

Light Duty Natural Gas Vehicle Regulator

The NEW Light Duty NGV Regulator (LDNGV Regulator) incorporates the same robust design and manufacturing practices as the HPNGV series NGV Regulator, and offers improvements in function and value for smaller engine applications. This regulator provides the market with a Durable, Stable, Predictable and Repeatable regulator for smaller fuel injected NGV engine (to 5.0 liter displacement) applications.

Key design features include an integral (and serviceable) 10 micron filter, an optional solenoid valve (high pressure shut-off), an optional inlet pressure sensor, which is matched to the regulator's performance, compact size, all fluid connections on a single side, an optional bonnet to intake manifold connection, outstanding performance and durability, all in a handsome and easy to install package. Certified to ECE R110, the LDNGV Regulator is proven to be a safe and reliable pressure control element. Certifications and Approvals pending are for ISO15500, ANSI/AGA NGV3.1 and ARAI Type Approval AIS-037.

Standard Specifications

Regulated Media:

Compressed Natural Gas

Inlet Pressure:

300 to 3600 psig (2.07 to 24.84 Mpa) to meet all performance specifications

Outlet Pressure:

Factory calibrated per order / Range from 50 to 150 PSIG (0.345 to 1.03 Mpa)

Proof Pressure:

Minimum 150% of operating pressure

Burst Pressure:

Minimum 400% of operating pressure

Pressure Accuracy:

Outlet pressure to be within ± 15 psi (0.103 Mpa) of factory calibrated outlet pressure throughout range of flow, inlet pressure and temperature

Flow Capacity:

110 lb/hr (50 kg/hr)

Filtration:

10 micron, field serviceable element

Temperature:

-40 to 257 °F (-40 to 125 °C)

Application:

Fuel injected engines to 5.0 liter displacement (normally aspirated and turbocharged)

Connections:

Inlet (high pressure) gas: SAE-4, per SAE J1926

Outlet (low pressure) gas: SAE-6, per SAE J1926

PRRV Gas Discharge Port: 3/8-18 NPT Female

Engine Coolant Ports: 1/4-18 NPT Female

Optional Bonnet: 3/16" (4.8 mm) Hose Barb

Optional Solenoid: Amp Superseal 1.5 (2 wire)

Optional Sensor: Packard Metripack 150 (3 wire)

Mounting:

Sides: (2) M10 x 1.5 bolt threads per side

Bottom: (3) M8 x 1.25 bolt threads

Weight:

Refer to the table on page 4

Approvals:

ECE R110

Pending:

ANSI/AGA

NGV3.1

ISO 15500

ARAI Type

Approval

AIS-037

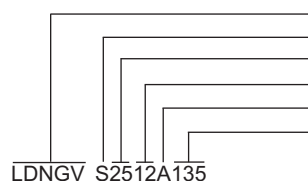


Ordering Sequence — Select desired option for each category

REGULATOR MODEL BREAKDOWN (CED CODE)

TEXT POSITION 1 through 5	OPTION CODE LDNGV	DEFINITION OF CHARACTER Natural Gas Vehicle Fuel Pressure Regulator
6	S C	REGULATOR BONNET OPTIONS Standard Bonnet (Atmospheric pressure reference) Captured Bonnet (3/16" Straight Hose Barb)
7 - 8	XX 25 50 NOTES:	SENSOR OPTIONS No Sensor (SAE-3 Port will be plugged) Sensor Only - 0.25 to 4.75 Volt Output (Notes 1,2) Sensor Only - 0.50 to 4.50 Volt Output (Notes 1,2) 1. See drawing for electrical connection. 2. Sensor output with 5.0 volt DC excitement for 5000 psi span.
9 - 10	XX 12 24 NOTES:	SOLENOID OPTIONS No Solenoid Valve (Port will be plugged) Solenoid Only - Normally Closed Lock Off Solenoid - 12 Volts DC (Notes 1,2) Solenoid Only - Normally Closed Lock Off Solenoid - 24 Volts DC (Notes 1,2) 1. See drawing for electrical connection. 2. Maximum solenoid wattage: 24 watts.
11	A B C D NOTES:	PRESSURE REGULATOR RELIEF VALVE (PRRV) OPTIONS 100 psi (0.69 Mpa) Opening Pressure 150 PSI (1.03 Mpa) Opening Pressure 200 PSI (1.38 Mpa) Opening Pressure 250 PSI (1.73 Mpa) Opening Pressure 1. Opening pressure should be at least 50 psi (0.345 MPA) greater than the specified output pressure. 2. The PRRV discharges into a 3/8-18 NPT port. The user may route any gas discharge from the PRRV safely out of the area.
12 - 14	XXX	OUTPUT PRESSURE SELECTION Regulators can be factory set from 50 to 150 PSIG (0.346 to 1.03 Mpa). For outlet pressure settings less than 100 PSIG, use 0XX format.

