

# TX2/TX3



**Air-cooled  
Direct Injection  
Diesel Engines**

## Technical Data Sheet



### Accessories

- Air cleaner - standard and heavy duty
- Engine protection switches & solenoids
- Industrial Clutch
- SAE4, SAE5 Adapter
- Exhaust silencers
- Air inlet and outlet duct adapter
- Speed and Stop/Run Controls
- Flywheel end drives, shaft extensions and couplings
- Gauges
- Fan drive guard
- Hydraulic pump adapters - gear end and/or flywheel end
- Radiators - mounted or loose, with or without cooling fans
- Start panels - mounted or loose
- 12V or 24V Electric Starting
- Fuel tanks, fuel lift pump
- Tool Kit
- Lubricating oil cooler

*Additional accessories available - Consult Lister-Petter*

### Product Support

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

### Standard Equipment

- Flywheel housing with SAE4 flange
- Flywheel and ring gear drilled for automotive clutch
- Fuel filter with water trap
- Governor - fixed or variable speed
- Inlet & exhaust manifolds
- Lubricating oil filter
- Decompressor levers
- Auto excess fuel device
- Operators handbook

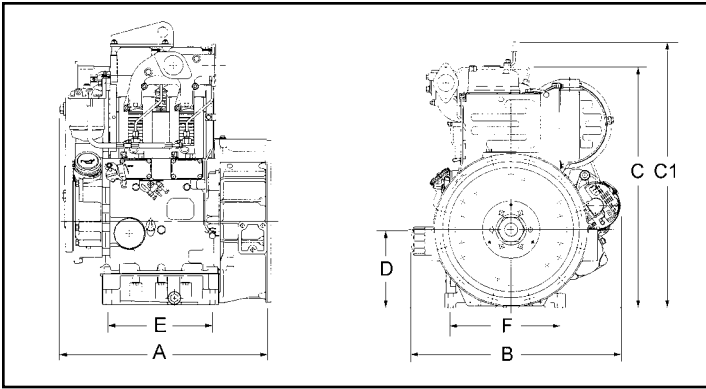
### General Data

		TX2	TX3
<b>Bore:</b>	mm	100.0	100.0
	inch	3.94	3.94
<b>Stroke</b>	mm	101.6	101.6
	inch	4.00	4.00
<b>Cylinder Capacity:</b>	liter	1.60	2.39
	in <sup>3</sup>	97.4	146.1
<b>Lubricating Oil Capacity: (including filter)</b>	liter	4.0	6.0
	US quarts	4.2	6.3
<b>Fuel Consumption @2500 r/min: (75% Load)</b>	l/h	4.4	6.4
	US gal/hr	1.2	1.7
<b>Specific Fuel Consumption: (full load @ max. torque speed - 5% tol.)</b>	g/kW h	225	214
	lb/hp h	0.37	0.35
<b>PermanentAngles of inclination:</b>	Flywheel End Up/Down	10°	10°
	Manifold Side Up	10°	10°
	Manifold Side Down	10°	10°
<b>Minimum Idling Speed:</b>	r/min	850	850
<b>Combustion Air Required @2000 r/min.</b>	l/s	22.60	33.90
	ft <sup>3</sup> /min	47.90	71.80
<b>Dry Weight (including flywheel)</b>	kg	190	235
	lb	410	519

### Electrical System

		TX2	TX3
<b>Alternator Output:</b>	amp	(12V) 45	(12V) 45
	kW	(12V) 2.1	(12V) 2.1
<b>Starter Motor Power:</b>		(24V) 4.0	(24V) 4.0
	amp @ -8°C (18°F)	(12V) 228	(12V) 295
<b>Starter Motor Battery Cold Cranking Performance Rating: (BS3911-Part 2)</b>	amp @ -18°C (0°F)	(12V) 420	(12V) 540
	°C	-6°	-6°
<b>Minimum Starting Temperature*: (without additional aids)</b>	°F	21°	21°

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



<b>Principle Dimensions</b>				
	<b>TX2</b>		<b>TX3</b>	
	mm	inch	mm	inch
<b>A</b>	525	20.7	652	25.7
<b>B</b>	557	21.9	569	22.4
<b>C</b>	664	26.1	664	26.1
<b>C1</b>	704	27.7	704	27.7
<b>D</b>	207	8.2	207	8.2
<b>E</b>	258	10.2	385	15.2
<b>F</b>	290	11.4	290	11.4

<b>Power Output</b>					
<b>Engine Speed r/min</b>		<b>Continuous Power</b>		<b>Intermittent Power</b>	
		BS5514/ISO3046/DIN627			
		<b>TX2</b>	<b>TX3</b>	<b>TX2</b>	<b>TX3</b>
<b>2500</b>	kW	20.3	30.4	22.3	33.4
	hp	27.2	40.8	29.9	44.8
<b>2000</b>	kW	16.8	25.2	18.5	27.7
	hp	22.5	33.8	24.8	37.1
<b>1800</b>	kW	15.0	22.5	16.5	24.7
	hp	20.1	30.2	22.1	33.1
<b>1500</b>	kW	12.3	18.4	13.5	20.2
	hp	16.5	24.7	18.1	27.1

<b>Torque - Variable Speed</b>			
<b>Engine Speed r/min</b>		<b>Intermittent Power</b>	
		BS5514/ISO3046/DIN6271	
		<b>TX2</b>	<b>TX3</b>
<b>2500</b>	Nm	85.2	127.6
	Ft Lbs	62.8	94.1
<b>2000</b>	Nm	88.3	132.2
	Ft Lbs	65.1	97.5
<b>1800</b>	Nm	87.5	131.0
	Ft Lbs	64.5	96.6
<b>1500</b>	Nm	85.9	128.6
	Ft Lbs	63.4	94.9

**Engine Data**

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

**Rotation:**  
Counter-clockwise, looking at the flywheel end.

**Cooling:**  
Air cooling by means of an axial flow fan. Designed for continuous operation in ambients up to 52°C (125°F). Oil cooling by means of air flow over deep crankcase finning.

**Lubrication:**  
Self regulating plunger type pump supplies oil under pressure to all important bearing surfaces. Full flow spin-on cartridge oil filter. Oil service interval is 250 hours.

**Fuel & Combustion Systems:**  
Direct injection combustion system easy starting and low fuel consumption. Individual fuel injection pumps per cylinder increases reliability and lowers service costs.

**Starting:**  
12V or 24V electric starting.

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

**Drives:**  
Full power is normally taken from the flywheel end. Hydraulic pump adapters are available.

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

For further information, contact:

*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.*



© Copyright Lister-Petter, Inc.  
June, 2001  
555-00448  
Printed in the USA