Leuze electronic

the sensor people

SMART
SENSOR
BUSINESS

25 SERIES

Photoelectric sensors and diffuse sensors

***power*reserve.**

www.leuze.com

ПРОМЭЛЕКТРОНИКА / sales@prom-elec.com

THE NEW SENSOR GENERATION SETS STANDARDS

The new 25 series offers a high level of functionality and flexibility for a wide range of industry sectors.

powerreserve.

COMPACT, RELIABLE FUNCTION-OPTIMIZED

With their degrees of protection IP 67 and IP 69K, the ECOLAB certification as well as the active ambient light suppression, the extremely compact sensors of the 25 series offer a very high level of flexibility and reliability for various areas of industry.

Numerous additional functions, such as the activation input and the warning output, enable the maximum of cost-efficient process reliability and system availability for your applications.

ONE SERIES – ALL OPERATING PRINCIPLES

From the throughbeam photoelectric sensor to the sensor with background suppression, the 25 series offers an extensive sensor product line that has been optimized for a wide range of applications, especially in intralogistics and packaging technology.

powerreserve.

- Not sensitive to soiling thanks to very high function reserve
- High immunity against external light interference through A²LS
- High environmental resistance: IP 67, IP 69K
- Chemical resistance tested in accordance with ECOLAB
- Large operating temperature range: –40 °C – +60 °C
- Increased availability through warning output and activation input

thinkmodular.

- Large operating ranges
- Adjustable sensitivity for high reliability
- Sensors with mechanical or electronic background suppression
- Reliable, exact object detection for positioning
- Diffuse sensors with special light spots

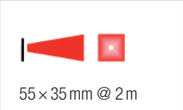
easyhandling.

- Time-saving commissioning with ***bright***vision®: Fast and simple alignment through very bright light spot
- Bright indicator diodes with all-round visibility enable complete monitoring
- Additional status display on the front side of the sensor
- Compact, robust housing with metal sleeves and M4-thread

brightvision®: Fast and simple alignment through very bright light spot

Bright indicator diodes with all-round visibility

RETRO-REFLECTIVE PHOTOELECTRIC SENSORS



Large operating range, maximum function reserve

PRK 25C

	PRK 25C
Light source	Red light LED
Operating range limit	0.05 – 12 m
Switching frequency	1,500 Hz
Response time	< 0.3 ms

- Standard retro-reflective photoelectric sensors offer high system availability under extreme environmental conditions
- Additional functions, e. g. warning, activation, for increasing the process reliability

Container detection

Fine and precise – the laser

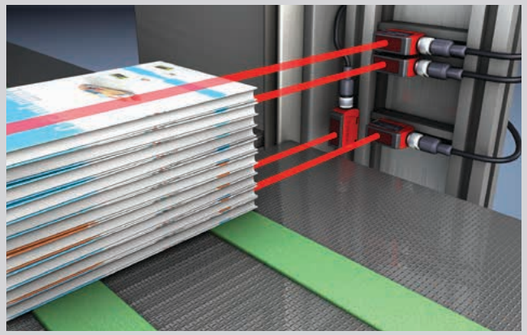
PRK 25C.L*

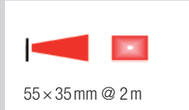
	PRK 25C.L
Light source	Red light laser
Operating range limit	0.1 – 15 m
Switching frequency	2,000 Hz
Response time	< 0.25 ms

- Powerful laser retro-reflective photoelectric sensor for small parts or gap monitoring
- Optimum beam path for counting and positioning applications
- In laser class 1 and 2

** Available from 2018*

Height verification





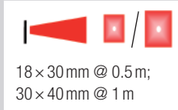
Maximum reliability with stretch-wrapped objects

PRK 25C.D

	PRK 25C.D
Light source	Red light LED
Operating range limit	0.1 – 10 m
Switching frequency	1,500 Hz
Response time	< 0.3 ms

- Various options for adapting to the respective application by means of potentiometer
- Intelligent retro-reflective photoelectric sensor for the detection of reflective and shrink-wrapped objects

