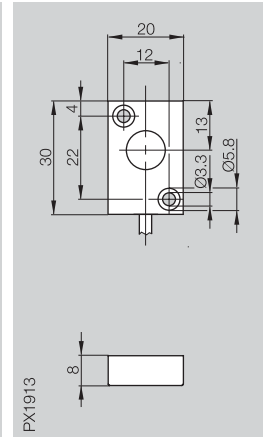
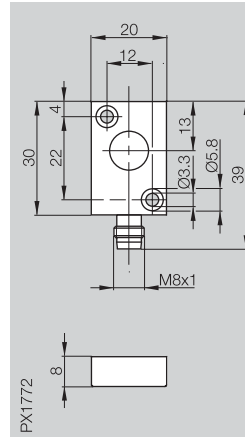
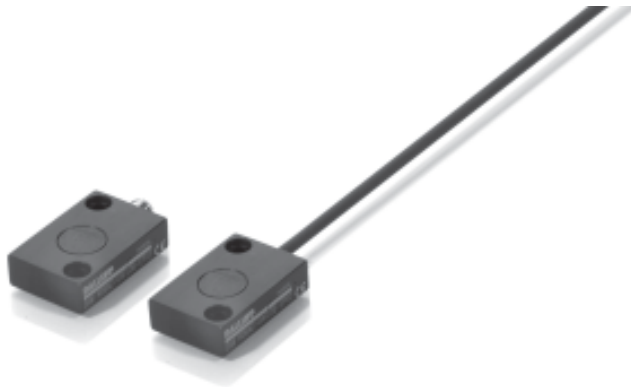


Quaderbauformen

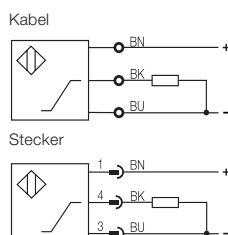


PNP analog	BAW R06AC-UAF20B-S49G	BAW R06AC-UAF20B-EP03
Bemessungsbetriebsspannung U_e	24 V DC	24 V DC
Betriebsspannung U_B	21,6...26,4 V DC	21,6...26,4 V DC
Restwelligkeit	$\leq 10\%$ von U_e	$\leq 10\%$ von U_e
Bemessungsisolationsspannung U_i	75 V DC	75 V DC
Bemessungsabstand s_e	1,25 mm	1,25 mm
Lastwiderstand R_L	$\geq 5\text{ k}\Omega$	$\geq 5\text{ k}\Omega$
Leerlaufstrom I_0 bei U_e	$\leq 15\text{ mA}$	$\leq 15\text{ mA}$
verpolungssicher	nein	nein
kurzschlussfest	nein	nein
Justieranzeige (Ende Linearitätsbereich)	nein	nein
Umgebungstemperatur T_a	+10...+60 °C*	+10...+60 °C*
Wiederholgenauigkeit R_{BWN}	$\pm 12\text{ }\mu\text{m}$	$\pm 12\text{ }\mu\text{m}$
Linearitätsfehler	$\leq \pm 45\text{ }\mu\text{m}$	$\leq \pm 45\text{ }\mu\text{m}$
Grenzfrequenz (-3dB)	1000 Hz	1000 Hz
Messgeschwindigkeit	$\leq 10\text{ m/s}$	$\leq 10\text{ m/s}$
Reaktionszeit	0,5 ms	0,5 ms
Temperaturkoeffizient TK	typisch +0,5 $\mu\text{m/K}$	+0,5 $\mu\text{m/K}$
im optimalen Bereich	min. -1 $\mu\text{m/K}$	-1 $\mu\text{m/K}$
von +10...+60 °C	max. +2 $\mu\text{m/K}$	+2 $\mu\text{m/K}$
Schutzart nach IEC 60529	IP 67	IP 67
Gehäusewerkstoff	Al eloxiert	Al eloxiert
Werkstoff der aktiven Fläche	PBT	PBT
Anschlussart	Steckverbinder	3 m Kabel PUR
Anzahl der Leiter $\times$ Leiterquerschnitt		3 $\times$ 0,14 mm ²
Zulassung		
Steckverbindervorschlag	BKS- 48/BKS- 49	

Andere Kabellängen auf Anfrage.

*Die Funktion wird auch im Bereich von -10...+70 °C gewährleistet.

