



SMART
SENSOR
BUSINESS

RK 46C VarOS

Retro-reflective photoelectric sensor with powerful light-band

*teach*me.



THIS LIGHT-BAND CAN DETECT EVERYTHING

The RK 46C.DXL VarOS variable object sensor also reliably detects objects with cutouts and holes or with an irregular shape.

*teach*me.

ONE SENSOR FOR ALL
APPLICATIONS
FROM 7 TO 14 MM

The 45 to 60 mm wide light-band detects angled or curved shapes and objects with cutouts or holes without difficulty. Where previously an expensive light barrier or several sensors were required, the new RK 46C.DXL VarOS with its plastic housing provides a quick solution at an unbeatable price – that is SMARTER PRODUCT USABILITY like only Leuze electronic can offer.



TRIED-AND-TESTED SENSOR EXPERTISE WITH INNOVATIVE LIGHT-BAND OPTICS

The sensor technology has been tried and tested in thousands of applications — the innovative light-band with clearly visible *bright*vision red light and adjustable sensitivity levels with automatic **ALC** readjustment also enhances the benefits considerably.

The special lens allows objects to be detected reliably across the entire width of the light-band at two easy-to-set sensitivities of 7 mm and 14 mm. This ensures that this industrial retro-reflective photoelectric sensor can reliably detect any objects (even objects with cutouts or holes) in the light-band, e.g. for height / protrusion / area and pallet detection in material handling systems, warehouses, etc.

*easy*handling.

- **Active ambient light suppression A²LS**
enables the simultaneous use of one reflector for two sensors, thereby reducing mounting and material requirements
- **Holes and mounting devices compatible**
with standard series 46 sensors on mounting brackets or rods
- **Use of standard reflectors**
40 × 60 mm or 100 × 100 mm
- **Perfect all-round LED visibility**
providing indication of status
- **Visible *bright*vision light-band**
for easy alignment
- **Only one sensor for 45 to 60 mm detection**
The new wide light-band replaces multiple individual sensors or light barriers

*power*reserve.

- **Sensitivity readjustment ALC**
using a tracking function for greater availability ensures a constant performance reserve in the case of soiling
- **Versatile use**
through 2 preselectable sensitivity levels and *easytune* fine tuning
- **Simple adaptation**
of the sensitivity / resolution through 2-level *teach*me function by pressing a button on the rear of the housing

*think*modular.

- **Comprehensive range of accessories**
Various mounting devices and brackets, M12 connection cables
- **Connection variants**
M12 plug, 200 mm cable stub with M12 or molded cable

WE DON'T MISS A THING ...

Asymmetric, non-cubic, irregular or variable in height—
this sensor can detect them all.

ALWAYS THE RIGHT CHOICE IF FLEXIBLE DETECTION IS REQUIRED

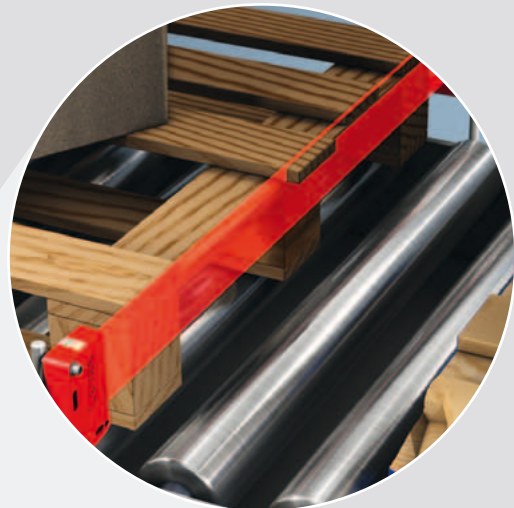
The new light-band allows reliable object detection with just one sensor despite very different and possibly also constantly changing object shapes and sizes.

The new RK 46C.DXL VarOS reliably detects for example:

- Different object heights and different pallet shapes and sizes
- Curved or angled object edges
- Protruding or projecting elements on the object
- Damaged pallets and other objects (e.g. if a board is missing)
- Objects with cutouts or holes (standard sensor delivers multiple signals)



Detection of pallets of different size and condition



Depending on the taught-in sensitivity, the sensor responds to all objects or object parts that appear inside the 45 to 60 mm wide light-band. It doesn't matter where the light-band is broken by the object.

