



**Model Number**

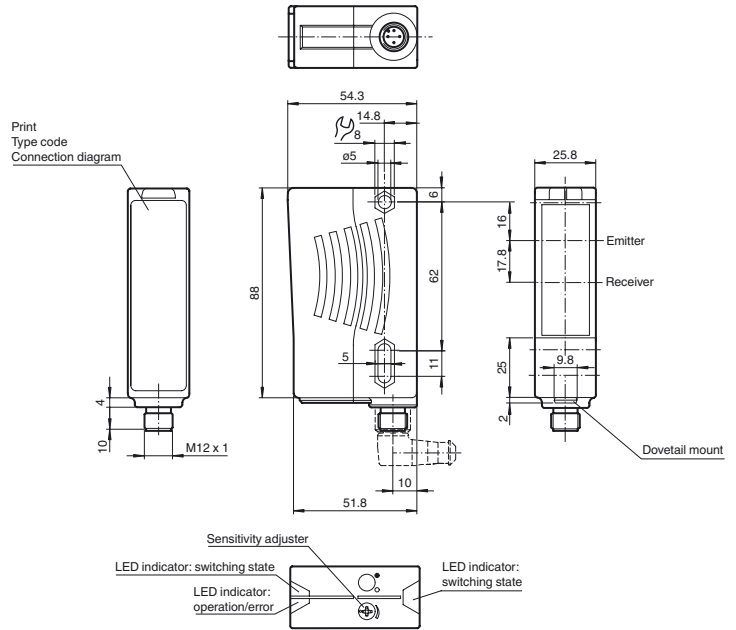
**RL28-55-AS-i/73c**

Retroreflective sensor  
with 4-pin, M12 x 1 plastic connector

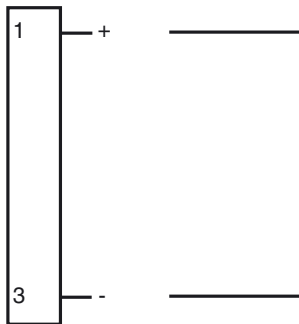
**Features**

- Sensor with AS interface according to Spec. 2.11
- Ultra bright LEDs for power on, pre fault indication and switching state
- Not sensitive to ambient light, even with switched energy saving lamps
- Waterproof, protection degree IP67
- Protection class II

**Dimensions**



**Electrical connection**



- = Light on
- = Dark on

Release date: 2011-12-21 10:25 Date of issue: 2011-12-21 12:3468\_eng.xml

Subject to modifications without notice

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**Technical data****General specifications**

Effective detection range	0 ... 17 m
Reflector distance	0.05 ... 17 m
Threshold detection range	21 m

Reference target	H85-2 reflector
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Light source	LED
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Light type	modulated visible red light , 660 nm
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Diameter of the light spot	approx. 290 mm at a distance of 17 m
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Angle of divergence	emitter 1.2° receiver 2°
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Ambient light limit	80000 Lux
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**Indicators/operating means**

Operating display	dual-LED green/red green: AS-Interface voltage, normal operation red: communication error or address 0 red/green flashing: peripherie fault
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Function display	LED yellow: 1. LED lit constantly: signal > 2 x switching point (function reserve) 2. LED flashes: signal between 1 x switching point and 2 x switching point 3. LED off: signal < switching point
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Controls	sensitivity adjustment (Adjustment to < 25% of the effective operating range)
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**Electrical specifications**

Operating voltage	$U_B$	26.5 ... 31.6 V via AS-Interface network , min. 18.5 V
No-load supply current	$I_0$	≤ 40 mA

**Input**

Test input	Data bit D2: 0: emitter on 1: emitter off
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**Output**

Output of the pre-fault indication	data bit D1: 0: stability control falls for approx. 10 s (LED yellow is flashing) or at once 0 after the 4. light beam interruption during the flash time 1: sufficient stability control
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Switching type	light/dark on switchable via AS-i bus system
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Signal output	AS-Interface
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Switching frequency	f	1000 Hz
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Response time	0.5 ms
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Timer function	Impulsed off-delay IAB, 50 ms, switchable via AS-Interface
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**Ambient conditions**

Ambient temperature	-40 ... 60 °C (-40 ... 140 °F)
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Storage temperature	-40 ... 75 °C (-40 ... 167 °F)
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**Mechanical specifications**

Protection degree	IP67
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Connection	connector M12 x 1, 4-pin
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**Material**