Anschluss-Schaltbilder

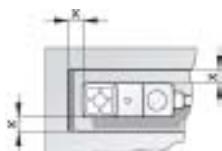


10×30×6 mm bündig Spannung 0...10 V 1...4 mm	10×30×6 mm bündig Spannung 0...10 V 1...4 mm	10×30×6 mm bündig Spannung 0...10 V 1...4 mm		
BAW R03KC-UAE40B-BP00,3-GS49	BAW R03KC-UAE40B-BP00,3-GS26	BAW R03KC-UAE40B-BP03		
24 V DC 21,6...26,4 V DC ≤ 10 % von U _e 75 V DC 2,5 mm ≥ 5 kΩ	24 V DC 21,6...26,4 V DC ≤ 10 % von U _e 75 V DC 2,5 mm ≥ 5 kΩ	24 V DC 21,6...26,4 V DC ≤ 10 % von U _e 75 V DC 2,5 mm ≥ 5 kΩ		
≤ 15 mA nein nein ja	≤ 15 mA nein nein ja	≤ 15 mA nein nein ja		
0...+70 °C ±35 µm ≤ ±150 µm 1000 Hz ≤ 20 m/s 0,5 ms +4,7 µm/K +1 µm/K +7 µm/K	0...+70 °C ±35 µm ≤ ±150 µm 1000 Hz ≤ 20 m/s 0,5 ms +4,7 µm/K +1 µm/K +7 µm/K	0...+70 °C ±35 µm ≤ ±150 µm 1000 Hz ≤ 20 m/s 0,5 ms +4,7 µm/K +1 µm/K +7 µm/K		
IP 67	IP 67	IP 67		
PA 6 PA 6 0,3 m Kabel PUR mit Steckverbinder	PA 6 PA 6 0,3 m Kabel PUR mit Steckverbinder	PA 6 PA 6 3 m Kabel PUR		
cULus	cULus	3×0,14 mm ² cULus		

1.6

Einbauhinweis für BAW R03...

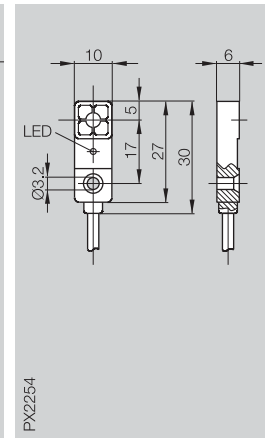
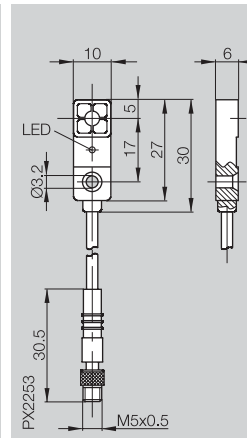
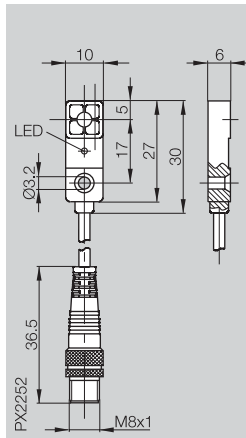
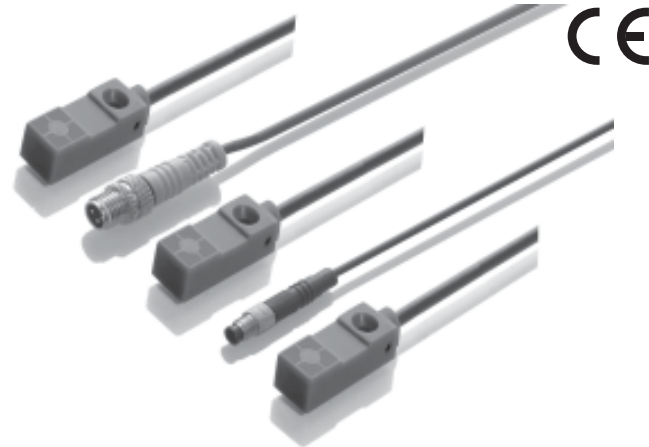
Material	Einbau- maß "x"
Stahl	0 mm
Messing	5 mm
Aluminium	5 mm
Edelstahl	5 mm



6

Steck-
verbinder,
Halter ...
Seite 6.2 ...

