

# SH/TH

## SH4/R-1KIA

Safety, M18, Receiver, M12 90°, Type 4  
PHOTOCELLS TYPE 2 AND TYPE 4

## OVERVIEW

- M18 Models 10 m (axial optic) and 5 m (radial optic) operating distance
- M30 models 60 m operating distance
- EN50100 Category 2 and Category 4 compliant
- LED indicators
- Plastic and Metal Housing
- Inputs and Outputs IEC61131-2 compliant and adaptable with any safety module
- To be used together with a Category 2 or Category 4 safety control unit to obtain a safety system EN ISO 13849 compliant



## TECHNICAL FEATURES

### Detection properties

Nominal sensing distance	10m (ExG=4)
Thermal drift of Sr	≤ 10%
Resolution	Single-beam
controlled height	Single-beam

Effective Aperture Angle	Typical $\pm 1,8^\circ$
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#### Application

Function Principle	Receiver
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Control unit to be used	SBCR03
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Description	M18 Type 4 Safety Photocell Receiver
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#### Safety parameters

Type	Type 4 safety photocell
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SIL	3
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SILCL	3
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PL	e
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MTTFd	20 years
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#### Outputs

Output type	Totem-pole
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Output Function	To be connected to SBCR03
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Response time for light/dark transition	200 $\mu$ s
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Response time for dark/light transition	400 $\mu$ s
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#### Electrical data

Operating Voltage	10 ... 30 Vdc
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No-Load supply current	$\leq 25$ mA
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Load current	$\leq 70\text{mA}$
Output voltage drop	2,5V @ 50mA
Max ripple content	$\leq 5 \text{ Vpp}$
LED indicators	Yellow (alignement)

#### Mechanical data

Dimensions	M18
Housing material	PBT
Connections	M12 plug
Active Head Material	Glass
Operating temperature	-20°C ... +55°C
Storage temperature	-40°C ... +75°C
Humidity	15% ... 95%

#### Test/Approvals

Approvals	CE, TÜV
Shocks and vibrations	10g - 16ms (according to IEC600068-2-29) 10Hz...55Hz - 1 oct/min - 0,35mm (according to 60068-2-6)
Degree of protection	IP67

#### Accessories

Supplied Accessories	2 x nuts
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## Generical Data

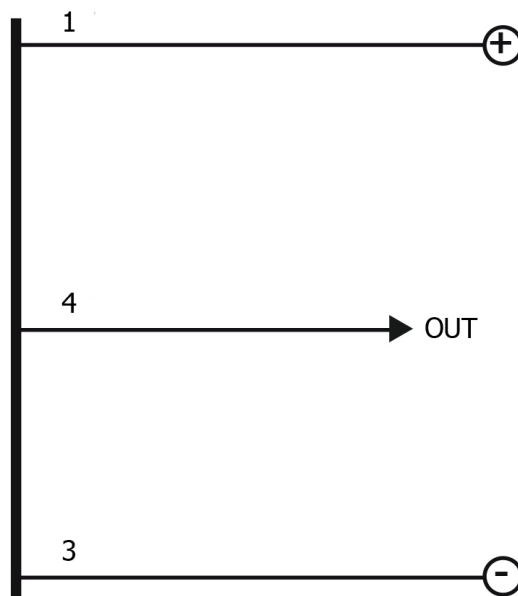
Dimensions	M18
Operating Temperature	-20...+55°C (Without freeze)
Humidity	15% ... 95%
Mechanical Protection	IP67

## UNASSIGNED

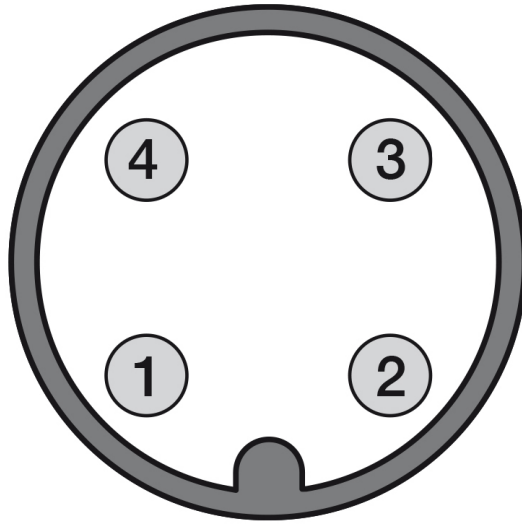
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# CONNECTIONS

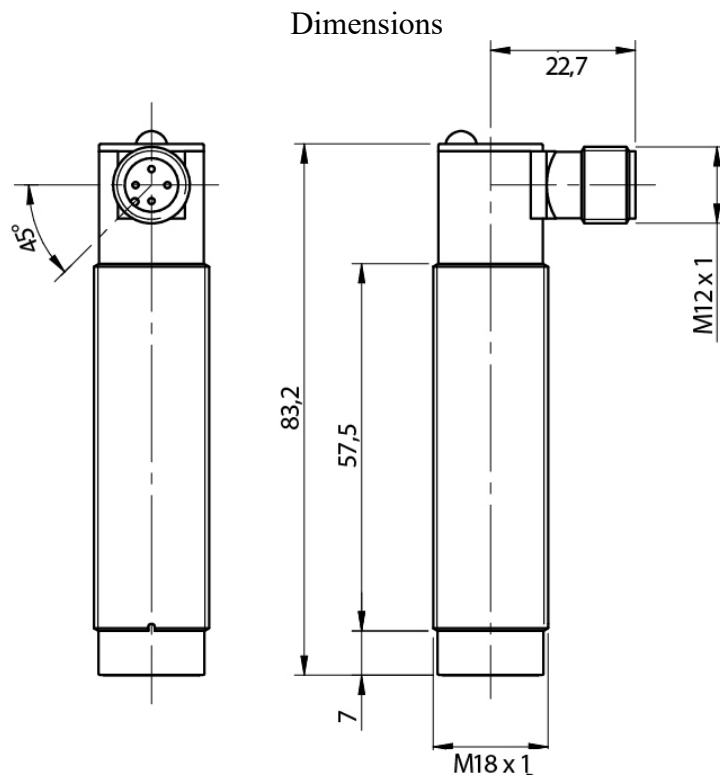
Electrical diagram



Connector



## OTHERS



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