

MAN Lion's City 12 E LE

Vehicle Description



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VEHICLE TYPE

Test vehicle _____	MAN Lion's City 12 E LE
Design _____	2-axle low-entry bus
Homologation _____	Class 1
Legally permissible gross weight _____	19,500 kg

ENGINE

Engine type _____	Electric MAN central motor
Arrangement _____	Centrally on rear axle
Continuous power _____	160 kW (218 HP)
Maximum power _____	240 kW (326 HP)
Maximum torque _____	2,100 Nm
Continuous torque _____	1,300 Nm

GEARBOX

Gearbox type _____	Single-stage MAN adapter gearbox
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FRONT AXLE

Axle type _____	MAN VOKS-08-B-01 ERA
Suspension _____	ECAS air suspension with lift limitation
Axle guide _____	Independent wheel suspension with stabiliser and PCV shock absorbers
Tyres _____	275/70 R22.5
Steering _____	MAN Basic Steering
Permissible axle load _____	8,000 kg

REAR AXLE

Axle type _____	MAN HU-1330-B-00
Suspension _____	ECAS air suspension and PCV shock absorbers
Tyres _____	275/70 R22.5
Permissible axle load (technical) _____	11,500 kg
Axle ratio _____	i = 5.12

BRAKE SYSTEM

Front axle _____	Disc brakes
Rear axle _____	Disc brakes
Brake system _____	Electronic brake system (EBS) with - ABS, anti-lock braking system - ASR, anti-slip regulator - Brake lining wear display - Stepless recuperation via brake pedal

ENERGY STORAGE

Battery technology _____	Lithium-ion (NMC)
Installed capacity _____	480 kWh
Location _____	6 battery packs located on the vehicle roof
Battery usage strategy _____	Maximum Range (80% DoD)
Cooling system _____	Water cooling circuit
Auxiliary heating tank volume _____	80 l (optionally 170 l or 35 l) compatible with HVO and biodiesel

CHARGING SYSTEM

Charging strategy _____	Depot charging
Charging technology _____	Plug charging (CCS)
Charging power _____	Up to 150 kW (DC)
Charging time _____	< 4 hours
Position of charging sockets _____	On the right above axle 1 and right side in the back

ELECTRICAL SYSTEM

Batteries _____	24 V vehicle electrical system with 2 x 230Ah batteries; battery protection shutdown via battery emergency stop switch in accordance with ECE R 36
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HEATING/VENTILATION/AIR CONDITIONING

Heating/air-conditioning system _____	CO2 air conditioning Valeo, air conditioning in driver's workplace via separate evaporator, fan-assisted convector heating
Type _____	Heat pump, integrated, with heating and cooling function
Max. cooling power _____	38 kW
Max. heating power _____	38 kW
Refrigerant _____	CO (R744)
Auxiliary heating _____	Valeo Spheros Thermo 300 S

DOORS

Door 1 _____	Swing/sliding doors with electric drive
Door 2 _____	Swing/sliding door with electric drive, manual folding ramp as an entry aid
Door 1 / door 2 clearing width _____	1,200 mm / 1,200 mm
Entry height _____	320 mm

