BECAUSE OBJECTS COME IN ALL SHAPES AND SIZES

RETRO-REFLECTIVE AREA SENSORS
SERIES RLG28

PEPPERL+FUCHS

SENSING YOUR NEEDS

INTRODUCING A SENSOR INNOVATION

Retro-reflective area sensor with 6 light beams in a standard photoelectric sensor housing

With 6 beams, it generates a 60 mm wide detection area throughout the entire sensing range, without blind spots

Connection compatibility makes it easy to replace single-beam photoelectric sensor

60 mm

Constant detection of objects as small as 12 mm within the entire detection area

Reliable front edge detection of the object of irrespective of its shape, position and surface finish

Reflection and foil resistant, shock and vibration resistant

Use in low temperature range to -30 °C

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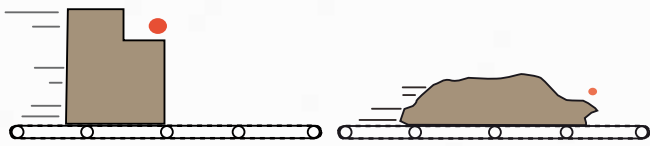# HIGH SPECIFICATION WITH A TROUBLE FREE GUARENTEE FOR DETECTION, INSTALLATION AND OPERATION

RLG28 FEATURES

- **Retro-reflective area sensor with 4 m sensing range**
- **Standard series 28 housing**
- **Uses 6 beams to generate a 60 mm wide detection area**
- **Consistently detects object sizes as small as 12 mm**
- **Switches at a min. 10% contrast difference**
- **Compensation for external influences (lens contamination, misalignment and temperature)**
- **Suitable for extremely low-temperature applications (to -30°C/-22 °F)**
- **Bright, highly visible transmitter beams guarantee easy alignment**
- **Simple teach-in**
- **Protection against mutual interference**
- **Resistent to reflection objects and foil, shock and vibration resistant**
- **Immune to extraneous light**
- **Mechanically and electrically compatible with the single beam photoelectric sensors commonly used in the market**
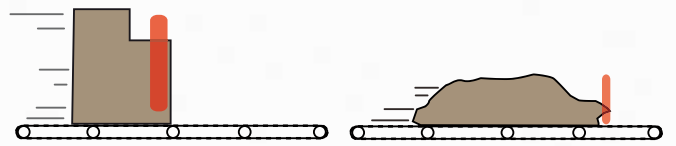
EVERY TASK IS CONSIDERED A LITTLE EASIER IN THE RIGHT LIGHT:

SINGLE BEAM SENSOR

The use of normal photoelectric sensors to detect objects whose appearance occasionally differs due to certain characteristics often causes problems. More specifically, objects with varying front edges regularly overload devices with single-point detection characteristics.
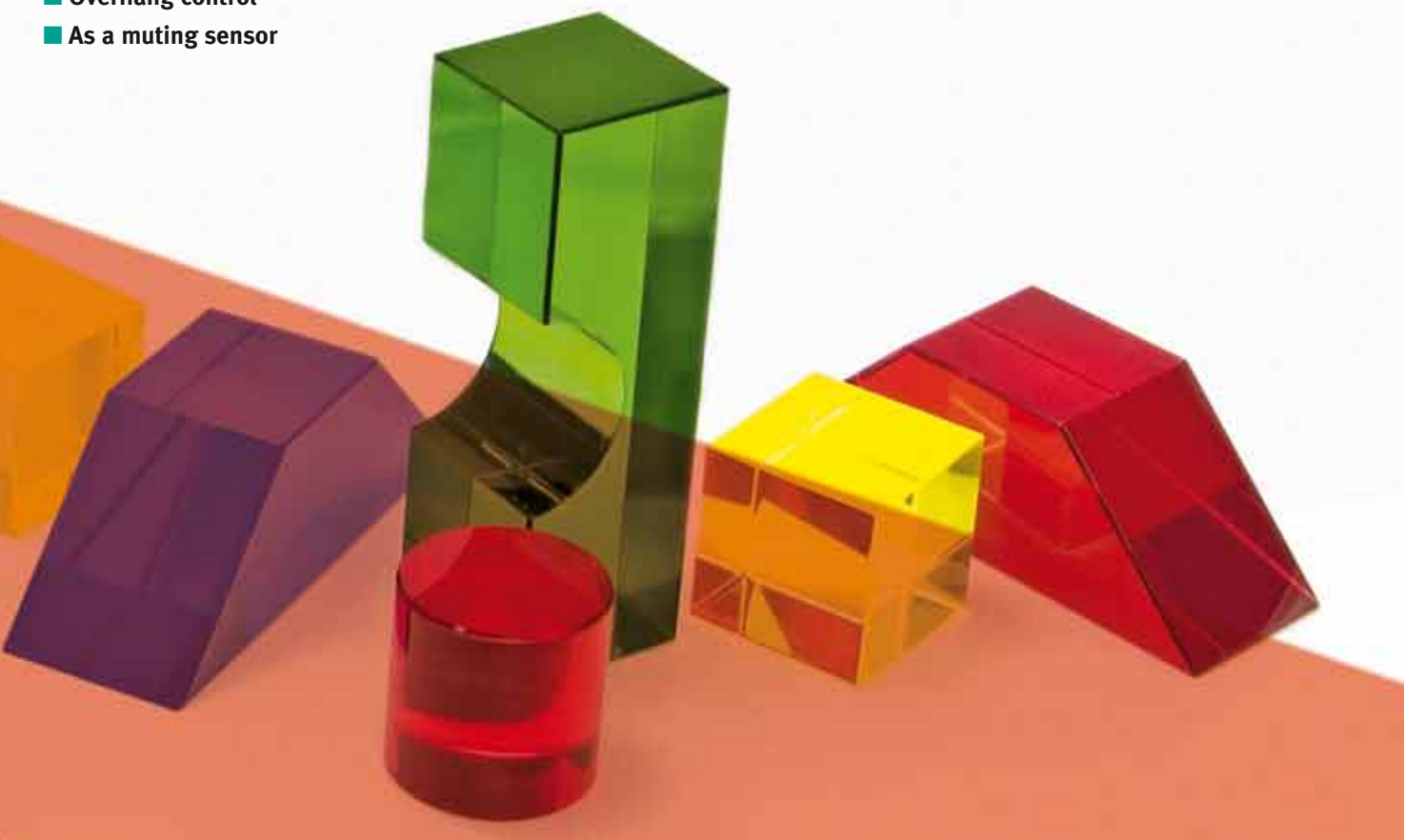
RETRO-REFLECTIVE AREA SENSOR