ANY SENSOR CAN DETECT CLEARLY DEFINED EDGES — VARIABLE OBJECTS REQUIRE SKILL

The detection of variable objects is the premier league of detection tasks. The new sensors also master these tasks reliably even if they have to operate in hostile ambient conditions and are exposed to vibration.

Simple area detection is used e.g. for:

- Machine, sheet metal or plastic parts
- Pallet detection
- Boards for furniture, work surfaces and laminate flooring
- Shrink-wrapped objects with variable exterior shapes



Reliable detection of curved objects



Detection of structured boards and flat objects

Top performance in all areas.



Type	Range	Resolution	Reflector
RK 46C	up to 4 m	14 mm	TKS 100 × 100 mm
RK 46C	up to 2 m	7 mm	TKS 40 × 60 mm

Technical Data	RK 46C.DXL VarOS
Temperature range	-40 to +60 °C
Switching frequency	250 Hz
Degree of protection	IP 67 and IP 69K
Dimensions	44 × 21 × 75 mm
Switching output	PNP (light / dark switching)
Repeatability	1 mm



The light-band also makes the RK 46C.DXL VarOS ideal as a muting sensor

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.

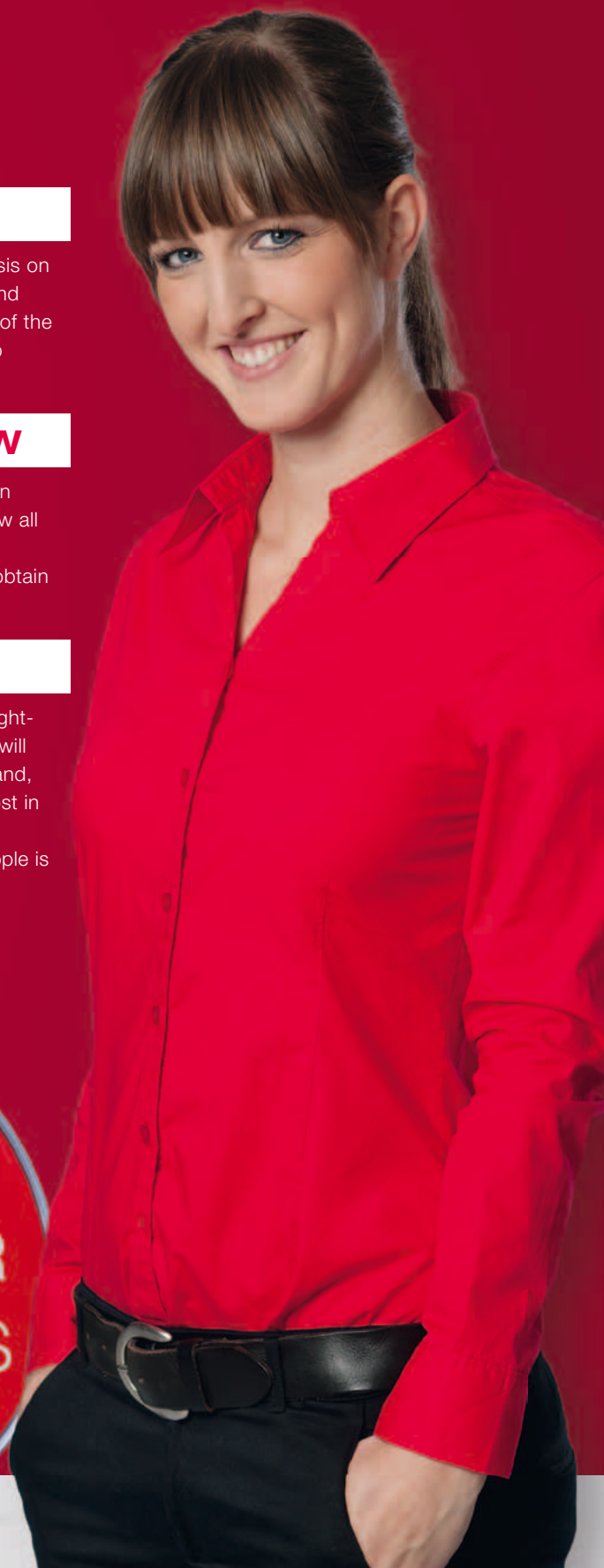
SMARTER **CUSTOMER SERVICE**

The technical and personal closeness to our customers, and a skilled, straight-forward 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



Katrin Rieker,
Employee in the
Customer Care Center



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 Interfacing Units
Data Transmission
Safe Control Components

Industrial Image Processing

Light-Section Sensors
Smart Camera

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