

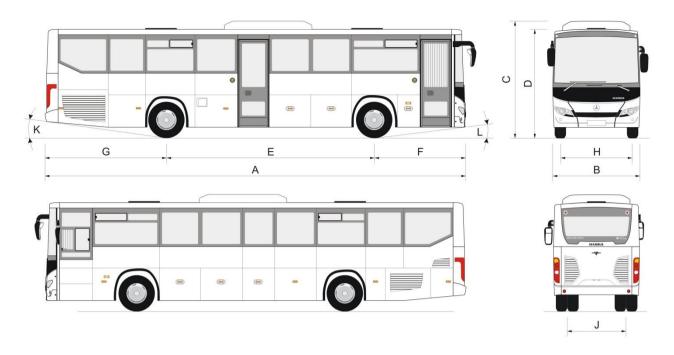
TECHNICAL SPECIFICATION

IK 3 | 2 MB

INTERCITY BUS

Technical specification – IK 312MB





DIMENSIONS

| • A – Length | 12300 mm |
|------------------------------|----------|
| • B – Width | 2535 mm |
| • C - Height (including A/C) | 3380 mm |
| • D – Height | 3140 mm |
| • E – Wheelbase | 6100 mm |
| • F - Front overhang | 2655 mm |
| • G - Rear overhang | 3545 mm |
| • H - Front track | 2089 mm |
| • J – Rear track | 1803 mm |
| Interior height | 2050 mm |
| • Floor height | 1025 mm |
| • 1st step height | 320 mm |
| Aproach angle | 7° |
| Departure angle | 7° |

AXLE LOADS & WEIGHTS

| • Front axle load (maximum permissible) | 7100 kg |
|---|----------|
| • Rear axle load (maximum permissible) | 11500 kg |
| Gross vehicle weight (GVW) | 18600 kg |

SEATING ARRANGEMENT

- This seating arrangement is an example
- Other variants are possible



Seats: up to 55 +1+1





| Manufacturer | Mercedes-Benz |
|--------------|---------------------------|
| • Type | IBC 2-RF (OC 500 RF 1930) |

ENGINE

| Manufacturer | Daimler AG / Mercedes-Benz |
|------------------------------|--|
| • Type | OM 936 |
| • Emission standard | EURO 6 |
| • Fuel type | diesel |
| Construction | 4-stroke engine |
| wi | th turbocharger and intercooler |
| Mounting position | rear, vertical engine |
| • Cylinders (number, arrange | ement)6, In-line |
| • Displacement (Swept volum | ne)7698 cm³ (7,7 litres) |
| • Cylinder bore x Piston str | oke 110 x 135 mm |
| Compression ratio | 17,0 : 1 |
| Rated power | 220 kW (299 hp) / 2200 min ⁻¹ |
| Maximum torque | 1200 Nm / 1200-1600 min-1 |
| • Fuel injection system | Common Rail |
| • Exhaust gas treatment | SCR system |
| | with AdBlue |



| Manufacturer | Mercedes-Benz |
|-----------------|----------------------------------|
| • Type | GO 190-6 |
| | manual |
| | with integrated retarder (VOITH) |
| Number of gears | 6 + 1(R) |

REAR AXLE

| Manufacturer | Mercedes-Benz |
|--------------|---------------|
| • Type | RO 440 |
| • Ratio | 3,154 |

FRONT AXLE

| Manufacturer | ZF |
|--------------|------------------------|
| • Type | RL-75E |
| | independent suspension |

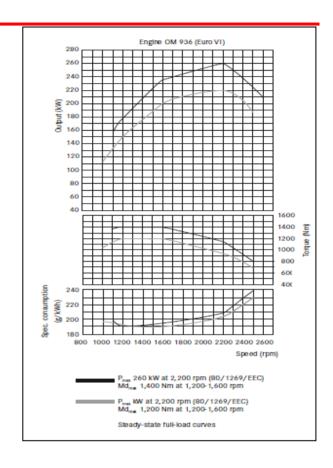
WHEELS & TYRES

| • Rims | 8,25 x 22,5" |
|---------------|-----------------|
| | 295/80 R22,5" |
| | stainless steel |
| • Spare wheel | |

FUEL TANK

| • Capacity45 | ou liters |
|---|-----------|
| Made of stainless materials | |
| • Filler cap at right-ha | and side |

• Fuel consumption display on dashboard



STEERING

- Hydraulic power-assisted steering
- ZF 8098 Servocom
- Adjustable steering column with pneumatic lock