The 100% problem-solver with a 60 mm wide detection field for the reliable detection of objects whose front edges can vary, e.g., different types of pallets, bags, packaged objects or other items without a clearly defined shape.

APPLICATION EXAMPLES

- **Reliable front edge detection for a wide range of objects, such as pallets with different heights, varying reflectivity, as well as dirt and damage**
- **Object detection irrespective of object shape, e.g., bags or other objects without a clearly defined shape**
- **Detection of the object irrespective of the object texture, e.g., reflective, foil wrapped objects**
- **Reliable, consistent detection of falling objects, e.g., in ejection control**
- **Overhang control**
- **As a muting sensor**

A VERY EFFECTIVE OPERATING PRINCIPLE

A retro-reflective area sensor contains several transmitters and receivers in one enclosure with a reflector positioned opposite forming a continuous wide or high detection area over the relevant sensing range. When the light beams in the detection area are interrupted by an object, the switching function is triggered.

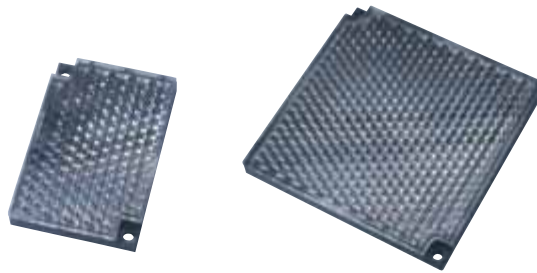| TECHNICAL DATA	
Operating range	0 m … 4 m
Detection field	60 mm across the entire sensing range
Resolution	12 mm
Reference object	Reflector H60, reflector H85-2
Light source	modulated visible red light
Number of beams	6
Light spot diameter	Approx. 220 mm at sensing range of 4 m
Light beam angle	±2,5°
Ambient light limit	5000 Lux
LED indicators	Operating indicator/Undervoltage indicator Short-circuit/Function display/Teach-In
Operating controls	Rotary switch for dark on/light on, Teach-In button
Supply voltage	12 V DC … 30 V DC
Operating mode	Light on/dark on modes, switchable
Signal output	2 antivalent push-pull outputs (4 in 1)
Switching frequency	230 Hz
Response time	1 ms
Ambient temperature	-30 °C ... 60 °C (-22 °F …140 °F)
Degree of protection	IP67
Connection	M12 connector, 4-pin or fixed cable, 300 mm, with M12 connector, 4-pin (pigtail)
Dimensions (WxHxL)	25.8 mm x 88 mm x 54.3 mm

MODEL NUMBER	DESCRIPTION
RLG28-55/40a/73c/136	4-pin M12 connector
RLG28-55/40a/115b/136	Pigtail connector (300 mm cable with 4-pin M12 quick disconnect)

SPECIFIED REFLECTORS

Reflector H60	40 mm x 60 mm
Reflector H85-2	85 mm x 85 mm

STANDARD MOUNTING BRACKETS FOR SERIES 28

OMH-05	Mounting bracket for circular or flat profiles
OMH-07	Mounting bracket for circular or flat profiles, footplate angled 90°
OMH-21	Standard mounting bracket
OMH-RLK29-HW	Mounting bracket when fitting to rear panel
OMH-K01	Mounting clamp for dovetail joint

CONNECTING CABLE

V1-G-2M-PVC	Straight M12 4-pin connecting quick disconnect with 2 m PVC cable
V1-W-2M-PVC	Angled M12 4-pin connecting quick disconnect with 2 m PVC cable
V1-G-2M-PUR	Straight M12 4-pin connecting quick disconnect with 2 m cable
V1-W-2M-PUR	Angled M12 4-pin connecting quick disconnect with 2 m cable

other lengths available on request

For more information on our Series RLG28, visit:

www.pepperl-fuchs.com/rlg28

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