

Power / Torque

Full load → Low-end-torque, continuous / max. power M_M in Nm, p_{me} in bar, @ n_M in min^{-1} , P_e in kW

Part load / idle → Uniformity, combustion stability Δp_{mi} in bar

Transient behavior → Response characteristics at load change dp_{mi}/dt

Emissions (vehicle / application specific)

EU-Norm (PKW: EU 1-6 a-d, RDE, NFZ: EU I-VI)

USA (EPA, CARB) (Tier1, Tier2, TLEV, LEV, ULEV, SULEV, ZEV)

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Voluntary limits (Trucks in Europe)

On-Board-Diagnostics (US-OBD, EOBD)

Economy

Fuel consumption in g/kWh in

Full load

→ max. power

Part load

→ typical map point (e. g. 2000 min^{-1} / 2 bar p_{me})

Idle

Minimum

→ $b_{e,min}$

Oil consumption in g/kWh pro oil-changing interval

Maintenance interval / service-costs → Oil filter-, spark-plug change, valve lash adjustment, ...