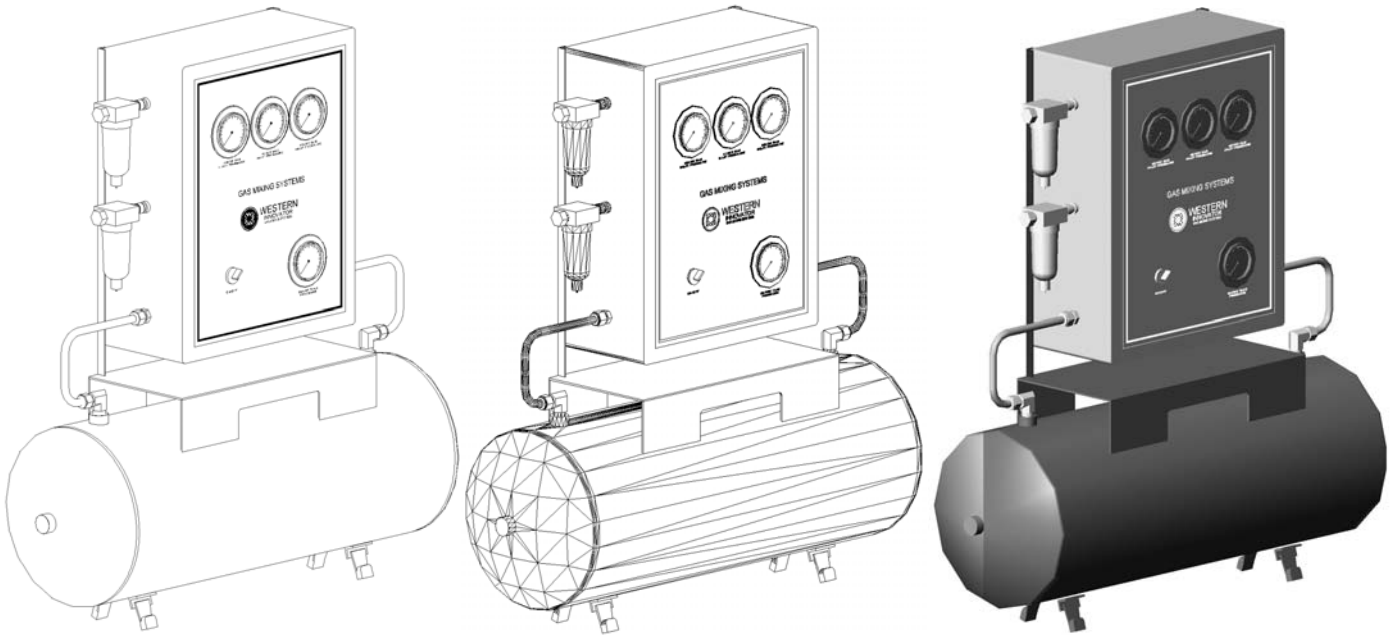


Variable Ratio Gas Mixers - 1200 scfh
Fixed Ratio Gas Mixers - 2000 scfh

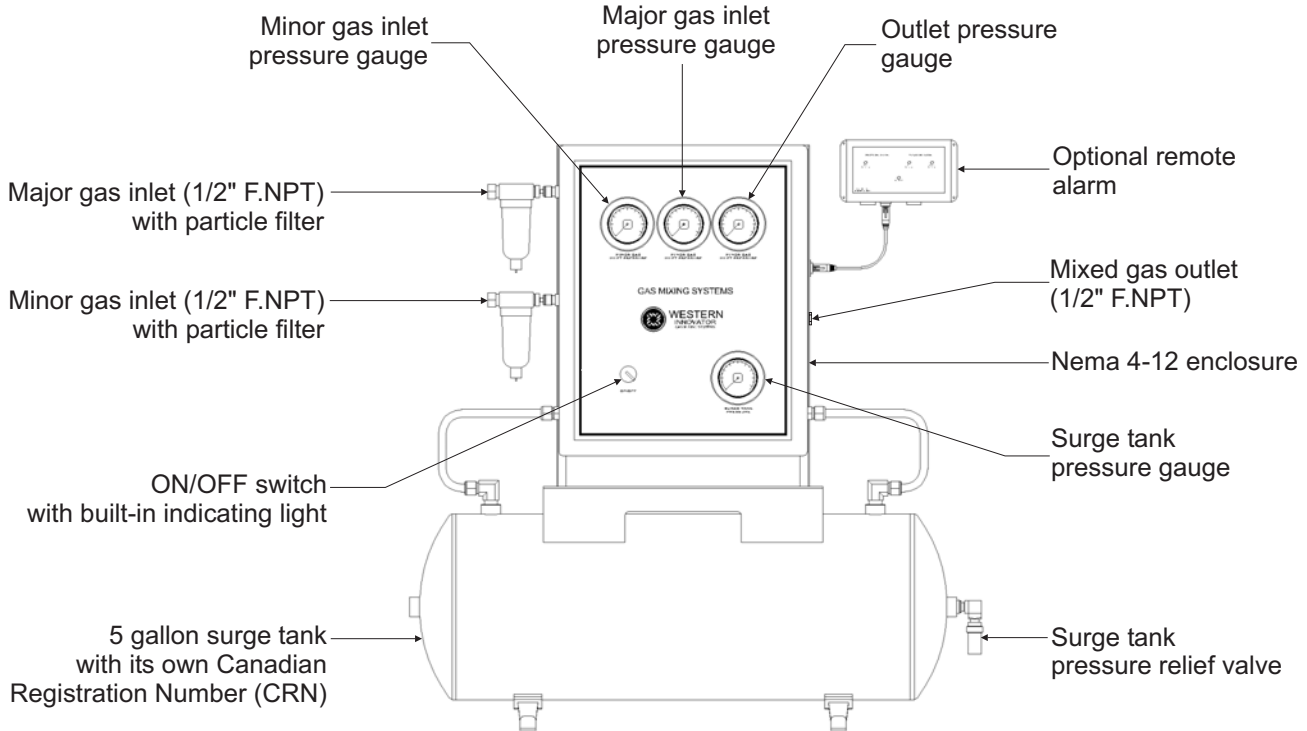


Innovative solutions for all your gas delivery needs



VARIABLE RATIO GAS MIXERS - 1200 SCFH
FIXED RATIO GAS MIXERS - 2000 SCFH

1200 & 2000
SERIES



Description - 1200 scfh mixers

The Western VRM1200 is a variable ratio gas mixer for argon, carbon dioxide, helium, nitrogen and oxygen. The mixer is suitable for different applications such as welding, modified atmosphere packaging, process control and similar applications. The gas mixture can be changed in the field by adjusting a single calibrated dial located inside the mixer control box. The VRM1200 gas mixer will deliver constant gas mixture concentration over 1200 scfh while the mixer is still cycling.

Description - 2000 scfh mixers

The Western FRM2000 is a fixed ratio gas mixer. It has the same configuration as the VRM1200. Because of the fixed flow device, the mixture cannot be changed in the field as it is pre-calibrated at the factory. Although tank and overall dimensions remain the same, the internal components allow flows up to 2000 scfh while the mixer is still cycling.

How to order - part number matrix

FRM2000	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Series FRM2000 = Fixed	Major gas	Minor gas	Adjustable minor gas concentration range	Remote alarm
				<input type="checkbox"/> RA = Remote alarm (Leave blank if none)