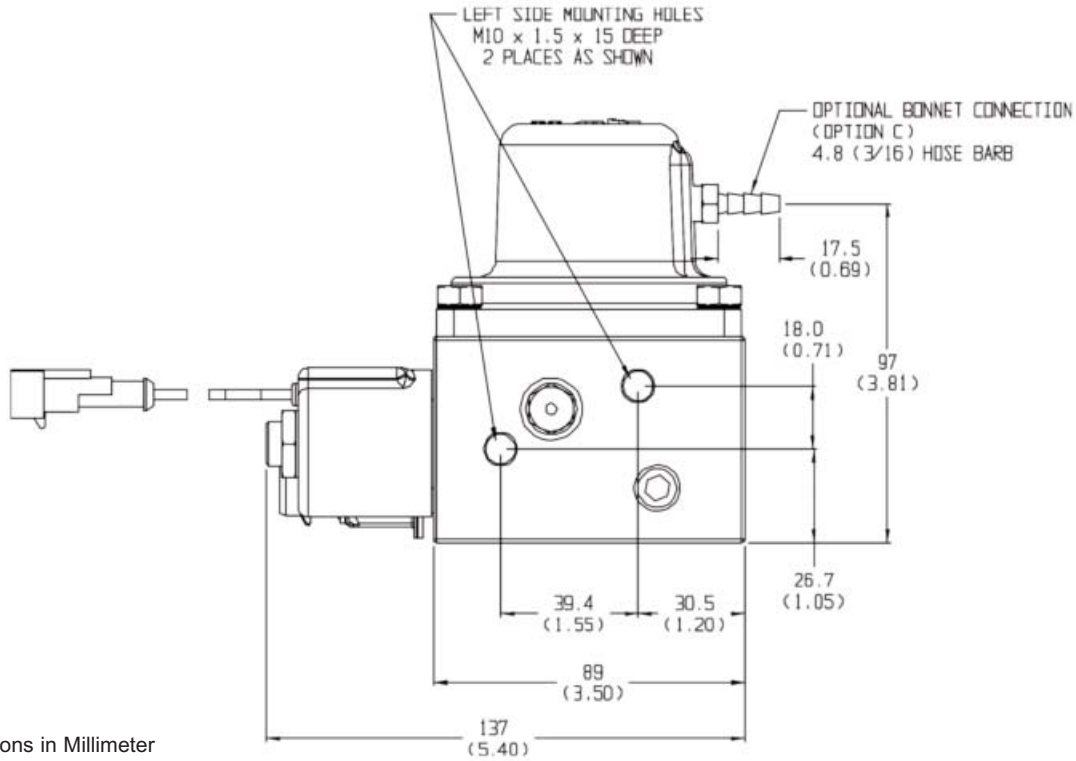
Example



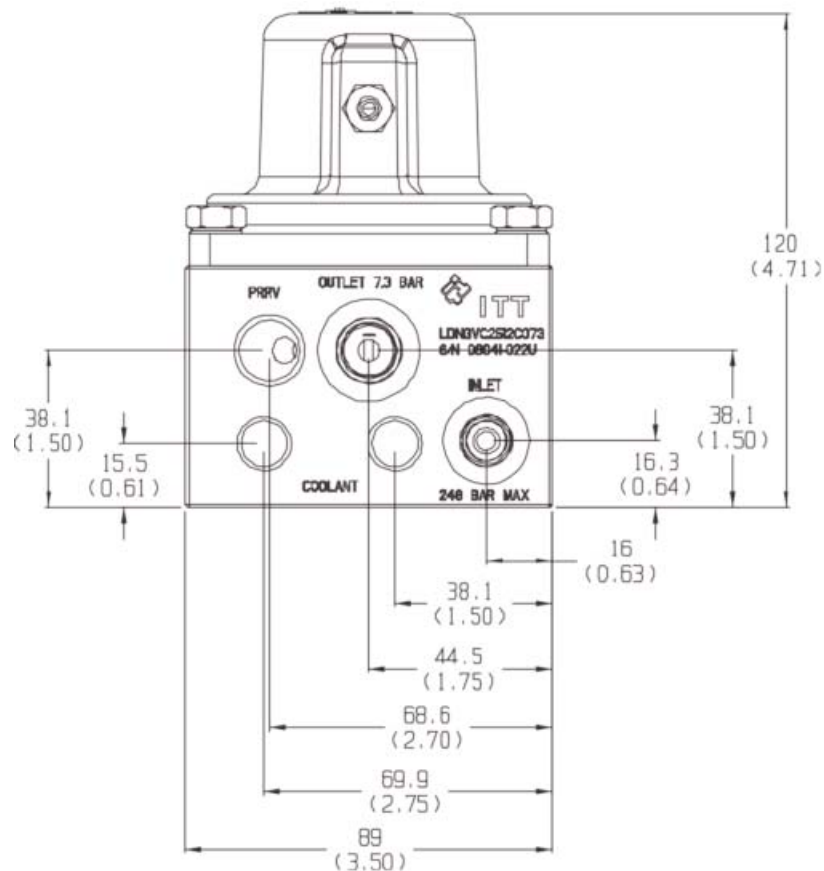
Series - Regulator Base Model
 Regulator Bonnet
 Sensor Options
 Solenoid Options
 Pressure Regulator Relief Valve (PRRV)
 Output Pressure Selection

