

LT1 / LV1



**Air-cooled
Direct Injection
Diesel Engines**

Technical Data Sheet



Accessories

- Air cleaner - medium duty
- Alternative speed and stop/run control devices
- Engine protection switches & solenoids
- Exhaust silencers
- Exhaust and manifold lagging
- Flywheel end adaptors
- Flywheel end shaft extensions, couplings and pulleys
- Fuel filters
- Alternative paint finishes
- Fuel tanks
- Gear end reduction gearboxes
- Gear end shaft extensions
- Hydraulic pump drives - gear end (LV1) or flywheel end
- Starting handle - in both limited kickback or non limited kickback versions
- 12 volt starter motor
- Tool kit

Additional accessories available - Consult Lister-Petter

Product Support

- Recommended spares kits
- Special service tools
- Workshop Manual

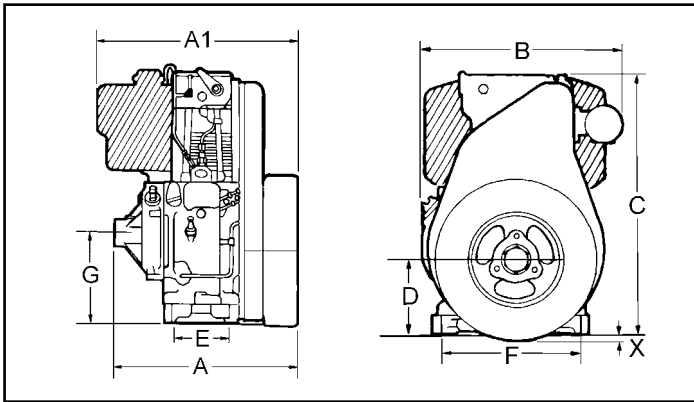
Standard Equipment

- Inlet & exhaust manifold
- Decompressor lever
- Sheet metal or cast SAE5 fanshroud depending on build
- Lifting eye (LV1)
- Governor - fixed (LT1) or variable speed
- Green paint finish
- Operator's handbook
- Self-vent fuel system (LV1)

General Data		LT1	LV1
Bore:	mm	82.6	85.7
	inch	3.25	3.37
Stroke	mm	76.2	82.6
	inch	3.00	3.25
Cylinder Capacity:	liter	0.408	0.477
	in ³	24.9	29.1
Lubricating Oil Capacity: (including filter)	liter	1.3	1.3
	pint	2.3	2.3
Fuel Consumption @2500 r/min: (75% Load)	l/h	1.3	1.4
	pt/h	2.3	2.5
Specific Fuel Consumption: (full load @ max. torque speed - 5% tol.)	g/kW h	268	259
	lb/hp h	0.44	0.43
Angles of inclination: Permanent (Temporary)	Flywheel end up	15°	15°
	Flywheel end down	10°	10°
	Manifold side up/down	10°	10°
Minimum Idling Speed:	r/min	900	900
Combustion Air Required @2000 r/min.	l/s	6.0	6.9
	ft ³ /min	12.7	14.7
Dry Weight (including flywheel)	kg	83	83
	lb	183	183

Electrical System		LT1	LV1
Starter Motor Power:	kW	1.2	1.2
Starter Motor Battery Cold Cranking Performance Rating: (BS3911-Part 2)	amp @ -8°C 18°F	110	120
Minimum Starting Temperature*: (without additional aids)	°C	-8°	-8°
	°F	18°	18°

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



Principal Dimensions								
	SHEET METAL FAN SHROUD				CAST ALUMINUM FAN SHROUD			
	LT1		LV1		LT1		LV1	
	mm	inch	mm	inch	mm	inch	mm	inch
A	354	13.9	358	14.0	359	14.1	359	14.1
A1	404	15.9	398	15.6	403	15.8	403	15.8
B	371	14.6	394	15.5	424	16.7	424	16.7
C	503	19.8	503	19.8	503	19.8	503	19.8
D	140	5.5	140	5.5	140	5.5	140	5.5
E	112	4.4	112	4.4	112	4.4	112	4.4
F	260	10.2	260	10.2	260	10.2	260	10.2
G	175	6.9	175	6.9	175	6.9	175	6.9
X	10	0.4	16	0.6	35	1.4	35	1.4

Power Output					
Engine Speed r/min		Continuous Power		Intermittent Power	
		BS5514/ISO3046/DIN6271			
		LT1	LV1	LT1	LV1
3000	kW	5.6	6.7	6.2	7.4
	hp	7.5	9.0	8.3	9.9
2500	kW	5.0	5.8	5.5	6.4
	hp	6.7	7.8	7.4	8.6
2000	kW	4.0	4.8	4.4	5.3
	hp	5.4	6.4	5.9	7
1800	kW	3.6	4.3	3.9	4.7
	hp	4.8	5.8	5.3	6.3
1500	kW	3.0	3.5	3.3	3.9
	hp	4.0	4.8	4.4	5.2
1000	kW	1.9	2.2	2.1	2.4
	hp	2.5	2.9	2.8	3.2

Torque - Variable Speed			
Engine Speed r/min		Intermittent Power	
		BS5514/ISO3046/DIN6271	
		LT1	LV1
3000	Nm	19.5	23.5
	Ft Lbs	14.4	17.3
2500	Nm	20.9	24.4
	Ft Lbs	15.4	18.0
2000	Nm	21.0	25.0
	Ft Lbs	15.5	18.5
1800	Nm	21.0	25.0
	Ft Lbs	15.5	18.5
1500	Nm	20.9	24.8
	Ft Lbs	15.4	18.3
1000	Nm	19.6	22.7
	Ft Lbs	14.5	16.8

For further information, contact:

Engine Data

Construction:

Cast iron crankcase for durability. Large bearing surfaces for low bearing loads and long life.

Rotation:

LT1 clockwise or counter-clockwise, looking at the flywheel end according to build. LV1 counter-clockwise looking at the flywheel end on all builds except build 09.

Cooling:

Air cooling by means of a highly efficient flywheel mounted fan. Designed for continuous operation in ambients up to 52°C (125°F).

Lubrication:

Self regulating plunger type pump supplies oil under pressure to all important bearing surfaces. Oil service interval is 250 hours.

Fuel & Combustion Systems:

Direct injection combustion system for easy starting and low fuel consumption. Self vent fuel system (LV1).

Starting:

LT1 - hand starting is available on the camshaft extension or from geared arrangement on the flywheel dependant on the build. LV1 - hand starting is available on the camshaft extension. Starting handles are available in both limited or non limited kickback versions. 12V electric starting is optional on counter clockwise rotation builds.

Governing:

Mechanical governing is provided for either constant speed (LT1) or variable speed depending on the build.

Drives:

Full power is normally taken from the flywheel end. For approved applications, power take off is also available from the gear case end.

Mounting:

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



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