SUSPENSION

- ECAS (Electronically Controlled Air Suspension)
- \bullet ENR (<code>Electronic Level Control</code>), independent of door status
- Automatic controlled body lifting
- Front axle
 - air springs (air bellows).....x2 - shock absorbersx2
 - anti-roll bar
- Rear axle
 - air springs (air bellows).....x4
 shock absorbersx4
 - anti-roll bar



BRAKING SYSTEM

IKARBUS

- Disk brakes
- Braking system.....dual-circuit, pneumatic
- \bullet EBS ($Electro\mbox{-}pneumatic\mbox{ }Braking\mbox{ }System$), with integrated:
 - ABS (Anti-lock Braking System)
- Auxiliary braking......DBI (Retarder System Integration)
 - retarder
 - hand and foot operated
- Bus stop brake
- Parking brake
- Air dryersingle chamber with replaceable element and pressure regulator
- Oil seperator
- Compressor......2-cylinder

ELECTRICAL EQUIPMENT

SAFETY & ADVANCED EQUIPMENT

- AEBS (Advanced/Autonomous Emergency Braking System)
- BAS (Brake Assist System)
- ESP (Electronic Stability Program) including:
 - -ASR (Acceleration Slip Regulation/Anti-Slip Regulation)
- LDWS (Lane Departure Warning System)
- Cruise control (Tempomat)

HEATING - VENTILATION - AIR CONDITION

HEATING:

- Passenger compartment
 - convectors
 - roof heating (via A/C)
- Driver's compartment
 - frontbox:
 - heater mounted under driver's control desk (front pult) which also serves for demisting/defrosting the windscreen
- Autonomous heater, pre-start heating of engine

VENTILATION:

- Natural
 - roof hatches
 - slide-windows
- Forced
 - roof air conditioner
 - frontbox

AIR CONDITION:

- Passenger compartment
 - roof air conditioner
- Driver's compartment
 - frontbox



| • Dashboardin | accordance with VDV Standard |
|--|---------------------------------|
| • Battery | 2 x 200 Ah / 12 V |
| | 3 x 150 A |
| Starter | 5,5 kW |
| Tachograph | digital (DTCO) |
| Safety switch | in accordance with ECE R36 |
| Water cooling with level sen | isor, buzzer and optic signal |
| Engine protection with buzz | er and optic signal for too low |
| oil pressure and too high ter | nperature |
| Headlights | halogen |
| • Front fog lights | halogen |
| Rear fog lights | halogen |
| Reversing lights | halogen |
| Stop lights | halogen |
| • End-outline lamps (front and | d rear)halogen |
| Interior lighting | LED |
| | |



INTERIOR

Passenger seats luxurious, ergonomically shaped, upholstered comfortable and appropriate for all traveling distances typesingle and double in accordance with seat arrangement

- additional accessories..... optionally, by choice

• Driver's seat

- with air suspension and automatic weight adjustment

 $- \ height \ and \ tilt..... \ adjustable$

- headrest and backrestadjustable

• Roller blinds for

– windscreen

- driver's window

• Luggage racks.....above seats, open

• Luggage compartment...... 5 m³

Mirrors

– exterior..... rear view mirrors, heated

- interiorfor monitoring passenger compartment and door areas





DOORS

| Door arangement | 1-1-0 |
|------------------------------------|-------|
| - single-panel plug door (outward) | x2 |
| | |

• Power operated by driver (pneumatically, with electronic control)

• Emergency door control valvesinside/outside



GLAZING

| Windscreen | laminated, 1-piece |
|--------------|---------------------------------|
| Side windows | single-glazed, tempered, bonded |
| Door glasses | tempered. bonded |

BODY STRUCTURE

- Combined steel frame tubular structure (frame/chassis)
- All cavities are protected from inside and outside
- Side panels in wheel arches area and lower side cavity made of stainless steel
- Wheel arches......stainless steel
 Side panels.....aluminium
- Roof and sidewalls with thermal insulation

ADDITIONAL EQUIPMENT (ON REQUEST)

| Route and destination displays (monochrome or color) | : |
|--|---|
|--|---|

| - Front | route number + destination |
|--------------|----------------------------|
| – Right side | route number + destination |
| – Rear | route number |
| – Interior | route number + destination |

 Fire suppression system for engine compartment, including:

- -automatic fire detection system for engine compartment monitoring
- -automatic fire extinguishing system within the engine compartment
- Audio-video system:
 - -Audio-system + microphone
 - -LCD monitor 19".....x2
- CCTV
- Automatic oil level control (replenishment) system
- Central lubrication system