altronic

GV800

Fuel Admission Valve for Large Industrial Engines

Applications

The GV800 has been designed for OEM PFI (Ported Fuel Injection) applications for large-bore industrial gas engines.

The GV800 is installed on the intake manifold and injects fuel into the air steam when the cyclinder intake valve is open. The GV800 injects fuel based on electronic control signals received from the engine management system

The GV800 has been designed specifically to operate with natural gas, however a variety of methane-based fuels may also be used, including dry gas derived from liquid forms (i.e., LNG).

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 Diameter 95mm (3,74in)

Gas Outlet Hole Diameter..... 129mm (5,08in)

Specifications

Equivalent Flow Area	800mm²
Steady State Flow-Rate (Contact Hoerbiger for specific application)	344g/s CNG @ P1=1.5barg, P2=ATM
Internal Leakage	<0.25% of steady state flow-Rate
Nominal Differential Pressure*	1,5barg (22psig)
Maximum Differential Pressure*	2,5barg (36psig)
Max. Gas Supply Pressure (P1)	10,0barg (145psig)
Max. Air Manifold Pressure (P2)	9,5barg (138psig)
Maximum Backfire Pressure Spike (without backflowing through valve)	0,3barg (4psig)
Maximum Housing Pressure (non operating)	10,5barg (145psig)
Opening/Closing Time**	3ms max
Response Time**	0,8ms max
Voltage Supply	24–185Vdc ±10%
Peak Current**	15amps
Hold Current**	2,0amps
Max. particle size within fuel gas (integrated protection filter: 140µm)	<10µm
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: Zone 2, Category II 3 G, EEx m IIC T4

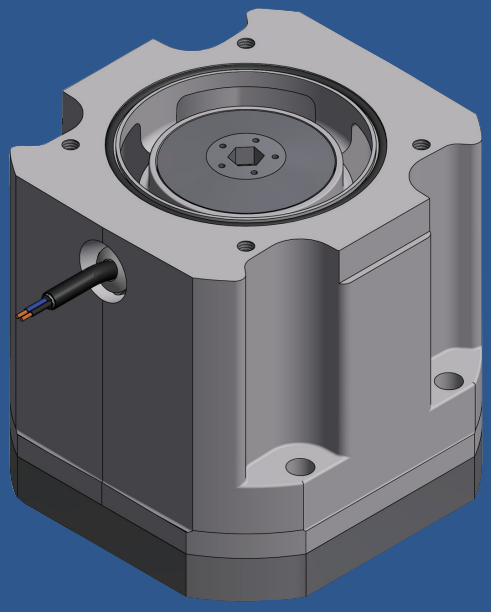
CE Compliant with ATEX, LVD and MD Directives

