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Lithium-ION 



Electric Tow Tractor

P120 – P350

Capacity 12 – 35 t | Series 5007-10

Powerful load handler

- Powerful electric motors for a high towing capacity of up to 35 tons at top speeds of up to 25 kilometers per hour
- High maneuverability for effortless control of the heaviest loads in narrow production halls and warehouses
- Operator's compartment decoupled from chassis and drive axle equipped with coil spring and damping system that protects from any vibrations
- Free choice between lead-acid batteries and lithium-ion batteries



STANDARD AND OPTIONAL EQUIPMENT

| Model/ Equipment | | P120 (VSWB) | P180 (VSWB) | P250 (SWB) | P250 (LWB) | P300 (LWB) | P350 (VLWB) |
|------------------------------|--|----------------|----------------|---------------|---------------|---------------|----------------|
| Safety | Chassis protection | ○ | ○ | ○ | ○ | ○ | ○ |
| | Gradient assist | ● | ● | ● | ● | ● | ● |
| | Automatic speed reduction when cornering | ○ | ○ | ○ | ○ | ○ | ○ |
| | Safety belt | ○ | ○ | ○ | ○ | ○ | ○ |
| | Linde BlueSpot™ | ○ | ○ | ○ | ○ | ○ | ○ |
| | Flashing/ Rotating Beacon on /below overhead guard | ○ | ○ | ○ | ○ | ○ | ○ |
| | Additional emergency buttons located in the rear part | ● | ● | ● | ● | ● | ● |
| | Key switch | ● | ● | ● | ● | ● | ● |
| Operation / Load Handling | Log in PIN code | ○ | ○ | ○ | ○ | ○ | ○ |
| | Inching control | ● | ● | ● | ● | ● | ● |
| | Load platform lighting | ○ | ○ | ○ | ○ | ○ | ○ |
| | Reversing camera | ○ | ○ | ○ | ○ | ○ | ○ |
| | Speed reduced if deep discharge | ● | ● | ● | ● | ● | ● |
| | External rear-view mirrors | ○ | ○ | ○ | ○ | ○ | ○ |
| Digitalisation | Telescopic rear-view mirrors | ○ | ○ | ○ | ○ | ○ | ○ |
| | Linde connect: desk | ○ | ○ | ○ | ○ | ○ | ○ |
| | ac: access control (PIN or RFID) | ○ | ○ | ○ | ○ | ○ | ○ |
| | dt: crash detection | ○ | ○ | ○ | ○ | ○ | ○ |
| | Linde connect: cloud | ○ | ○ | ○ | ○ | ○ | ○ |
| Workplace | Data Transmission (WiFi or Online) | ○ | ○ | ○ | ○ | ○ | ○ |
| | Suspended Cabin | ● | ● | ● | ● | ● | ● |
| | Steering wheel with knob | ○ | ○ | ○ | ○ | ○ | ○ |
| | Air conditioning | ○ | ○ | ○ | ○ | ○ | ○ |
| | Heating | ○ | ○ | ○ | ○ | ○ | ○ |
| | Multifunction coloured display with hour meter, maintenance indication, battery discharge indicator, internal fault code indication, selected drive direction and actual steering wheel position | ● | ● | ● | ● | ● | ● |
| | Radio | ○ | ○ | ○ | ○ | ○ | ○ |
| | Electrical socket and USB-connection | ○ | ○ | ○ | ○ | ○ | ○ |
| | Sun visor | ○ | ○ | ○ | ○ | ○ | ○ |
| Attachement / Forks | Support clipboard DIN A4 | ○ | ○ | ○ | ○ | ○ | ○ |
| | Lighting for rear towing attachment | ○ | ○ | ○ | ○ | ○ | ○ |
| | Electric. socket 12 V (13-pole) | ○ | ○ | ○ | ○ | ○ | ○ |
| Axles and Tyres | Tyre Conti. RV20 | ● | ● | ● | ● | ● | — |
| | SE-SIT Continental | ○ | ○ | ○ | ○ | ○ | ○ |
| | SE-SIT non marking | ○ | ○ | ○ | ○ | ○ | ○ |
| Drive and Brake-System | Onboard charger | ○ | ○ | ○ | ○ | ○ | ○ |
| | Lateral battery change option | ● | ● | ● | ● | ● | ● |
| | Vertical battery change option | ○ | ○ | ○ | ○ | ○ | — |
| | Battery 3 PzS 420 - 465 Ah | ● | ● | — | — | — | — |
| | Battery 4 PzS 560 - 620 Ah | — | — | ● | — | — | — |
| | Battery 5 PzS 700 - 775 Ah | — | — | — | ● | ● | — |
| | Battery 6 PzS 840 - 930 Ah | — | — | — | ○ | ○ | ○ |
| Battery 8 PzS 1120 - 1240 Ah | — | — | — | — | — | ● | |
| Service | CAN bus technology | ● | ● | ● | ● | ● | ● |
| | Free maintenance braking system | ● | ● | ● | ● | ● | ● |

