | V10.5-8 ^{†††} | | V10.5-12 ^{†††} | | | 1" | 4"-150# FLG | 6"-150# FLG |
| 13 | | | V13-10 ^{†††} | | | | 1" | 4"-150# FLG | 6"-150# FLG |
| 14 | V14-5 ^{†††} | V14-8 ^{†††} | | V14-12 ^{†††} | V14-15 ^{†††} | | 1" | 4"-150# FLG | 6"-150# FLG |
| 21 | V21-5 | V21-8 | | V21-12 | | | 1" | 4"-150# FLG | 6"-150# FLG |
| 26 | | | V26-10 | | | | 1" | 4"-150# FLG | 6"-150# FLG |
| 28 | V28-5 | V28-8 | | V28-12 | V28-15 | V28-PA | 1" | 4"-150# FLG | 6"-150# FLG |
| 35 | V35-5 | V35-8 | | V35-12 | | | 1½" | 4"-150# FLG | 6"-150# FLG |
| 39 | | | V39-10 | | | | 1½" | 4"-150# FLG | 6"-150# FLG |
| 42 | V42-5 | V42-8 | | V42-12 | V42-15 | V42-PA | 1½" ** | 4"-150# FLG | 6"-150# FLG |
| 52 | | | V52-10 | | | | 1½" | 4"-150# FLG | 6"-150# FLG |
| 56 | V56-5 | V56-8 | | V56-12 | V56-15 | V56-PA | 1½" ** | 4"-150# FLG | 6"-150# FLG |
| 65 | | | V65-10 | | | | 2" | 4"-150# FLG | 6"-150# FLG |
| 70 | V70-5 | V70-8 | | V70-12 | V70-15 | V70-PA | 2" | 4"-150# FLG | 6"-150# FLG |
| 78 | | | V78-10 | | | | 2" | 4"-15-# FLG | 6"-150# FLG |
| 84 | V84-5 | V84-8 | | V84-12 | V84-15 | V84-PA | 2" | 4"-150# FLG | 6"-150# FLG |
| 100 | V100-5 | V100-8 | | V100-12 [♦] | V100-15 [♦] | V100-PA ^{♦♦} | 2" | 6"-150# FLG | 8"-150# FLG |
| 125 | V125-5 | V125-8 | | V125-12 | | V125-PA | 2½" | 6"-150# FLG | 8"-150# FLG |
| 150 | V150-5 | V150-8 | | V150-12 | V150-15 | V150-PA | 3" | 6"-150# FLG | 8"-150# FLG |
| 175 | V175-5 ^{♦♦♦} | V175-8 | | V175-12 | | V175-PA | 3" | 6"-150# FLG | 8"-150# FLG |
| 200 | V200-5 | V200-8 | | V200-12 | | V200-PA ^{♦♦} | 3" | 8"-150# FLG | 10"-150# FLG |
| 225 | V225-5 | V225-8 | | V225-12 | | V225-PA | 3" | 8"-150# FLG | 10"-150# FLG |
| 250 | V250-5 | V250-8 | | V250-12 | | V250-PA | 3" | 8"-150# FLG | 10"-150# FLG |

* Models V21-5 and V28-5 have a 1-½"NPT vapor inlet.

** Models V42-5 and V56-5 have a 2"NPT vapor inlet.

*** All 15 PSI models use a 640 gallon accumulator tank.

▲ PA - Pressure assist. Only available without tank.

† Mixing capacities shown are approximate and may be adjusted by increasing or decreasing the LPG motive pressure. Capacity ratings based on a mixed gas gross heating value of 1450 BTU/SCF ± 5% with commercial grade propane.

†† Delivery pressures shown are valid up to 2000ft elevation.

††† Only available with accumulator tank. See ME mixer specification sheet.

♦ 6" Outlet.

♦♦ 8" Outlet.

♦♦♦ 10" Outlet.

Contact factory for information regarding applications at higher elevations.

Contact factory for shipping weights.

Features

- Solid state progressive sequencer performs pre-programmed logic On/Off switching functions to accurately match each venturi to any flow demand (21-250 MMBTU/hr) (Bellows type pressure switch provided on 7-14 MMBTU/hr models).
- Adjustable mixed gas delivery pressures are available between: 4-5 psig, 6-8 psig, 9-10 psig, 11-12 psig, and 13-15 psig. Consult factory for adjustable ranges on air assist.
- Accumulator tanks are fabricated and stamped in accordance with ASME Unfired Pressure Vessel Code, Section VIII, Division 1.
- Accumulator tank design pressure: 50 psig and 650°F.

