

LPA2 / LPA3



**Air-cooled
Direct Injection
Diesel Engines**

Technical Data Sheet



Standard Equipment

- Belt driven axial flow fan
- Flywheel drilled for automotive clutch
- Flywheel housing with SAE5 flange
- Fuel filter with water trap
- Fuel lift pump
- Governor - fixed or variable speed
- Grey paint finish
- Inlet & exhaust manifolds
- Inlet manifold heater plug
- Lubricating oil filter
- Operator's handbook
- Self-vent fuel system
- Tapping for speed detection

Accessories

- Air cleaner - medium or heavy duty
- Alternative speed and stop/run control devices
- Engine protection switches & solenoids
- Exhaust flanges or silencers
- Fan drive guards
- Flywheel end drives, shaft extensions, couplings
- Gauges - supplied loose
- Gear end drives
- Hydraulic pump drives - gear end and/or flywheel end
- Inlet and outlet cooling air ducting
- Start panels - mounted or loose
- 12 volt starter motor & 45 amp battery charging alternator
- 12 litre fuel tank

Additional accessories available - Consult Lister-Petter

Product Support

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

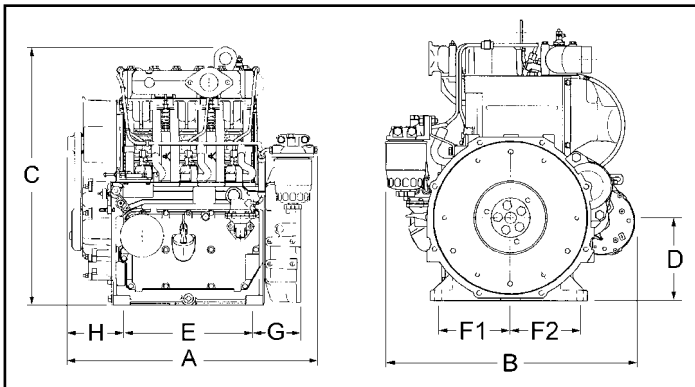
General Data

		LPA2	LPA3
Bore:	mm	76.0	76.0
	inch	2.99	2.99
Stroke	mm	80.0	80.0
	inch	3.15	3.15
Cylinder Capacity:	liter	0.726	1.089
	in ³	44.3	66.5
Lubricating Oil Capacity: (including filter)	liter	3.2	4.4
	US quarts	3.4	4.6
Fuel Consumption @2500 r/min: (75% Load)	l/h	1.9	2.9
	US gal/h	0.5	0.8
Specific Fuel Consumption: (full load @ max. torque speed - 5% tol.)	g/kW h	240	240
	lb/hp h	0.39	0.39
Angles of inclination: (any direction)	Permanent	20°	20°
	Temporary	25°	30°
Minimum Idling Speed:	r/min	850	850
Combustion Air Required @2000 r/min.	l/s	10.3	15.4
	ft ³ /min	21.8	32.7
Dry Weight (including flywheel)	kg	104	132
	lb	229	291

Electrical System

		LPA2	LPA3
Alternator Output:	amp	45	45
Starter Motor Power:	kW	1.4	1.4
Starter Motor Battery Cold Cranking Performance Rating: (BS3911-Part 2)	amp @ -8°C (18°F)	190	200
	amp @ -18°C (0°F)	315	355
Minimum Starting Temperature*: (without additional aids)	°C	-15°	-15°
	°F	5°	5°

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



Principle Dimensions				
	LPA2		LPA3	
	mm	inch	mm	inch
A	452	17.8	552	21.7
B	515	20.3	515	20.3
C	573	22.6	573	22.6
D	170	6.7	170	6.7
E	184	7.2	284	11.2
F1	147	5.8	147	5.8
F2	142	5.6	142	5.6
G	108	4.3	108	4.3
H	126	5.0	126	5.0

Power Output									
Engine Speed r/min		Continuous Power		Intermittent Power		Automotive Power			
		BS5514/ISO3046/DIN6271				DIN 70020			
		LPA2	LPA3	LPA2	LPA3	LPA2	LPA3		
3600	kW	Consult Lister-Petter							
	hp								
3000	kW	10.4	15.6	11.4	17.2	11.6	17.6		
	hp	13.9	20.9	15.3	23.1	15.6	23.6		
2500	kW	9.2	13.8	10.1	15.2	10.3	15.5		
	hp	12.3	18.5	13.5	20.3	13.8	20.8		
2000	kW	7.5	11.2	8.2	12.3	8.4	12.6		
	hp	10.1	15.0	11.1	16.5	11.3	16.9		
1800	kW	6.0	9.0	6.6	9.9	7.4	11.0		
	hp	8.0	12.1	8.9	13.3	9.9	14.8		
1500	kW	4.7	7.1	5.2	7.8	5.8	8.8		
	hp	6.3	9.5	7.0	10.5	7.8	11.8		

Torque - Variable Speed			
Engine Speed r/min		Automotive Power	
		DIN 70020	
		LPA2	LPA3
3600	Nm		
	Ft Lbs		
3000	Nm	36.9	56.0
	Ft Lbs	27.2	41.3
2500	Nm	39.3	59.2
	Ft Lbs	29.0	43.7
2000	Nm	40.1	60.2
	Ft Lbs	29.6	44.4
1800	Nm	39.3	58.4
	Ft Lbs	29.0	43.0
1500	Nm	36.9	56.0
	Ft Lbs	27.2	41.3

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:

Air cooling by means of a highly efficient axial flow fan mounted at the gear end of the engine. Designed for continuous operation in 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 tappets. Lubricating oil pump is a gear-driven, positive displacement design. Oil service interval is 250 hours.

Fuel & Combustion Systems:

Direct injection combustion system for easy starting and low fuel consumption. 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 & 3600 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 sump 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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