● Standard equipment

○ Optional equipment

— Not available

TECHNICAL DATA (According to VDI 2198)

| | Technical Data | | | | | | | | | |
|-----------------|----------------|--|---|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-----------|
| | 1.1 | Manufacturer | Linde | Linde | Linde | Linde | Linde | Linde | Linde | |
| Characteristics | 1.2 | Model designation | P120 (VSWB) | P180 (VSWB) | P250 (SWB) | P250 (LWB) | P300 (LWB) | P350 (VLWB) | | |
| | 1.3 | Power unit | Electric | Electric | Electric | Electric | Electric | Electric | Electric | |
| | 1.4 | Operation | Seat | Seat | Seat | Seat | Seat | Seat | Seat | |
| | 1.5 | Load capacity | Q (kg) | 300 | 300 | 300 | 300 | 300 | 300 | |
| | 1.5.1 | Towing capacity | Q (kg) | 12000 | 18000 | 25000 | 25000 | 30000 | 35000 | |
| | 1.7 | Rated tractive force | F (N) | 2400 | 3600 | 5000 | 5000 | - | 7000 | |
| | 1.9 | Wheelbase | y (mm) | 1408 | 1408 | 1551 | 1906 | 1906 | 2156 | |
| | Weights | 2.1 | Service weight incl. battery (with cabin) | (kg) | 3883 | 3883 | 4450 | 5250 | 5250 | 6000 |
| | | 2.2 | Axle load with load, front/rear | (kg) | 2079/2104 | 2079/2104 | 2900/1850 | 2928/2622 | 2928/2622 | 3220/3080 |
| 2.3 | | Axle load without load, front/rear | (kg) | 2010/1873 | 2010/1873 | 2780/1670 | 2808/2442 | 2808/2442 | 3150/2850 | |
| Wheels/Tyres | 3.1 | Tyres rubber, SE, pneumatic, polyurethane | Pneumatic/Superelastic | Pneumatic/Superelastic | Pneumatic/Superelastic | Pneumatic/Superelastic | Pneumatic/Superelastic | Pneumatic/Superelastic | Pneumatic/Superelastic | |
| | 3.2 | Tyre size, front | 6.00 R 9 | 6.00 R 9 | 6.00 R 9 | 6.00 R 9 | 6.00 R 9 | 6.00 R 9 | 6.00 R 9 | |
| | 3.3 | Tyre size, rear | 7.00 R 12 | 7.00 R 12 | 7.00 R 12 | 7.00 R 12 | 7.00 R 12 | 7.00 R 12 | 7.00 R 12 | |
| | 3.5 | Wheels number front/rear (x = driven) | 2/2x | 2/2x | 2/2x | 2/2x | 2/2x | 2/2x | 2/2x | |
| | 3.6 | Track width, front | b10 (mm) | 1102/1120 | 1102/1120 | 1102/1120 | 1102/1120 | 1102/1120 | 1102/1120 | |
| | 3.7 | Track width, rear | b11 (mm) | 1060 | 1060 | 1060 | 1060 | 1060 | 1060 | |
| | Dimensions | 4.7 | Height of overhead guard (cabin) | h6 (mm) | 1950 | 1950 | 1950 | 1950 | 1950 | 1950 |
| 4.8 | | Height of seat/stand-on platform | h7 (mm) | 907 | 907 | 907 | 907 | 907 | 907 | |
| 4.12 | | Towing coupling height | h10 (mm) | 270, 330, 380, 440* | 270, 330, 380, 440* | 270, 330, 380, 440* | 345* | 345* | 345* | |
| 4.13 | | Platform height, unladen | h11 (mm) | 1060 | 1060 | 1060 | 1060 | 1060 | 1060 | |
| 4.16 | | Loading platform, length | l3 (mm) | 1396 | 1396 | 1540 | 1895 | 1895 | 2145 | |
