

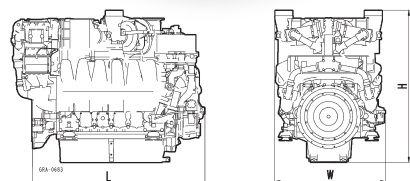
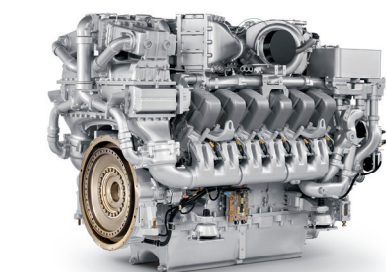


Rail

DIESEL ENGINES SERIES 4000 R04

for push-pull trains and locomotives

EU Stage V (EU Stage IIIB compliant/UIC IIIA)



Engine	Dimensions (LxWxH) mm (in)	Mass, dry kg (lbs)
12V	2670 x 1696 x 2001 (105.1 x 66.8 x 78.8)	7700 (16976)
16V	3140 x 1696 x 2001 (123.6 x 66.8 x 78.8)	9050 (19952)

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

Engine		
Bore/stroke	mm (in)	170/210 (6.7/8.3)
Cylinder configuration		90° V
Displacement	l (cu in)	4.77 (291)
Displacement, total	l (cu in)	12V: 57.2 (3491); 16V: 76.3 (4654)
Fuel specification		DIN EN 590

Optional equipment and finishing shown. Standard may vary.

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	Stage
12V 4000 R64	1500	2012	1800	8185	6036	1750	203	193	EU Stage V (EU Stage IIIB compl./UIC IIIA)
12V 4000 R84	1800	2414	1800	9822	7243	1750	202	193	EU Stage V (EU Stage IIIB compl./UIC IIIA)
16V 4000 R64	2000	2682	1800	10913	8048	1750	201	190	EU Stage V (EU Stage IIIB compl./UIC IIIA)
16V 4000 R74	2200	2950	1800	12005	8853	1750	202	190	EU Stage V (EU Stage IIIB compl./UIC IIIA)
16V 4000 R84	2400	3218	1800	13096	9658	1750	199	190	EU Stage V (EU Stage IIIB compl./UIC IIIA)

* Emissions:

EU V:

EU IIIB compl.:

UIC:

Nonroad Directive (EU) 2016/1628

Nonroad Directive 97/68/EC (as amended by 2004/26/EC). Only for replacement engines.

International Union of Railways (UIC Code 624) (UIC Stage IIIA corresponds to the EU Stage IIIA)



A Rolls-Royce solution

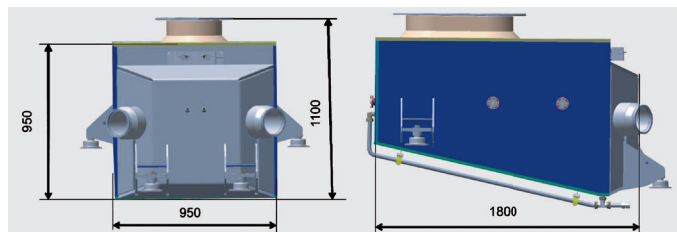
Standard equipment	Optional equipment
ADEC engine control	Dry-type air filter
Common rail injection system	Auxiliary PTOs
Turbocharging	Assembly and drive parts for hydrostatic pump
Charge-air cooling as separate circuit	Transformer: 64-72 V DC/24 V DC or 96/110 V DC/24 V DC
Flywheel housing SAE #00	Various interfaces for I/O signals
Resilient engine mountings	Fuel prefilter
24V starter	Various adapters for connections and interfaces
28V DC/140A battery-charging generator	Coupling for main drive
Power output module (POM) 24V	
Connection interface (PAU)	
Long-life 4-valve cylinder heads	
Diesel particulate filter	

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)
- > Air intake restriction: 25 mbar

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

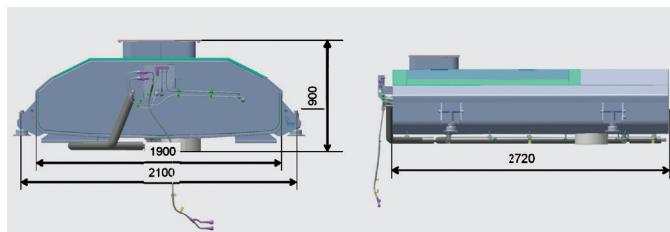
Diesel particulate filter – 12V 4000 R64/R84



Engine	Dimensions (LxWxH) mm (in)	Mass, dry kg (lbs)
12V	2670 x 1696 x 2001 (105.1 x 66.8 x 78.8)	7700 (16976)

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Diesel particulate filter – 16V 4000 R64/R74/R84



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