

SF 6500

Bogie-platform for electrical- and diesel multiple units

The bogie platform consists of trailer and motor bogies with a two-stage suspension system using an air spring as secondary suspension.

The bogie platform is characterized by its compact design. It is specially designed for high positions of carbody centre of gravity.

Because of the modular design of the bogie platform a large range of applications is possible. This high performance bogie platform ensures high reliability, easy maintenance, low service costs, high flexibility and excellent riding comfort.

The bogies SF 6500 are used especially for Express and Commuter trains.

The axle guidance is carried out through one elastic bush per axle box, which joins the radial arm with the frame. The primary springs are located in front of the wheelset bearings and consist of steel coil springs and rubber elements for acoustical and electrical isolation.

All longitudinal forces between bogie and carbody are transmitted via a centre pivot.

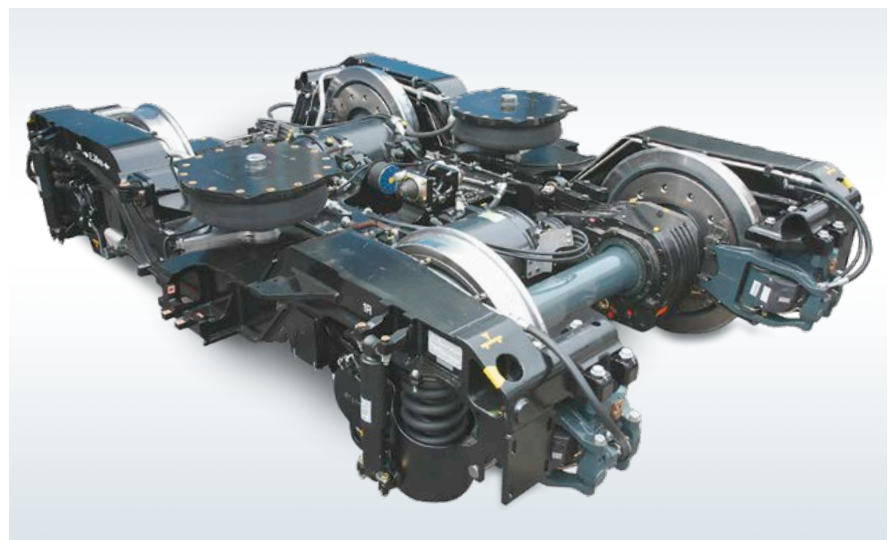
The secondary suspension system consists of air spring bags in combination with a pneumatic 2-point levelling valve system.

The traction torque is transmitted from the motor to the wheels by a partially suspended helical toothed spur gear box and a flexible toothed coupling.

The traction motor is directly mounted on the bogie frame by the use of rubber elements for acoustical isolation.

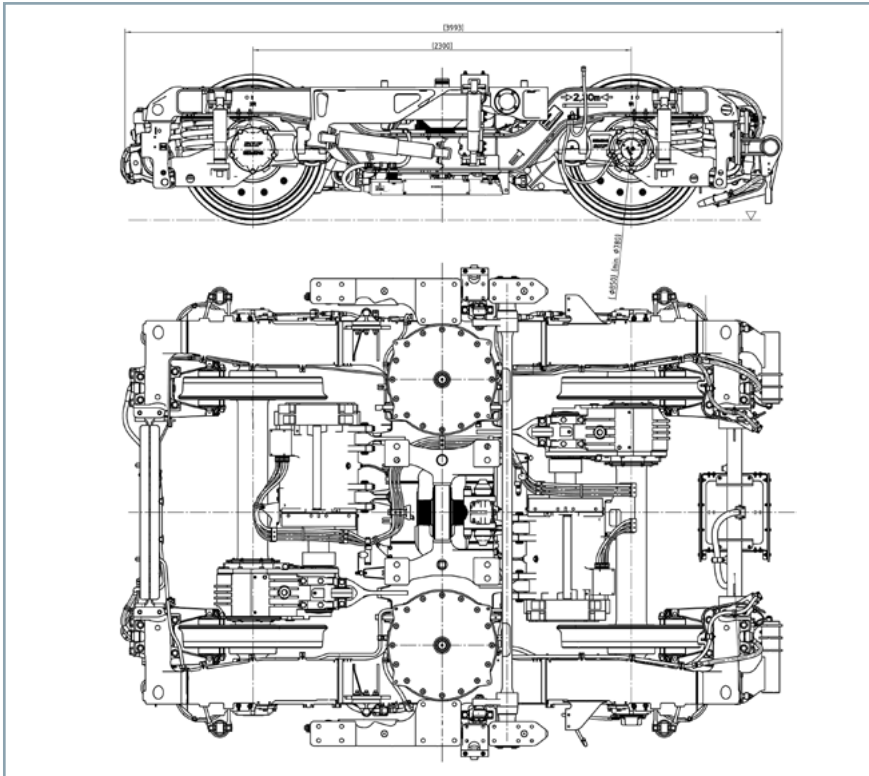
Separation of the coupling enables exchange of the wheel set with the gear unit without having to dismount the motor.

Low-maintenance wheel cheek disk brakes are used. Optionally a magnetic track brake can be used for mechanical braking.



Technical data

Bogie	SF 6500
Running speed	160 km/h
Axle load	Max. 18 t
Continuous power per wheelset	235 kW
Wheelbase	2300 mm
Track gauge	1435 mm
Wheel diameter new/worn	850/780 mm
Smallest radius of curvature in operation/depot in service/workshop	100/80 m
Height of bogie (top of airspring)	Approx. 800 mm
Weight motor/trailer bogies	Approx. 9.0 t/6.7 t
Secondary transmission of longitudinal forces	Partly suspended
Mechanical brake	Wheel disc brakes/ optional magnetic track brake



References

Desiro ML Mittelrheinbahn
 RER Brussels
 DMU Croatia
 Desiro ML ÖBB
 NS Lighttrain



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The information given in this document contains general descriptions of technical possibilities which may not always be available in a particular case. The requested performance characteristics have therefore to be defined in the event of contract ward for the particular case in question.