Vossloh Rolling Stock

DE 18
Technical Data

Mid-cab locomotive **for heavy shunting and mainline service**

Diesel-electric, four-axle DE 18

This freight-hauling locomotive stands for excellence in terms of performance and maintainability. Thanks to its extremely flexible range of applications, the DE 18 has established itself as an industry standard.

Moreover, Vossloh Rolling Stock covers every aspect of service provision from classical spare parts management and ECM-certified services in connection with all the required maintenance, repairs and remedial works all the way to full fleet management.

Service for a locomotive's entire lifetime!

The benefits at a glance

- → Suitable for both national and cross-border use
- → Most powerful mid-cab locomotive in Europe
- → Ideal for heavy-duty shunting operations requiring high tractive power
- → Flexible locomotive for different types of operation:
  - → For main-line hauling to shunting operations in industrial facilities, ports and marshalling stations
  - → Ideal for track construction, where a steady speed is required at maximum traction even at the lowest speeds
  - → Ideal for construction works in tunnels thanks to a special engine control system
  - → Excellent for middle and long distance main-line transport thanks to its ergonomically designed, air-conditioned cab
  - → Maximum speed of 120 km/h
- → MTU engine with Stage V EU emission standard and approved for the HVO biofuel in accordance with EN 15940
- → Up to 90 % less carbon emissions when using climate-friendly alternative fuels compared to standard EN 590 diesel
- → Eco Drive helps to save fuel
- → Information on fuel consumption
- → Available with optional radio remote control
- → Optionally available with RK 900 manoeuvring coupling
- → Start-Stop System

On the safe side economically and ecologically

By conforming to the latest European standards, the DE 18 represents a secure future and a safe investment. Based on the standard platform principle, this fail-safe, diesel-electric locomotive scores well in terms of cost-effectiveness. It also features a motor management system that ensures compliance with Stage V emissions limits. The engines have been approved to use climate friendly fuels, which have significantly reduced CO_2 emissions.

The DE 18 is equipped with climate-friendly features, which includes:

- → Application-specific operating modes for low-consumption and low-emission operation
- → Additional features such as the Eco Drive, the Eco Mode and the Start-Stop function, all of which can contribute to saving fuel
- → Low-maintenance operation with minimal wear and tear
- → As an option, the locomotive can also be equipped with an additional battery pack (SmartHybrid module), which enables short-term local emission-free operation in factory halls or similar, extended operation in start-stop mode and lower maintenance costs. At the same time, the fuel supply is reduced to 2,700 litres

The model also lives up to the highest expectations in terms of user comfort:

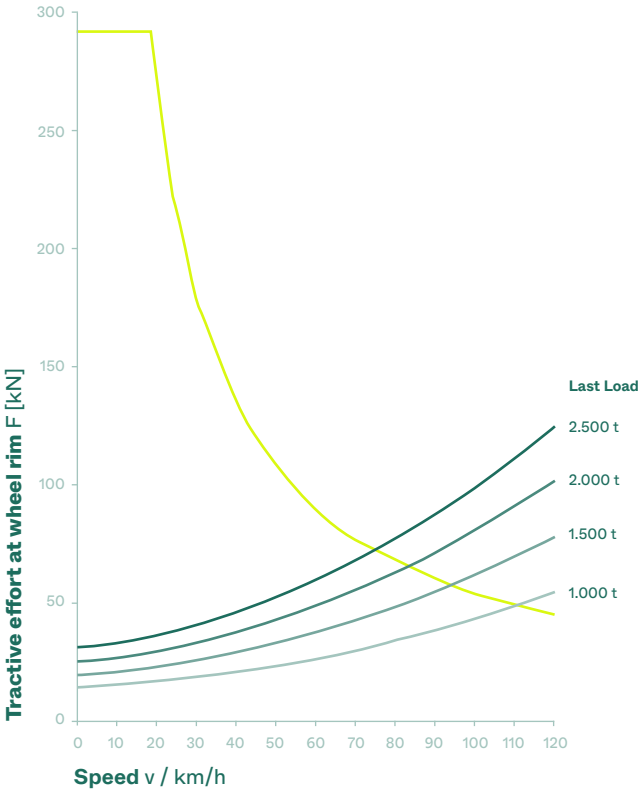
- → The mid-cab concept provides a very good 360° view and allows the driver to change driver's consoles and directions quickly during shunting operations
- → Ergonomically-designed access steps cater to frequent alighting and climbing on board and provide the shunter with safe riding platforms
- → Spacious walkways allow personnel to move along the sides of the locomotive while remaining inside the locomotive's loading gauge
- → Bogie designed with enough clearance to negotiate classification humps and shunting installations

100 %
Permanent Power

Technical Data

Wheel arrangement	Bo'Bo'
Length over buffers	17.000 mm
Min. curve radius	75 m
Vehicle mass	80 t, 90 t
Fuel tank capacity	3.700 l
Diesel engine output	1.800 kW
Diesel engine	MTU 12V 4000
Exhaust emission restriction	Stage V as per EU Regulation 2016/1628
Power transmission	AC/AC wheelset-selective control
Converter	IGBT inverter
Power at the wheel	1.600 kW
Electro dynamic brake	1.450 kW
Tractive effort	300 kN starting tractive effort
Top speed	120 km/h
Ambient conditions	T1 -25°C to +40°C
Homologation	As per TSI in Germany, France, Belgium, Luxembourg or Italy.

DE 18 **Tractive effort speed diagram DE 18**
(according to UIC 622)



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