

GO Regulator Glossary of Regulator Terms

CDA	Clean, dry air.
Droop	The difference between the set outlet pressure at a flow rate of zero and the outlet pressure at a given flow rate.
Flow curve	Graphic representation of the flow characteristics for a valve or regulator.
Hysteresis	The pressure difference between readings taken as flow is increased from a prescribed minimum to a prescribed maximum, and then decreased from the same maximum back to the same minimum.
Hysteresis curve	Graphic representation of the hysteresis for a regulator throughout the entire operating range.
Lock up	Disproportionate amount of droop that occurs during the first few hundred cc's of flow
Maximum flow ratings	Maximum flow rate as specified by the manufacturer for given inlet and outlet pressures.
MIRP	Maximum inlet rated pressure as specified by the manufacturer.
MORP	Maximum outlet rated pressure as specified by the manufacturer.
Operating hysteresis value	Maximum difference between the high and low curves on the hysteresis curve.
Preload	Leakage of pressure past the seat when regulator knob is backed off all of the way.
PSI	Pounds per square inch
PSIA	Pounds per square inch absolute
PSID	Pounds per square inch differential
PSIG	Pounds per square inch gauge
Repeatability	The ability of a regulator to return to the same pressure after termination and restart of a given flow rate.
Resonance	High frequency noise that will happen sometimes when a regulator is under extreme flowing conditions.
SCFM	Standard cubic feet per minute
Set point sensitivity	The minimum increment of pressure that can be consistently set on a regulator for given inlet and outlet pressures.
Set point stability	The variation in outlet pressure that occurs under flowing conditions for given inlet and outlet pressures.
SLPM	Standard liters per minute
Standard conditions	101.3 kPa, 20.0°C (14.73 PSIA, 68°F)
Static set point drift (creep)	Leakage of pressure past the seat when outlet flow is stopped.
Step function transient response	A plot of outlet pressure versus time when switching between two different flow rates.
Supply pressure effect	The effect on outlet pressure (P2) as inlet pressure (P1) decreases. Sometimes referred to as accuracy, the units of this measurement are expressed in terms of percent, or how many psi change in P2 per 100 psi change in P1.