

STANDARD EQUIPMENT

AIR CLEANER - Two, dry type with rain shield and service indicator.

BARRING DEVICE - Manual.

BEARINGS - Heavy duty, replaceable, precision type.

BREATHER - Closed system.

CONNECTING RODS - Drop forged steel, rifle drilled.

CONTROL SYSTEM - Pneumatic. Includes pilot operated valves for air start and prelube. Engine mounted control panel with two push button valves. Pilot operated air start valves omitted when starter is not furnished by Waukesha. Includes engine On/Off push button. One mounted on either side of the engine.

CRANKCASE - Integral crankcase and cylinder frame. Main bearing caps drilled and tapped for temperature sensors. Does not include sensors.

CRANKSHAFT - Counterweighted, forged steel, seven main bearings, and dynamically balanced.

CYLINDERS - Removable wet type cylinder liners, chrome plated on outer diameter. Induction hardened.

CYLINDER HEADS - Twelve interchangeable. Two hard faced intake and two hard faced exhaust valves per cylinder. Hard faced intake and exhaust valve seat inserts. Roller valve lifters and hydraulic push rods.

ENGINE ROTATION - Counterclockwise when facing flywheel.

ENGINE MONITOR DEVICES - Engine thermocouples, K-type, are wired to a common junction box for jacket water temperature, lube oil temperature and intake manifold temperature. Magnetic pickup wired for customer supplied tachometer. Lube oil pressure and intake manifold pressure sensing lines are terminated in a common bulk head.

EXHAUST OUTLET - Single vertical at rear. Flexible stainless steel connection with 8" (203 mm) pipe flange.

FLYWHEEL - Approx. WR2 = 155000 lb-in²; with ring gear (208 teeth), machined to accept two drive adapters: 31.88" (810 mm) pilot bore, 30.25" (768 mm) bolt circle, (12) 0.75"-10 tapped holes; or 28.88" (734 mm) pilot bore, 27.25" (692 mm) bolt circle, (12) 0.625"-11 tapped holes and (12) 0.75"-10 tapped holes.

FUEL SYSTEM - Dual, natural gas, 4" (102 mm) updraft. Two Fisher Model S-201, 2" (51 mm) gas regulators, 13 psi (89 kPa) maximum inlet pressure.

FLYWHEEL HOUSING - No. 00 SAE.

GOVERNOR - Woodward UG-8 LD hydraulic lever type, with friction type speed control. Mounted on right hand side.

IGNITION - Waukesha Custom Engine Control Ignition Module. Electronic digital ignition system. 24V DC power required.

LEVELING BOLTS

LIFTING EYES - Requires 9.5 ton Working Load Limit (W.L.L.) anchor shackles.

LUBRICATION - Full pressure. Gear type pump. Full flow filter, 36 gallon (136 litres) capacity, not mounted. Includes lube oil strainer (mounted on engine) and flexible connections (shipped loose). Air/gas motor driven prelube pump. Requires final piping.

MANIFOLDS - Exhaust, (2) water cooled.

OIL COOLER - With thermostatic temperature controller and pressure regulating valve. Not mounted.

OIL PAN - Base type. 90 gallon (340 litres) capacity including filter and cooler.

PAINT - Oilfield orange primer.

PISTONS - Aluminum with floating pin. Standard 10:1 compression ratio. Oil cooled.

SHIPPING SKID - Steel for domestic truck or rail.

VIBRATION DAMPER - Viscous type. Guard included with remote mounted radiator or no radiator.

WATER CIRCULATING SYSTEM, AUXILIARY CIRCUIT - For oil cooler. Pump is belt driven from crankshaft pulley.

WATER CIRCULATING SYSTEM, ENGINE JACKET - Belt driven water circulating pump, cluster type thermostatic temperature regulating valve, full flow bypass type. Flange connections and mating flanges for (2) 4" (102 mm) inlets and (1) 5" (127 mm) outlet.

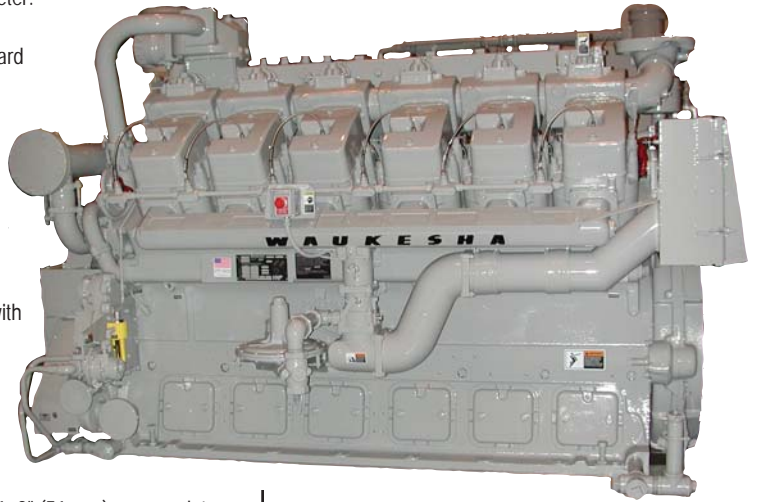


Waukesha

POWERING PERFORMANCE

L7042G

VHP™ Series Gas Engine 732 - 1025 BHP



Engine shown with options.