VRM1200	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Series VRM1200 = Variable	Major gas	Minor gas	Minor gas concentration set point	Remote alarm
				<input type="checkbox"/> RA = Remote alarm (Leave blank if none)

Gas	
■ Argon	= 3
■ Carbon dioxide	= 4
■ Helium	= 5
■ Nitrogen	= 7
■ Oxygen	= 9

Refer to technical specifications for acceptable gases and related concentrations

Contact Technical Sales 800.783.7890

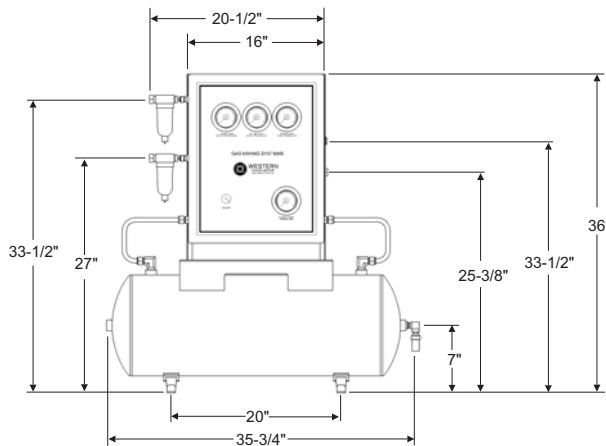


FIXED 2000 SCFH & VARIABLE 1200 SCFH GAS MIXERS FRM2000 & VRM1200 SERIES TECHNICAL SPECIFICATIONS

Principle of operation

The supply gases are individually filtered at the inlet of the mixer to remove particulates. The pressure of each gas is then regulated at the exact same pressure before entering their respective flow restrictors. The flow restrictors are adjusted to ensure the requested gas mixture. The gases are blended in a mixing tee before entering the surge tank. The tank is constantly monitored by a pressure switch which actuates the solenoid valve on & off to allow the mixture to fill the surge tank at a constant pressure and flow. The mixture pressure is controlled by a line regulator before entering the pipeline.

Dimensions



Fixed vs Variable mixers

Fixed

- Greater mixture accuracy (+/- 2% of minor gas)
- Wide range of mixtures.
- Prevents operators from changing mixture concentrations.

Variable

- Field adjustable mixture.
- For applications where mixture accuracy is not critical.
- Possibility of changing mixture concentrations by operators.