| 4.17 | | Rear overhang (Cabin/rear) | l5.1 l5 (mm) | 1055/624 | 1055/624 | 1055/624 | 1055/707 | 1055/707 | 1055/707 | |
| 4.18 | | Loading platform, width | b9 (mm) | 1056 - 1176 | 1056 - 1176 | 1056 - 1176 | 1056 - 1176 | 1056 - 1176 | 1056 - 1176 | |
| 4.19 | | Overall length | l1 (mm) | 3086 | 3086 | 3230 | 3668 | 3668 | 3918 | |
| 4.21 | | Overall width | b1 (mm) | 1310 | 1310 | 1310 | 1310 | 1310 | 1310 | |
| 4.32 | | Ground clearance, centre of wheelbase (front) | m2 (mm) | 150 | 150 | 150 | 150 | 150 | 150 | |
| 4.34 | | Aisle width (without safety distance) | Ast (mm) | 4500 | 4500 | 4696 | 5230 | 5230 | 5603 | |
| 4.35 | | Turning radius (front/rear) | Waf / War (mm) | 2737/1563 | 2737/1563 | 2884/1612 | 3280/1750 | 3280/1750 | 3539/1864 | |
| 4.36 | | Minimum pivoting point distance | b13 (mm) | 881 | 881 | 931 | 1071 | 1071 | 1187 | |
| Performance | 5.1 | Travel speed, with/without load | (km/h) | 15/22 | 17/23 | 18/25 | 20/25 | 20/25 | 20/25 | |
| | 5.5 | Tractive force, with/without load | (N) | 2400 | 3600 | 5000 | 5000 | - | - | |
| | 5.6 | Maximum tractive force, with/without load | (N) | 12000 | 15000 | 18000 | 18000 | 20000 | 21500 | |
| | 5.7 | Climbing ability, with/without load | (%) | See towing diagram | See towing diagram | See towing diagram | See towing diagram | See towing diagram | See towing diagram | |
| | 5.8 | Maximum climbing ability, with/without load | (%) | See towing diagram | See towing diagram | See towing diagram | See towing diagram | See towing diagram | See towing diagram | |
| | 5.10 | Service brake | | Electric/hydraulic | Electric/hydraulic | Electric/hydraulic | Electric/hydraulic | Electric/hydraulic | Electric/hydraulic | |
| E-Motor | 6.1 | Drive motor, 60 minute rating | (kW) | 2 × 10.5 KW | 2 × 10.5 KW | 2 × 10.5 KW | 2 × 10.5 KW | 2 × 10.5 KW | 2 × 10.5 KW | |
| | 6.3 | Battery according to DIN 43531/35/36 A, B, C, no | | 43536 A | 43536 A | 43536 A | 43536 A | 43536 A | 43536 A | |
| | 6.4 | Battery voltage | U (V) | 80 | 80 | 80 | 80 | 80 | 80 | |
| | 6.4.1 | Battery capacity | K5 (Ah) | 420/465 | 420/465 | 500/620 | 700/930 | 700/930 | 1240 | |
| | 6.5 | Battery weight | (kg) | 1238 | 1238 | 1210/1558 | 1863/2178 | 1863/2178 | 2785 | |
| | 6.6 | Power consumption according to EN16796 | (kWh/h) | 5.82 | 6.79 | 7.76 | 8.73 | 9.69 | 10.66 | |
| Others | 8.4 | Noise level at operator's ear | (dB(A)) | 62 | 62 | 62 | 62 | 62 | 62 | |
| | 8.5 | Towing coupling, design/ type, DIN | | Rockinger 244 | Rockinger 244 | Rockinger 244 | Typ HSM 2140 | Typ HSM 2140 | Typ HSM 2140 | |