Detection of stretch-wrapped packages



Detection of highly transparent objects

PRK 25C.A

	PRK 25C.A
Light source	Red light LED
Operating range limit	0.1 – 6 m
Switching frequency	1,500 Hz
Response time	< 0.3 ms

- As single lens model for highly accurate positioning
- Reliable sensor for the detection of clear glass and PET bottles as well as highly transparent films
- Various options for adapting to the respective application by means of potentiometer

Detection of PET and glass bottles

DIFFUSE REFLECTION SENSORS WITH BACKGROUND SUPPRESSION

HT 25C

Ø 10 mm @ 150 mm;
15 x 15 mm @ 400 mm

HT 25C.S

Ø 5 mm @ 150 mm;
20 x 15 mm @ 400 mm

1 × 5 mm @ collimated

Reliable detection of glossy or dark objects – infrared or red light
HT 25C / HT 25CI / HT 25C.S

	HT 25C	HT 25CI	HT 25C.S
Light source	Red light LED	Infrared LED	Red light LED
Operating range limit	1,000 mm		0 – 600 mm
Adjustment range	50 – 1,000 mm		50 – 600 mm
Switching frequency	1,000 Hz		1,500 Hz
Response time	< 0.5 ms		< 0.3 ms

- Universally usable diffuse sensor
- Reliable detection of objects with glossy and inconsistently structured surfaces
- Mechanical adjustment of scanning range, background suppression
- Reliable switching even in dusty environments

Wood plate detection

For very accurate positioning or small parts
HT 25C.L*

	HT 25C.L
Light source	Red light laser
Operating range limit	0 – 600 m
Adjustment range	50 – 600 mm
Switching frequency	2,000 Hz
Response time	< 0.2 ms

- In laser class 1 and 2
- Mechanical adjustment of scanning range, background suppression
- Very good black/white behavior

** Available from 2018*

Compartment fine positioning in high racks

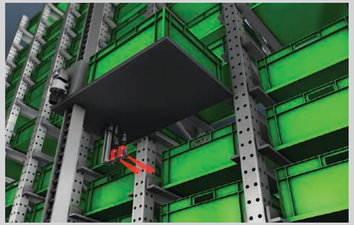
27 × 11 mm @ 150 m

Reliable detection of objects with glossy, inconsistently structured surfaces or openings
HRT 25B.XL

	HRT 25B.XL
Light source	Red light LED
Operating range limit	600 mm
Adjustment range	600 mm
Switching frequency	250 Hz
Response time	< 2 ms

- High switching frequency and short response time for detection of fast events
- Long light spot for structured surfaces
- Reliable detection of objects with openings such as meshed containers

Positioning in container warehouse



Small sensor – large operating range
HRT 25B-LR

	HRT 25B-LR
Light source	Infrared LED
Operating range limit	0.1 – 2.5 m
Switching frequency	30 – 50 Hz
Response time	< 33 ms

- Especially small black/white error with high reproducibility
- TOF sensor for the detection of objects > 50 × 50 mm with 2 switching points
- 2 teachable switching points with indicator LEDs in optical window

Compartment occupation check

THROUGHBEAM PHOTOELECTRIC SENSORS

Ø 150 mm @ 2 m

LSR 25B

55 × 35 mm @ 2 m

Protective sensor in category 2
SLSR 25B

	SLSR 25B
Light source	Red light LED
Operating range limit	0 – 22 m
Switching frequency	100 Hz
Response time	< 5 ms

- Contactless protective device in accordance with category 2 in combination with testing in accordance with EN 61496-1 and MSI-T safety relay

Foot-space safeguarding

Photoelectric sensor with large operating range
LSR 25B / LSR 25B.2

	LSR 25B	LSR 25B.2
Light source	Red light LED	Infrared LED
Operating range limit	0 – 24 m	0 – 200 m
Switching frequency	500 Hz	100 Hz
Response time	< 1 ms	< 5 ms

- Time-saving alignment through optimized light beam propagation (opening angle)
- High-intensity throughbeam photoelectric sensor (adjustable on both sides, LSR.2) for large operating range and demanding environments
- Also suitable for radiation through films

Content check with radiation through films

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.