Technical specifications

Description	Fixed	Variable
Available mixtures	0-100% CO ₂ in Argon 0-100% Oxygen in Argon 0-100% Helium in Argon 0-100% Nitrogen in Argon 0-100% CO ₂ in Nitrogen 0-100% Oxygen in Nitrogen 0-100% Helium in Nitrogen	0-35% CO ₂ in Argon 0-10% Oxygen in Argon 0-50% Helium in Argon 0-50% CO ₂ in Nitrogen Other ranges available
Flow capacity (still cycling)	2000 scfh	1200 scfh

For both Fixed & Variable mixers

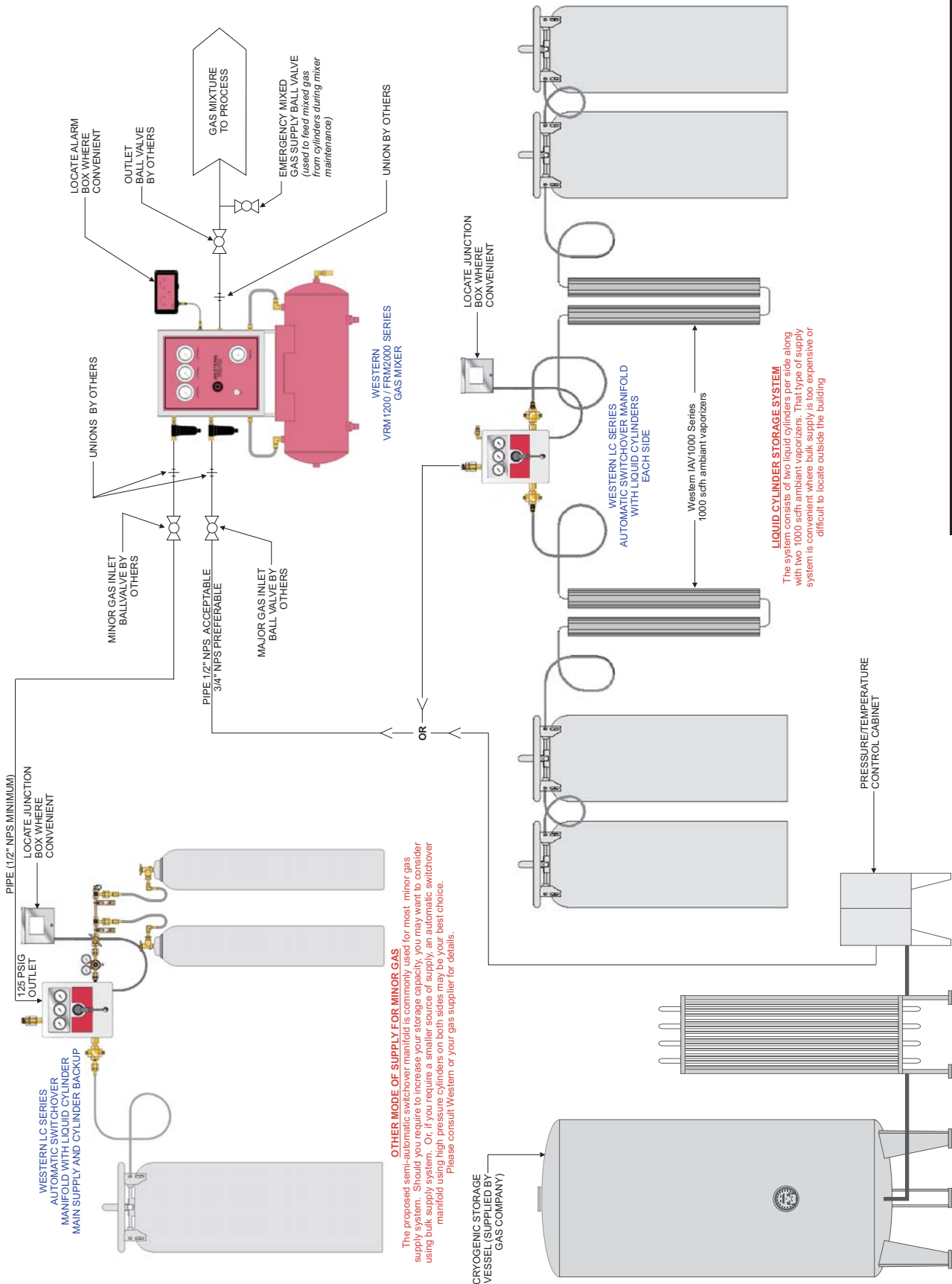
Operating temperature	-28.9°C to 37.8°C (-20°F to + 100°F)
Maximum inlet pressure	250 psig
Factory set inlet pressure	100-125 psig
Maximum outlet pressure	50 psig
Size of pressure gauges	2"
Surge tank pressure relief valve	150 psig (1034 Kpa)
Outlet connection	1/2" FNPT
Inlet connections	1/2" F.NPT
Filtering element	40 micron
Tank capacity	15 gallons
Alarm	Optional
Power requirement	110 VAC, 50/60 Hz, 5 Amp



Western Enterprises

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 Web-site: www.westernenterprises.com

Hours: Monday- Friday 8:00 AM to 5:00 PM / Eastern Standard Time



Typical Installation

