



ELECTRIC **MO(RE)**BILITY.

Our integrated eMobility solutions for your needs.







MORE VALUE, LESS EFFORT.

Switching all or part of your fleet to electric vehicles can raise a number of questions.

- Which lines can I use electric vehicles for?
- How can I make the transition as easy as possible?
- What kind of charging infrastructure suits my fleet best?

Your smooth and successful transition to eMobility is our top priority. By combining comprehensive yet individual consultancy services, tailor-made eMobility solutions and reliable fully-electric buses with latest battery technology, MAN has put together an eMobility package for you, that helps you easily and efficiently reduce the ecological footprint of your fleet.

Our customized, integrated eMobility solution is your roadmap into the future. For greater efficiency, flexibility and sustainability.

MORE eMOBILITY? MAN LION'S CITY E.

The MAN Lion's City E, available in three different lengths, gets your passengers to their destination reliably and with zero emissions. With our electric bus you can count on an operation range of up to 380 kilometres* without having to charge in-between. In addition to its high range, the MAN Lion's City E offers you further benefits that help you continue down your path to success: fast depot charging, latest battery technology, a reliable and maintenance-friendly central motor as well as a highly comfortable passenger area.

Your benefits package at a glance:

- **emission-free mobility** thanks to proven cell and battery technology of the latest generation
- **high operational flexibility** thanks to our extensive product range including vehicles with lengths between 10.5 m to 18.1 m and a low-entry 12 m bus
- **maximum operational reliability** thanks to high, modular battery capacity
- **intelligent energy management** thanks to future-proof lithium-ion technology
- **simple and fast charging** thanks to smart depot charging concept
- **easy integration into existing fleets** thanks to customised eMobility solutions

* According to SORT (Standardized On Road Test), however with thermal comfort and preconditioned vehicle.
Applies to the MAN Lion's City 12 E and 18 E.



eFLEET

RANGE

EFFICIENCY

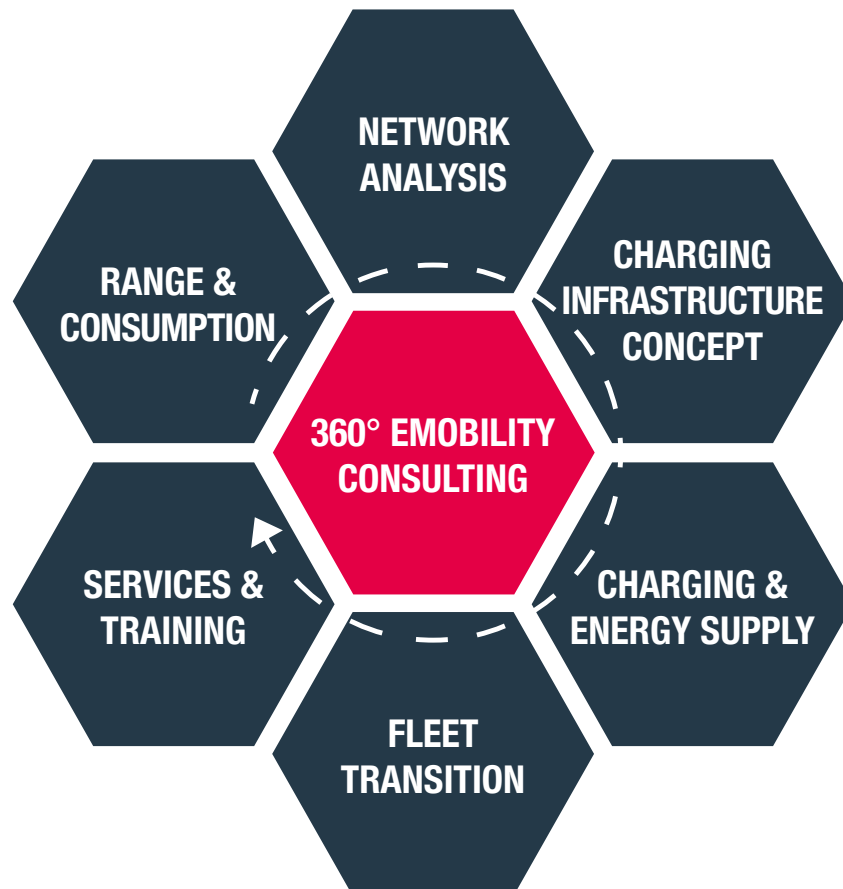
COMFORT AND DESIGN

SERVICES

Global climate protection targets, local emission regulations, cleaner cities or company environmental targets based on fleet emissions – the reasons for switching to alternative drive systems are multifaceted, yet specific to each customer. Just like the solutions from MAN.



