NEXT.assembly

x-light

The flexible and modular headlamp measuring and setting system

Operator-independent headlamp measuring and setting systems using image processing ensure highly accurate and reproducible test and setting results.

Dürr develops and markets headlamp setting systems tailored to the high demands in the end-of-line area of automotive plants under the name x-light.

The camera-based measuring system is equipped with measuring algorithms for testing and adjusting low beam, high beam and fog light according to ECE and SAE. It can be extended at any time with product- and customer-specific measuring procedures.

CUSTOMER BENEFITS

- Operator-independent analysis and automated documentation of the measuring values
- Measurement algorithms for the latest headlamp technologies
- Extensive self-diagnosis options and error detection
- Setting tool ensures process-reliable adjustment
- Measuring very wide headlamps
- Considering chassis and car body parameters determined in the wheel alignment stand

Technical data

x-light

LIGHT MEASURING DEVICE x-light

- GigE camera technology with automated exposure control
- Storage of headlamp setting sequences for "off-line" analysis
- Nanoparticle-coated projection surface in the light measuring device for optimized analysis
- Extra wide Fresnel lens for measuring wide LED headlamp systems, special design for headlamp measurement
- Quick-change coupling for replacing the complete light measuring device
- Extra-large window below a rubberized storage surface
- Graved projection plate for check that can be folded down from the outside

Close-up of the light measuring device

OPTIONAL FEATURES

- Implementation of camera technology for Near Infrared (NIR)
- Integration of power LED module for radar settings with auxiliary mirror

SETTING TOOLS

The new generation of setting tools Smart Ergo Drive sets new standards in terms of ergonomics and weight.
The optionally available semi-automatic tools were developed by Dürr specifically for headlamp and sensor adjustment according to torque and speed characteristics.

In addition to a rubberized grip area for perfect handling and LED lighting to illuminate the bolting point, the tool is equipped with an angle of rotation encoder, with the help of which high-precision settings can be made on request with pre-set angle of rotation.
As a unique feature on the market, a built-in sensor system can be used to check whether forces are applied to the alignment bolt during the adjustment process. In this way, the quality of the setting can be reliably guaranteed.

The headlamps are automatically adjusted to the nominal value by means of a decentralized control unit after the tools have been mounted.

TECHNICAL DATA	
x-light	
Measurement accuracy	< 0,1 % (3,43') Constraint: The point of emergence of the headlamp is in front of the lens centre
Smart Ergo Drive	
Lightning	LED
Push-Down sensor	Process-safe storage of setting values
Position feedback	Digital encoder
Weight	590 g, without bits
Length	270 mm, without bits
Housing	Glass fibre reinforced plastic housing with rubberized grip area

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