Exempt from the Pressure Equipment Directive 97/23/EC per Article 1-3.10

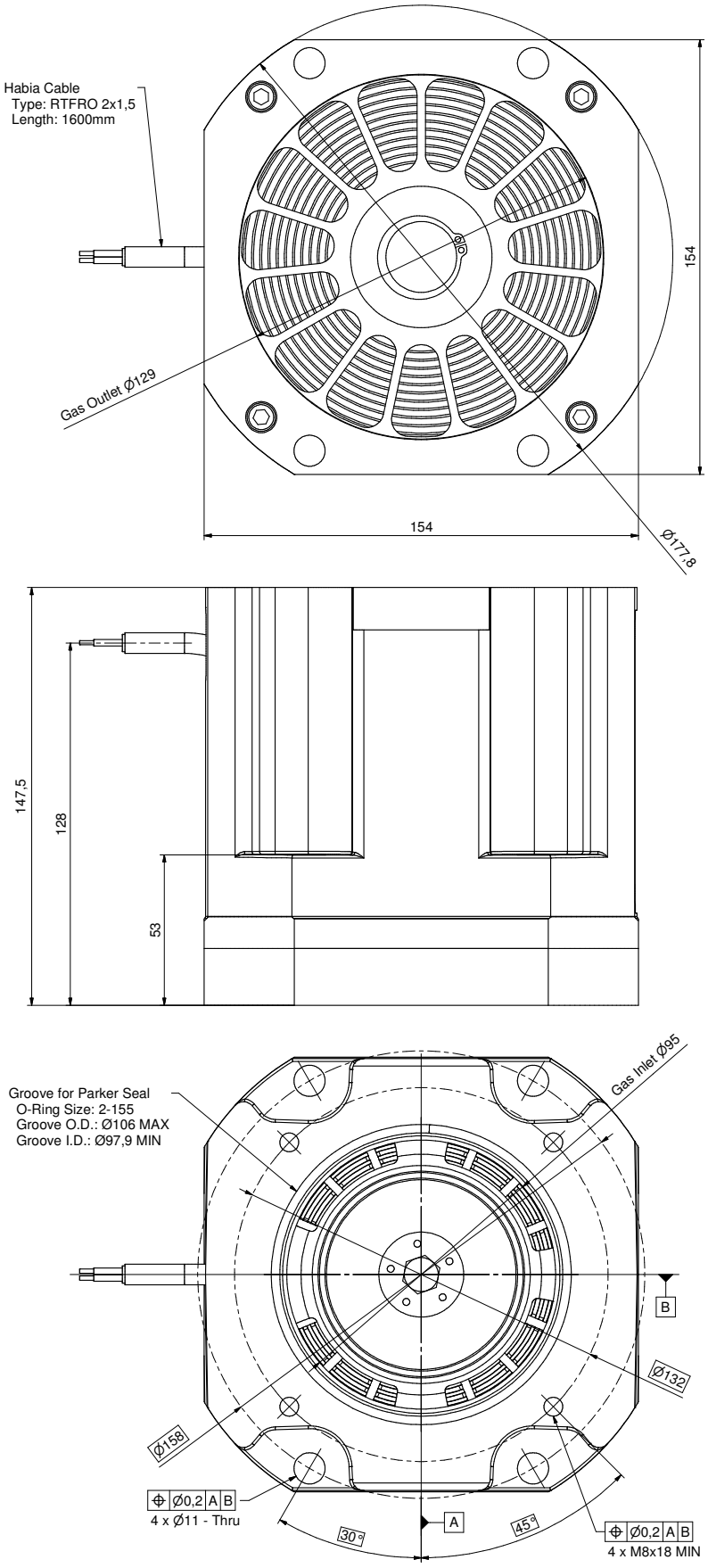
***Applications Pending

HOERBIGER

Altronic, LLC – A Member of the Hoerbiger Group

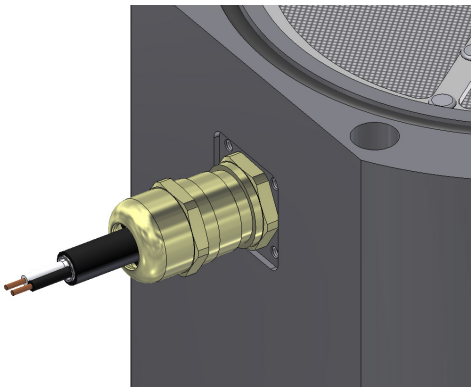


Outline drawing



1769955 Cable Version

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 100mm (4in)
Check minimum fitting cross section

Minimum 300–400mm (12–16in)

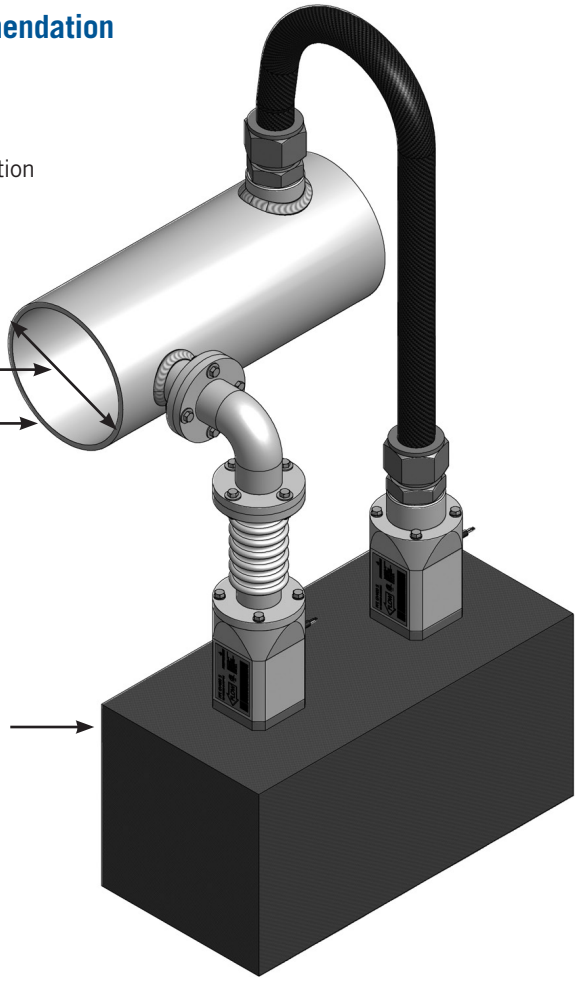
Dependent on cylinder count
and firing sequence

Main Fuel Supply Rail

Flange Assembly

Minimum pipe: ID 100mm (4in)
Always use flexible pipe coupler

Cylinder Head/Intake Manifold



altronic
HOERBIGER Engine Solutions

HOERBIGER Ventilwerke GmbH & Co KG
Braunhubergasse 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

Form GV800 2-13 ©2013 Altronic, LLC