eFLEET CONSULTING BY MAN TRANSPORT SOLUTIONS.



Do you want to simply enter eMobility? We have already shown over 200 customers across Europe how this can be done – with MAN Transport Solutions. Our integrated and maximum efficient eMobility solutions offer you genuine added value.

- **Orientation** provided by a competent partner and comprehensive 360° eMobility consultancy
- **Stable and optimised operating processes** thanks to tailored and integrated eSolutions that take into account all relevant factors
- **Maximum efficiency** due to our optimum support across all development stages
- **eSolutions from a single source** thanks to our close cooperation with effective and reliable partners - from electric vehicles and route optimisation to charging infrastructure and installation perfectly tailored to you and your needs



THE RIGHT CHARGING SOLUTION FROM A SINGLE SOURCE.

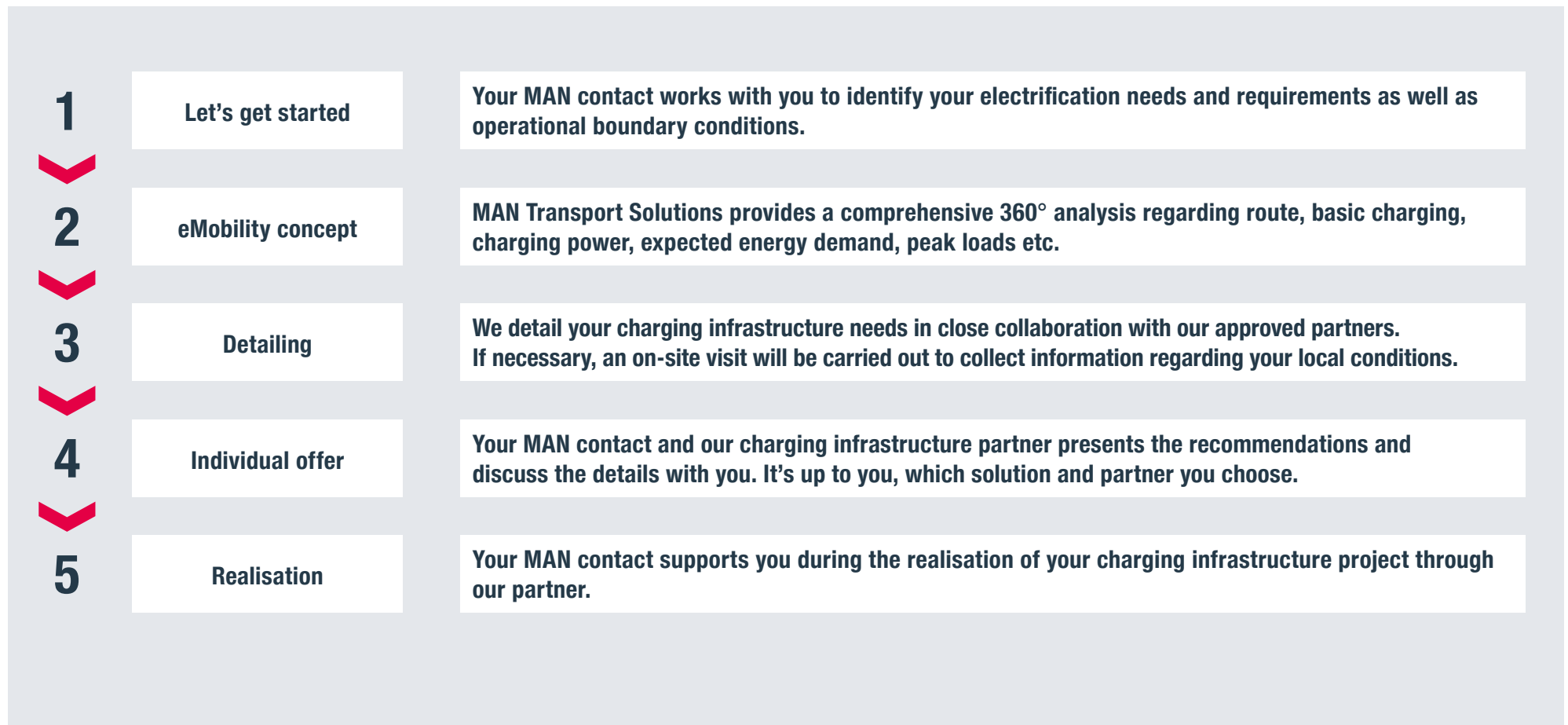
MAN now also offers you the right charging infrastructure together with strong partners.

