

LRV Manchester Two-Part Bi-Directional Train

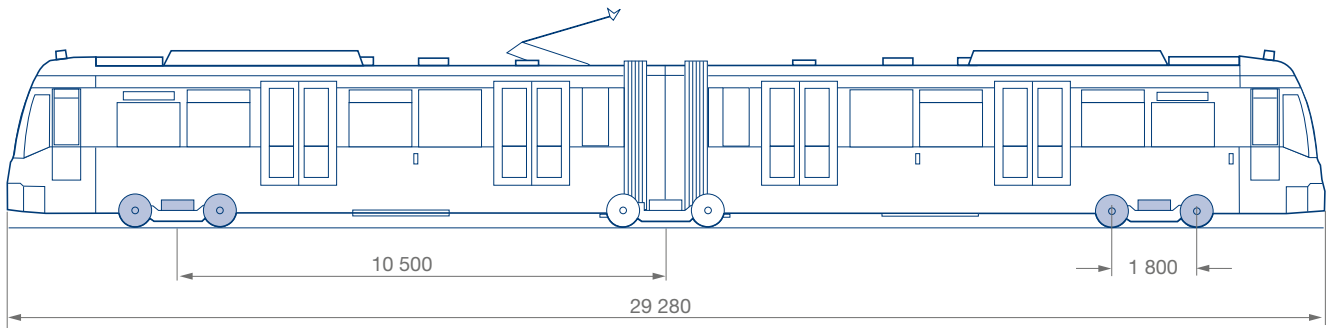


LRV Manchester with Motor-Gear Unit and Scharfenberg Coupler Type 330.

The M5000 vehicles are two-part bi-directional train sets with gauge width of 1435 mm. They are 29 meters long and fitted with two driven bogies and one non-driven bogie. The entire motor-gear unit including the rubber pad coupling is supplied by Voith.

| | |
|-------------------------|---|
| Vehicle manufacturer | Konsortium Bombardier Transportation/ Vossloh Kiepe |
| Operator | GMPTE (Greater Manchester Passenger Transport Executive) |
| Year of construction | from 2009 |
| Country | United Kingdom |
| Motor transmission unit | MGU 120-SV-SZH418 |
| Engine output | 120 kW / 2380 min ⁻¹ |
| Top speed | 80 km / h |
| Vehicle weight | 40 t |
| Axle load | 11 t |

Two Part Bi-Directional Train M5000



Motor-Gear Unit MGU 120-SV-SZH418

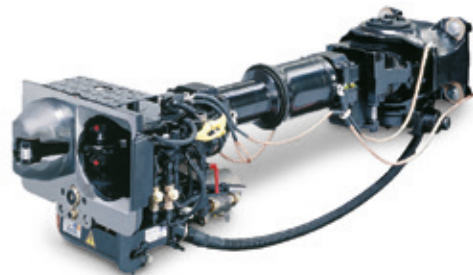
The drive concept consists of a fully sprung, integrated transverse drive. Each of the two driven bogies has two motor-gear units. The traction motor of the motor-gear unit is unilaterally supported and connected with the transmission via a torsionally stiff membrane coupling that is capable of being bent elastically.

The full encapsulation of the self-ventilated asynchronous motor ensures highly reliable operation. The two-stage helical gear is directly bolted to the traction motor. Power is transmitted to the wheelset shaft via a cardanic hollow shaft and an elastic double level rubber pad coupling. The output hollow shaft is also used to carry the brake disc. The suspension for the brake caliper is directly integrated into the transmission housing.

The motor-gear unit has a highly compact design and offers high operational availability thanks to its robustness.



Motor-Gear-Unit 120-SV-SZH418



Scharfenberg coupler type 330

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