

MoComp Bogies SF30

Bogie for low floor tramcars

The bogie SF 30 is in service for the low floor tram Combino plus as well as for the Astra Imperio and also in some Chinese cities.

Bogie for 100 % low floor tram with continuous floor height

In opposition to the original Combino concept, the Combino plus bogies are in the center of the car body modules which requires a rotating angle of app. 4,5°. The floor height of 350 mm above TOR throughout the whole length of the car, however, remains the same for the new concept.

Proven spring concept

The transmission of longitudinal forces is realized via a longitudinal rod containing two rubber bushes. The secondary suspension is performed by 4 rubber springs (hourglass springs), which allow a higher lateral movement than steel coil springs. For primary suspension, the same conical rubber springs as for the original bogie design are applied. Stub axles allow low floor without ramps.

Outboard longitudinal traction units

The motor bogies with the outboard longitudinal traction units have small unsprung mass and a low center of gravity compared with other 100% low floor bogies. The motor bogie is equipped with completely suspended traction drive units with self-ventilated three-phase asynchronous motors. The wheels of these motors are arranged in line and mechanically coupled by means of the motor gearing unit. This design gives the bogie excellent axle guidance characteristics such as self-centering and low tendency to lateral oscillation. The torque transmission from the traction motor to the

front and rear wheel is affected by a low-noise bevel gear and two link couplings, which are arranged at different levels. For the trailer bogie the brake disc is directly flanged to the wheel. Braking is carried out by active brake calipers. The stub axle carries internal mounted tapered roller bearings. The wheel diameter for both motor and trailer bogie are 600 mm (new) and 520 mm (worn). To reduce wheel squeal, noise absorber can be mounted. The bogie frame is a combination of plates, cast, forged parts and a head beam integrated on both of its ends.

Easy maintenance

The traction drive units are equipped with spring-loaded brakes, with the brake disc directly arranged on the motor shaft. This allows an easy access to all major traction and brake components. As a result, nearly all maintenance work can usually be performed without the need for a pit. The complete traction drive units can even be removed and installed without having to lift the vehicle or remove the bogies.



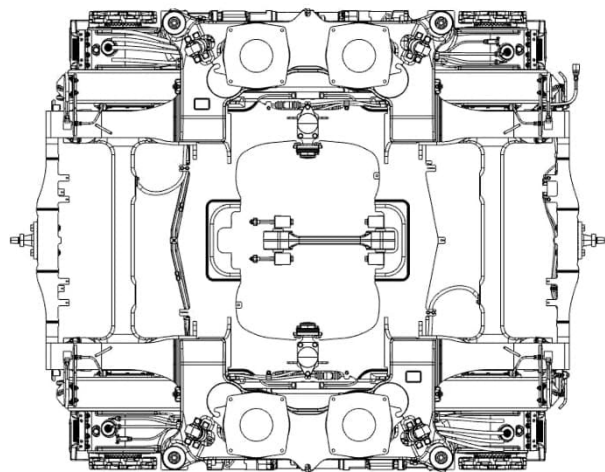
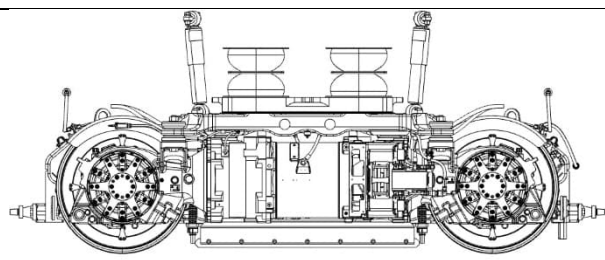
SF30 motor bogie

Technical data SF30

Bogie	SF30
Running speed	70 km/h
Axle load	2 x 10 t
Continuous power per bogie	2 x 100 kW
Wheelbase	1800 mm
Track gauge	1435 mm
Wheel diameter new/worn	600 / 520 mm
Smallest radius of curvature in service/workshop	15 m
Weight MBG/TBG (with tread brakes)	approx. 5 t / 3,4 t

References:

- Metro Sul de Tejo
- Budapest
- China
- Bucharest
- Oradea
- Cluj



SF30 motor bogie

Published by
Siemens Mobility Austria GmbH
 SMO RS CP BG&P
 Eggenberger Straße 31
 A-8020 Graz
 Austria

© Siemens Mobility GmbH 09/2024

[siemens.com/mobility](https://www.siemens.com/mobility)



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.