



## Bump Test Gas Concentrations for MPS™ A2L Gas Sensor

The following compressed gas cylinder mixtures can be applied to the MPS while it is already operating in normal, ambient air. Ambient air consists of 78.08% Nitrogen, 20.95% Oxygen, 0.93% Argon, and 0.04% Carbon Dioxide by volume. This constitutes the air that we typically breathe, only without humidity. The addition of A2L flammable refrigerant gas reduces the relative concentrations of the other constituents.

	Nitrogen	Oxygen	Argon	CO <sub>2</sub>	A2L Gas
Synthetic (dry) air at 10 %LFL <sup>1</sup> <b>R-32</b>	76.96%	20.65%	0.92%	0.04%	1.44%
Synthetic (dry) air at 25 %LFL <sup>1</sup> <b>R-32</b>	75.27%	20.20%	0.90%	0.04%	3.60%
Synthetic (dry) air at 10 %LFL <sup>1</sup> <b>R-454B</b>	77.48%	20.79%	0.92%	0.04%	0.77%
Synthetic (dry) air at 25 %LFL <sup>1</sup> <b>R-454B</b>	76.58%	20.55%	0.91%	0.04%	1.93%

<sup>1</sup>LFL concentrations per ISO 817

The following compressed gas cylinder mixtures can be delivered only if the sensor has been initialized in zero air prior to delivery of the gas. Zero air consists of only 79.1% Nitrogen and 20.9% Oxygen by volume.

	Zero Air	A2L Gas
25 %LFL <b>R-32</b>	Balance	3.60%
25 %LFL <b>R-454B</b>	Balance	1.93%