Leuze electronic

the sensor people

SMART
SENSOR
BUSINESS

3C SERIES

Compact photoelectric sensors and diffuse sensors

powerreserve.

www.leuze.com

ПРОМЭЛЕКТРОНИКА / sales@prom-elec.com

SENSOR SOLUTIONS FOR ALMOST ANY APPLICATION

The 3C series offers a range of unique features and the largest selection of functions that any device currently available on the market in this performance segment has to offer.

*power*reserve.

COMPACT, ROBUST, VERSATILE AND USER-FRIENDLY

In addition to large operating ranges and increased function reserves, the 3C series scores with simple handling and fast commissioning. Thus, the devices stand for reliable object detection even in dusty environments or with high alignment tolerances.

Technologies such as A²LS (Active Ambient Light Suppression), simple one-point teaching and the optional IO-Link interface characterize this series.

THE ALL-ROUNDERS AMONG THE SENSORS

Thanks to the diverse range of models of the compact 3C series, these sensors are used in a wide range of applications, such as in mounting/handling technology as well as in the transport of very small containers, in printing technology or in packaging systems.

*power*reserve.

- Maximum function reserves
- High extraneous light protection through A^2LS
- Energy savings through low power consumption
- Degree of protection IP 67 and IP 69K for demanding environmental conditions

*easy*handling.

- 360° visibility of the indicator diodes
- Teaching devices, also with line teaching
- Protection against manipulation by means of a lockable button
- Significantly reduced squint angle simplifies mounting without alignment
- All sensors optionally with IO-Link

*think*modular.

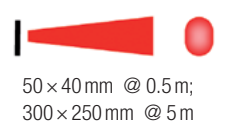
- Models with M3 threaded sleeves
- Slotted hole for flexible mounting
- Diffuse sensors with background suppression and special light-spot profiles (rectangular, small)
- Diffuse sensors with background suppression
- Sensors with autocollimation principle
- Photoelectric sensors and diffuse sensors with laser light and collimated light beam propagation
- Models with PNP and NPN outputs
- Connection options include M8 connector, 2,000 mm cable and cable with M8 or M12 connector

Simple, one-point teaching

Integrated metal mounting sleeve

Robust M8 metal thread

RETRO-REFLECTIVE PHOTOELECTRIC SENSORS



The retro-reflective photoelectric sensor for reliable detection

IO-Link

PRK 3C

	PRK 3C
Operating range limit	0 – 10 m
Switching frequency	1,500 Hz
Functions	Standard

- High function reserve
- Reliable detection with standard light spot

Detection of containers

The single-lenses device for exact positioning applications

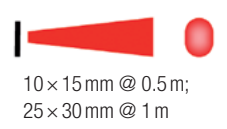
IO-Link

PRK 3C.A / PRK 3CL.A

	PRK 3C.A	PRK 3CL.A
Operating range limit	0 – 5 m	0 – 3 m
Switching frequency	1,500 Hz	3,000 Hz
Functions	Autocollimation	Dynamic teach

- Specially suited for positioning with high accuracy
- Object detection through slits, holes and gaps
- Reliable detection in fast processes
- Reliable detection of objects with a diameter ≥ 1 mm

Detection of tamper-evident seals



The retro-reflective photoelectric sensors for films and transparent objects

IO-Link

PRK 3C.T / TT

	PRK 3C.T / PRK 3C.TT	PRK 3C.TT
Operating range limit	0 – 3.5 m	
Switching frequency	1,500 Hz	
Functions	For bottles	Tracking

- Maximum threshold adjustability for detection of transparent objects
- High switching point stability through temperature compensation
- Automatic contamination compensation with tracking

Detection of clear glass containers

MATCHING ACCESSORIES FOR RETRO-REFLECTIVE PHOTOELECTRIC SENSORS

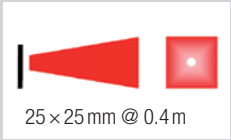
Plastic triple reflectors
TKS 20 x 40, TKS 40 x 60

Micro-triad-type reflectors for laser types MTKS 14 x 23, MTKS 20 x 30

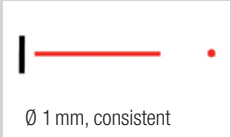
Reflective tapes
REF 20 x 20, REF 50 x 50

