

Description:

The VC2-5 Voltage Clamp is designed to condition the output of sensors that operate from a 5V supply. The VC2-5 is designed to operate from the same +5V supply and ground that powers the sensor it connects to. Under normal operating conditions, the VC2-5 outputs a signal that is identical to the signal present at its input. When the voltage of the flow signal reaches the internally set clamp level, the VC2-5 maintains a constant output voltage at the clamp level as the input voltage rises.

The VC2-5 differs from the VC1 by offering a hard clamp function that is user adjustable. The hard clamp allows the output to track the input right up to the clamp voltage. Once in clamp, the VC2-5 maintains the clamp level with high accuracy regardless of overdrive.

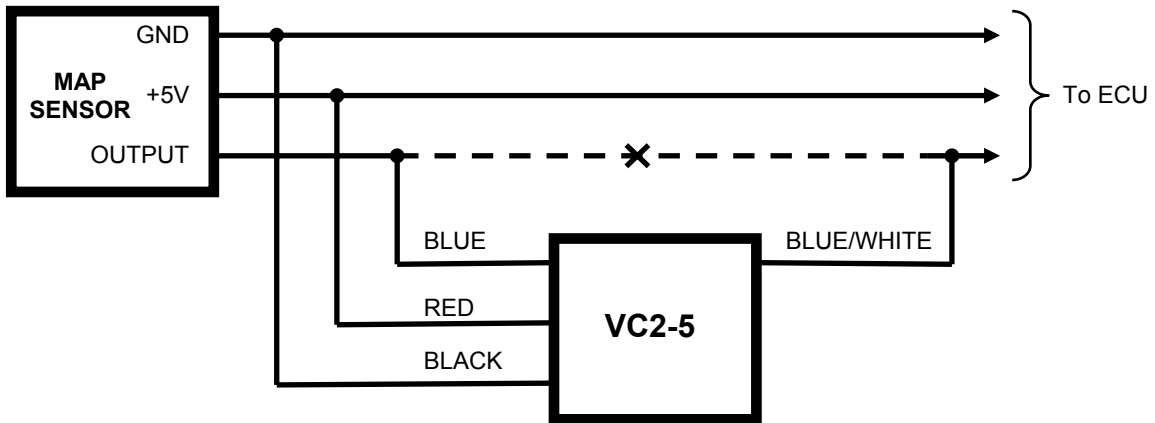
The VC2-5 is especially useful for forced induction conversions where a supercharger or turbocharger is fitted to an engine that is normally naturally aspirated. Under boost the engine can generate higher flow or pressure levels than normal. The clamping function of the VC2-5 maintains the input to the ECU within normal levels. Throughout its entire tracking and clamping range, the VC2-5 always produces a clean, undistorted signal that the ECU can reliably read.

The VC2-5 allows the conversion to forced induction on engines with modern fuel injection including those with OBDII on-board diagnostics. The stock ECU programming may be used without activation of fault codes under boost.

Features:

- Hard clamp limits to a precise level
- User adjustable from 2.5V to 5V
- Can be ordered from the factory with a preset voltage
- Avoids fault codes due to excess flow or pressure readings
- Compatible with OBDII systems
- Clean, undistorted output signal

Typical Connections:

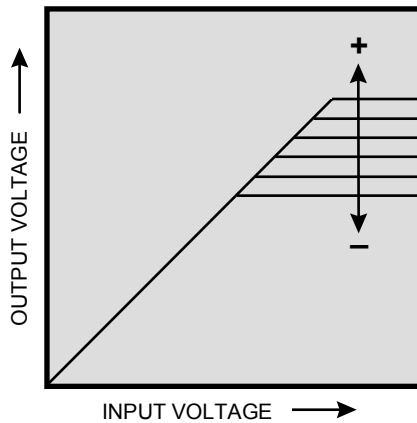


Note: For highest accuracy, the Black wire should be tied to sensor ground.

Wire Assignments:

WIRE COLOR	CONNECT TO	LABEL
Red	+5V	+5
Black	Sensor ground	GROUND
Blue	MAP sensor output	MAP IN
Blue/White	MAP sensor input to the ECU	MAP OUT

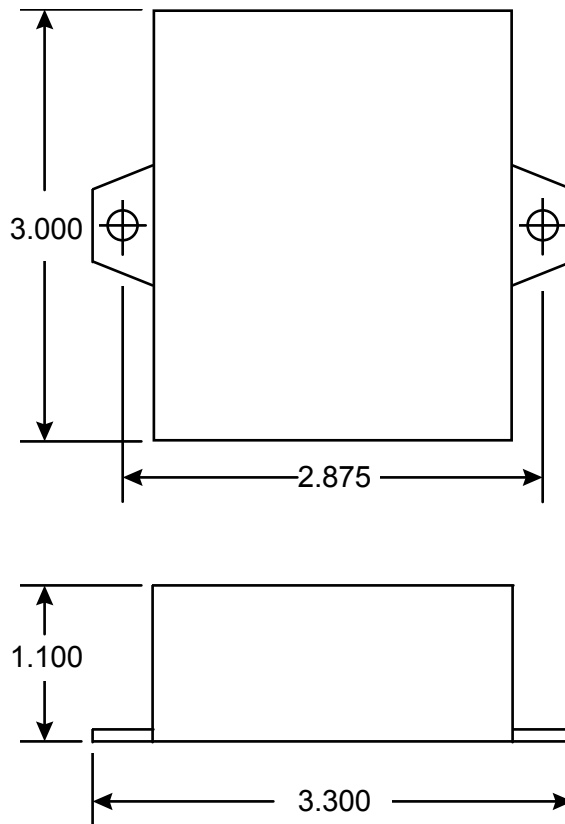
Clamp Function (User adjustable):



Electrical Characteristics:

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Supply Voltage	+5V to ground	4.5	5	13.5	V
Input Voltage	Signal Input to ground			9	V
Clamp Range	Signal Output to ground	2.5		5	V
Input Resistance	Signal Input to ground		20		k Ω
Output Resistance	Output to ground		100		Ω
Supply Current	+5V To ground		6		mA

Mechanical Characteristics:



(dimensions in inches)



1949 E. Deere Ave.
Santa Ana, CA 92705
TEL (949) 863-1359
FAX (949) 863-1363