

Technical Bulletin - ITT Conoflow HPNGV-1 Series Regulator Configurations

Several options are now available to properly configure this regulator for the class of vehicle. Different vehicles have different operating conditions, which must be considered when selecting a configuration for the application.

For small passenger vehicles (cars, passenger vans, light duty pickup trucks), the typical regulator configuration utilizes a reinforced plastic coolant bowl to circulate warm engine coolant within the regulator. A reinforced plastic bowl is less costly than the aluminum bowl, and has integral 3/8 inch hose barbs built in. A plastic coolant bowl also is equipped with a patented feature consisting of a thermostat to stop the coolant flow once the engine has warmed the regulator sufficiently.

For heavy vehicles, moderate to large engines (5.6 liter or larger), or installations within an engine compartment, an aluminum coolant bowl should be used. In these applications, an aluminum coolant bowl is necessary for one or more of the following reasons.

- ✓ The coolant pressure is relatively high due to temperature and coolant circulation pump head pressure.
- ✓ The ambient temperature is relatively high.
- ✓ The design life of the coolant containment needs is in question.

For any vehicle, where the regulator is mounted in the engine compartment, a PRD (pressure relief device) capture pipe should be used. This device permits any gas released by the PRD to be routed through low-pressure piping and harmlessly discharged away from potential sources of ignition.

The following table will assist you in recognizing some of the options available within the family of ITT Conoflow HPNGV-1 CNG Regulators.

Regulator Component	Passenger Cars, Vans, Light Duty Pickup Trucks	Heavy Engine Application
Coolant Bowl	Plastic with Thermostat	Metal / No Thermostat
PRD Device	Flush to Surface Mount	Capture Pipe Required
PRD Pressure Setting	275 PSI +-60PSI	200 +-40 / 275 +-60 / 350 +-60 PSI
Regulator Bonnet	No Bias Port Available	Bias Port / Sealed Bonnet Available

As always, you should discuss your application with ITT Conoflow to insure compatibility with your application.