DIFFUSE REFLECTION SENSORS

HT 3C



HT 3CL

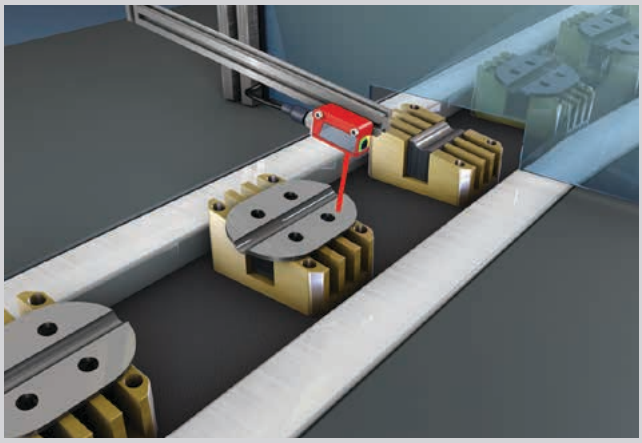


Diffuse reflection sensor with background suppression
HT 3C / HT 3CL

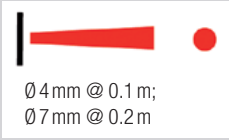
	HT 3C	HT 3CL
Operating range limit	5 – 400 mm	15 – 550 mm
Switching frequency	1,000 Hz	3,000 Hz
Functions	Standard	

- Very good black/white behavior and reliable switching
- Exact range adjustment via 8-turn potentiometer
- Also available with laser class 1 (HT 3CL)

Detection of workpiece holders



HT 3C-S



HT 3C-XL

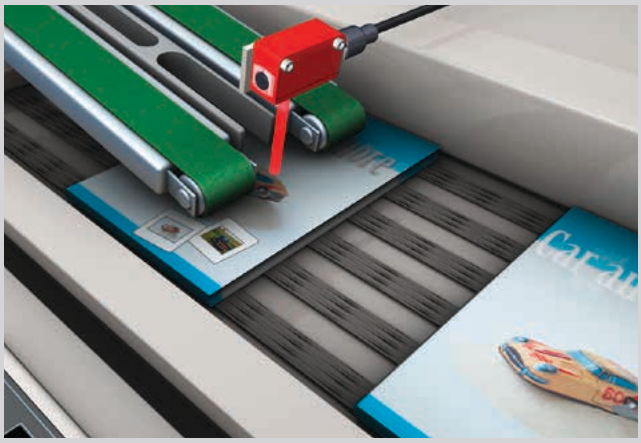
HT 3C-V

Sensor for demanding object detection
HT 3C-S/-XL/-V

	HT 3C-S	HT 3C-XL	HT 3C-V
Operating range limit	5 – 200 mm	5 – 100 mm	15 – 150 mm
Switching frequency	1,000 Hz		
Functions (light spot)	Small	Long	V-optics

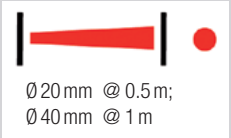
- Light spot HT 3C-S: For glossy and color structured objects
- Light spot HT 3C-XL: Detection of objects with bore holes and grooves, e.g. circuit boards
- Light spot HT 3C-V: Especially suitable for planar, reflective and high-gloss surfaces

Detection of high-gloss objects

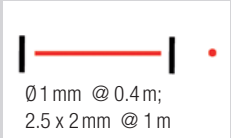


THROUGHBEAM PHOTOELECTRIC SENSORS

L 3C



L 3CL

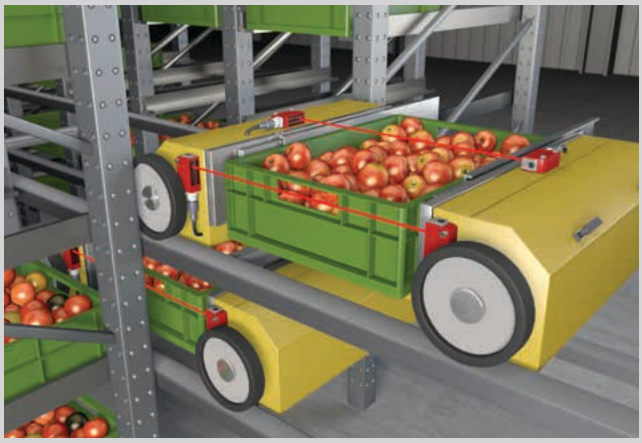


Throughbeam photoelectric sensor IO-Link
for large operating range and small objects
L 3C / L 3CL

