



10 SERIES

Measuring and switching
distance sensors with
high object tolerance

*power*reserve.



TODAY, ONE MEASURES DISTANCES SMARTLY

The distance sensors of the 10 series will win you over above all with their high tolerance to different materials.

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MEASURING OR SWITCHING — THE CHOICE IS YOURS

The measuring ODS 10 and the switching HT 10 are compact, optical distance sensors that reliably detect objects and measure distances with an operating range of up to eight meters and an accuracy of +/-30 mm.



SUITABILITY FOR PRACTICAL USE HAS TOP PRIORITY HERE

The devices have high tolerance with respect to the angle of incidence as well as to color, surface structure and brightness of the reflective material. They detect precisely at all times, even in situations with changing environmental conditions or changing materials, and are easy to install in the system and to start up.

easyhandling.

- Recess for M4 bolts or nuts on both sides
- Space-saving, rotatable M12 connection, connector or pigtail
- Large control buttons
- Status LED visible from above and from front
- Configuration options via I/O-Link and Sensor Studio
- Adjustment and diagnosis via OLED display with the ODS 10
- Adjustment and diagnosis via teach buttons with the HT 10
- Compact housing: 55 x 25 x 65 mm

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- Working range from 50–8,000 mm (25 m against reflective tape)
- Reliable detection of dark, glossy and colored objects
- Laser class 1
- Robust plastic housing with glass pane
- Operating temperature -40 °C to +50 °C

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Thanks to the modularly designed structure of the product, the required functions, such as measuring or switching, electrical connection, number of I/Os as well as the data output, can be combined with one another to the customer's specifications.

The sensor, which is thereby optimally tailored to the application, combines precise detection and ease of use with an attractive price.

availabilitycontrol.

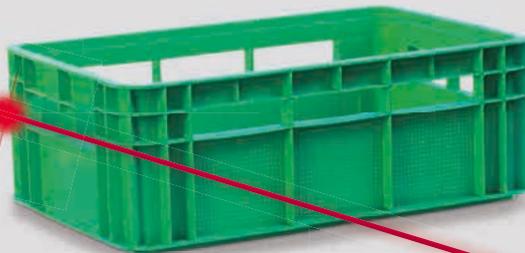
Constant monitoring of the receiving level means that the user can be alerted of an impending failure, e.g., as a result of excessive soiling or misalignment, in good time. The prefailure message appears either on the display or is available as a signal on a switching output. All relevant information is precisely depicted in the control panel.

TOLERANCE MAKES THE DIFFERENCE

With respect to surface and angle of detection, the new distance sensors are not picky and, as a result, always operate reliably.

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“Wood, metal – matt, glossy – straight, angled” Rapidly transported objects, deep black or glossy materials and objects that are not ideally aligned often result in detection problems and tedious readjustment with conventional distance sensors. The new ODS 10 and HT 10 distance sensors master these challenges without problem – and do so with constant switching point and operating ranges of up to eight meters.



- Varying surfaces and detection angles are no challenge for the new ODS 10 and HT 10.

- Even organic surfaces and objects that are not aligned exactly orthogonal are reliably detected.



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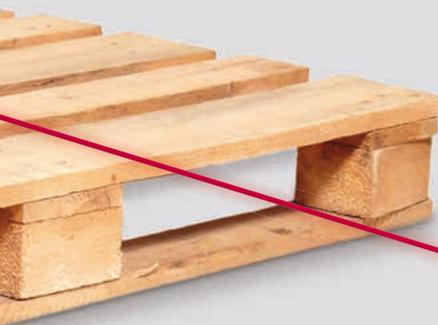
The devices are available with a rotatable M12 plug, a pigtail or a cable and thus offer the user a choice of connection type.



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Large control buttons as well as the OLED display on the ODS 10 facilitate step-by-step commissioning and diagnosis of the sensors at the press of a button. Highly visible status indicators on the top and front also make possible simple status checks even from a distance or in situations with limited installation space.

The compact housing and the minimal short range (< 50 mm) enable space-saving mounting, e.g., even in shuttles in the tightest of spaces. The recesses for M4 screws or nuts integrated in the housing save additional important millimeters during mounting.



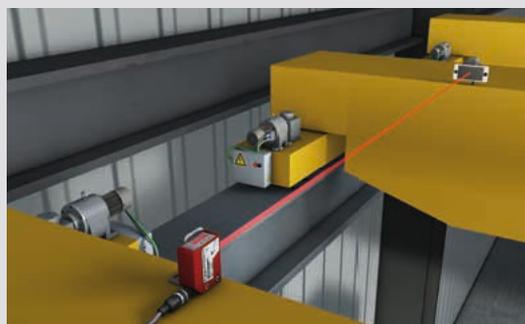
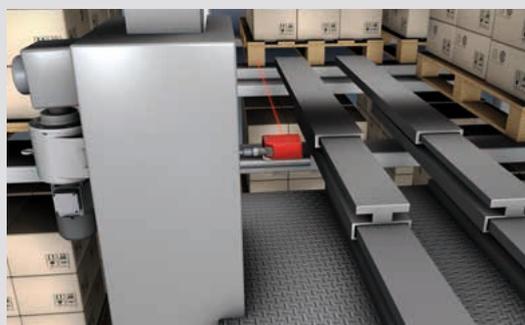
- Objects are reliably detected over operating ranges of up to eight meters.

