



VGF F18SE

With emPact Emission Control System
310-400 BHP (230-300 kWb)

Technical Data

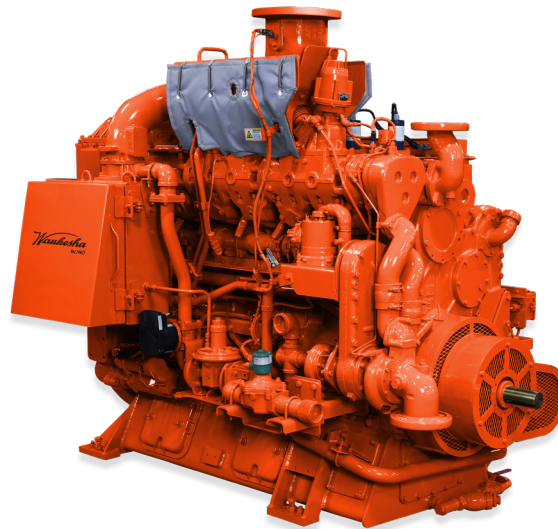
Cylinders	Inline 6
Piston displacement	1096 cu. in. (18 L)
Compression ratio	8.6:1
Bore & stroke	5.98" x 6.5" (152 x 165 mm)
Jacket water system capacity	16 gal. (60 L)
Lube oil capacity	44 gal. (166 L)
Fuel Pressure Range	1.5 - 5.0 psig (0.1 - 0.34 bar)
Starting system	120 psi max. air/gas 24V DC electric

Dimensions l x w x h inch (mm)

80.5 (2043) x 48 (1218) x 68.4 (1737)

Weights lb (kg)

6,900 (3,136)



The VGF* series of high-speed engines are built with the durability expected from a medium-speed engine. The SE family of VGF engines with ESM* features the most advanced and comprehensive control capability in its class. Multiple options for AFR control, INNIO catalysts, and NOx ratings are available. Non-road EPA mobile and stationary certification is available direct from INNIO as part of the mobileFLEX* product line. Additionally, system reliability and performance upgrades have been integrated into the turbocharging/wastegate, oil filtration, oil cooling, crankcase breathing, and cylinder heads.

Waukesha's emPact* Emission Control System combines an engine, catalyst, and air/fuel ratio control, factory-designed for enhanced interaction and improved performance. It consists of a factory supplied catalyst, pre- and post-catalyst oxygen sensing, and differential temperature and pressure sensors.

The emPact display panel provides real-time engine operating parameters, including faults, alarms, logs, and shutdowns. Waukesha's emPact Emission Control System provides a one-stop shop for compliance and a simple method of obtaining and meeting emission permits.



Standard Features

Air inlet system

- single, high capacity air filter
- service indicator
- rain shield

Cooling systems

- gear-driven jacket & auxiliary water pumps
- engine-mounted thermostats
- jacket circuit at 200° F outlet
- auxiliary circuit at 130° F inlet

Engine control system

- Engine System Manager (ESM)
- Start/stop, governing, electronic throttle and fuel valve control, AFR, ignition, individual cylinder detonation protection, fault logging

- CSA class 1, division 2
- HMI (shipped loose)
- Modbus RS-485 communications
- ESP laptop software

Exhaust system

- high altitude turbocharger
- water-cooled wastegate
- water-cooled manifolds

Fuel system

- 24V on/off valve
- mounted pressure regulator
- full flow control valve
- carburetor (850-2350 Btu/scft LHV)

Lubrication system

- high capacity main filters
- mounted centrifuge
- high efficiency oil cooler
- closed crankcase breather
- high capacity oil pan

Mounting system

- SAE 0 flywheel housing
- SAE18 flywheel
- base-style oil pan with four-point mount

Miscellaneous

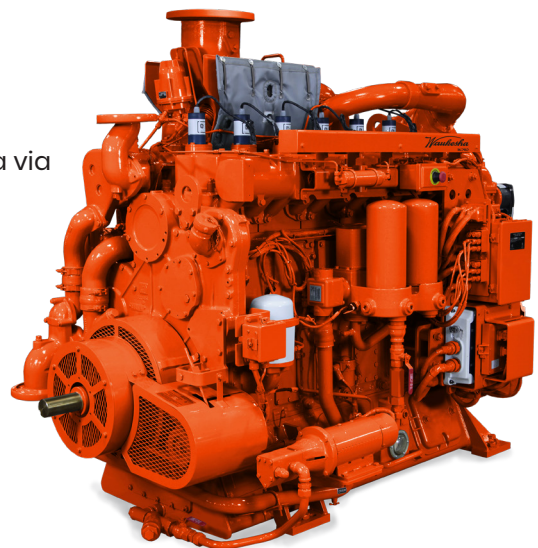
- viscous vibration damper
- two access doors per cylinder
- oil pan access doors

Optional Equipment

- SAE14 flywheel
- CSA B149-compliant fuel system
- multiple length customer control harnesses
- exhaust flex & silencers
- emPact emissions control at 0.15gr NOx +0.3gr CO
- emPact emissions control at 0.5gr NOx +1.0gr CO
- front and rear stub shafts
- 24V electric starter
- air/gas turbine air starter
- 24V, 50A engine-driven alternator
- inertial precleaner for air filter
- 24Vdc, 240Vac, and air/gas pre- and post-lube

- jacket water heating and circulation
- knockdown gas pressure regulator
- removal of engine driven water pumps
- oil leveler
- extra magnetic pickup
- field gas & liquid propane (LP) dual-fuel autoswitching system included engine-mounted vaporizers
- CE mark
- crankshaft pulley
- exhaust thermocouples, including all harnesses & hardware to provide data via Modbus

- EPA non-road/mobile & stationary certification
- low Btu fuel system for 650-850 Btu LHV applications
- capability for NFPA110 Type 10



INNIO* is a leading solutions provider of gas engines, power equipment, a digital platform and related services for power generation and gas compression at or near the point of use. With our Jenbacher* and Waukesha* product brands, INNIO pushes beyond the possible and looks boldly toward tomorrow. Our diverse portfolio of reliable, economical and sustainable industrial gas engines generates 200 kW to 10 MW of power for numerous industries globally. We can provide life cycle support to the more than 48,000 delivered gas engines worldwide. And, backed by our service network in more than 100 countries, INNIO connects with you locally for rapid response to your service needs. Headquartered in Jenbach, Austria, the business also has primary operations in Welland, Ontario, Canada, and Waukesha, Wisconsin, US.

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