



NEXT.assembly

## x-light s

### The smart aiming system for headlamps

Operator independent headlamp aiming by image processing is part of today's standard testing and setting technology in vehicle production.

x-light s is a low-cost headlamp setting device that, on the one hand, has the same image processing performance with Dürr's experience as at the end of line in the automotive plant and, on the other hand, is free from the usual level of automation.

The optimum cost/performance ratio of x-light s is particularly suitable for increasing the setting quality of headlamps in: CKD plants, the production of trucks, busses and tractors, the audit and rework sectors of vehicle production and it is suited to fulfil the responsibility for documentation.

#### CUSTOMER BENEFITS



Camera technology, test and measurement algorithms are identical to x-light

Online measurement of the pictures

Headlamp adjustment correction enabled by driving axle geometry values

Quality measurement algorithms and light intensity analysis optionally available

Customized measurement and testing algorithms optionally available

Low maintenance and easy to service product design

# Technical data

## x-light s

### FLEXIBILITY

The high flexibility starts with the set-up and the installation of x-light s. The installation site must only be equipped with a 230 V socket. Thus, a later relocation of the system is only a matter of a few hours. A comfortable and non-clamping height adjustment and a balancing weight integrated in the Z column ensure the ergonomic operation of the light measuring device of the x-light s.

The large height adjustment range of light measuring device (250 mm - 1,200 mm) ensures that fog lamps, main and high-beam headlamps can be measured and adjusted for a wide variety of vehicle types. The large light-collecting lens is ideal for measuring current and future LED lighting systems.

When the system is used in combination with a Dürr wheel alignment stand the high Dürr standard is also applied. In this case, vehicle information and setting release are sent to the headlamp aiming system via a defined interface.

After calibration on the master gauge of the wheel alignment stand by means of a laser pointer, the rear axle correction angle which has been detected by the wheel aligner can be taken into account for the measuring values of the x-light s.

### QUALITÄT

Dürr has assigned the qualities of the camera-based measurement technology to x-light s, a technology well-proven over many years. For that purpose, different, proven measuring algorithms are available which take an online measurement of the main headlights, the fog lamps and the high-beam headlamps according to the legal regulations.

Algorithms for quality assessment and for checking the light intensity of headlamps are optionally available. Customer-specific measurement and testing algorithms can also be stored in the software as an option.

### TECHNICAL DATA

|   |   |   |
|---|---|---|
| Light measuring device                  | Transfer distance (middle of lens):   | 250 mm to 1,200 mm  |
|   | Recommended distance headlamp to light measuring device:  | 300 mm to 700 mm  |
|   | Special aluminium extrusion profiles with nano-coated projection surface  |   |
| Measuring accuracy                      | < 0,1% (3,43')  | Peripheral condition: Light emission point at the headlamp is positioned in front of the lens center in a range of $\pm 20$ mm in Y- and Z- direction |
| Lens                                    | Lens type:  | Aspheric positive lens, fresnel lens, optimized for headlamp light  |
|   | WxHxD (visible area):   | 401 mm x 201 mm x 1.9 mm  |
| Guide column and light measuring device | HxLxW:  | 2,400 mm x 950 mm x 790 mm  |
| Dimensions of computer station          | LxWxH:  | 645 mm x 610 mm x 1,700 mm  |
| Camera                                  | Digital camera with CMOS color chip, resolution 1920 x 1200 pixels, Automated exposure control via Global Shutter |   |