	L 3C	L 3CL
Operating range limit	10 m	
Switching frequency	1,500 Hz	3,000 Hz
Functions	Standard	Laser

- Reliable detection with small light spot
- Activation input / warning output

Detection of small objects



MATCHING ACCESSORIES

Sensor mounting bracket
BT205M / BT3B

Sensors rod mount
BTU 200M

Sensor voltage supply
PSU

Sensor distribution box with M8-/M12 ports MD7XX

Connection and interconnection cables
K DS / K DU

Signaling column
A7 / A4

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 field bus systems and easy configuration, e.g. via a web browser, are.

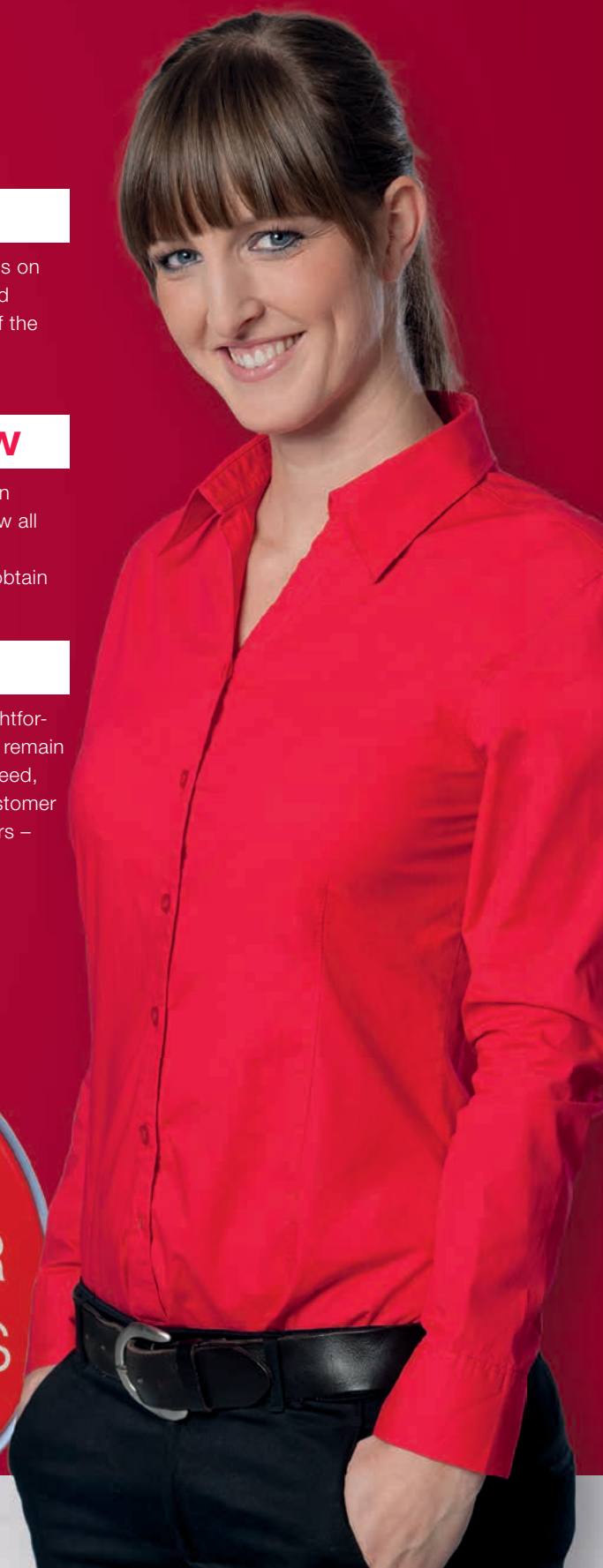
SMARTER **APPLICATION KNOW-HOW**

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 proximity 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, on 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,
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
Signaling Devices
Connection Technology and Passive Distribution Boxes

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

en 02-2017/11 50134788
Subject to modifications and errors