In close cooperation with experienced international charging infrastructure partners, we provide you with integrated solutions for your entry into eMobility – making things as easy, reliable and cost-efficient as possible.

Our new services are available throughout Europe. They cover a wide range of requirements: from mobile charging units to large fleet solutions. The mobile charging units can be flexibly used in the depot or workshop. Charging capacity ranging from 40 kW to 150 kW guarantees a sustainable tailored solution. It is also possible to charge multiple vehicles from a single charging station. Along with our partners, we develop a charging structure perfectly tailored to your requirements as well as its installation – all from a single source. On request, our partners can provide a maintenance service for your charging solution.



YOUR EASY WAY TO THE RIGHT CHARGING INFRASTRUCTURE.





FUTURE-PROOF THANKS TO THE LATEST BATTERY GENERATION.

With the latest generation of batteries, the MAN Lion's City E once again sets new standards in electromobility. The smart overall concept of our electric buses is further improved by the future-proof battery concept. At the heart of this development is the innovative, modular multi-battery system, which enables maximum ranges over the entire service life while at the same time increasing passenger capacity.

Thanks to its particularly high energy density and increased usable energy capacity, the MAN Lion's City E achieves ranges of up to 380 kilometres under optimum conditions. This makes the electric bus ideal for use on all urban routes - without compromising on performance.

In addition, you benefit from increased passenger capacity as a result of the weight-optimised battery design: the Lion's City 18 E can carry up to five additional passengers, the Lion's City 12 E up to six. No compromises have been made in terms of comfort or efficiency.

The MAN Lion's City E thus combines highest efficiency with utmost practicality and first-class driving comfort - the perfect choice for a sustainable future in local public transport.

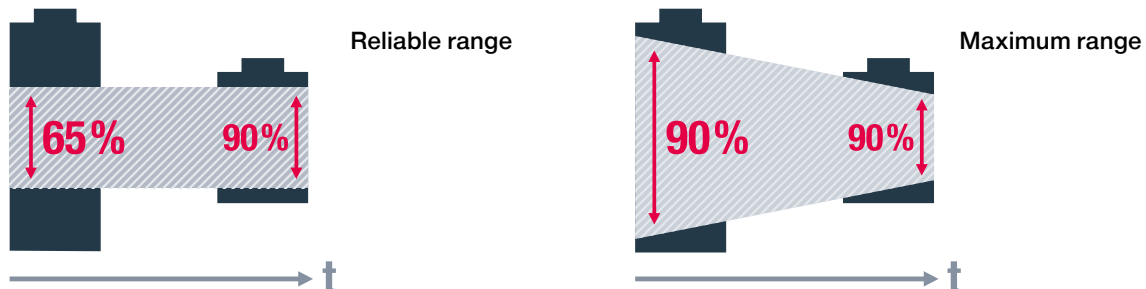
BATTERY USAGE STRATEGY.

As flexible as your application.

