



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

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

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

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
1 692 105 202	Yaw angle fine adjustment MLD 9000