

INDUSTRIAL DIESEL ENGINE

**KUBOTA 03-M-SERIES (3-cylinder)**

# D1503-M-E3B

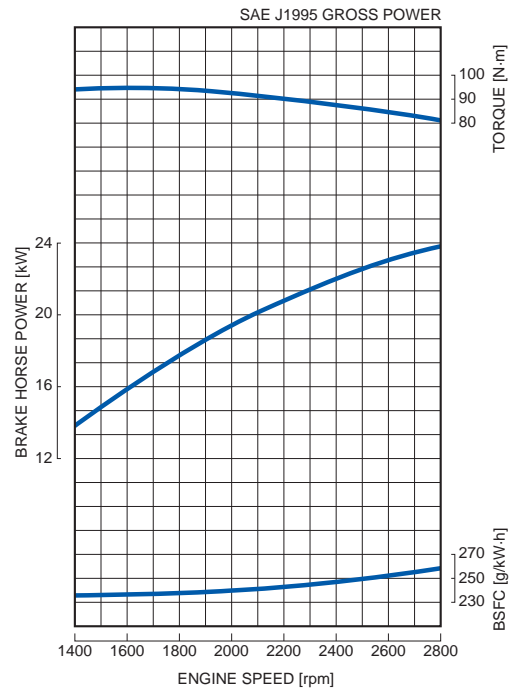


## RATED POWER

**23.8 kW/2800 rpm**



## PERFORMANCE CURVE



## FEATURES with BENEFITS

### Emissions

- The D1503-M engine complies with EPA Interim Tier 4 emissions regulations that are effective through the end of 2012. This engine also complies with EU Stage 3A requirements that are effective through 2012 and beyond in the European market.

### Durable Power

- The Kubota 03-M-Series is well recognized for industrial applications. With numerous features such as a built-in solenoid, low fan position, and single side serviceability, this engine offers excellent performance characteristics and application flexibility.
- The cooling water passages between the cylinder bores, using Kubota's original casting technology as a countermeasure against heat load of high power density, provides both superior endurance and reliable engine characteristics.
- The D1503-M engine offers a seamless transition from Tier 2 to Interim Tier 4 by maintaining the same footprint and hard mounting points with only slight performance changes from the Tier 2 engine.

### Clean and Quiet Power

- Kubota's original E-TVCS (Three Vortex Combustion System) has been improved. The airflow, combustion chamber and piston recess were optimized to provide a 50% lower particulate matter (PM) level, the same stringent level as above the 37kW-class (EPA Interim Tier 4).
- The half-float valve cover and MoS<sub>2</sub> coated pistons lower noise levels by 1.0-2.0 dBA over conventional diesel engines and provide reduced transmitted vibration from the valve area for better noise characteristics.

### Option

- The Kubota 03-M-Series engines offer side power take-off (PTO), in response to the trend of increasing hydraulic control devices in industrial machines. It is possible to install a hydraulic pump at two side PTO locations.

## GENERAL SPECIFICATION

Model		<b>D1503-M-E3B</b>
Emission Regulation		Interim Tier 4 / Stage 3A
Type		Vertical 4-cycle Liquid Cooled Diesel
Number of Cylinders		3
Bore	mm (in)	83 (3.27)
Stroke	mm (in)	92.4 (3.64)
Displacement	L (cu.in)	1.499 (91.47)
Combustion System		Indirect Injection
Intake System		Naturally Aspirated
Maximum Speed	rpm	2800
Output: SAE J1995 Gross Power	kW	23.8
	hp	31.9
	ps	32.4
Direction of Rotation		Counterclockwise Viewed on Flywheel
Oil Pan Capacity	L (gal)	5.6 (1.48) [US] / 7.0 (1.85) [EU]
Starter Capacity	V-kW	12-1.4
Alternator Capacity	V-A	12-40
Length	mm (in)	572.1 (22.5)
Width	mm (in)	499.0 (19.6)
Height (1)	mm (in)	643.0 (25.3) [US] / 679.5 (26.8) [EU]
Height (2)	mm (in)	229.3 (9.0) [US] / 266.0 (10.5) [EU]
Dry Weight	kg (lb)	148.0 (326.3)

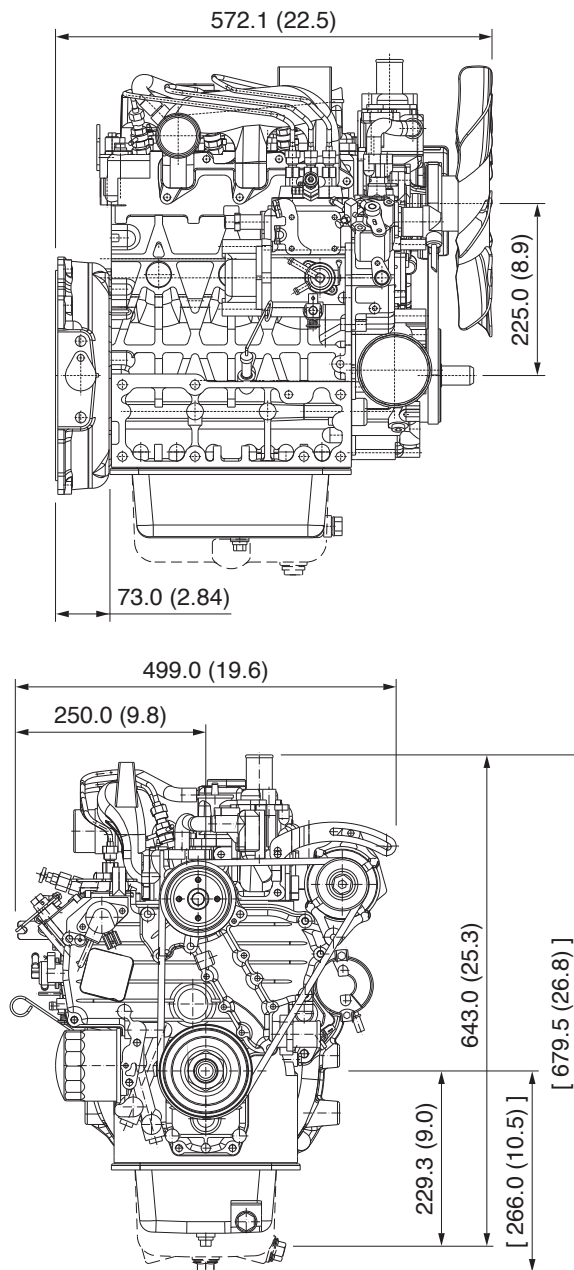
\*Specification is subject to change without notice.

\*Dry weight is according to Kubota's standard specification.

When specification varies, the weight will vary accordingly.

\*SAE J1995 Gross Power: 1-hour rating based on engine without cooling fan, air cleaner and muffler, with alternator.

## DIMENSIONS



\*[ ] EU spec

**Kubota Corporation**

2-47, Shikitsuhigashi 1-chome, Naniwa-ku, Osaka, 556-8601 Japan  
 Fax: +81 (0) 6 6648 /35 21  
<http://engine.kubota.co.jp>

**AUTHORISED DEALER FOR ROMANIA:**

**mecanexim  
engineering**

**Mecanexim Engineering SRL**  
 Str. Tudor Arghezi, nr.1  
 Comuna 1 Decembrie, judetul Ilfov  
 Telefon: +40 21 369 1340  
 Fax: +40 21 369 1341  
 eMail: [office@mecanexim.ro](mailto:office@mecanexim.ro)  
 website: [www.mecanexim.ro](http://www.mecanexim.ro)