



DIGITAL

Headlight testing device MLD 9000 | with inclinometer

Beissbarth MLD 9000 with inclinometer - Digital headlight measurement and adjustment

Article number: 1 692 104 355

Description

German Road Traffic Type-Approval Law StVZO § 29 general-inspection headlight-test directive: MLD 9000 can be calibrated according to the legal requirements

- TÜV certificate in line with StVZO § 50 - TPN 2023-05-2208486: MLD 9000 is TÜV-certified by prototype technical release examination in accordance with the directives for testing headlight adjustment/test equipment (German Road Traffic Type-Approval Law StVZO §50 paragraph 5).
- Two-dimensional spirit level for horizontal leveling of the optical box
- Levelable 3-Wheel base system fitting for all common rail systems

Digital headlight testing with MLD 9000: intelligent, fast and precise

- The MLD 9000 (1692104355) supports leveling accuracy through software correction via a built-in inclinometer
- Precise green alignment lasers for accurate alignment with the vehicle. Green laser diodes are particularly well visible to the human eye because the eye has its maximum spectral sensitivity in the green range
- Cross laser function for precise positioning in the center of the headlight
- For all light sources (Xenon, Bi-Xenon, LED, Bi-LED, Halogen) and glare-free high-beam systems (Dynamic Light Assist - DLA, Matrix1, HD-Matrix2, ILS Ford)
- All types of vehicles (passenger cars, trucks, motorcycles)
- All types of headlights (main headlights, fog lamps, auxiliary lamps)
- High-resolution (5 megapixel) CMOS camera for real-time digital image processing
- Measurement results in real time optimized with live images
- Comparison between measured and limit values and unambiguous red/green evaluation
- Saving and archiving of the measured values in database
- Reporting of the measurement result possible via PDF
- Time-saving quick measurement functionality
- Precise definition of the cut-off line without disrupting blue fringe
- Workshop-proof touch-screen display (7")
- Continuously swiveling display for a variety of applications (such as the MOT for testing or in the workshop for adjustment) and for adapting to the local lighting conditions
- Intuitive and simple user guidance
- Visual and acoustic signals support the measurement procedure
- Independent operation thanks to battery
- Measured values: Horizontal and vertical deviation (pitch angle), intensity, roll angle, yaw angle
- Ports: LAN, USB, RS232
- Live firmware update possible

Highest mechanical precision and long-life cycle (suitable for future legal requirements):

- A new developed torsion-free and specially hardened aluminum column
- Easy to use, robust sliding system for precise height adjustment and comfortable working
- Robust and durable counter weight system with toothed belt
- Determination of the headlight installation height via adjustable, specially made aluminum scale or use of the optional height measuring sensor
- Optional: fine adjustment of the column with 1 angle minute accuracy

Networking: Test results via WLAN with quick and aptly arranged results on the PC

- Save measurement printouts in a network folder
- Mirror software on a PC
- Integration with Bosch Connected Repair (fees apply for activation)
- ASA-ready

Certificate: CE, TÜV, EMC, FCC, FDA

Please note: vehicle-specific light distribution patterns such as Ford Matrix, Skoda Matrix, or Skoda Kink need to be activated separately.

Technical Data

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| Weight | 42 kg |
| Operating temperature | 5 - 45 °C |
| Electrical connection | 100 - 240 V 50 - 60 Hz |
| Battery voltage (DC) | 12 V |
| Height of light center | 240 - 1500 mm |
| Measuring range lowest stand/highest stand | 800 - -800 mm |
| Light intensity | 0 - 150000 cd |
| Illumination | (1m) 0 - 150000 / (25m) 0 - 240 lx |
| Storage temperature | -25 - 45 °C |
| Version | - digital |
| Packaging length | 1900 mm |
| Packaging width | 700 mm |
| Packaging height | 600 mm |
| Gross weight | 62 kg |
| Measuring range low beam left/right | 1000 - -1000 mm |
| Measuring range high beam left/right | 1000 - -1000 mm |
| Relative humidity storage | 20 - 80 % |
| Relative humidity, use | 30 - 60 % |
| Radiant power alignment laser | ≤ 2 mW |
| Operating voltage alignment laser | 3 - 5 V (DC) |
| Laser class alignment laser | 2 |
| Projection alignment laser | 130° x 0,4 mrad |
| Laser diode alignment laser | 520 +/- 5 nm |
| Laser class cross laser | 2 |
| Projection cross laser | 90° x 0,4 mrad |
| Laser diode cross laser | 635 nm |
| Radiant power cross laser | 5 mW |
| Operating voltage cross laser | 3 - 5 V (DC) |
| Integrated inclinometer | - Yes |

Accessories

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|---------------|---|
| 1 692 105 080 | Rail kit 3 m |
| 1 692 105 112 | Extension kit for rail kit 1.5 m |
| 1 692 105 201 | Cover for MLD 9000 |
| 1 692 105 252 | Alignment kit for alignment on the vehicle center line Ford |

requirement | for MLD 9000

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|---------------|--|
| 1 690 381 124 | P-Assist laser module for symmetry alignment |
| 1 692 105 278 | Height-messuring sensor for MLD 9000 |
| 1 692 105 281 | CoRe Function for MLD 9000 |
| 1 692 105 282 | CoRe Function + Wifi stick for MLD 9000 |