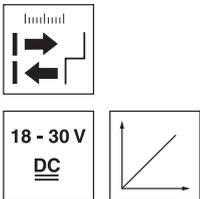


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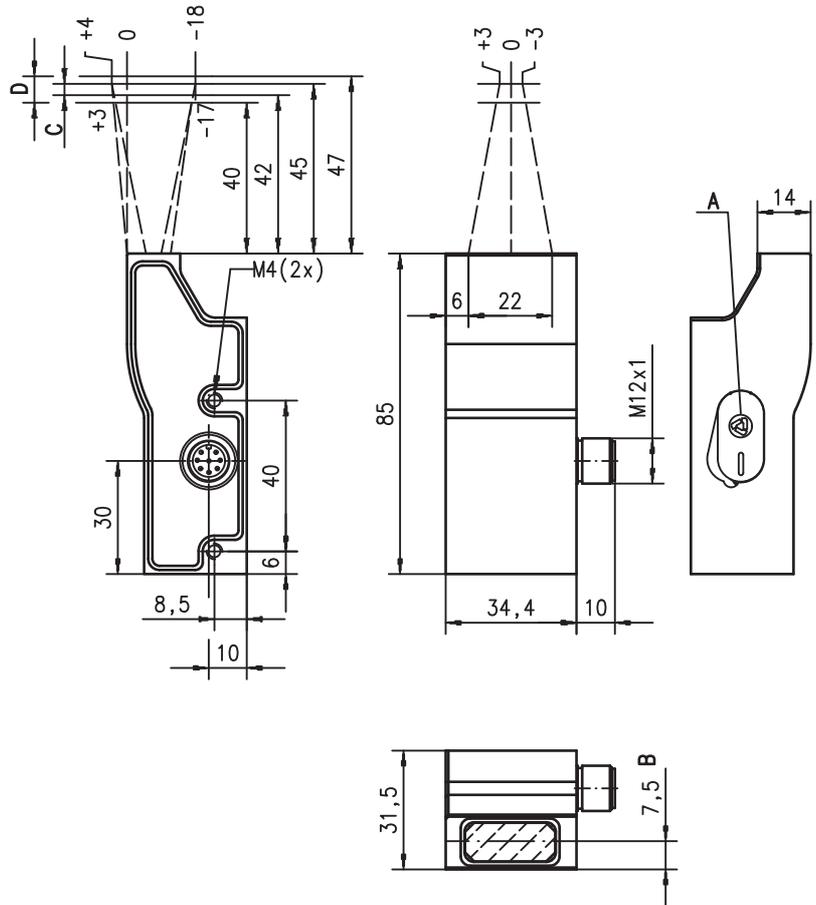
- 20mm line length at the object (for a scanning distance of 40mm)
- +5mm depth of field
- Reflection-independent height measurement of stack front edges
- Height measurement of stack front edges with a luminosity coefficient between 10 and 90%
- Two switching outputs for the stack height
- Warning output if the gap in the stack is too large
- Switching output "object detected"
- Synchronisation input
- Metal housing with glass cover, protection class IP 67



Accessories:

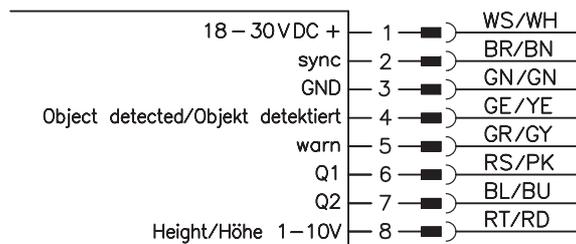
- (available separately)
- M12 connectors (KD ...)
 - Ready-made cables (KD ...)

Dimensioned drawing



- A** Diagnostics plug
- B** Optical axis
- C** Recommended scanning range
- D** Typ. scanning range limit

Electrical Connection



We reserve the right to make changes • DS_KA958B_en_50137353.fm

Specifications

Optical data

Recommended scanning range	42 ... 45 mm
Typ. scanning range limit	40 ... 47 mm
Line length at object	20 ... 21.7 mm
Resolution	0.2 mm
Light source	LED (modulated light)
Wavelength	665 nm (red light)

Error limits

Stack height measurement	±0.5 mm (40 mm scanning range)
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Timing

Measurement frequency	16 Hz
Measurement value output	approx. 60 ms
Cycle time sync	approx. 80 ms
Response time	≤ 100 ms
Delay before start-up	≤ 600 ms

Electrical data

Operating voltage U_B	18 ... 30 VDC (incl. residual ripple)
Residual ripple	≤ 15% of U_B
Bias current	≤ 80 mA

Inputs/outputs

sync (trigger input)	active on signal change low/high (edge triggered) or ≥ no signal change for 3 s
Object detected	PNP transistor output
Function characteristics	light switching from object position > -13.9 mm
warn (warning output)	PNP transistor output
Function characteristics	Transistor activated if gap in the detection range > than about 1.3 mm
Q1, Q2	PNP transistor output
Function characteristics	Q1 light switching from object position of about -0.3 mm Q2 light switching from object position of about -3.3 mm
Signal voltage high/low	≥ ($U_B - 2V$) / ≤ 2V
Output current	max. 200 mA per output
height (analogue output)	analogue voltage 1 ... 10 V $R_L \geq 2k\Omega$

Mechanical data

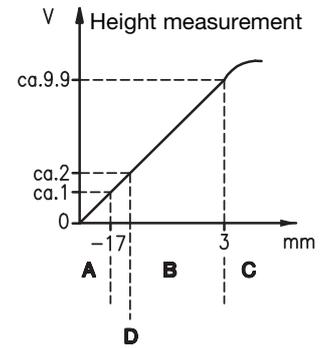
Housing	aluminium
Weight	100 g
Optics cover	glass
Connection type	M12 connector, 8-pin

Environmental data

ambient temp. (operation/storage)	+10 °C ... +40 °C / -30 °C ... +70 °C
Ambient light limit	≤ 5 klux
Protective circuit 1)	1, 2, 3
VDE safety class	III
Protection class	IP 67
Standards applied	IEC 60947-5-2

1) 1=transient protection, 2=polarity reversal protection, 3=short circuit protection for all outputs

Diagrams



- A** Wire break
- B** Stack height
- C** Stack too high
- D** Object detected (pin 4)

Remarks

<p>Operate in accordance with intended use!</p> <ul style="list-style-type: none"> ☞ This product is not a safety sensor and is not intended as personnel protection. ☞ The product may only be put into operation by competent persons. ☞ Only use the product in accordance with the intended use.
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- Clean lenses regularly or provide device for blowing off dirt.
- Optimum distance is achieved when the two light dashes form a single line.
- The measured edge position of the material may change depending on the material's luminosity coefficient.
- **Recommendation**
Clean with a lens cleaning cloth (microfibre), in case of heavy soiling dampen with ISOPROPANOL.

Order guide

	Designation	Part No.
CCD line sensor	KA 958B	50134611