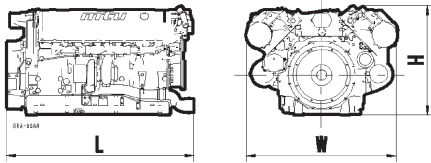
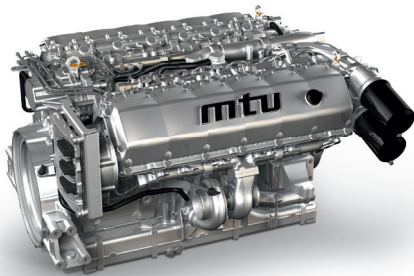




Rail

DIESEL ENGINE 12V 1600

for railcar applications
EU Stage IIIB



Optional equipment and finishing shown. Standard may vary.

Engine	Dimensions (LxWxH) mm (in)	Mass, dry kg (lbs)
12V 1600 R	1500 x 1250 x 845 (59.1 x 49.2 x 33.3)	2014 (4440)

All dimensions are approximate, for complete information refer to the installation drawing.

Engine		
Bore/stroke	mm (in)	122/150 (4.8/5.9)
Cylinder configuration		12V
Displacement	l (cu in)	1.75 (107)
Displacement, total	l (cu in)	21 (1284)
Fuel specification		DIN EN 590; Grade Nr. 1-D/2-D

Engine type	Rated power			Peak torque			Fuel consumpt. at rated power best point		Optim. *
	kW	bhp	rpm	Nm	lb-ft	rpm	g/kWh	g/kWh	g/kWh
12V 1600 R70	565	758	2100	3083	2274	1200-1575	207	190	EU IIIB
12V 1600 R70L	625	838	2100	3410	2515	1200-1575	207	190	EU IIIB
12V 1600 R80	660	885	1900	3395	2504	1800	200	191	EU IIIB
12V 1600 R80L	700	939	1900	3601	2655	1800	200	191	EU IIIB

* Emissions: EU: Nonroad Directive 97/68/EC (as amended by 2004/26/EC)

Standard Equipment	Optional Equipment
12 cylinder V diesel engine	28V DC battery-charging generator
Four stroke Diesel direct injection	Air compressor
Electronic engine management	Resilient engine mountings
Common rail injection system	PTO drive for hydrostatic pump
SCR system, catalyst with silencer function, urea injection with supplying and metering unit*	Coolant water pump for low temperature charge air cooling circuit
Turbocharging with charge air cooling (air/air)	
24V Starter	

Reference conditions:

- > Intake temperature: 25°C (77°F)
- > Ambient air pressure: 1000 mbar
- > Charge air coolant temp.: 45°C (113°F)
- > Altitude above sea level: 100 m (328 ft)

Subject to change without notice. Customization possible. Engines illustrated in this document may feature options not fitted as standard to standard engine.

* Dimensions and weight on request