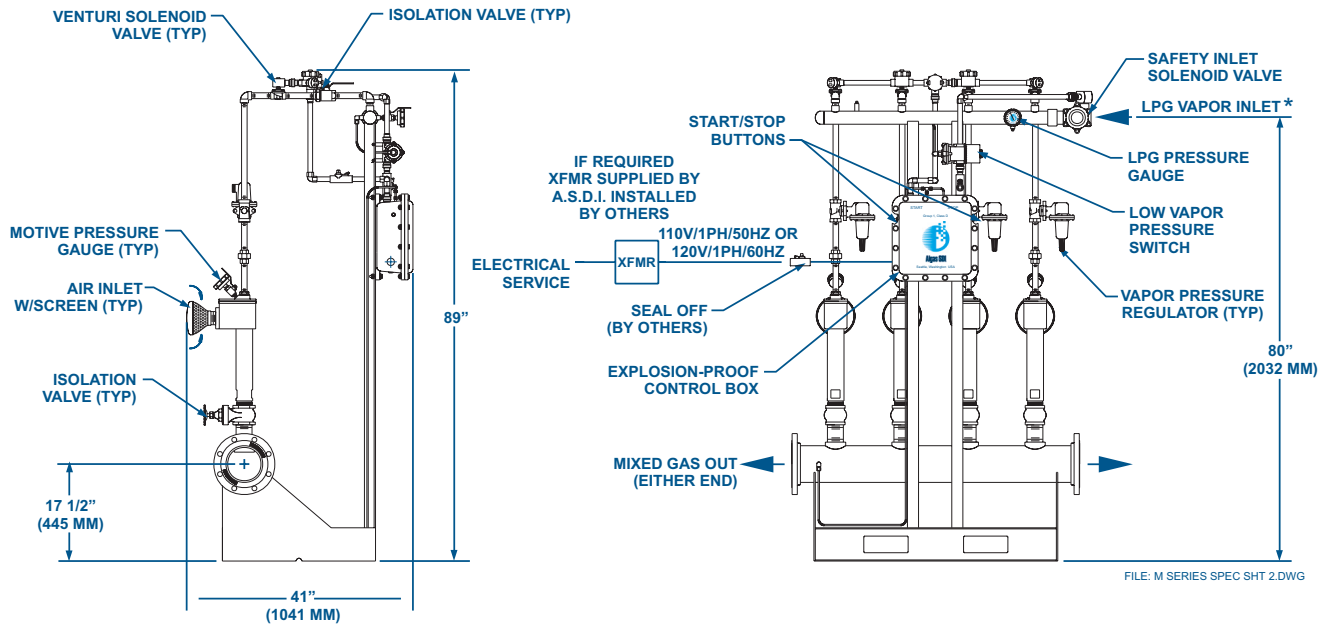
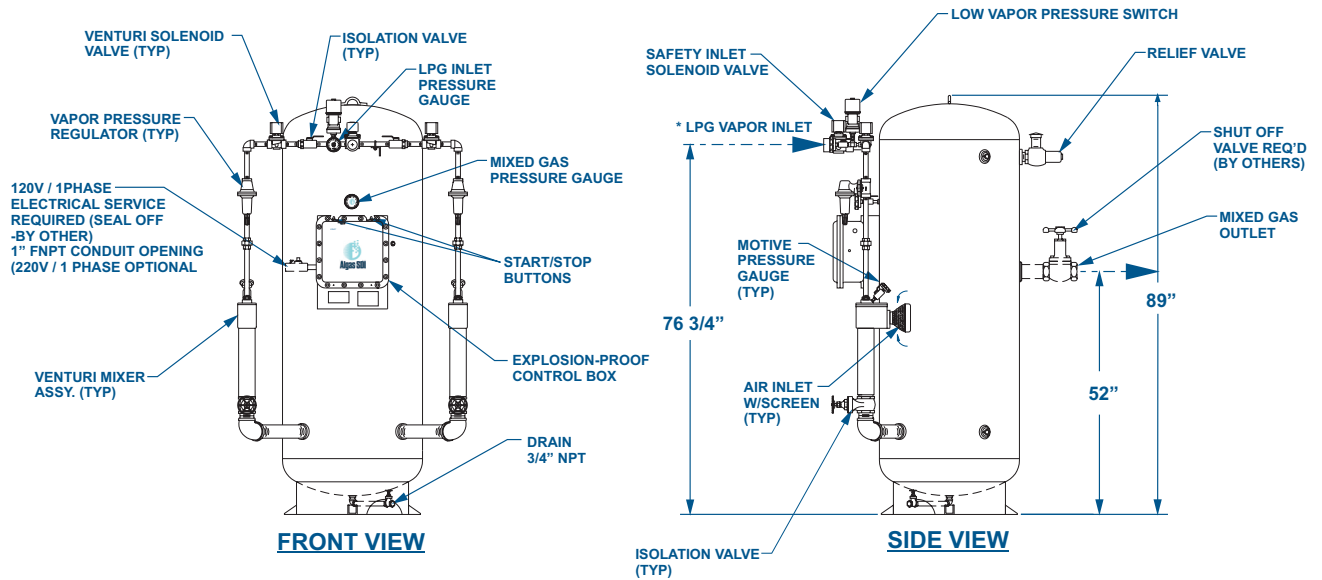
- 100% turndown capability.
- Low vapor pressure safety switch prevents rich mixtures from developing due to inadequate motive pressure.
- High mixed gas pressure safety switch prevents over pressurization of gas accumulator.
- Two or more units can easily be operated in parallel to meet the growing requirements of your business.
- All external metal surfaces are mechanically cleaned, primed, and painted.
- 120V/1ph electrical system (220V/1ph optional).
- Shipped complete with all operating and safety controls.

