

GVR300

Fuel Admission Valve for Large Industrial Engines

Applications

The GVR300 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 GVR300 then injects fuel based on electronic control signals directly into the intake manifold.

An EFC application uses a GVR300 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 Diameter 44mm (1,70in)

Gas Outlet Hole Diameter 78mm (3,00in)

Specifications

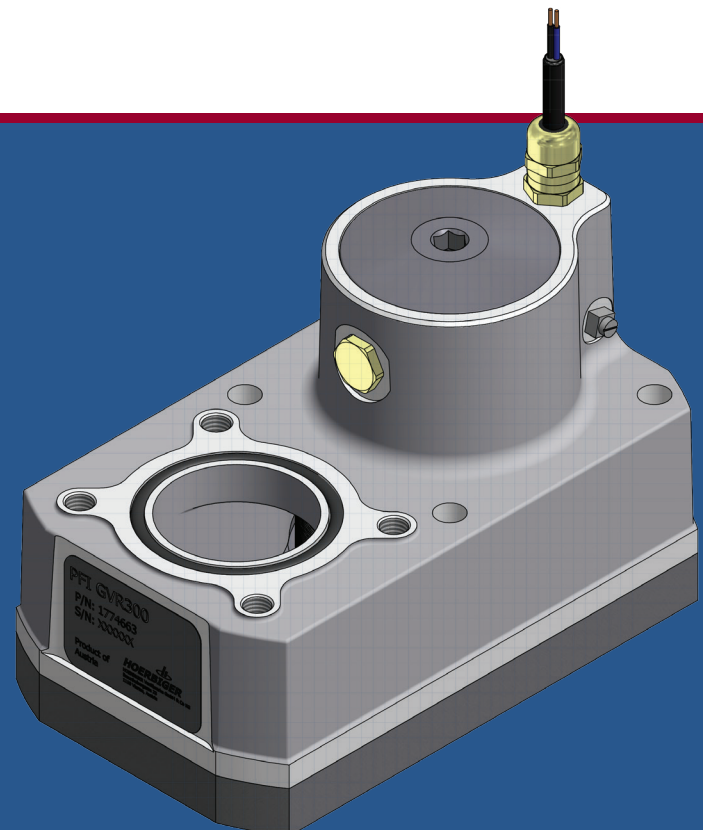
Equivalent Flow Area	270mm ²
Steady State Flow-Rate	186g/s CNG @
(Contact Hoerbiger for specific application)	P1=3bar, P2=ATM
Internal Leakage.....	<0,25% of steady state flow-Rate
Nominal Differential Pressure*.....	3bar (43psi)
Maximum Differential Pressure*.....	4bar (58psi)
Max. Gas Supply Pressure (P1).....	10bar (145psig)
Max. Air Manifold Pressure (P2).....	9bar (130psig)
Maximum Backfire Pressure Spike	0,5bar (7psig)
(without backflowing through valve)	
Maximum Housing Pressure	10bar (145psig)
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: 20µm)	
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

