

GV200

Fuel Admission Valve for Large Industrial Engines

Applications

The GV200 is designed for OEM PFI (Ported Fuel Injection) applications but can also be used as a retrofit PFI or EFC (Electronic Fuel Control) application.

In the case of retrofit PFI applications, the mechanical fuel system is disabled/removed and one or more PFI valves is mounted just before the engine intake on the air manifold. The GV200 then injects fuel based on electronic control signals directly into the intake manifold.

An EFC application uses a GV200 valve in addition to the mechanical fuel system to electronically control injection timing.

Construction

Materials All parts exposed to the gas are resistant to corrosion and stress corrosion cracking

Mounting May be mounted in any configuration, however, a vertical orientation (valve inlet facing upwards) is preferred.

Gas Inlet Hole Diameter82,5mm (3,25in)

Gas Outlet Hole Diameter89,0mm (3,50in)

Specifications

Equivalent Flow Area	200mm ²
Steady State Flow-Rate	138g/s CNG @
(Contact Hoerbiger for specific application)	P1=3barg, P2=ATM
Internal Leakage.....	<0.25% of steady state flow-Rate
Nominal Differential Pressure*.....	3bar (43psi)
Maximum Differential Pressure*.....	4bar (58psi)
Max. Gas Supply Pressure (P1).....	10barg (145psig)
Max. Air Manifold Pressure (P2).....	9barg (130psig)
Maximum Backfire Pressure Spike	0,5barg (7psig)
(without backflowing through valve)	
Maximum Housing Pressure	10barg (145psig)
(non operating)	
Opening/Closing Time**	3ms max
Response Time**	0,8ms max
Voltage Supply	24–120Vdc ±10%
Peak Current**	15amps
Hold Current**	2,0amps
Max. particle size within fuel gas.....	<10µm
(integrated protection filter: 60µm)	
Max. particle concentration:	1ppm
Ambient Temperature:	-20–95°C (-4–203°F)
Fuel Gas Temperature:	-20–80°C (-4–176°F)