Housing size	10×30×6 mm	10×30×6 mm	10×30×6 mm
Mounting	flush	flush	flush
Output signal	Voltage 0...10 V	Voltage 0...10 V	Voltage 0...10 V
Linear range s_L	1...4 mm	1...4 mm	1...4 mm

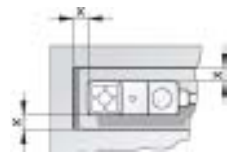


Analog block-style miniature sensors

- Small cross-section 10×6 mm
- Long sensing range
- Low height in detection direction
- Cable version or M8/M5 connector

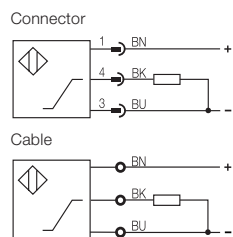
Installation note

Material	Installation dimension "x"
Steel	0 mm
Brass	5 mm
Aluminum	5 mm
Stainless	5 mm

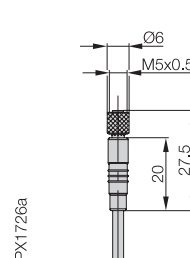
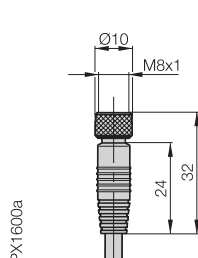


PNP analog	BAW R03KC-UAE40B-BP00,3-GS49	BAW R03KC-UAE40B-BP00,3-GS26	BAW R03KC-UAE40B-BP03
Rated operational voltage U_o	24 V DC	24 V DC	24 V DC
Supply voltage U_B	21.6...26.4 V DC	21.6...26.4 V DC	21.6...26.4 V DC
Ripple	$\leq 10\%$ of U_o	$\leq 10\%$ of U_o	$\leq 10\%$ of U_o
Rated insulation voltage U_i	75 V DC	75 V DC	75 V DC
Rated sensing distance s_o	2.5 mm	2.5 mm	2.5 mm
Load resistance R_L	$\geq 5\text{ k}\Omega$	$\geq 5\text{ k}\Omega$	$\geq 5\text{ k}\Omega$
No-load supply current I_o at U_o	$\leq 15\text{ mA}$	$\leq 15\text{ mA}$	$\leq 15\text{ mA}$
Polarity reversal protected	no	no	no
Short circuit protected	no	no	no
Adjustment indicator (end of linear range)	yes	yes	yes
Ambient temperature range T_a	0...+70 °C	0...+70 °C	0...+70 °C
Repeat accuracy R_{EWN}	$\pm 35\text{ }\mu\text{m}$	$\pm 35\text{ }\mu\text{m}$	$\pm 35\text{ }\mu\text{m}$
Non-linearity	$\leq \pm 150\text{ }\mu\text{m}$	$\leq \pm 150\text{ }\mu\text{m}$	$\leq \pm 150\text{ }\mu\text{m}$
Limit frequency (–3dB)	1000 Hz	1000 Hz	1000 Hz
Measuring speed	$\leq 20\text{ m/s}$	$\leq 20\text{ m/s}$	$\leq 20\text{ m/s}$
Response time	0.5 ms	0.5 ms	0.5 ms
Temperature coefficient TK in the optimal range	typical min. 4.7 $\mu\text{m/K}$ max. 1 $\mu\text{m/K}$	typical min. 4.7 $\mu\text{m/K}$ max. 1 $\mu\text{m/K}$	typical min. 4.7 $\mu\text{m/K}$ max. 1 $\mu\text{m/K}$
Degree of protection per IEC 60529	IP 67	IP 67	IP 67
Housing material	PA 6	PA 6	PA 6
Material of sensing face	PA 6	PA 6	PA 6
Connection	0.3 m cable with connector	0.3 m cable with connector	3 m cable, PUR
No. of wires × cross-section			3×0.14 mm ²
Approval	cULus	cULus	cULus

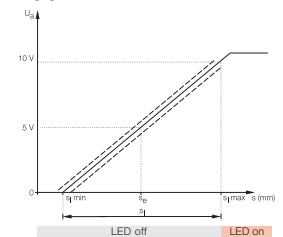
Wiring diagrams



Connector	BKS-B 48	BKS-B 25
Type	straight female	straight female
Application	S 49 sensors	S 26 sensors



Approach curve



no LED	BKS-B 48-1-PU-03	BKS-B 25-1-PU-03
Cable	molded-on PUR	molded-on PUR
No. of wires × cross-section	3×0.25 mm ²	3×0.14 mm ²
Degree of protection per IEC 60529	IP 67	IP 67