JUST AS MUCH POWER AS YOU NEED

	ODS 10	HT 10
Electrical data		
Interface	Analog (current or voltage) I/O link	I/O link
Supply voltage	18...30 VDC	18...30 VDC
Switching outputs	Up to 2 selectable	Up to 3 selectable
Switching inputs	Up to 1 selectable	Up to 1 selectable
Optical data		
Measurement range / scanning range limit (90% diffuse reflection)	50 ... 8,000 mm	50 ... 8,000 mm
Measurement range / scanning range limit (6% diffuse reflection)	50 ... 3,500 mm	50 ... 3,500 mm
Measurement range / scanning range limit (against reflective tape)	100 ... 25,000 mm	100 ... 25,000 mm
Accuracy*	±30 mm	±30 mm
Reproducibility**	4 mm	5 mm
B/W detection thresholds	±10 mm	±10 mm
Switching frequency		40 Hz
Measurement time / response time	3.5 ... 50 ms	< 50 ms
Light spot	7 x 7 mm at 8 mm	7 x 7 mm at 8 mm
Laser class	1 (red light)	1 (red light)
Mechanical data		
Housing	65 x 55 x 25 mm	65 x 55 x 25 mm
Degree of protection	IP 67	IP 67
Environmental data		
Operating temperature	-40 ... +50 °C	-40 ... +50 °C
Indicators		
LED	2 x front / 3 x top	2 x front / 3 x top
Display	OLED display	-

*For measurement range 50–3,500 mm, luminosity coefficient 6–90%

**Same object, "Precision" operating mode, measuring value noise 1 sigma



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.

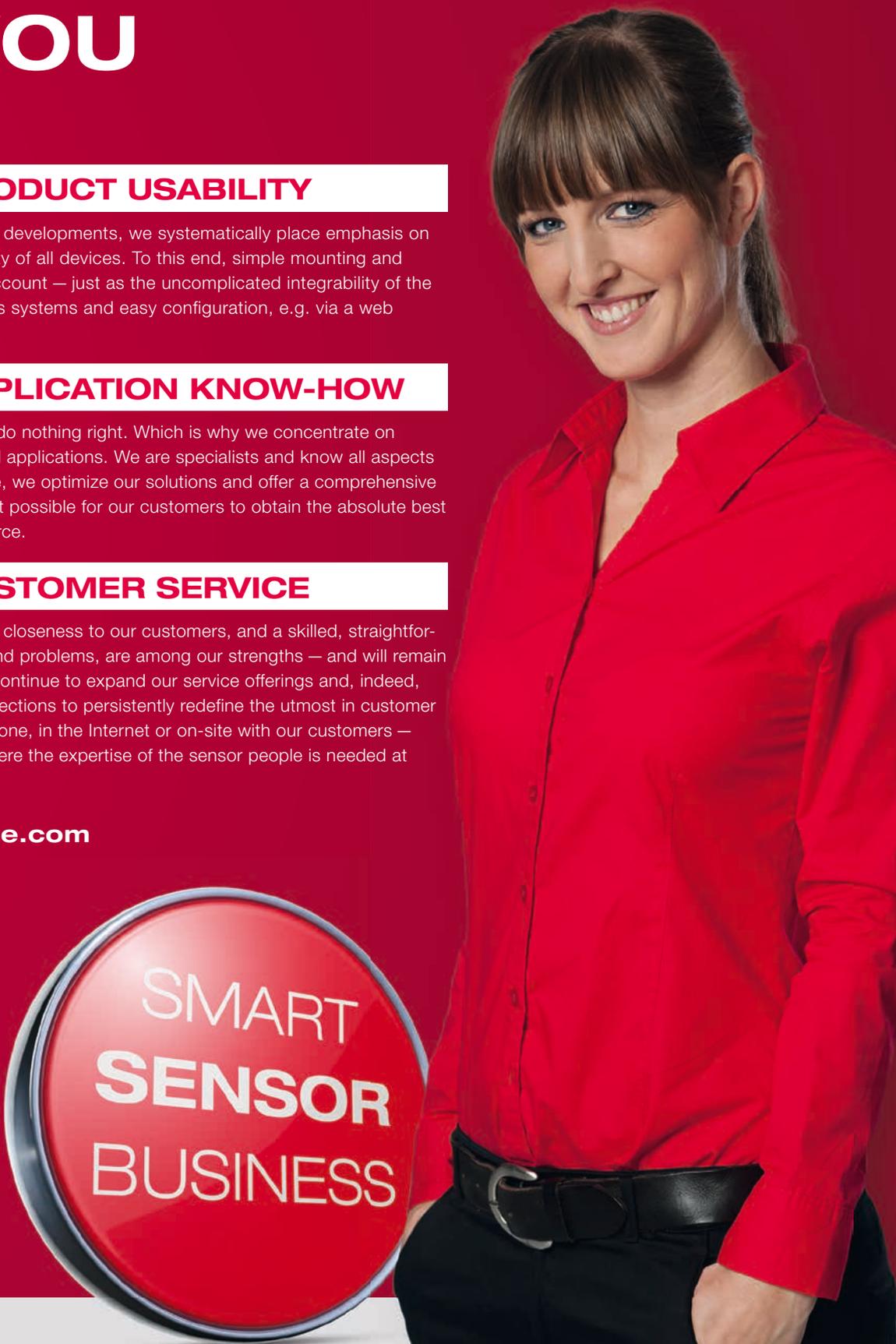
SMARTER **APPLICATION KNOW-HOW**

Whoever can do it all, can do nothing right. Which is why we concentrate on selected target sectors and applications. 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

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