Housing	Plastic ABS
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Optical face	plastic
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Connector	plastic
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Mass	70 g
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**Compliance with standards and directives****Standard conformity**

Product standard	EN 60947-5-2:2007
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AS-Interface	EN 50295 AS-i Complete Spec 2.11
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**Approvals and certificates**

Protection class	II, rated insulation voltage ≤ 250 V AC with pollution degree 1-2 according to IEC 60664-1
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UL approval	cULus
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**Accessories****VBP-HH1-V3.0-KIT**

AS-Interface Handheld with accessory

**VBP-HH1**

Handheld programming device

**OMH-05**

Mounting aid for round steel ø 12 mm or sheet 1.5 mm ... 3 mm

**OMH-07**

Mounting aid for round steel ø 12 mm or sheet 1.5 mm ... 3 mm

**OMH-21**

Mounting bracket

**OMH-22**

Mounting bracket

**OMH-MLV11-K**

dove tail mounting clamp

**OMH-RLK29**

Mounting bracket

**OMH-RLK29-HW**

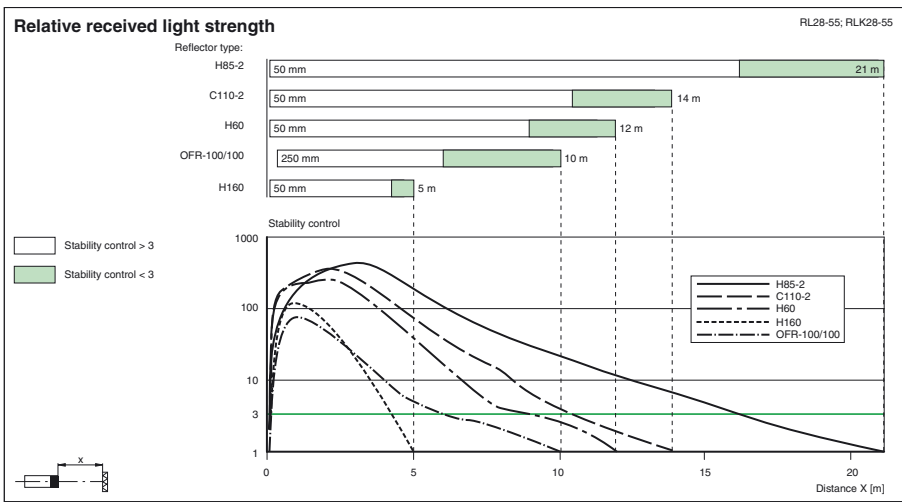
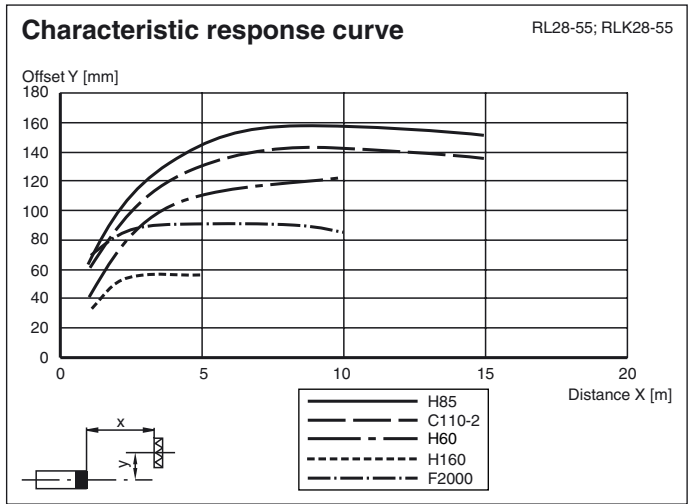
Mounting bracket for rear wall mounting

**OMH-RL28-C**

Protective cover

Other suitable accessories can be found at [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com)

**Curves/Diagrams**



**AS-Interface programming**

<F id="261">Address preset to 00, can be changed via Busmaster or programming devices

IO-Code 3  
 ID-Code A  
 ID2 1

• **Data bit**

<F id="263">**Bitfunction**

- D0 Switch output (0=light beam free, 1=light beam interrupted) applies to P1=0
- D1 Pre-fault indicator (0=alarm, 1=no alarm)
- D2 Test function (0=emitter ON, 1=emitter OFF)
- D3 not used

• **Parameter bit**

<F id="263">**Bitfunction (1/0)**

- P0 not used
- P1 Light/dark-changeover switch (0=DS, 1=HS)
- P2 Time function IAB, 50 ms (0=time ON, 1=time OFF)
- P3not used

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