

LPWT4 G BUILD ENGINE

LPWT4

Power ranges: 18.9—41.3 kW; 25.3—55.4 bhp Fixed speeds: 1500, 1800, 3000 r/min

DURABLE, RELIABLE, EASY TO MAINTAIN LIQUID COOLED, G BUILD DIESEL ENGINE

SPECIAL ATTRIBUTES

- 500 hour service intervals
- designed for continuous operation in ambient temperatures up to 52°C (122°F)
- cold start capability down to -32°C (-25.6°F)

BASIC ENGINE CHARACTERISTICS

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

DESIGN FEATURES AND EQUIPMENT

- heavy duty air cleaner
- Polyvee fan/alternator drive belt
- belt guarding
- · inlet and exhaust manifolds
- inlet manifold heater plugs
- fuel lift pump
- self vent fuel system with individual fuel injection pumps
- fuel filter/agglomerator
- gear-driven positive displacement type lubricating oil pump
- · spin-on lubricating oil filter
- 12V starter motor
- · safety switches
- fuel control solenoid (energised to run)
- · mechanical governing
- · radiator with fan and belt guard
- turbocharger
- flywheel with ring gear; 7.5" heavy



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flywheel for 1500/1800 r/min

- SAE 5 flywheel housing
- standard skid base packing
- operators' handbook

EMISSIONS

 Models under 19 kW output power comply with EU Stage 3A emissions regulations.

OPTIONAL ITEMS

- · oil cooler
- 12V battery charge alternator
- increased oil sump capacity (deep sump)
 See also items with asterisk under Design
 Features and Equipment.m A range of options allows you to select a specification that matches your requirements; please consult your Lister Petter distributor.

POWER OUTPUTS								
Power	r/min	1500	1800	3000				
Continuous	kW	18.9	23.8	37.5				
	bhp	25.3	31.9	50.3				
Fuel Stop	kW	20.8	26.2	41.3				
	bhp	27.8	35.1	55.4				

Key to Emissions Compliance

EU Stage 3A or	nıy	I
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Notes: 1. Power ratings measured at the flywheel apply to a fully run-in, non-derated engine without a radiator and fan fitted, and without power absorbing accessories or transmission equipment. 2. The overload capability applies to a fully run-in engine. This is normally attained after a running period of about 50 hours. 3. Excluding radiator.

RATING DEFINITIONS, TO ISO 3046

ISO Standard Conditions

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

Fixed speed power: continuous power (ICN)

The power in kW which the engine is capable of delivering continuously at the stated crankshaft speed, under ISO standard conditions, measured at the flywheel without power-absorbing 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 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 ISO standard conditions and with the provisions specified for continuous power above.

De-rating

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

TECHNICAL DATA						
Type of fuel injection	Direct					
Number of cylinders		4				
Aspiration	Turbocharged					
Direction of rotation (flywheel er	Anti clockwise					
Nominal aylindar bara	mm	86.0				
Nominal cylinder bore	in	3.39				
Stroke	mm	80.0				
Stroke	in	3.15				
Total adjuder conscitu	litre	1.860				
Total cylinder capacity	in ³	113.50				
Compression ratio	16.2:1					
Firing order (number 1 cylinder is at t end)	1-3-4-2					
Number of flywheel ring gear tee	96					
Maximum continuous crankshaft	kgf	180				
end thrust	lbf	400				
Maximum permissible intake restric-	mbar	25				
tion at full rated speed and load	in	10				
Maximum permissible exhaust	mbar	50				
back pressure	in	20				
Lubricating oil pressure at 3000r/min	bar	2.0				
and with the oil at 110°C (230°F)	lbf/in ²	29				

APPROXIMATE DIMENSIONS AND WEIGHT					
	Dry weight	kg	226		
		lb	498		
	Length (A)	mm	930		
		in	36.6		
	Width (B)	mm	565		
A — B —		in	22.2		
	Height (C)	mm	685		
		in	27		

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DISTRIBUTOR'S ADDRESS

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