MAN's modular battery concept gives you the flexibility to adapt the number of battery packs to your individual requirements*. You can control charging time, passenger capacity and range by choosing more or fewer battery packs: Each additional battery pack increases the range of the electric bus, while fewer batteries increase the passenger capacity and shorten the charging time. From 2025, battery production will take place at MAN in Nuremberg - performance made in Germany!

Model	Number of battery packs	Installed capacity	Reliable range DoD	Usable energy	Maximum range DoD max.	Usable energy max.
Lion's City 10 E	4	356 kWh	65 %	231 kWh	90 %	320 kWh
	5	445 kWh	65 %	289 kWh	90 %	400 kWh
Lion's City 12 E	6	534 kWh	65 %	347 kWh	90 %	480 kWh
	7	623 kWh	65 %	405 kWh	90 %	560 kWh

Comparison of usage strategy:



*Possible with MAN Lion's City 12 E and MAN Lion's City 18 E.

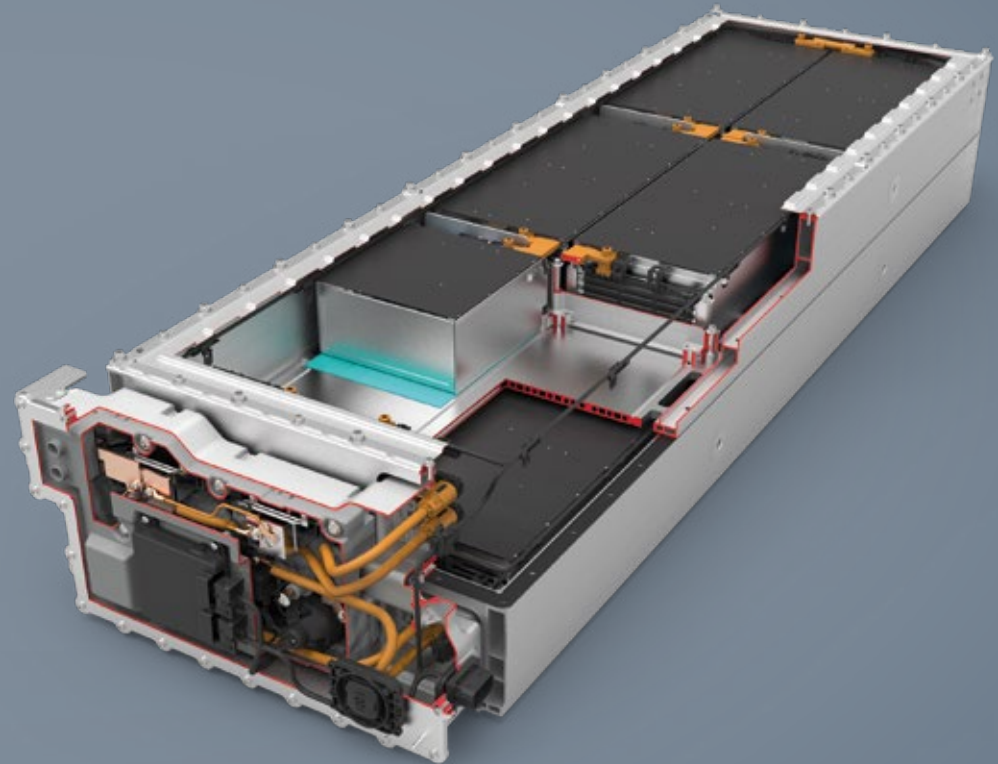
EFFICIENCY RIGHT DOWN TO THE LAST CELL.

Depending on the vehicle length, the modular battery system of the MAN Lion's City E consists of four to eight battery packs, each containing 30 interchangeable independent modules. If required, a smaller number of battery packs can be specified and thus the equipment individually adapted to your application*. In addition, the extremely economical air conditioning system is operated with the environmentally friendly refrigerant CO₂ as standard. Good for efficiency and good for the environment.

In addition, all batteries are located outside the crash-prone rear area on the roof and are therefore easily accessible. Due to the high level of recuperation, the MAN Lion's City E is highly efficient. In the articulated bus, thanks to the usable battery capacity of max. 560 kWh and the two driven axles, the maximum energy recovery during braking increases and raises efficiency even further.