* with Ro 244

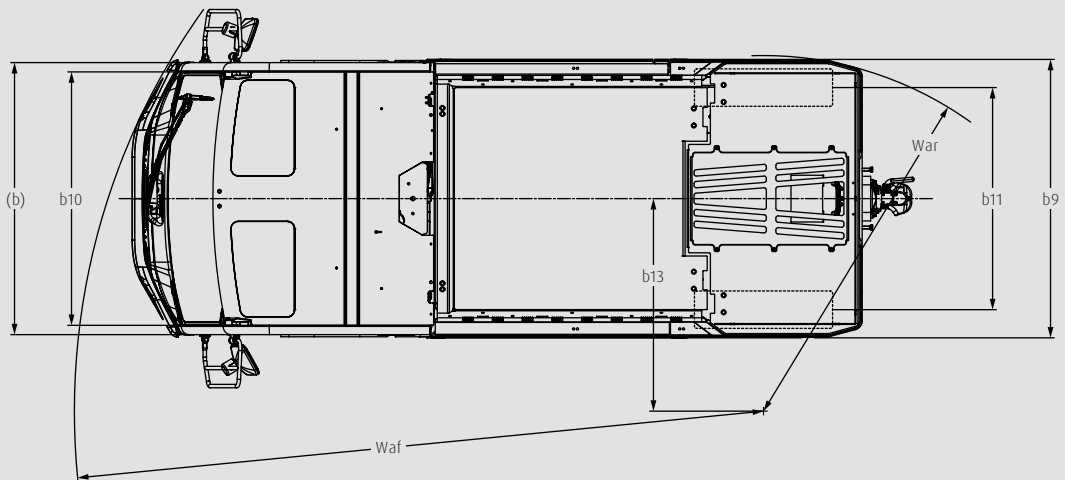
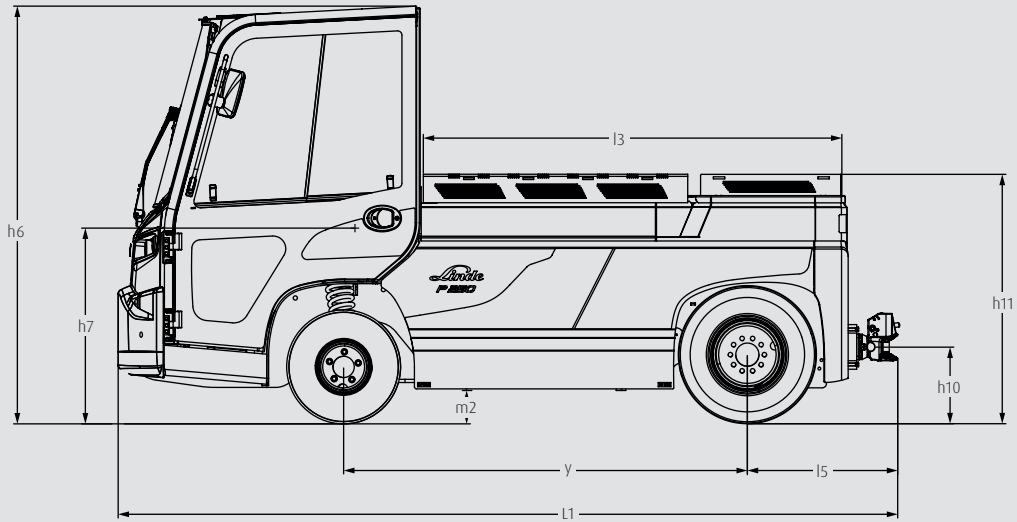
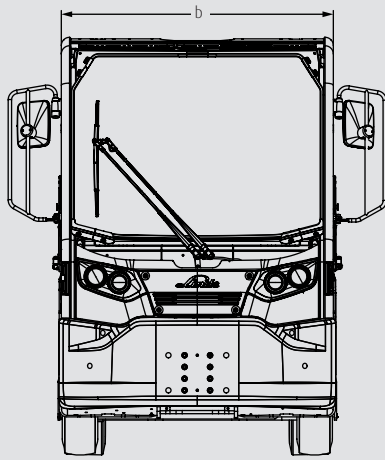
* with Ro 244

