

the sensor people



## **46C SERIES**

Photoelectric sensors and light scanners with maximum function reserve

powerreserve.

# MORE RANGE MEETS HIGHER FUNCTION RES

The 46C series shines with many improved functions and helps to significantly improve the reliability and efficiency of your system.

## powerreserve.



## A FAMILY WITH THE BEST GENES

With their high function reserves and the large operating ranges of up to 150 m, these sensors are ideally suited for use in conveyor systems, in the wood-processing industry and in special-purpose machinery manufacture. The highly visible, bright **bright**vision<sup>®</sup> light spot, an even more readable status LED and the reliable detection of stretch-wrapped objects reduce life-cycle costs in many applications of conveyor and storage systems.

# **ERVE!**

## AT LEAST 80% MORE FUNCTION RESERVE SPEAKS FOR ITSELF

Even the predecessor series, the 46B and 96, set new standards. With the newly developed 46C series, we set a new benchmark in terms of reliability and technology. Operating ranges of up to 150 m, further-optimized ambient light suppression  $A^2LS$  and auto performance optimization for reliable detection even with soiling and reflections offer up to 80% more function reserve than the predecessor models, which directly results in a more stable system function and less downtime.

### power reserve.

- Automatic performance optimization for high function reserve
- High operating ranges up to 150 m
- Large adjustment range through multiturn potentiometer
- Very fine adjustment through mechanical adaptation for scanners with background suppression
- Temperature range from -40 °C to +60 °C

### think modular.

- Particularly extensive series with devices of all operating principles and special models
- Standard M12 connector or cable connection
- Large variety of fastening options and corner-hole fastening compatibility with the 46B series

Large *bright*vision<sup>®</sup> light spot

Status LED visible from all sides



easyhandling.

- Immediately ready for use in standard applications, simple adaptation via potentiometer for more demanding uses
- Simple and fast configuration on the device by means of teach-in button or potentiometer
- Bright *bright*vision<sup>®</sup> light spot for fast and simple alignment
- Indicator LEDs visible from all sides for simple diagnostics and full device control
- High immunity against external light interference through optimized A<sup>2</sup>LS for reliable differentiation between object and background
- High degree of protection IP 67 or IP 69K for rough environmental conditions

Potentiometer or teach button



# THROUGHBEAM SENSORS



For maximum functional reliability and operating range L 46C

Light source	Red light LED/infrared LED
Operating range limit	150 m
Switching frequency	500 Hz

- Switching state display visible over the entire range
- Robust behavior thanks to optimized beam geometry
- Simple alignment and check of the alignment through SAT 5 alignment aid



### For efficient machine safeguarding SLS 46C

Light source	Red light LED/infrared LED
Operating range limit	48/80m
Switching frequency	250 Hz

- AOPD type 2 and type 4 (with switching module) protective sensor
- Switching state display visible over the entire range
- Robust behavior thanks to optimized beam geometry
- Light Beam Safety Device already complies with EN ISO 13849-1
- Simple alignment and check of the alignment through SAT 5 alignment aid

Gap monitoring on high-bay storage device



Foot-space safeguarding on side-tracking shelf



# **REFLECTION LIGHT SCANNERS AND LIGHT-BAND SENSORS**



Reliable function with small, misadjusted reflectors and heavy soiling PRK 46C/PRK 46C.D

Light source	Red-light LED
Operating range limit	0.01-30m/0.1-20m
Switching frequency	500 Hz

- Maximum function reserve
- Reliable object detection with small, mis-adjusted reflectors, large range or heavy soiling
- Optimized for use on roller conveyors
- Reliable function even with stretch-wrapped pallets



Flexible and variable detection with light-band optics RK 46C VarOS

Light source	Red-light LED
Operating range limit	0.4-5.2 m
Switching frequency	250 Hz

- Different object heights and different pallet shapes and sizes
- Curved or angled object edges
- Protruding or projecting elements on the object
- Objects with cutouts or holes or irregular objects, e.g., meshed containers, damaged pallets (standard sensor delivers multiple signals)

#### Detection of stretch-wrapped objects



#### Detection of pallets of different size and condition



## DIFFUSE REFLECTION LIGHT SCANNER



For reliable detection of dark and glossy objects HT 46C

Light source	Red light LED/infrared LED
Operating range limit	0-3m
Adjustment range	120-2.5 m

- Very high function reserve
- Very small black/white error
- Optimized for glossy, dark objects and large operating range
- Reliable object detection even in "dusty" environments

Object detection on stretch packaging machine





**OIO**-Link

For other demanding applications, our well-known HRT 46B light scanners are the right solution

Details on the function and the specifications are available online at www.leuze.com/en/br46b

- Reproducible scanning range adjustment via teach-in in different teach variants
- Variants with 2 individual switching points
- Scanning range adjustment from control via IO-Link interface
- Comprehensive diagnostic options via IO-Link interface
- Remote teach via cable
- Reference scanner with permanently set scanning range
- Laser devices with narrow beam available A

# OUR PROMISE TO YOU

## SMARTER PRODUCT USABILITY

With regard to our product developments, we systematically place emphasis on the especially good usability of all devices. To this end, simple mounting and alignment are taken into account – just as the uncomplicated integrability of the sensors in existing fieldbus systems and easy configuration, e.g. via a web browser, are.

## SMARTER APPLICATION KNOW-HOW

Whoever can do it all, can do nothing right. Which is why we concentrate on selected target sectors and applications. There, we are specialists and know all aspects inside out. For this purpose, we optimize our solutions and offer a comprehensive product range that makes it possible for our customers to obtain the absolute best solutions from a single source.

## SMARTER CUSTOMER SERVICE

The technical and personal closeness to our customers, and a skilled, straightforward handling of queries and problems, are among our strengths – and will remain so. Consequently, we will continue to expand our service offerings and, indeed, also forge ahead in new directions to persistently redefine the utmost in customer service. Whether on the phone, in the Internet or on-site with our customers – regardless of when and where the expertise of the sensor people is needed at any time.

## Info at: www.leuze.com

SMART SENSOR BUSINESS

Katrin Rieker, Sales Methods, Processes, Tools

### Switching Sensors Optical Sensors Ultrasonic Sensors Fiber Optic Sensors Inductive Switches Forked Sensors Light Curtains Special Sensors

Measuring Sensors Distance Sensors Sensors for Positioning 3D Sensors Light Curtains Forked Sensors

Products for Safety at Work Optoelectronic Safety Sensors Safe Locking Devices, Switches and Proximity Sensors Safe Control Components Machine Safety Services

Identification Bar Code Identification 2D-Code Identification RF Identification

Data Transmission/ Control Components MA Modular Connection Units Data Transmission Safe Control Components

Industrial Image Processing Light-Section Sensors Smart Camera

Leuze electronic GmbH + Co. KG In der Braike 1 73277 Owen/Germany Phone +49 7021 573-0 Fax +49 7021 573-199 info@leuze.de www.leuze.com