

## INDUSTRIAL DIESEL ENGINE

### KUBOTA 03-M SERIES (4-cylinder)

# V2403-M-E3B



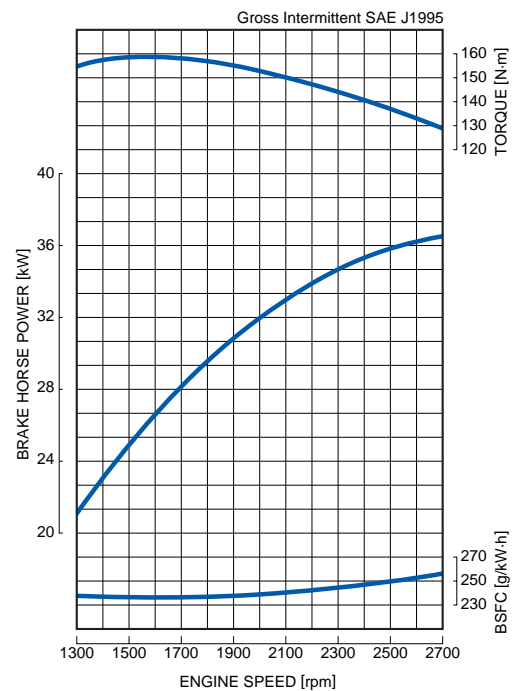
## RATED POWER

**36.5kW @2700rpm**



Photograph may show non-standard equipment.

## PERFORMANCE CURVE



## FEATURES and BENEFITS

### Emissions

- The V2403-M naturally aspirated engine complies with EPA Interim Tier 4 emissions regulations that are effective through the end of 2012. This engine also complies with EU Stage III A 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 V2403-M NA 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 Option 1).
- 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.
- A Direct Injection engine is also available.

## GENERAL SPECIFICATION

|                               |           |                                       |
|-------------------------------|-----------|---------------------------------------|
| Model                         |           | <b>V2403-M-E3B</b>                    |
| Emission Regulation           |           | Interim Tier 4 / Stage III A          |
| Type                          |           | Vertical 4-cycle Liquid Cooled Diesel |
| Number of Cylinders           |           | 4                                     |
| Bore                          | mm (in)   | 87 (3.43)                             |
| Stroke                        | mm (in)   | 102.4 (4.03)                          |
| Displacement                  | L (cu.in) | 2.434 (148.5)                         |
| Combustion System             |           | IDI                                   |
| Intake System                 |           | Naturally Aspirated                   |
| Maximum Speed                 | rpm       | 2700                                  |
| Output:<br>Gross Intermittent | kW        | 36.5                                  |
|                               | hp        | 48.9                                  |
|                               | ps        | 49.6                                  |
| Direction of Rotation         |           | Counterclockwise Viewed on Flywheel   |
| Oil Pan Capacity              | L (gal)   | 9.5 (2.51)                            |
| Starter Capacity              | V-kW      | 12-2.0                                |
| Alternator Capacity           | V-A       | 12-40                                 |
| Length                        | mm (in)   | 670.9 (26.4)                          |
| Width                         | mm (in)   | 499.0 (19.6)                          |
| Height (1)                    | mm (in)   | 684.0 (26.9)                          |
| Height (2)                    | mm (in)   | 265.5 (10.5)                          |
| Dry Weight                    | kg (lb)   | 184.0 (405.7)                         |

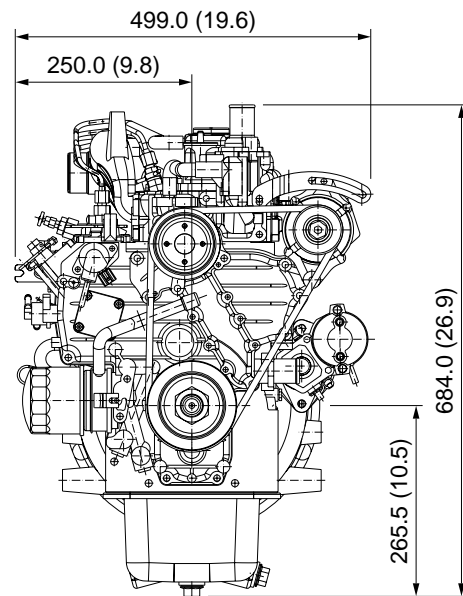
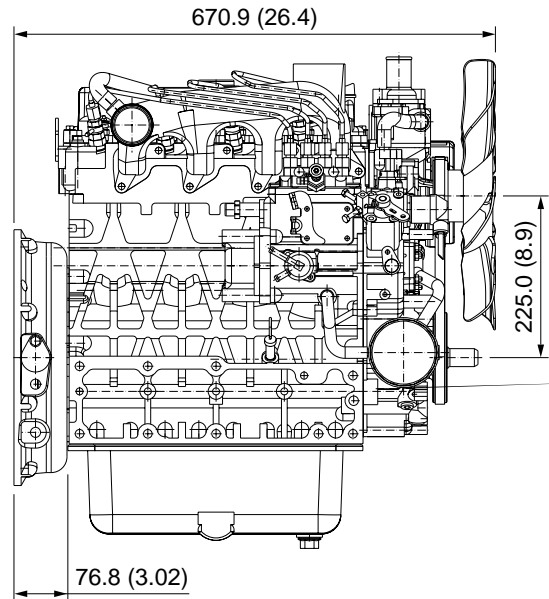
\*Specification is subject to change without notice.

\*Output: Gross Intermittent SAE J1995

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

When specification varies, the weight will vary accordingly.

## DIMENSIONS



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