

Proximity Sensors Inductive

Analogue Voltage Output, Nickel-plated Brass Housing

Types IA, M12



- Nickel-plated brass housing
- Housing diameter: 12 mm
- Sensing distance: 0.3 - 5 mm, 0.3 - 3 mm
- Power supply: 17/18 to 30 VDC
- Output: 0-10 V
- Protection degree IP67
- 2 m PVC cable

Product Description

Inductive proximity sensor with analogue 0-10 or 1-10 V voltage output. The analogue signal can be directly connected to measuring systems. Nickel-plated brass housing, M12. Connection with 2 m PVC cable.

Ordering Key

IA 12 ASC 05 AK-K

Type _____
Housing style _____
Housing size _____
Housing material _____
Housing length _____
Detection principle _____
Sensing distance _____
Output type _____
Output configuration _____

Type Selection

Detecting range	Output voltage	Housing dimensions	Connection	Ordering no. Analogue Voltage Output, PNP
0.3 - 5.0 mm	0-10 V	M12	Cable, 2 m	IA 12 ASC 05 AK-K
0.3 - 3.0 mm ¹⁾	1-10 V	M12	Cable, 2 m	IA 12 ALC 03 AK-K

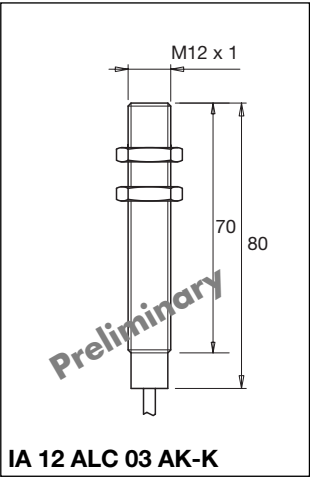
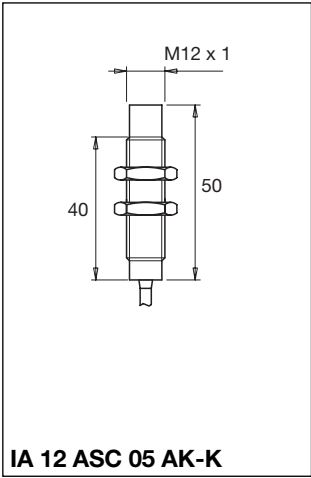
¹⁾ For flush mounting in metal

Specifications

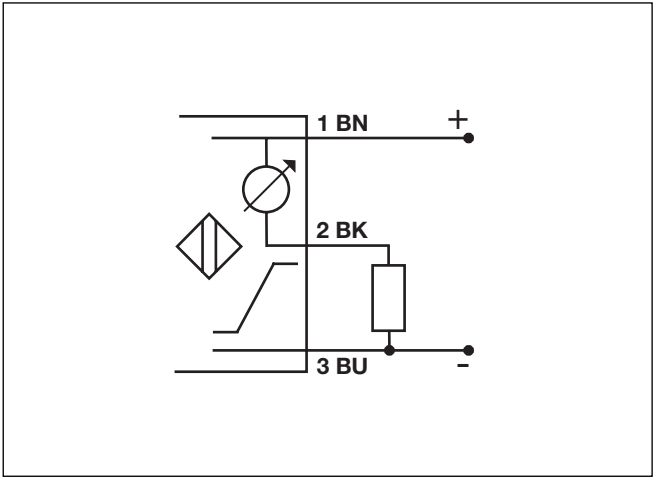
Rated operational volt. (U_B) IA 12 ASC 05 AK-K IA 12 ALC 03 AK-K	17 to 30 VDC (ripple included) 18 to 30 VDC (ripple included)	Temperature drift IA 12 ASC 05 AK-K IA 12 ALC 03 AK-K	< 5% < 10%
Ripple	≤ 10%	Ambient temperature Operating IA 12 ASC 05 AK-K IA 12 ALC 03 AK-K Storage	0° to +70°C (32° to +158°F) -10° to +70°C (14° to +158°F) -30° to +75°C (-22° to +167°F)
Output voltage IA 12 ASC 05 AK-K IA 12 ALC 03 AK-K	0 to 10 V 1 to 10 V	Degree of protection	IP 67 (Nema 1, 3, 4, 6, 13)
No-load supply current (I_o) IA 12 ASC 05 AK-K IA 12 ALC 03 AK-K	< 22 mA < 20 mA	Housing material	Nickel-plated brass
Load IA 12 ASC 05 AK-K IA 12 ALC 03 AK-K	> 300 Ω > 300 Ω	CE-marking	Yes
Detecting range IA 12 ASC 05 AK-K IA 12 ALC 03 AK-K	0.3 - 5 mm 0.3 - 3 mm	Connection Cable	2 m, PVC, AWG 24
Linearity error IA 12 ASC 05 AK-K IA 12 ALC 03 AK-K	< 3% < 5%		



Dimensions



Wiring Diagram



Installation Hints

<p>To avoid interference from inductive voltage/current peaks, separate the prox. switch power cables from any other power cables, e.g. motor, contactor or solenoid cables</p>	<p>Relief of cable strain</p> <p>Incorrect</p> <p>Correct</p> <p>The cable should not be pulled</p>	<p>Protection of the sensing face</p> <p>A proximity switch should not serve as mechanical stop</p>	<p>Switch mounted on mobile carrier</p> <p>Any repetitive flexing of the cable should be avoided</p>
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