Options

- Air intake silencers.
- Mixed gas BTU analyzer.
- Cabinet enclosure.

Dimensions

* Contact factory for inlet temperatures exceeding 180°F



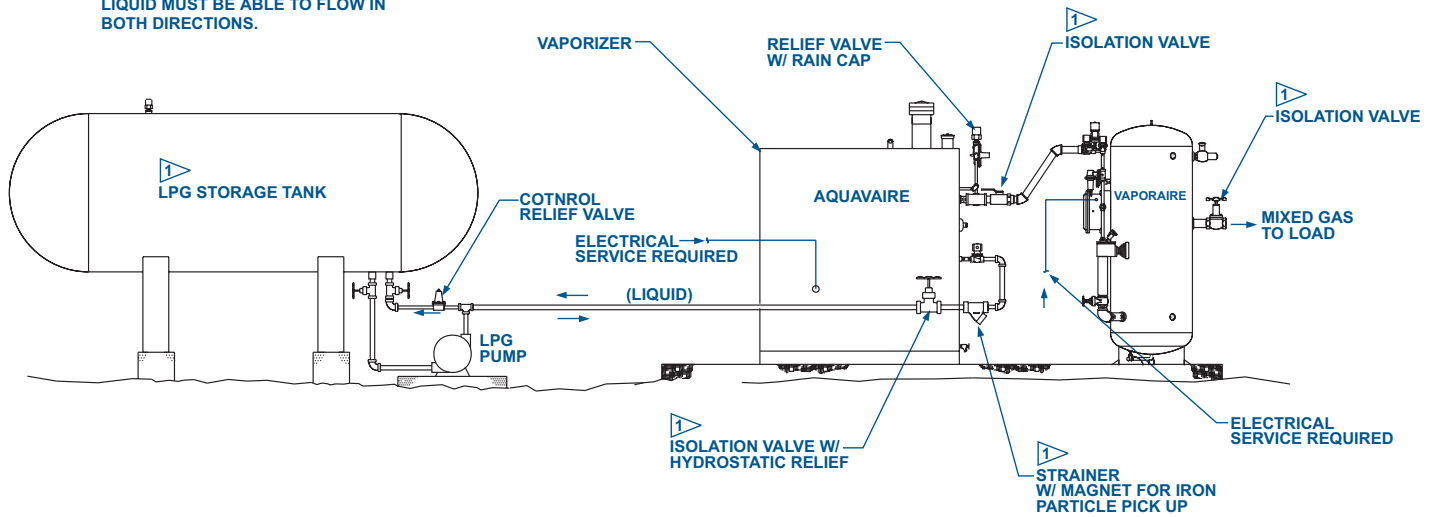
LPG Vapor Pressure Requirement Data

| Mixed Air/Propane Delivery Pressure (psig) | Minimum Inlet Vapor Pressure (psig) |
|---|-------------------------------------|
| Propane | |
| 5 | 31 - 51 |
| 8 | 70 - 76 |
| 10 | 99 - 109 |
| 12 | 110 - 120 |
| 15 | 160 |
| Butane | |
| 8 | 95 |
| Pressure Assist | |
| 15 - 40 | 70 - 90 |
| Contact factory for additional information | |

Product improvement is a continuing goal at Algas-SDI. Designs and specifications are subject to change without notice or obligation (contact factory for dimensions on V100 through V250).

NOTES:

1. BY OTHERS
2. INSTALL SYSTEM PER NFPA 58 AND 70 AND OTHER APPLICABLE CODES.
3. NO CHECK VALVES IN LIQUID LINE: LIQUID MUST BE ABLE TO FLOW IN BOTH DIRECTIONS.



FILE: VAPSPEC2.DWG

VAPORAIRE[®] is a registered U.S. trademark of Algas-SDI.



ISO 9001
Certified

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