



GAMMA Series

GW4 G-Build Engine

GW4 15, GW4 18

*Power range: 40–48 kW; 53.6 –64.3 bhp
Fixed speed; full-load speed ranges: 1500 and 1800 r/min*

Naturally aspirated heavy-duty G-Build diesel engine



Special Attributes

- ✓ continuous operation in ambient temperatures up to 52 °C (122 °F)
- ✓ cold-start down to -10 °C (14 °F)
- ✓ 400-hour service intervals

Engine Characteristics

- diesel-fuelled
- four cylinders
- direct injection
- water-cooled
- naturally aspirated
- standard oil and fuel filters
- 12 V electric start (optional 24 V)
- anticlockwise rotation, looking on the flywheel end
- SAE 10" and 11.5" flywheel
- SAE3 flywheel housing
- radiator with fan guard

Design Features and Equipment

- cast-iron crankcase
- self-vent fuel system
- inline fuel injection pump
- flywheel with ring gear
- air cleaner
- low oil-pressure switch
- spin-on lubricating-oil filter
- fuel filter/agglomerator
- inlet and exhaust manifolds
- operators' handbook

Technical Data			
		GW4 15	GW4 18
Number of cylinders		4	
Firing order (number 1 cylinder is at the gear case end)		1 3 4 2	
Type of fuel injection		direct injection	
Aspiration		natural	
Direction of rotation, looking on the flywheel end		anticlockwise	
Nominal cylinder bore	mm	100	
	in	3.94	
Stroke	mm	127	
	in	5	
Total cylinder capacity	litre	3.99	
	in ³	243.3	
Compression ratio		16.5:1	
Rated maximum full-load speed (r/min)		1500	1800
Mean piston speed	m/sec	6.35	7.62
	f/sec	20.8	25.0
Oil consumption		maximum 0.2% of fuel consumption	

Power (to ISO 3046) ¹ , Torque and Fuel Consumption ²				
		r/min	1500	1800
Continuous Power		kW	40	44
		bhp	53.6	59
Overload Power		kW	44	48.4
		bhp	59	64.9
Fuel Consumption (Continuous Power)	litres/hr	100% power	9.5	10.3

1. Power ratings are measured at the flywheel end.
2. Power ratings and fuel consumption figures apply to a fully run-in, non-derated engine without a radiator and fan fitted, and without power-absorbing accessories or transmission equipment.

Rating Definitions, to ISO 3046

Fixed speed power: continuous power (ICN)

The power in kW which the engine is capable of delivering continuously at the stated crankshaft speed, under conditions of 100 kPa barometric pressure, 30% relative humidity and 25 °C air inlet temperature, provided that the engine is overhauled and maintained in good operating condition and that fuel to BS EN 590 Class A1 or A2, and lubricating oils to the correct performance specification and viscosity classification as recommended by Lister Petter Limited, are used.

Fixed speed power: overload power (ICXN)

The maximum power in kW which the engine is capable of delivering intermittently at the stated crankshaft speed for a period not exceeding one hour in any period of twelve hours continuous running, immediately after working at the continuous power, under the conditions specified in (1) above.

Variable speed: fuel-stop power, continuous power (IFN)

The maximum power in kW which an engine is capable of delivering continuously at stated crankshaft speed, under the conditions as specified in item 1, with the fuel limited so that the fuel stop power cannot be exceeded.

Variable speed: fuel-stop power, intermittent power (IOFN)

The maximum power in kW which an engine is capable of delivering intermittently at the stated crankshaft speed, for a period not exceeding 1 hour in any period of 12 hours continuous running immediately after running at the Continuous Fuel Stop Power rating.

De-rating

For non-standard site conditions, reference should be made to relevant BS, ISO and DIN standards.

The overload capability applies to a fully run-in engine. This is normally attained after a running period of about 50 hours .

Approximate Dimensions and Weight			
	Dry Weight	kg	409
		lb	902
	Length (A)	mm	1300
		in	52.0
	Height (B)	mm	880
		in	35.2
	Width (C)	mm	930
		in	37.2

A comprehensive range of options allows you to select a specification that matches your requirements. Please ask your Lister Petter distributor. (See panel below left.)

Distributor's Address



UK

Lister Petter have made efforts to ensure that the information in this data sheet is accurate but reserve the right to amend specifications and information without notice and without obligation or liability.

Lister Petter Limited, Dursley, Gloucestershire
 GL11 4HS England
 Tel: +44 (0)1453 544141; fax: +44 (0)1453 546732
 E-mail: sales@lister-petter.co.uk <http://www.lister-petter.co.uk>