After a long period of use in vehicles, batteries can be re-used in stationary applications.

After secondary use, the batteries can be efficiently recycled by means of mechanical and thermal processes. MAN already exceeds the legal recycling quotas that will apply from 2031.



* By reducing max. one battery pack, the passenger capacity can be increased by approximately eight people.

** As an option, you can choose between four other positions for the charging socket.

DESIGNED FOR MORE.

The MAN Lion's City E is in excellent shape.

The electrifying and award-winning exterior design already lets you know that the ride in the MAN Lion's City E will be a very special experience. While the electric bus follows its timetable emission-free and quietly, the extremely comfortable, spacious and light-flooded interior invites its passengers to sit back and relax. Driver comfort is also a top priority in the MAN Lion's City E. That's why we have redesigned the driver's workplace in such a way that it relieves the drivers as much as possible and allows them to control the numerous assistance and comfort functions intuitively, comfortably and safely.

The new extremely comfortable cockpit has a large digital display and can be easily adapted to a wide range of requirements. For example, the steering wheel with the clearly arranged instrument panel can be adjusted in height and inclination and ensures a perfectly ergonomic workplace. In addition, all controls are arranged in such a way that they do not distract the driver's attention from the traffic. The display and control levels are arranged separately, while the controls are to reach from a comfortable seating position.



MAN DIGITALSERVICES FOR **MORE** EFFICIENCY.

MAN DigitalServices make your fleet more efficient. For example, they support you in reducing energy consumption, planning and controlling service work on the bus, time management and much more.

Ultimately, MAN DigitalServices help to increase the availability of your vehicles and further improve the efficiency and profitability of your company.

MAN DigitalServices support you in the following areas:

- Vehicle tracking and route planning (Geo)
- Tachograph and time management (Timed, Compliant M)
- Charging and battery management (MAN eManager)
- Economical driving (Perform*)
- Data Management (MAN DataPackages)
- Maintenance and repair management (MAN ServiceCare)
- Driver support (MAN Driver App)



* In full available only for MAN Lion's Coach and NEOPLAN.



YOUR DIGITAL FLEET MANAGEMENT.

MAN eManager. Charging management made easy.

With the **MAN eManager** you can control the charging management and pre-conditioning of your MAN Lion's City E simply and efficiently. Use the timer mode to decide when your electric bus or your entire eFleet should be ready for use according to the timetable.

The **MAN eManager M** also offers additional functions to optimise the daily operation and efficiency of your electric vehicles.

Data management for your fleet. Fast and easy access.

With **MAN DataPackages** you can integrate the vehicle data from your MAN fleet into your own IT systems or third-party solutions. The data is transferred from the vehicle to the RIO Cloud via an appropriate telematics box and processed there.

The **MAN DataPackage S** and **MAN DataPackage TiGR** data packages are available here.



OUR DRIVE FOR YOUR eMOBILITY.

Our drive knows only one alternative: to ensure the unrestricted mobility of your electric buses with individually tailored financing solutions, flexible service products and digital fleet services, professional driver trainings and a Europe-wide breakdown service.

Our comprehensive services offer you numerous alternatives to reduce the administrative effort and increase the efficiency of your electric fleet. Depending on your needs, MAN can take care of the entire process from maintenance and invoice control to clarifying warranty and goodwill issues. Our extended warranties for the driveline or the entire vehicle provide more planning security in the event of unforeseen repair costs. With our comprehensive services, you reduce the effort of maintenance and repair and benefit from full cost transparency, maximum protection and minimum effort.

MAN | FinancialServices

MAN FinancialServices* help you to stay financially mobile.

- **Financing**
Acquisition of property through flexible financing solutions
- **Insurance**
Insurance solutions for commercial vehicles
- **Leasing**
Budget-friendly leasing models
- **MAN Card**
Europe-wide non-cash payments

*The services offered as part of the joint business relationship "MAN FinancialServices" (financing, leasing and insurance products) vary from country market to country market. They are provided or brokered by various subsidiaries of Volkswagen FinancialServices AG.