* Pressure differential between fuel gas and intake manifold

** Is differential pressure dependant and assumes the use of a HOERBIGER SDM (Solenoid Driver Module)

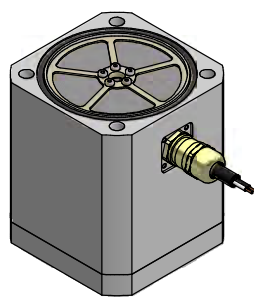
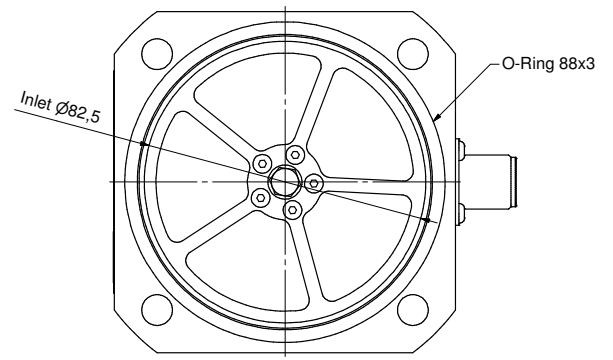
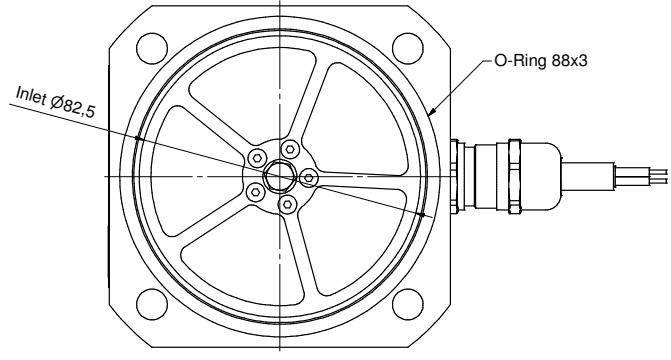
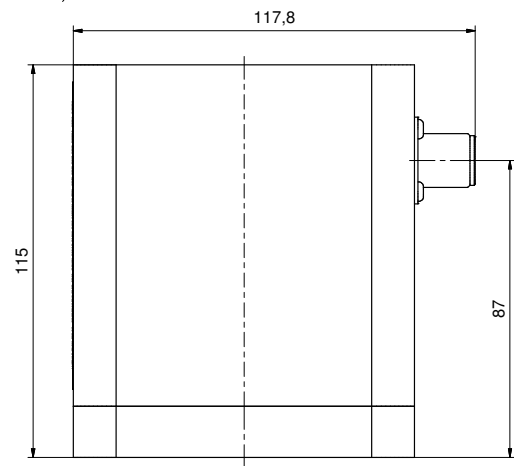
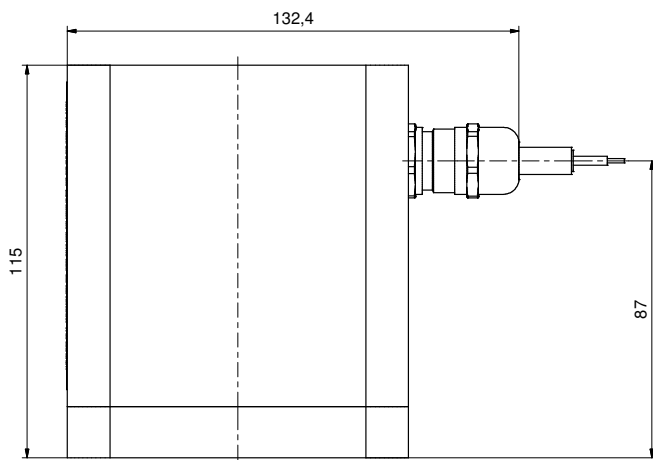
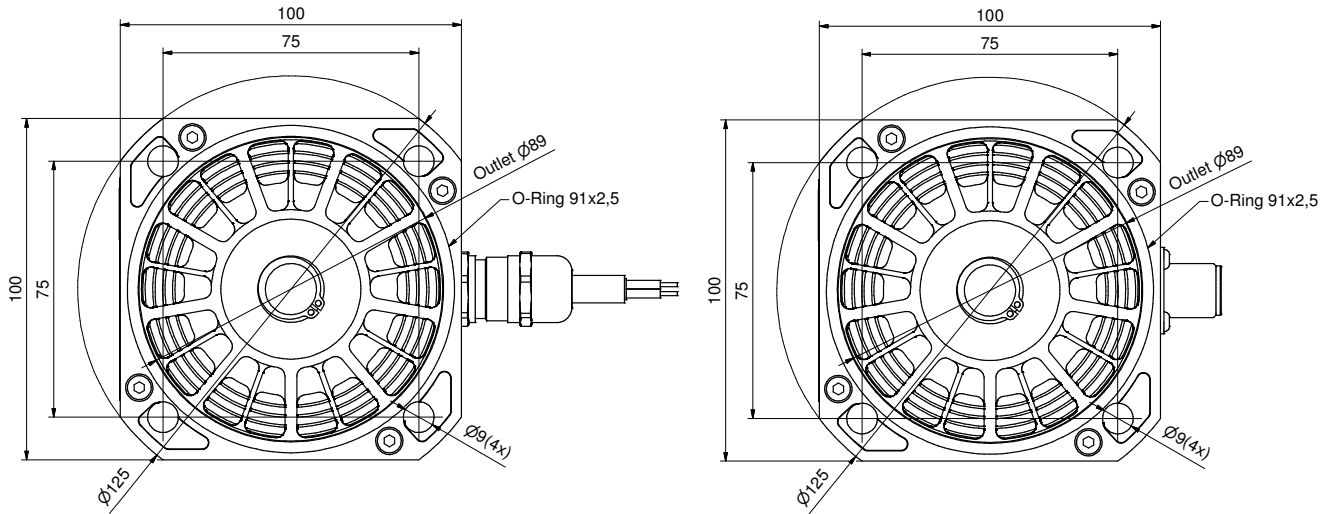
Regulatory Compliance