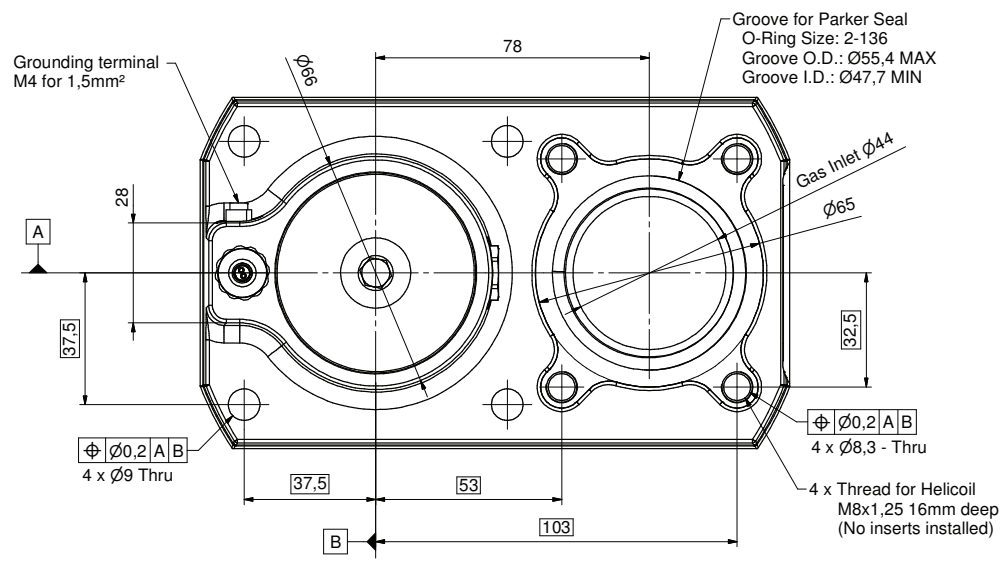
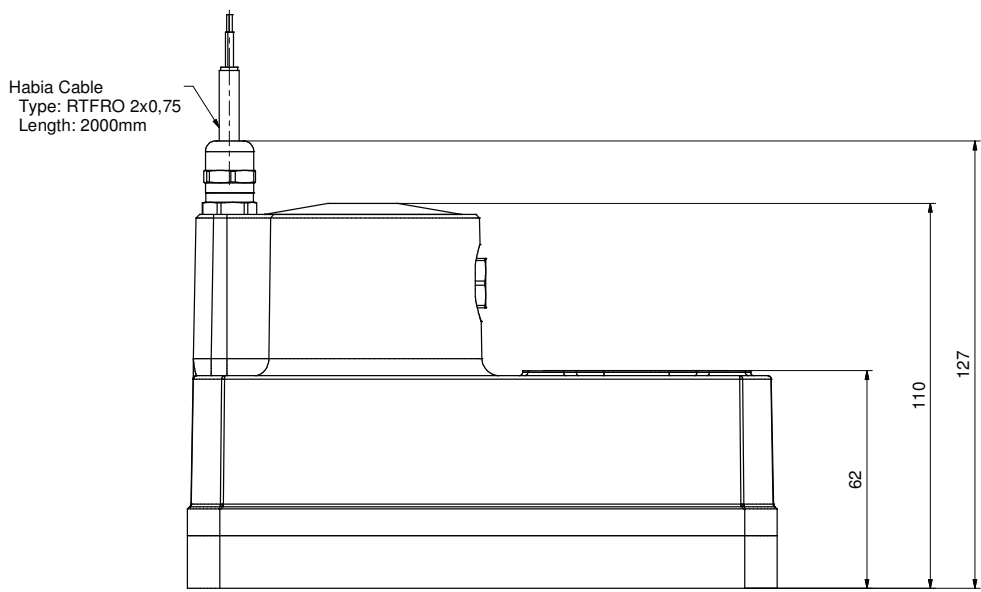
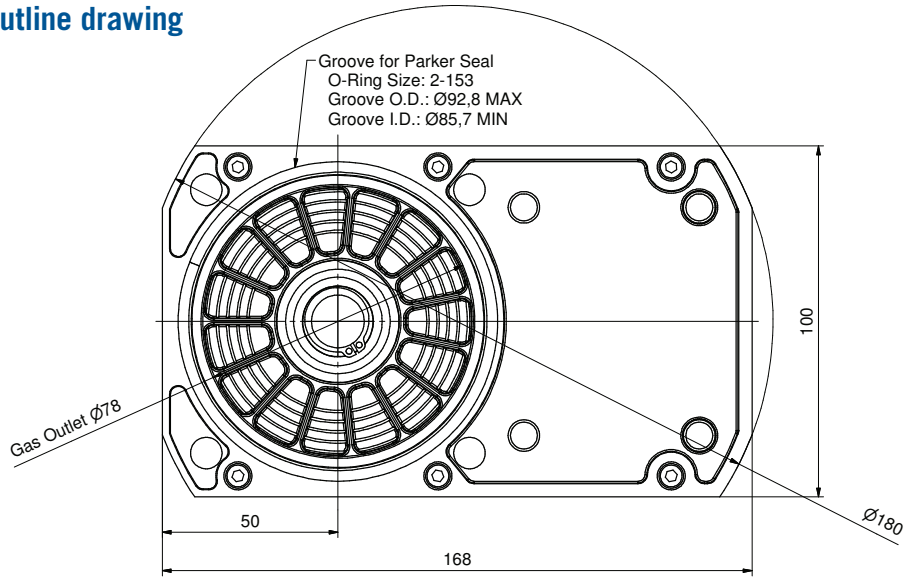
** Is differential pressure dependant and assumes the use of a HOERBIGER SDM (Solenoid Driver Module)

Regulatory Compliance

CE Ⓢ II 3G Ex nA IIC T4 Gc



Outline drawing



altronic
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