MAN Service

Higher quality, more time: Two years Warranty on MAN service and parts.



- **MAN Genuine Parts:** top quality, long service life and availability ensured
- **MAN Genuine Parts ecoline:** save a lot and protect the environment in the process with reconditioned MAN Genuine Parts from MAN, the manufacturer or external service providers
- **MAN Mobile24:** Europe-wide breakdown service
- **MAN Uptime Guarantee:** a flexible way of assuring mobility in many European countries
- **MAN Extended Warranty:** for the powertrain incl. high-voltage components, the high-voltage battery and the complete vehicle
- **MAN Service Contracts:** service agreements covering service and inspection tasks in accordance with the maintenance schedule. Additional scopes such as complete vehicle and wear-and-tear repairs can be combined

MAN TopUsed

- **Top used vehicles:** large selection of high-quality used vehicles of all coach types
- **Service promise:** top quality, top advisory service, top selection, top financing, top service
- **Top services:** including used vehicle guarantee, financing

MAN ProfiDrive

The MAN ProfiDrive driver training programmes and corporate coaching modules bring you up to speed, making day-to-day driving safe. The support and training programmes on offer give you additional opportunities to optimise your commercial environment.

HIGH VOLTAGE. HIGHEST SERVICE QUALITY.

Sometimes, it just cannot be prevented: From time to time, our electric buses are no longer roadworthy have to be taken to the workshop. In such cases you are in best hands at our MAN service centres.

From diagnosis, maintenance and repair of your electric bus to recycling of the high-voltage batteries, we are the strong partner at your side.

Are you planning maintenance and repair in your own workshop instead? In this case, too, we can support you by training your service staff in the professional and safe handling of high-voltage vehicles.

We electrify our MAN service centres so that you benefit from maximum service quality.





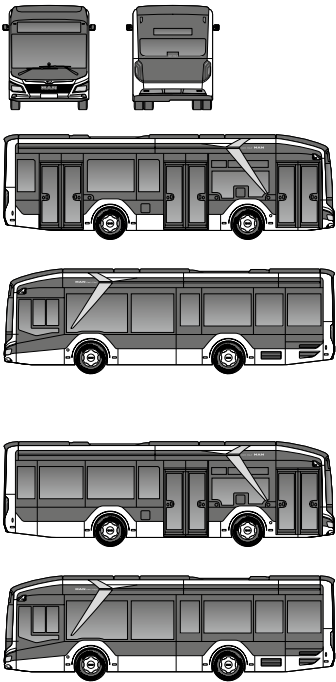
YOUR ELECTRIC BUS IN SAFE HANDS.

Our MAN service centres are optimally equipped for the professional maintenance and repair of your electric bus. Special tools, a well-conceived quarantine concept, a special high-voltage workplace and qualified service technicians will put your electric bus safely back onto the road.

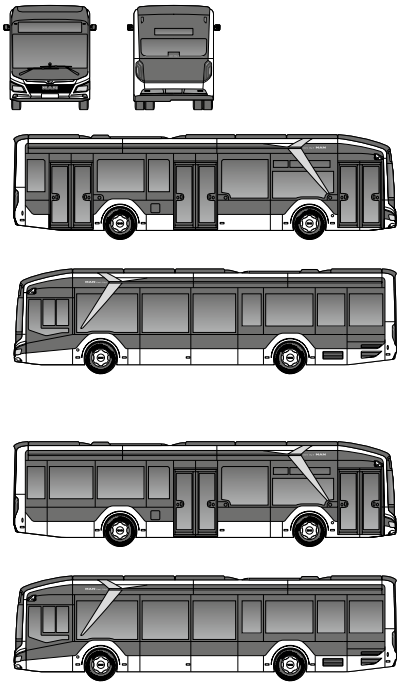
- **Competence:** Our employees are highly trained in the professional handling of high-voltage vehicles. Their expertise is based on a multi-stage training programme for qualified and safe work on vehicles with high-voltage technology and their components.
- **High-voltage workplace:** Working in a high-voltage environment requires appropriate safety measures. Our special high-voltage workstation is subject to strict cleanliness requirements, it is secured by access restrictions and equipped with special warning signs.
- **Special tools:** Our workshop staff perform service work on your electric bus exclusively with special tools and aids designed for this purpose. From diagnosis and defect analysis to the installation and removal of high-voltage components and the solution of your problem, our service technicians use vehicle-specific tools to ensure that the bus is in a voltage-free condition.
- **Quarantine concept:** For vehicle damage with potential danger, our MAN service centres have a separate and well thought-out quarantine area. From there, optimum access to the defective vehicle and repair under maximum safety conditions is guaranteed.