North America: CSA Class I, Division 2, Groups C & D

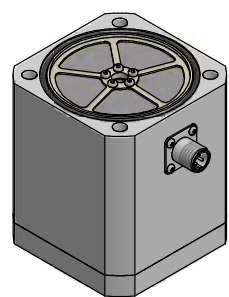
Europe: Europe: II 3G Ex nA IIB T4 Gc



Outline drawing



1756182
Cable Version



1756136
Connector Version

Connector and Cable Specification

Connector Specifications

Type: Standard MIL-C-5015

Connection type: Threaded

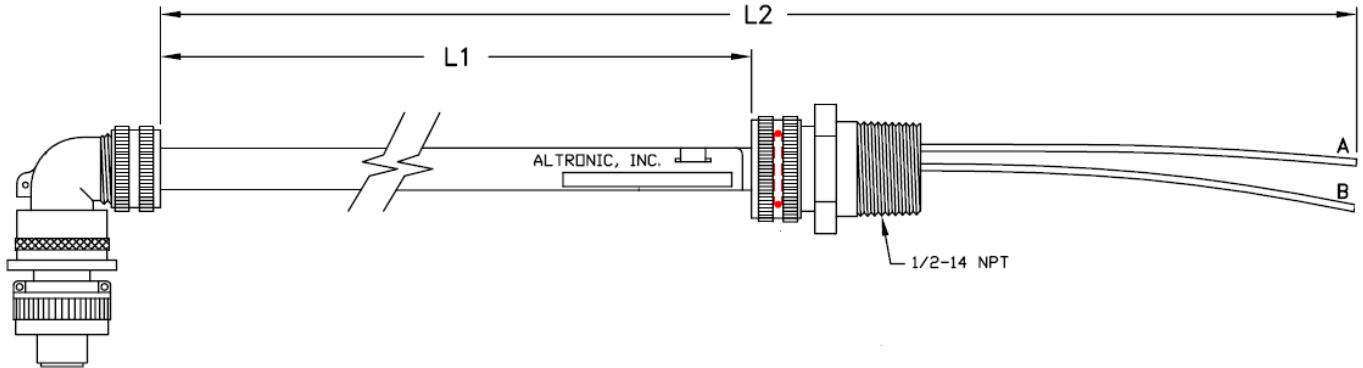
Tighten specification: Hand tight/lightly plier tightened

Connect Booster Output

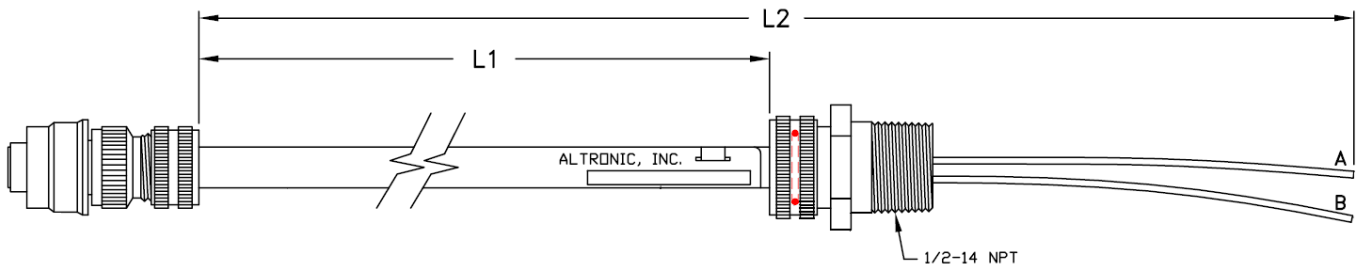
Pins A & B (polarity not relevant)

