

## Conversion Between Reference Conditions

Posifa mass flow sensors are generally specified as having volumetric flow units at standard reference conditions of 0 °C and 1 atm. This is indicated on volumetric units with the “S” prefix.

For example:

“Standard Cubic Centimeters (per) Minute” (SCCM) reference conditions: 0 °C, 1 atm

“Standard Liters (per) Minute” (SLM) reference conditions: 0 °C, 1 atm

There is no industry standard for the reference conditions indicated by SCCM or SLM, they must be explicitly determined. When a Posifa mass flow sensor is used in a system that uses a different reference condition such as 25 °C, 1 atm, then the sensor output must be multiplied by a conversion factor to achieve specified accuracy. The conversion factor is defined as follows:

Conversion factor = reference condition temperature in K / 273 K

From (Posifa reference condition)	To	Multiple by
0 °C and 1 atm	21 °C (70 °F) and 1 atm	1.077
0 °C and 1 atm	25 °C (70 °F) and 1 atm	1.091

## Conversion for Gases

Posifa mass flow sensors are calibrated using dry air. When they are used to measure gases other than dry air, the sensor output must be multiplied by a conversion factor to achieve specified accuracy.

From	To	Multiple by
Dry air	Oxygen	0.97