TECHNICAL DATA.

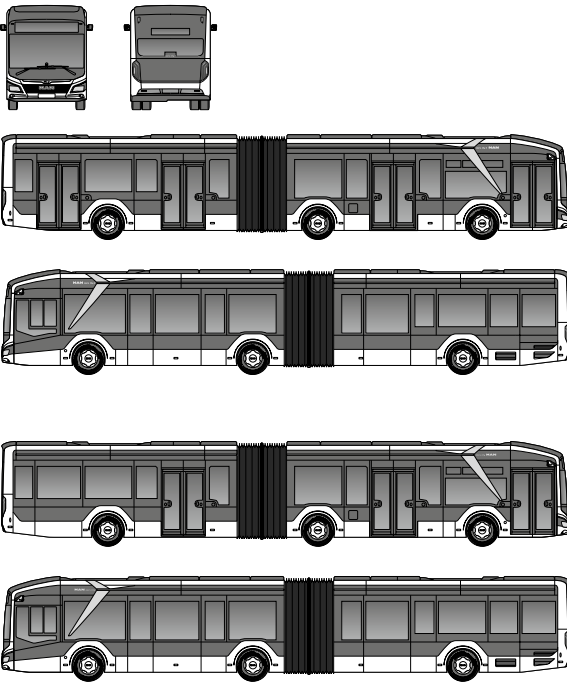
MAN Lion's City 10 E



MAN Lion's City 12 E



MAN Lion's City 18 E



	MAN Lion's City 10 E	MAN Lion's City 12 E	MAN Lion's City 18 E
Dimensions/weights			
Length	10,575 mm (10,610 mm)	12,185 mm	18,060 mm
Width	2,550 mm	2,550 mm	2,550 mm
Height	3,320 mm	3,320 mm	3,320 mm
Techn. permissible gross weight	20,000 kg	20,000 kg	30,000 kg
Max. passenger capacity (seated)**	Max. 33	Max. 45	Max. 60
Battery and charging concept			
Installed battery capacity	356 kWh	max. 445 kWh	max. 623 kWh
Installation location of batteries	Roof	Roof	Roof
Battery technology	NMC	NMC	NMC
Range	Up to 310 km (Maximum Range battery usage strategy)	Up to 380 km (Maximum range battery usage strategy)	
Charging strategy	Depot charging (overnight)	Depot charging (overnight)	Depot charging (overnight)
Charging system	Plug charging (CCS)	Plug charging (CCS)	Plug charging (CCS)
Charging power	Up to 150 kW (DC)	Up to 150 kW (DC)	Up to 150 kW (DC)
Charging time	< 2.5h	< 3.5h	< 4h
Drive and running gear			
Motor	Electric central motor	Electric central motor	Two driven axles, two electric central motors
Continuous power	160 kW	160 kW	267 kW
Maximum performance	240 kW	240 kW	320 kW
Gearbox	Single-stage adapter gearbox	Single-stage adapter gearbox	Single-stage adapter gearbox for each axle, electronic synchronisation between the two driven axles
Running gear	Adaptive PCV shock absorbers Front axle: low-floor axle with independent wheel suspension; rear axle: low-floor drop centre axle with stabiliser.		
Air conditioning	Automatically controlled all-year concept: electric roof air conditioning system using heat pump and electric heater elements, auxiliary heater using alternative fuels (biodiesel, HVO etc.)		

* Available with CO₂ refrigerant

** Without air conditioning system



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