Standard Connection Cables

90° connector – PN: 593027



Straight connector – PN: 593022



* Both cables CSA-Certified (LR#34575-6) Class 1, Group D, Division 2

** These products are not shipped with GV200 Valve

How to order

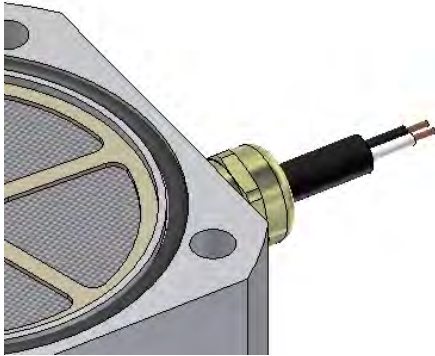
For 90° connector: 593027-XXX
 For straight connector: 593022-XXX

XXX - Conduit length L1 as shown in following table

Available Lengths

L1 (inches)	6	9	12	15	18	24	30	36	42	48	54	60	72	84	96	108	120	135	138	150
L2 (inches)	42	42	42	42	42	42	42	60	60	60	60	96	96	96	180	180	180	180	180	180

Cable Version



Specific Properties

- Specified up to 150°C (300°F)
- Two conductor cable (polarity not relevant)
- Braided steel shielding
- Approved by UL and CSA
- Standard cable length 1,5m (59in)

Piping/Hose Size Recommendation

Hose Installation

Minimum hose: ID 40mm (1½in)
 Check minimum fitting cross section

Minimum 100–130mm (4-5in)

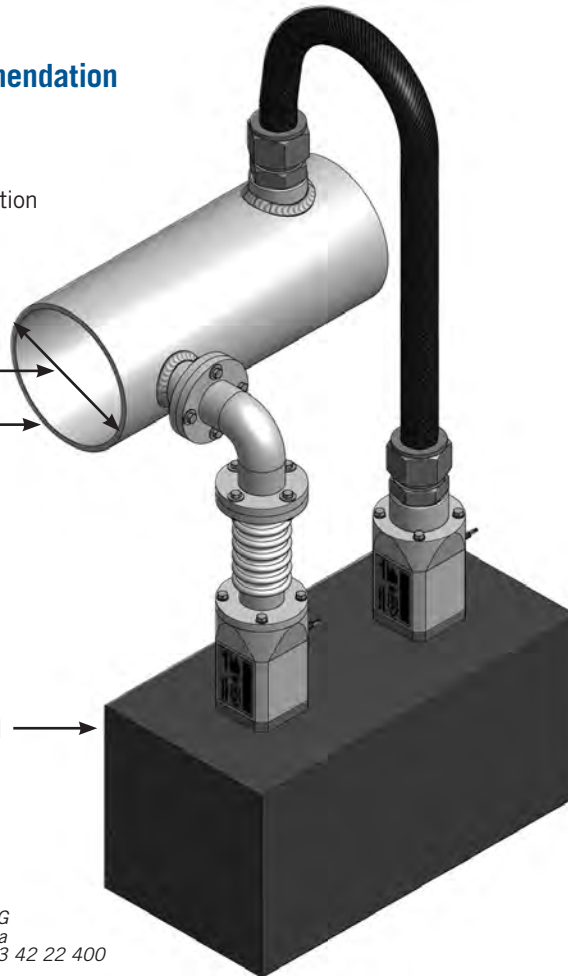
Dependent on cylinder count
 and firing sequence

Main Fuel Supply Rail

Flange Assembly

Minimum pipe: ID 40mm (1½in)
 Always use flexible pipe coupler

Cylinder Head/Intake Manifold



altronic

HOERBIGER Engine Solutions

HOERBIGER Ventilwerke GmbH & Co KG
 Brauhubergasse 23, 1110 Wien, Austria
 Tel. +43 1 74 004 388 / Fax. +43 1 743 42 22 400
 E-mail: info-hvt@hoerbiger.com
 http://www.hoerbiger.com

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