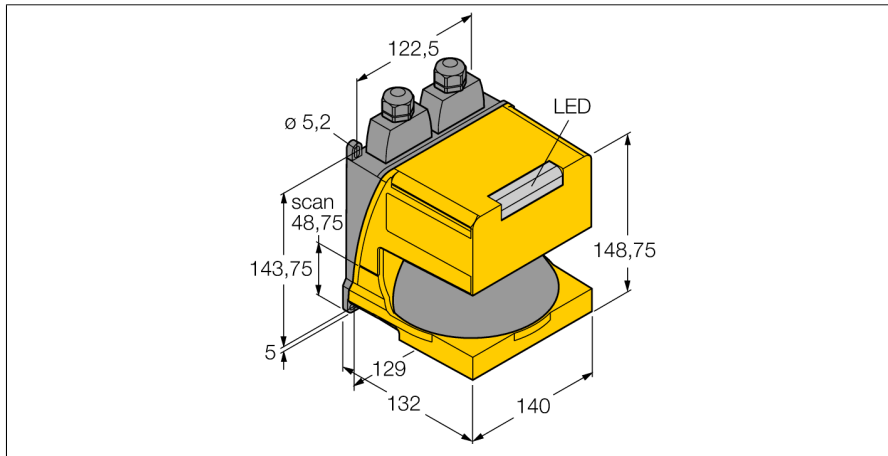


**Photoelectric sensor  
laser scanner  
AG4-4E**

**TURCK**

Industrial  
Automation



- Personnel safety category PLd acc. to ISO 13849-1
- Category 3 acc. to EN 945-1, type 3 (IEC 61496)
- SIL 2 to IEC 61508
- Parametrized via software
- Angular range max. 190°
- Angular resolution 0.36°
- Electrical connection via SUB-D15 connector
- Connection cable AG4-CPD15 (not incl. in delivery)
- 8 protective fields adjustable
- Laser class 1 acc.to EN 60825-1
- Resolution 30 mm at a distance of 1600 mm
- Resolution 70 mm at a distance of 4000 mm
- Minimum radiance factor 1.8% in protective field
- Protective field 0.2 ... 4 m
- Warning field 0.2...15 m
- Scan field 0...50 m
- Minimum radiance factor 20% in warning field
- Operating voltage 17...28 VDC
- Protection class IP65

<b>Type code</b>	AG4-4E
Ident no.	3082137
<b>Operating mode</b>	laser measuring system
Light type	IR
Wavelength	905 nm
Laser class	▲ 1
Optical resolution	30 mm
Range	200...4000 mm
Ambient temperature	0...+50 °C
<b>Operating voltage</b>	17...28VDC
DC rated operational current	≤ 420 mA
No-load current I <sub>0</sub>	≤ 170 mA
Output function	2x NC, 2 x PNP
Response time	< 80 ms
<b>Design</b>	rectangular, AG4
Dimensions	135 x 140 x 148 mm
Housing material	metal, AL
Lens	plastic, Acryl
Connection	male
Protection class	IP65
<b>Switching state</b>	LED green
Error indication	LED red
Excess gain indication	LED yellow

**Functional principle**

The safety sensor AG4-4E is a photoelectric, two dimensional measuring laser scanner. The safety sensor emits light pulses periodically via a rotating deflection unit. The light pulses are reflected by obstacles, like persons for example and then analysed by the safety sensor. The exact position of the obstacle is determined from the light-travel time and the current angle of the deflection unit. An obstacle located within the predefined protective field causes the safety sensor to initiate a safety-oriented shutdown of the safe switching outputs. Only when the protective field is free again, does the safety sensor reset the safety-oriented shutdown, either following confirmation or automatically, depending on the operating mode. The safety sensor can even detect people wearing very dark clothes with a very low radiance factor.

**Photoelectric sensor  
laser scanner  
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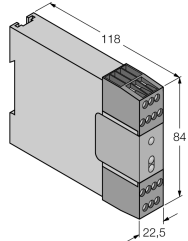
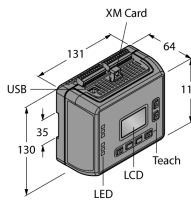
**Accessories**

Type code	Ident no.	Description	Dimension drawing
AG4-MBK1	3082139	Mounting panel, black, plastic, wall mounting	

**Wiring accessories**

Type code	Ident no.	Description	Dimension drawing
AG4-CPD15-5	3082142	Connection cable, 5 m, SUB-D 15-pin on open cable end	
AG4-CPD15-25	3082144	Connection cable, 25 m, SUB-D 15-pin on open cable end	
AG4-PCD9-3	3082147	Extension cable, 3 m SUB-D, 9-pin	
AG4-PCD9USB-1	3010717	Extension cable, 1 m, male SUB-D 9-pin on male USB type A	

**Function accessories**

Type code	Ident no.	Description	Dimension drawing
AG4-TB1 UM-FA-11A	3082141 3081228	Configuration and test box for AG4 Safety module, 3 NC outputs, 1 NO auxiliary output, 7 A max., 25 ms response time	
SC22-3	3079715	Safety controller with 3 safety outputs and 22 inputs, programmable	
MMD-TA-12B	3075091	Muting module, 2 PNP OSSD outputs, 1 PNP auxiliary output, 0.5 A output current, 10 ms response time	