Series LDNGV

Dimensional Views



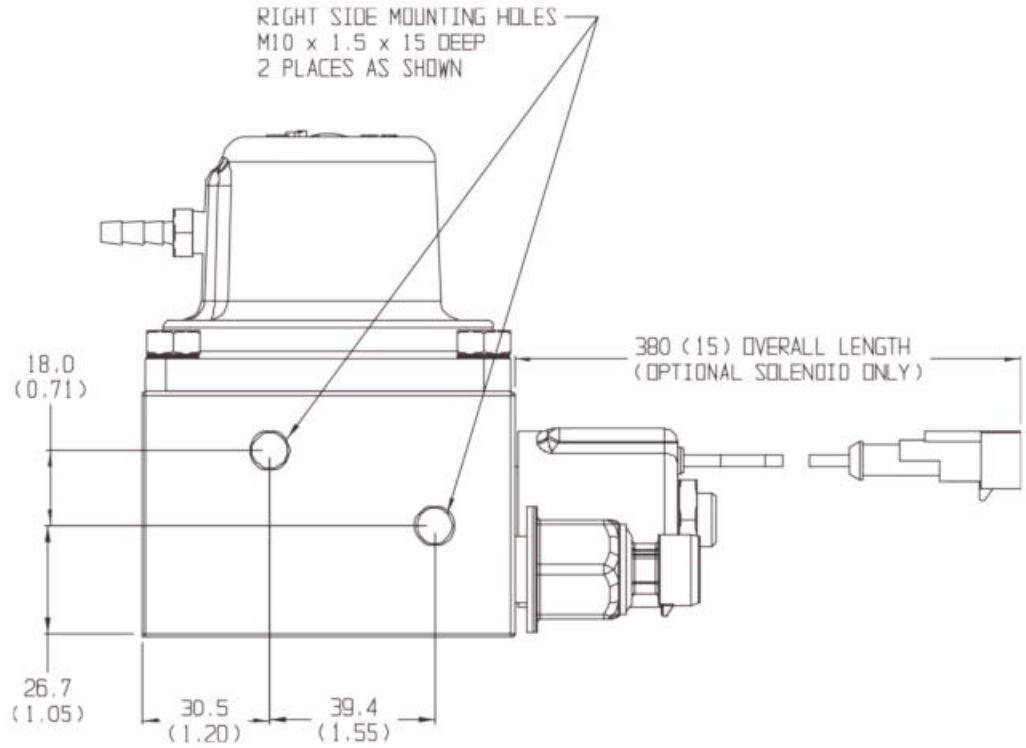
Left Side View / Port Dimensions



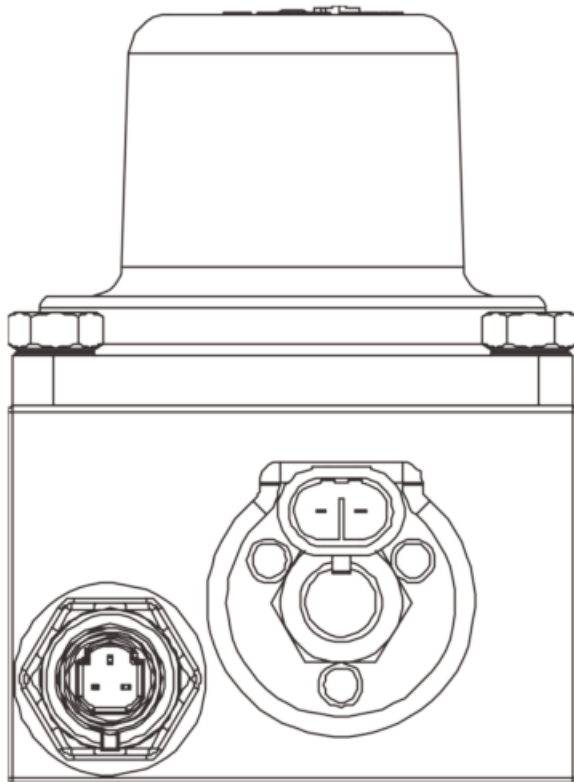
Front View / Port Dimensions

Series LDNGV

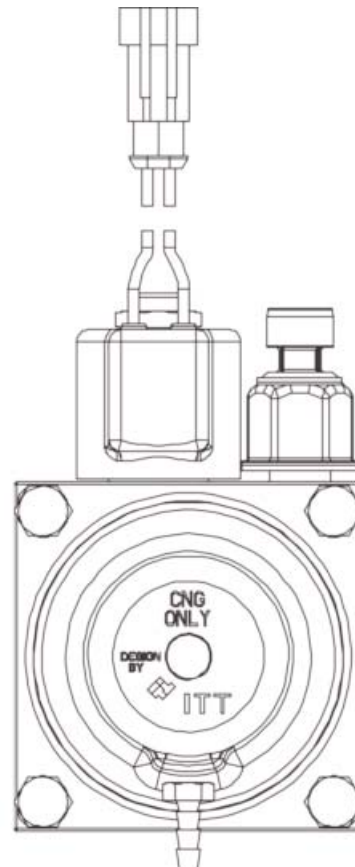
Dimensional Views



Right Side View



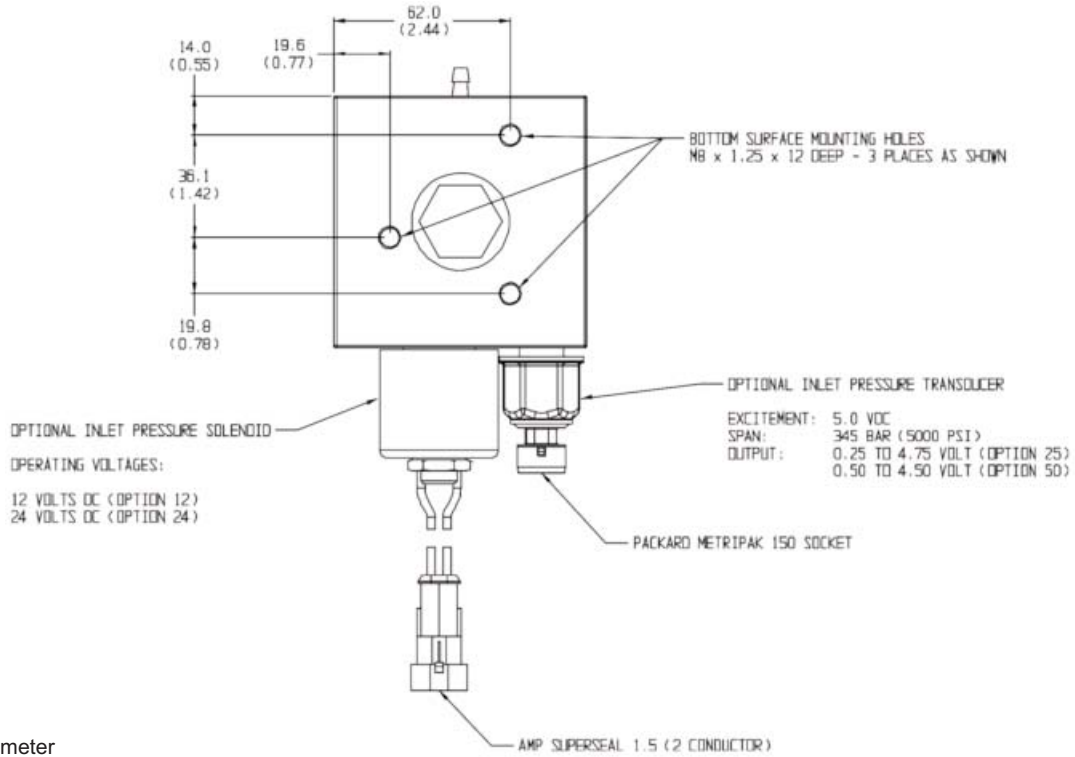