* with Ro 244

* with HSM 2140

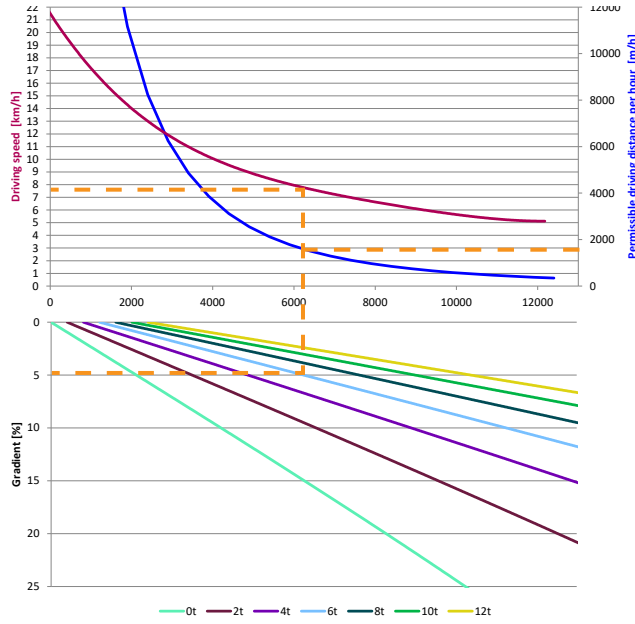
* with HSM 2140

* with HSM 2140



TOW DIAGRAMS

P120

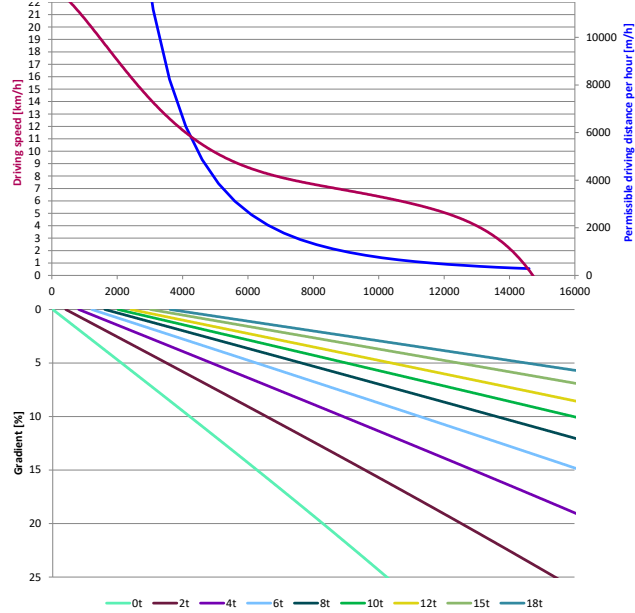


— Permissible driving distance per hour (m/h)
 — Driving speed (km/h)

The example shown illustrates a tractor transporting 6 t operating on a ramp of 5 % maximum travelling speed reachable 8 km/h to a maximum travel distance per hour of 1.8 km/h (1800 m^{*})

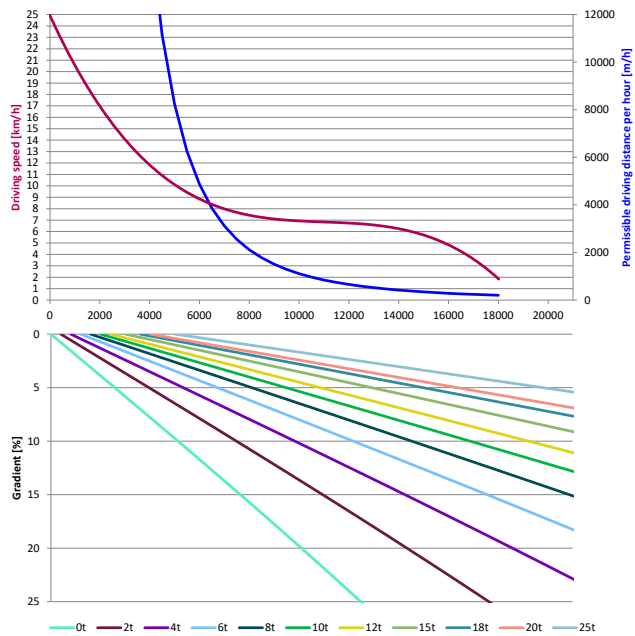
* depends on created heat while in application

