

Appendix B. Glossary of Terms

Area	<p>Cross-sectional area for a process line or duct.</p> <p>Area of a circular duct = πr^2 or $\pi \left(\frac{I.D.}{2} \right)^2$</p> <p>Area of a Rectangular duct = $h \times w$</p>
Bipolar	Allows users to view both negative and positive values for DR.
DVM	Digital Voltmeter
EIA	Electronics Interface Association
C1 - C5	<p>C1 through C5 are flow coefficients for the balanced polynomial equation. The flow coefficients characterize the shape of the curve generated by the equation.</p> <p>$Flow = C1(\Delta R^{-2}) + C2(\Delta R) + C3 + C4(\Delta R) + C5(\Delta R^2)$</p> <p>C1- C5 are unique to each sensing point. On the Delta R Parameter sheet, they are shown as H01C1 through H01C5 for sensing point 1. (H = head, 01 = sensing point 1).</p>
Comm Mode	Serial communication mode. There are three options: EIA-232, EIA-422, EIA-485.
CorrF[1]-[4]	<p>CorrF[1] through CorrF[4] are correction factors that apply to the Corrected Flow Rate equation. See Chapter 3 - Operation for more information.</p> <p>$Corrected\ Flow\ Rate = C_1 + (C_2 \times m_0) + (C_3 \times m_0^2) + (C_4 \times m_0^3)$</p>
dR Min	DR value low end cutoff. Should be set to approximately 5 ohms less than the lowest calibrated DR.
dr Max	DR value high end cutoff. Should be set to approximately 5 ohms greater than the lowest calibrated DR.
Flow Element	The Flow Element includes the local enclosure and the sensing points.
Flow Factor	The Flow Factor is the multiplier that converts the internal flow rate (SFPS) to the user selected flow units.
Flow Min	Minimum calibrated flow rate in standard feet per second (SFPS)
Flow Max	Maximum calibrated flow rate in standard feet per second (SFPS)
Flow Transmitter	The Flow Transmitter consists of the remote enclosure and all of the electronics contained within.
Full Scale	Full scale is from the zero value to the max flow value. For zero based applications this is from 0.00 to the maximum flow value. For non-zero based applications full scale is from minimum flow value to the maximum flow value.
Offset 1 - 16	Offset value for each sensing point. Offset Equation = DR + Offset Value

Port [1]	Channel 1 for output signal. Port [2] corresponds to Channel 2.
RTD	A Resistance Temperature Detector operates on the principle of change in resistance as a function of temperature.
Span	Span is the full scale value minus the minimum flow value.
Standard Density	Standard Density is the density of media (customer's original request) at standard conditions usually at 14.7 PSIA and 70°F: used by firmware for conversion when a mass flow rate unit is chosen such as LB/HR etc.
Sensing Point	The Sensing Points contain the four thermowells that house the resistance temperature detectors and the heater.
DR	The difference between two resistance values.
DT	The difference between two temperature values.
Unipolar	Allows users to view only positive values for DR.
Zero	0.00 for zero based applications. For non-zero based applications the zero is at minimum flow.