

LPWT4

**Water-cooled
Direct Injection
Turbocharged Diesel Engines**



Technical Data Sheet



Standard Equipment

- Flywheel drilled for automotive clutch
- Flywheel housing with SAE5 flange
- Fuel filter with water separator
- Fuel lift pump
- Governor - fixed or variable speed
- Grey paint finish
- High level oil filler
- Inlet & exhaust manifolds
- Inlet manifold heater plug
- Lubricating oil filter
- Oil cooler
- Operator's handbook
- Self-vent fuel system
- Standard or deep sump (depending on build)
- Tapping for speed detection
- Water circulation pump & thermostat

Accessories

- Air cleaner - heavy duty
- Alternative speed and stop/run control devices
- Engine protection switches & solenoids
- Exhaust flanges or mufflers
- Fan drive guards
- Flywheel end drives, shaft extensions and couplings
- Gauges - supplied loose
- Gear end drives
- High level bearers
- Hydraulic pump drives - gear end and/or flywheel end
- Radiators - mounted with cooling fans
- SAE overcenter PTO industrial clutches
- SAE4 flywheel housing
- Start panels - mounted or loose
- 12 volt starter motor & 45 amp battery charging alternator

Additional accessories available - Consult Lister-Petter

Product Support

- Recommended spares kits
- Special service tools
- Workshop Manual
- Master parts manual

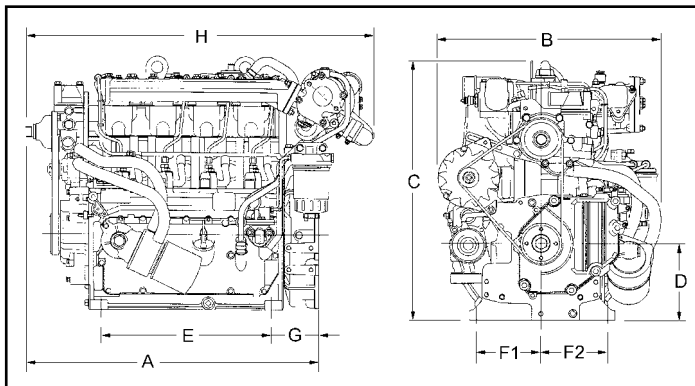
General Data

		LPWT4
Aspiration:		Turbocharged
Bore:	mm	86.0
	inch	3.38
Stroke	mm	80.0
	inch	3.15
Cylinder Capacity:	liter	1.86
	in ³	113.5
Lubricating Oil Capacity: (including filter)	liter	5.5
	U.S. quarts	5.8
Fuel Consumption @3000 r/min: (75% Load)	l/h	7.4
	U.S. gal/h	1.96
Specific Fuel Consumption: (full load @ max. torque speed - 5% tol.)	g/kW h	225
	lb/hp h	0.37
Angles of inclination: (any direction)	Permanent	20°
	Temporary	30°
Minimum Idling Speed:	r/min	850
Combustion Air Required @2000 r/min.	l/s	39.0
	ft ³ /min	82.6
Dry Weight (including flywheel)	kg	180
	lb	396

Electrical System

		LPWT4
Alternator Output:	amp	45
Starter Motor Power:	kW	2.0
Starter Motor Battery Cold Cranking Performance Rating: (BS3911-Part 2)	amp @ -8°C (18°F)	380
	amp @ -18°C (0°F)	670
Minimum Starting Temperature*: (without additional aids)	°C	-15°
	°F	5°

**Consult Lister-Petter Inc. concerning performance at lower temperatures.*

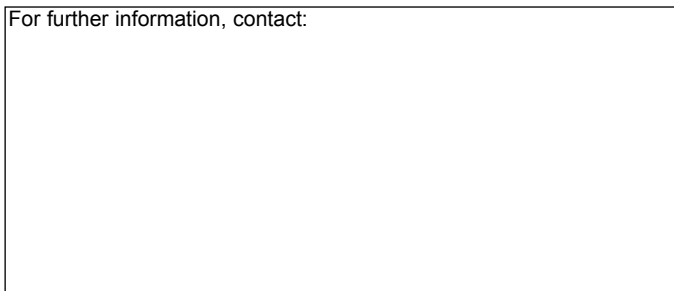


Principal Dimensions		
	inch	mm
A	26.1	662
B	19.3	490
C	22.6	574
D	6.7	170
E	15.1	384
F1	5.6	142
F2	5.8	147
G	4.3	108
H	30.9	786

Power Output				
Engine Speed r/min		Variable Speed Build		Fixed Speed Build
		Continuous	Intermittant	Continuous
3000	hp	50.3	53.9	50.3
	kW	37.5	40.2	37.5
2500	hp	46.0	49.2	
	kW	34.3	36.7	
2000	hp	38.5	41.6	
	kW	28.7	31.0	
1800	hp	35.4	38.2	31.9
	kW	26.4	28.5	23.8
1500	hp	27.8	29.9	25.6
	kW	20.7	22.3	19.1

Torque - Variable Speed		
Engine Speed r/min	Intermittent Power	
3000	Ft Lbs	94.4
	Nm	128.0
2500	Ft Lbs	103.4
	Nm	140.2
2000	Ft Lbs	109.2
	Nm	148.0
1800	Ft Lbs	111.5
	Nm	151.2
1500	Ft Lbs	104.7
	Nm	142.0

For further information, contact:



Engine Data

Construction:

Ribbed, thin-wall cast iron crankcase for quiet operation. Crankcase includes a service door for easy access. Internal crankcase breather for reduced emissions. Extra large bearing surfaces for low bearing loads and long life.

Rotation:

Counter-clockwise, looking at the flywheel end.

Cooling:

Water circulation pump with thermostat is driven by a polyvee long-life belt. Engine includes an integrated bypass system and is designed for ambients up to 52°C (125°F).

Lubrication:

Designed to run at high angles of inclination and includes a full flow spin-on cartridge filter. Service free hydraulic lifters. Lubricating oil pump is a gear-driven, positive displacement design. Oil service interval is 250 hours. Integral oil cooler.

Fuel & Combustion Systems:

Direct injection combustion system for easy starting and low fuel consumption. Compact turbocharger with internal wastegate and ultra high compressor efficiency. Cylinder head is a cross-flow, high swirl design to increase efficiency of combustion. Self-vent fuel system eliminates the need for bleeding. Individual fuel pumps per cylinder increases reliability and lowers service costs.

Starting:

Standard equipment includes an inlet manifold heater plug to ensure quick starting.

Governing:

Mechanical governing is provided for either variable or constant speeds depending on build. Generator set governing is available for 1500, 1800 & 3000 r/min.

Drives:

Full power is available at the flywheel end for axial or radial drives. Limited power drives are available for mounting at the gear end.

Mounting:

Hold-down feet are integral with the crankcase for base mounting.



The information in this data sheet is of a general nature and does not form part of any contract or warranty. We have made efforts to ensure that the information is accurate but reserve the right to amend specification and information without notice or any obligation or liability. The set illustrated is not necessarily the standard build.

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