Model L7042G

Naturally Aspirated, Twelve Cylinder,
Four-Cycle Gas Engine

SPECIFICATIONS

Cylinders	Lube Oil Capacity
V 12	90 gal. (340 L)
Piston Displacement	Starting System
7040 cu. in. (115 L)	125 - 150 psi air/gas 24 V electric
Bore & Stroke	Dry Weight
9.375" x 8.5" (238 x 216 mm)	20,500 lb. (9300 kg)
Compression Ratio	
10:1	
Jacket Water System Capacity	
107 gal. (405 L)	



POWER RATINGS: L7042G VHP™ SERIES GAS ENGINES

Brake Horsepower (kWb Output)						
Model	I.C. Water Inlet Temp. °F (°C) (Tcra)	C.R.	800 rpm	900 rpm	1000 rpm	1200 rpm
L7042G	—	10:1	732 (546)	818 (610)	896 (668)	1025 (764)

Rating Standard: All models: Ratings are based on ISO 3046/1-1995 with mechanical efficiency of 90% and auxiliary water temperature Tcra (clause 10.1) as specified above limited to $\pm 10^\circ\text{F}$ ($\pm 5^\circ\text{C}$). Ratings are also valid for SAE J1349, BS5514, DIN6271 and AP17B-11C standard atmospheric conditions.

ISO Standard Power/Continuous Power Rating: The highest load and speed which can be applied 24 hours a day, seven days a week, 365 days per year except for normal maintenance. It is permissible to operate the engine at up to 10% overload, or maximum load indicated by the intermittent rating, whichever is lower, for two hours in each 24 hour period.

All natural gas engine ratings are based on a fuel of 900 Btu/ft³ (35.3 MJ/nm³) SLHV value, with a 91 Waukesha Knock Index®.

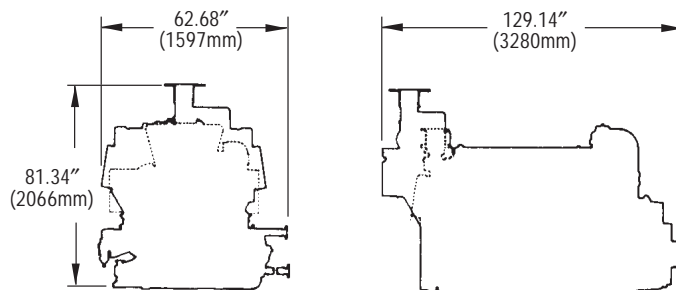
For conditions or fuels other than standard, contact the Waukesha Engine Sales Engineering Department.

PERFORMANCE: L7042G VHP™ SERIES GAS ENGINES

English 130° F I.C. Water Temperature			Metric 54° C I.C. Water Temperature		
RPM	1200	1000	RPM	1200	1000
Power (Bhp)	1025	896	Power (kWb)	764	668
BSFC (Btu/bhp-hr)	7225	7135	BSFC (kJ/kW-hr)	10225	10095
NOx (grams/bhp-hr)	16.0	16.0	NOx (g/nm ³)	5.9	5.9
CO (grams/bhp-hr)	13.0	13.0	CO (g/nm ³)	4.8	4.8
NMHC (grams/bhp-hr)	0.25	0.25	NMHC (g/nm ³)	0.1	0.1

NOTES:

- Fuel consumption and exhaust emissions are based on ISO 3046/1-1995 standard reference conditions and commercial quality natural gas of 900 Btu/ft³ (35.38 MJ/m³ [25, V(0; 101.325)]) saturated lower heat value, Waukesha Knock Index® of 91 and 93% methane content by volume. ISO 3046/1-1995 standard reference conditions are 77°F (25°C) ambient temperature, 29.54 inches Hg (100 kPa) barometric pressure, 30% relative humidity (1kPa/0.3 inches Hg water vapor pressure).
- S.I. exhaust emissions are corrected to 5% O₂ (0°C and 101.325 kPa).
- Data will vary due to variations in site conditions. For conditions and/or fuels other than standard, consult the Waukesha Engine Sales Engineering Department.
- Fuel consumption based on ISO 3046/1-1995 with a +5% tolerance for commercial quality natural gas having a 900 Btu/ft³ saturated low heat valve.



Waukesha

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Consult your local Waukesha Distributor for system application assistance. The manufacturer reserves the right to change or modify without notice, the design or equipment specifications as herein set forth without incurring any obligation either with respect to equipment previously sold or in the process of construction except where otherwise specifically guaranteed by the manufacturer.