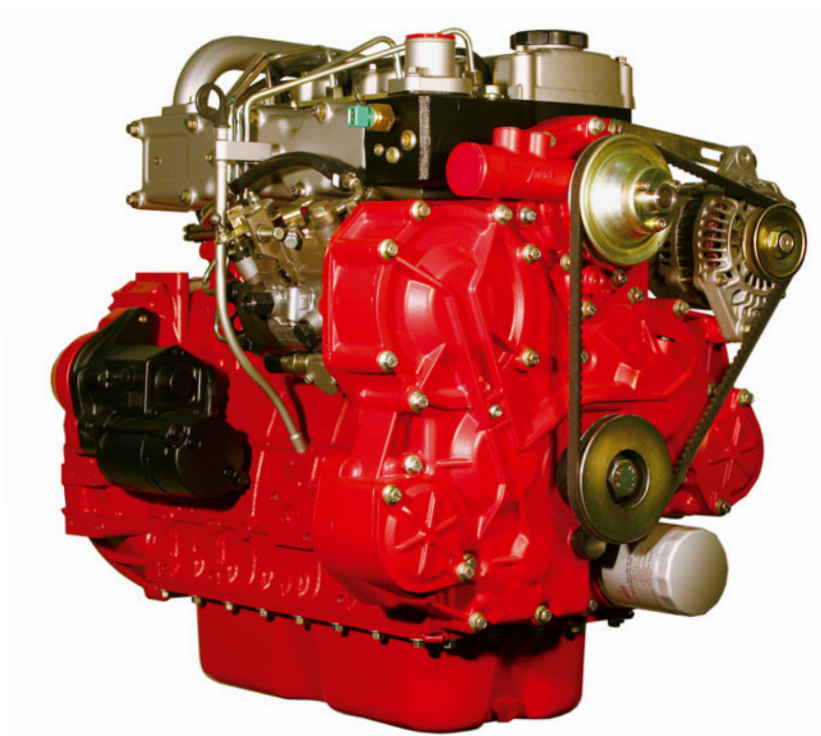


# TD 2009

The Construction Equipment Engine. 28–52 kW | 38–70 hp at 1600–3000 rpm



The engine company.



# Your benefits

- Compact engine, for low cost and space saving installations.
- Competitive power to weight ratio.
- Low exhaust emissions meeting 2004/26/EU level III A and EPA Tier III Option 1 Nonroad.
- Simple design with high reliability.
- Long maintenance intervals reducing after sales cost for your customers.

# Characteristics

3 and 4 cylinder naturally aspirated in-line engines | Turbocharging also for 4-cylinder engines plus turbocharging and charge air cooling | Water cooled | Compact engine design | Advanced fuel injection and combustion system | Full line customized options | Cold starting ability for extreme climatic conditions | Full power at flywheel end for axial or radial drives | Two optional side PTOs from gear end cover

## TIER III-Power ratings for mobile construction engines <sup>1)</sup>

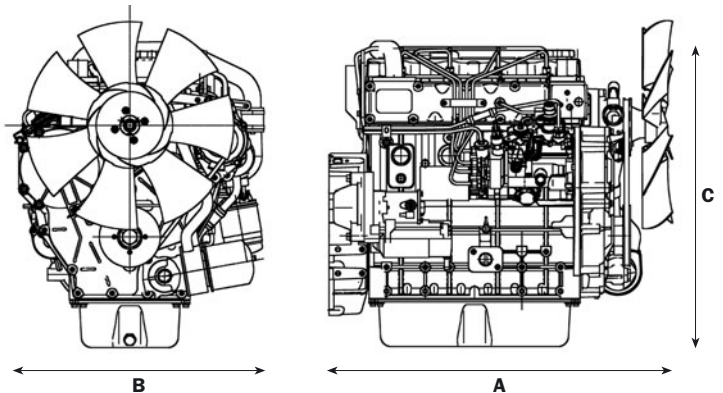
Motortyp		D 2009 L3	D 2009 L4	TD 2009 L4	TCD 2009 L4*
Number of cylinders		3	4	4	4
Bore/stroke	mm   inch	90/90   3.54/3.54	90/90   3.54/3.54	90/90   3.54/3.54	90/90   3.54/3.54
Displacement	l   cu inch	1.72   105	2.29   140	2.29   140	2.29   140
Compression ratio		1 : 23.5	1 : 23.5	1 : 18	1 : 18
Max. rated speed	rpm	3000	3000	2800	2800
Mean piston speed	m/s   ft/m	9.0   1772	9.0   1772	8.4   1654	8.4   1654

## Power ratings for mobile construction engines <sup>1)</sup>

Power output to ISO 14396	kW   hp	28   38	36   48	50   67	52   70
At engine speed	rpm	3000	3000	2800	2800
Mean effective pressure	bar   psi	6.5   94	6.4   93	9.3   135	9.8   142
Max. torque	Nm   ft-lb	107   79	150   111	190   140	220   162
At engine speed	rpm	1600	1600	1600	1600
Minimum idle speed	rpm	900	900	900	900
Specific fuel consumption <sup>2)</sup>	g/kWh   lb/hph	230   0.378	230   0.378	220   0.362	215   0.353
Weight to DIN 70020, Part 7A <sup>3)</sup>	kg   lbs	180   236	205   331	210   419	210   486

## Dimension

in mm   inch	A	B	C
<b>D 2009 L3</b>	597   24	490   19	612   24
<b>D 2009 L4</b>	680   27	490   19	612   24
<b>TD 2009 L4</b>	696   27	518   20	633   25
<b>TCD 2009 L4</b>	696   27	518   20	633   25



1) Power ratings at flywheel gross, without cooling system.  
 2) At optimal operating point. Specific fuel consumption based on diesel fuel with a specific gravity of 0.835 kg/dm<sup>3</sup> at 15 °C (6.96 lb/US gallon at 60 °F).

3) Not including starter motor/alternator, radiator and operating fluids but including flywheel and flywheel housing.  
 \*) Being developed.

The values given in this data sheet are for information purposes only and not binding.  
 The information given in the offer is decisive.