SAFETY EQUIPMENT

Assistance systems _____	MAN OptiView, heated incl. Corner Eye Lane departure warning system LDW with acoustic warning Lane change aid LCS with visual warning Turning aid with visual and acoustic warning Collision warning (front end detection) Rear view camera Cruise control Traffic sign recognition TSI ESP ride dynamics control Rain/light sensor Tyre pressure monitoring for all axles Attention warning MAN AttentionGuard Emergency braking assistant EBA
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Other equipment _____	LED front headlights with LED daytime driving light LED lighting of outside door area camera monitoring of door 2 Multi-function steering wheel
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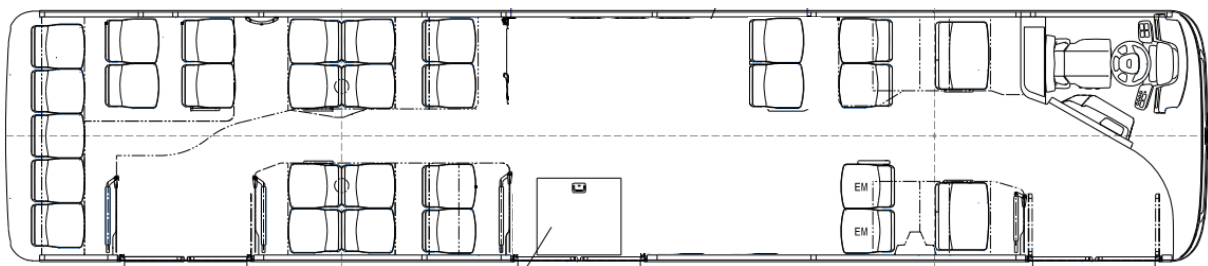
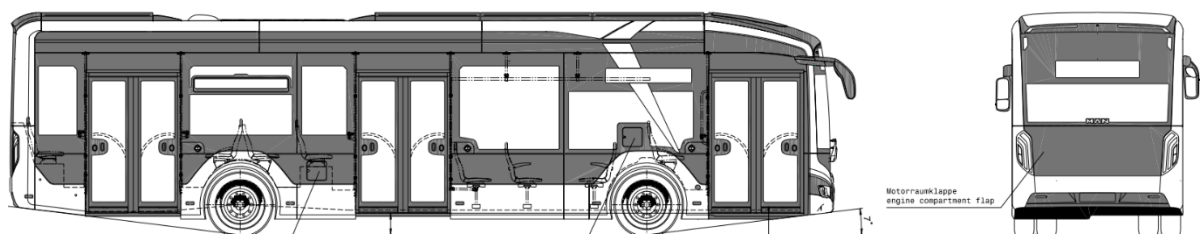
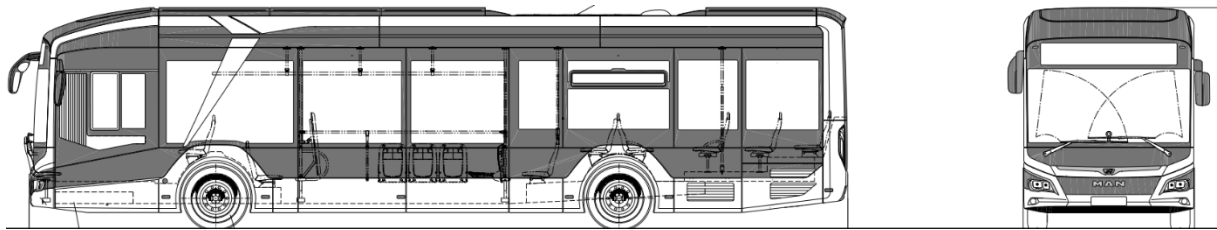
COMFORT FEATURES

Interior _____	LED ambient passenger area lighting, colour selectable LED ticket counter lighting combined antenna (WiFi, GPS, GSM/LTE) Infotainment monitors 29 inch luggage racks up to door 2 USB power plugs at side panels in seating area (type a & c)
Other equipment _____	Windscreen heating, driver's window roller blind and windscreen roller blind, electrically

DIMENSIONS AND WEIGHTS

Length _____	12,185 mm
Width _____	2,550 mm
Height _____	3,320 mm
Wheelbase _____	6,005 mm
Overhang at front/rear _____	2,775 mm / 3,405 mm
Slope angle at front/rear _____	7°/7°
Turning circle radius _____	10,747 mm
Max. steering angle _____	56°
Interior headroom _____	2,427 mm (in front area)
Seats _____	41 seats, >80% facing driving direction
Capacity _____	Max. overall capacity 69 people
Seating _____	MAN City Comfort without seat belts (optional with seat belts)
Driver's workplace _____	MAN Lion's City Pro, rear door hinged, steering wheel height and inclination angle adjustable Driver's seat Isri ProActive 2, with seat heating, driver's seat air conditioning, 3-point seat belt, driver's seat rotatable
Steering _____	Electrical/hydraulic

DRAWING



NOTES