Back View



Top View

Series LDNGV

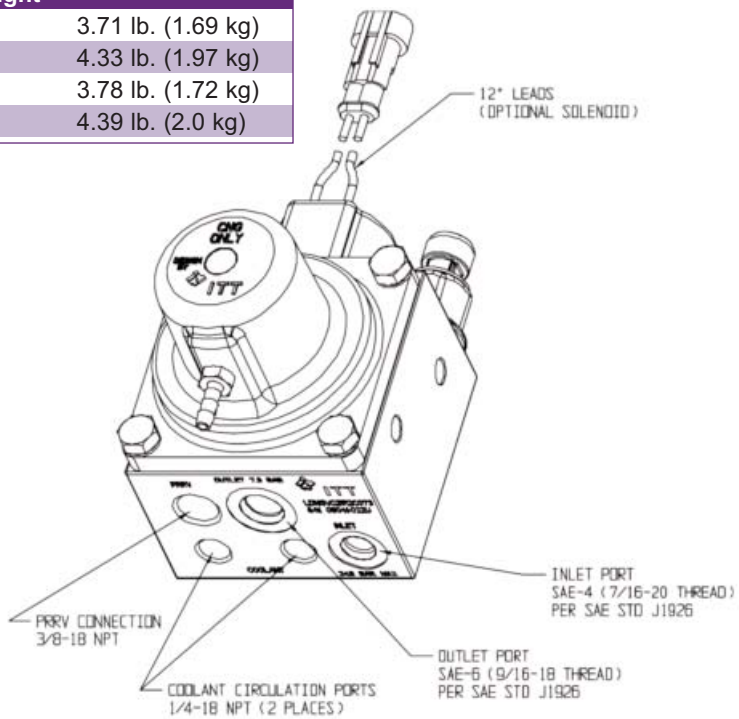
Dimensional Views



Bottom View

LDNGV Regulator Weight

LDNGV Regulator without sensor or solenoid	3.71 lb. (1.69 kg)
LDNGV Regulator with solenoid (no sensor)	4.33 lb. (1.97 kg)
LDNGV Regulator with sensor (no solenoid)	3.78 lb. (1.72 kg)
LDNGV Regulator with sensor and solenoid	4.39 lb. (2.0 kg)



PORT IDENTIFICATION, PART NUMBER, SERIAL NUMBER, SET POINT, AND MAXIMUM INLET PRESSURE TO BE LASER ENGRAVED ON ANODIZED ALUMINUM REGULATOR.

Dimensions in Millimeter (Dimensions in Inches)

Port Identification