



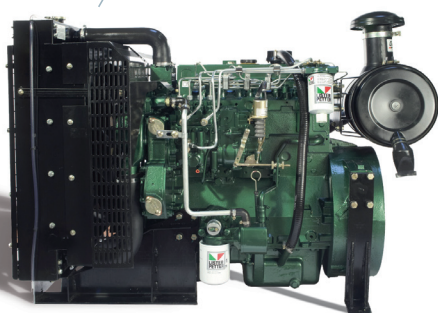
## GAMMA SERIES

# GWT4 15 | GWT4 18 G Build Engines

fixed speeds  
1500 | 1800 r/min

65.7 - 83.2 kW | 88.1 - 111.5 bhp

GWT4 Engine



### SPECIAL ATTRIBUTES

- suitable for generating sets
- 250-hour service intervals
- continuous operation in ambient temperatures up to 45°C (113°F)
- cold start down to -20°C (-4°F)

### BASIC ENGINE CHARACTERISTICS

- four cylinders
- diesel fuelled
- direct injection
- liquid cooled
- turbocharged

### DESIGN FEATURES AND EQUIPMENT

- standard oil and fuel filters
- 12V electric start (optional 24 V)
- anti clockwise rotation, looking on flywheel end
- SAE 10" and 11.5" flywheel
- SAE3 flywheel housing
- radiator with fan guard
- cast-iron crankcase
- self-vent fuel system
- n-line fuel injection pump
- flywheel with ring gear
- air cleaner
- oil pressure sender / switch combination
- water temperature sender / switch combination
- spin-on lubricating oil filter
- fuel filter / agglomerator
- inlet and exhaust manifolds
- operators' handbook

**POWER OUTPUTS TO ISO 3046**

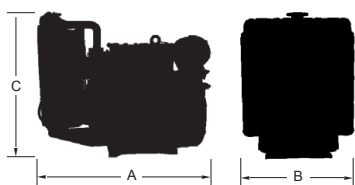
|                  | r/min | 1500 | 1800  |
|------------------|-------|------|-------|
| Continuous Power | kW    | 65.7 | 75.6  |
|                  | bhp   | 88.1 | 101.4 |
| Overload Power   | kW    | 72.3 | 83.2  |
|                  | bhp   | 96.9 | 111.5 |

**APPROXIMATE FUEL CONSUMPTION**

| r/min                                     | 1500 | 1800 |
|---|------|------|
| litre/hr at 100% power (continuous power) | 17.5 | 20.0 |

**TECHNICAL DATA**

| Model  |                 | GWT4 15                          | GWT4 18        |
|--|-----------------|----------------------------------|----------------|
| Number of cylinders                                    |                 | 4                                |                |
| Firing order<br>(number 1 cylinder is at the gear end) |                 | 1 - 3 - 4 - 2                    |                |
| Type of fuel injection                                 |                 | Direct                           | Direct         |
| Aspiration   |                 | Turbocharged                     | Turbocharged   |
| Direction of rotation, looking on flywheel             |                 | Anti clockwise                   | Anti clockwise |
| Cylinder bore  | mm              | 100                              | 100            |
|  | in              | 3.94                             | 3.94           |
| Stroke   | mm              | 127                              | 127            |
|  | in              | 5                                | 5              |
| Total cylinder capacity                                | litre           | 3.99                             | 3.99           |
|  | in <sup>3</sup> | 243.3                            | 243.3          |
| Compression ratio                                      |                 | 16.0:1                           | 16.0:1         |
| 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 |                |

**APPROXIMATE DIMENSIONS AND WEIGHT**

|            |    |      |
|------------|----|------|
| Length (A) | mm | 1260 |
|            | in | 49.6 |
| Width (B)  | mm | 950  |
|            | in | 37.4 |
| Height (C) | mm | 720  |
|            | in | 28.3 |
| Dry weight | kg | 550  |
|            | lb | 1213 |

**RATING DEFINITIONS  
TO ISO 3046****ISO Standard Conditions**

Barometric pressure 100 kPa  
Relative humidity 30%  
Ambient air temperature at the inlet manifold 25°C

**Fixed Speed: Continuous Power (ICN)**

The power in kW which the engine is capable of delivering continuously at the stated crankshaft speed, under ISO 3046 standard conditions, measured at the flywheel without powerabsorbing accessories, 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 Power Systems Limited are used.

**Fixed Speed (Fuel Stop):  
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 of continuous running, immediately after working at the continuous power, under ISO 3046 standard conditions and with the provisions specified for continuous power in item (1) above, but with the fuel limited so that the fuel stop power cannot be exceeded.

**Derating**

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

**Notes:**

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.

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