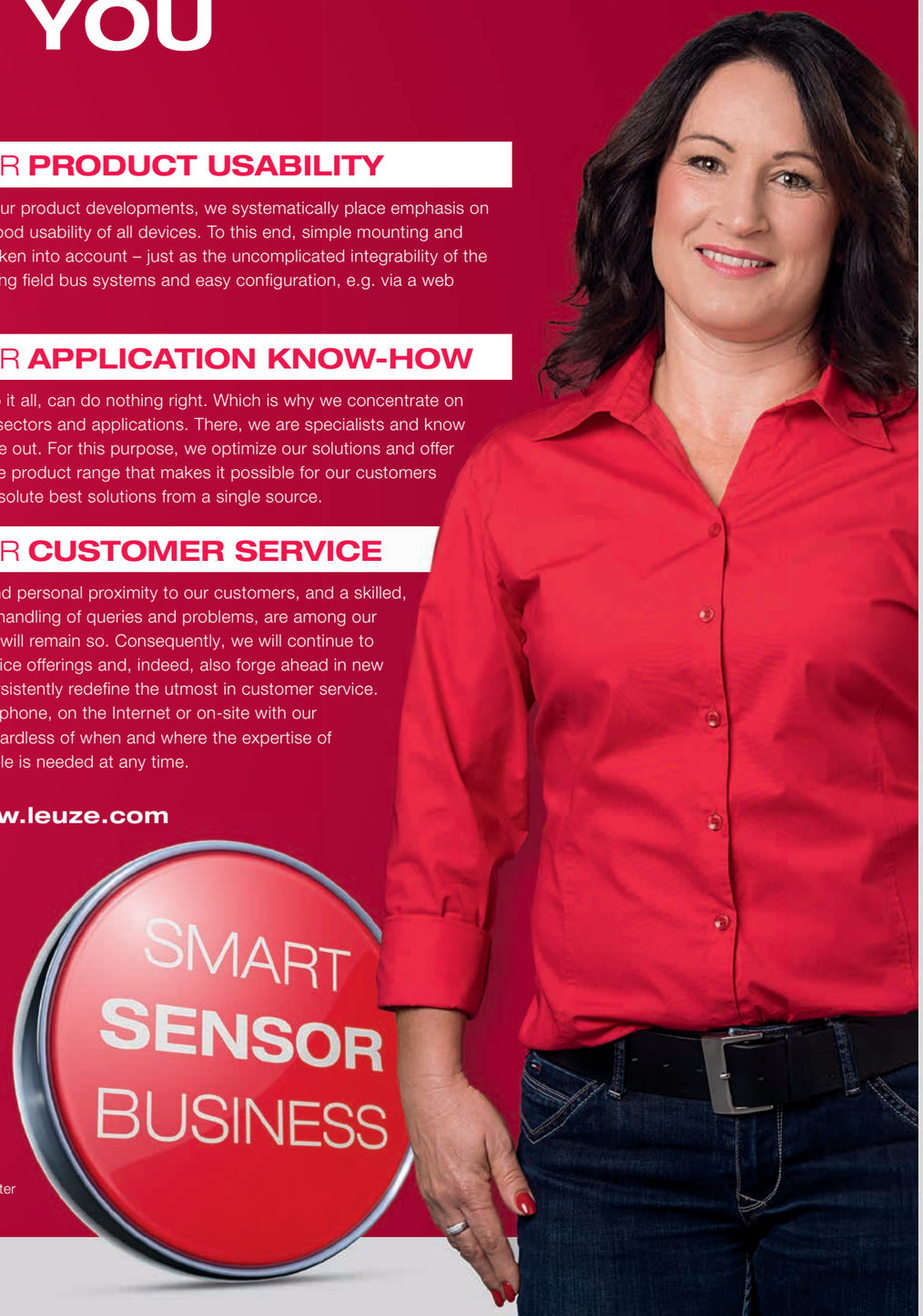
SMARTER **APPLICATION KNOW-HOW**

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**



Ivana Bechtle,
Head of
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 Connection Units
Data Transmission
Safe Control Components
Signaling Devices
Connection Technology and Passive Distribution Boxes

Industrial Image Processing
Light Section Sensors
Smart Camera

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en 01-2017/05 50135384
Subject to modifications and errors