P180



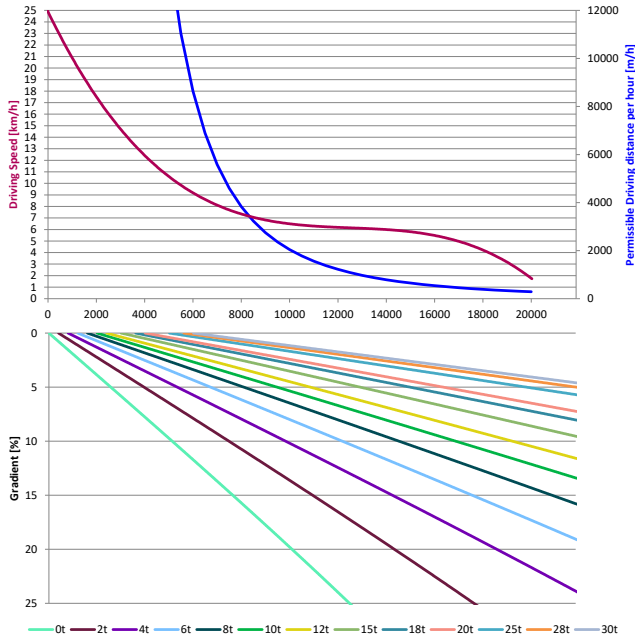
— Permissible driving distance per hour (m/h)
 — Driving speed (km/h)

P250



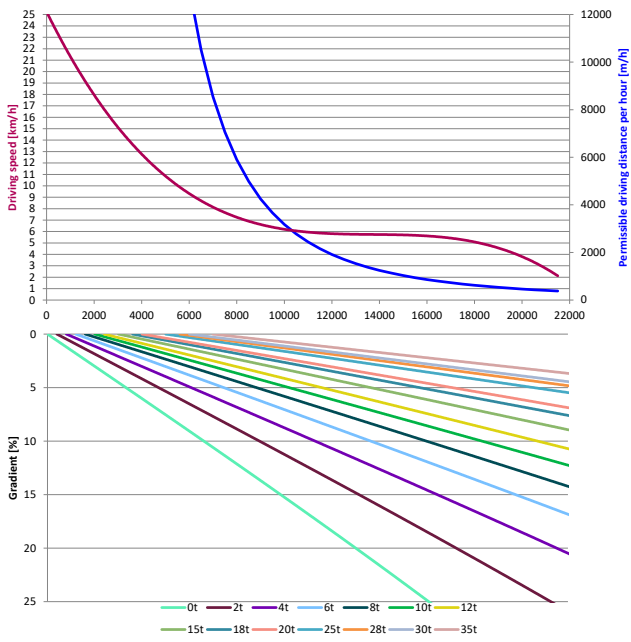
— Permissible driving distance per hour (m/h)
 — Driving speed (km/h)

P300



— Permissible driving distance per hour (m/h)
 — Driving speed (km/h)

P350



— Permissible driving distance per hour (m/h)
 — Driving speed (km/h)

Unbraked trailer load recommendation

| | P120 SWB | P180 SWB | P250 LWB | P350 VLWB |
|---|----------|----------|----------|-----------|
| Maximum recommended unbraked trailer load | 4 to | 7 to | 10 to | 12 to |

CHARACTERISTICS



Operator and passenger seat belt

Safety

- Automatic parking brake for preventing the vehicle from rolling unintentionally on slopes
- Constant speed even on ramps for consistent performance
- Robust cabin and windshield bars for protecting the driver
- Electrically monitored cabin doors for safe driving
- Door locked sensor to make sure operators drive safely inside the cabin
- Linde curve assist reducing speed when cornering



Door net storage compartment

Ergonomics

- Spacious damped cabin for increased driving comfort
- Optimum all-round visibility for maximum maneuverability in confined spaces
- Storage compartments and nets for sufficient storage space in everyday work
- Optional sliding doors for easy access and less damage
- Easy adjustable steering column
- Curved front screen ensures excellent maneuverability



Lateral battery change

Handling

- High handling performance thanks to powerful electric motors and constant speed on steep ramps
- Smooth, precise steering for easy maneuverability in tight spaces
- Small turning angle for all the models
- Inching control as standard
- Front and rear towing attachment



Coil spring and maintenance free braking system

Service

- Easily accessible service components for efficient maintenance and repair
- Maintenance-free multi-disc brake for maximum vehicle availability
- Lateral or vertical battery change for fast replacement (only lateral for P350)
- Easily replaceable windshield for fast reparations

Subject to modification in the interest of progress. Illustrations and technical details could include options and not binding for actual constructions. All dimensions subject to usual tolerances.