

# AI029 Inductive Factor-1-Sensor IP69k



Order by 2 pm - Shipping on the same working day

**31,63 €** offline price 33,47 €

Incl. 5.5% online discount for online orders

## Overview

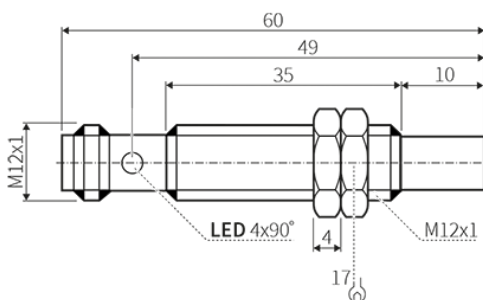
- Robust metal housing (brass, white bronze plated) with LED switch indicator, M12 thread and M12 connector (3-pin)
- Same sensing range (correction factor 1) for all metals
- sensing range 10 mm; non-flush mountable
- Normally open (NO)
- Protection rating IP65/ IP66/ IP67/ IP68/ IP69k

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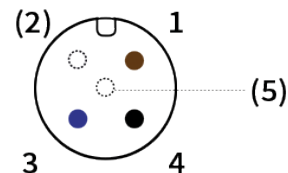
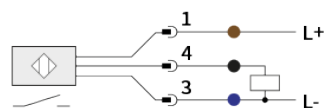
Direct link to the article on autosen.com

In daily use - proven millions of times over. Products from autosen are under highest quality requirements regarding robustness, insensitivity and reliability. We offer 5 years warranty - with money-back guarantee!

## Dimensional drawing



## Connection & pin assignment



## General information

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Sensor type	Inductive Factor 1
Switching frequency	2000Hz
Switching distance	10 mm

## Outputs / inputs

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Switching output	Normally open (NO)
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## Electrical data

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Operating voltage	10 ... 30 V DC
Voltage type	Direct voltage (DC)
Electrical design	PNP
Current carrying capacity max.	100mA
Voltage drop max.	2.5V
Current consumption max.	20mA
Protection class	III
Short-circuit protection	Yes
Overload-proof	Yes
Reverse polarity protection	Yes

## Mechanical data

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Structural shape	Cylindrical with thread
Thread size	M12
Installation type	Not flush
Structural length	60 mm
Material of housing	Brass coated with white bronze
Material of active surface	LCP
Electrical connection	M12 3-pin Contacts gold-plated

## Accuracy

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Correction factors	St37 = 1 V2A = 1 Ms = 1 Al = 1 Cu = 1
Hysteresis	3 ... 15 % of the real switching distance Sr

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## Ambient conditions

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Ambient temperature min.	-40°C
Ambient temperature max.	85°C
Magnetic field-resistant	Yes up to 300 mT
Protection rating	IP65 IP66 IP67 IP68 IP69k

## Additional information

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MTTF	474years
Function display	4 x LED Yellow
Accessories included with delivery	2 fastening nuts
EMC test	DIN EN 55011: Class B DIN EN 61000-4-2 ESD DIN EN 61000-4-3 HF radiated DIN EN 61000-4-4 burst DIN EN 61000-4-6 HF grid-bound
Shock resistance test	DIN EN 60068-2-27
Long-term shock resistance test	EN 60068-2-29 Eb
Salt spray test	EN 60068-2-52 Kb
Rapid temperature change test	EN 60068-2-14 Na
Vibration resistance test	DIN EN 60068-2-6 Fc
Approval	CE cULus



## Accessories: Mounting bracket M12


	<b>AA902</b> M12 angle bracket	<b>Unit price: 2,95 €*</b>
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## Accessories: Switching amplifier / evaluation

	<b>AN001</b> One-channel switching amplifier	<b>Unit price: 80,86 €*</b>
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	<b>AR003</b> Speed monitor	<b>Unit price: 139,23 €*</b>
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## Accessories: M12/M12 connection cable | 4-pol. | PUR | IP67


	<b>AA209</b> Connection cable M12/M12 4P PUR 2m IP67	<b>Unit price: 9,29 €*</b>
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	<b>AA211</b> Connection cable M12/M12 4P PUR 2m IP67	<b>Unit price: 10,71 €*</b>
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	<b>AA210</b> Connection cable M12/M12 4P PUR 5m IP67	<b>Unit price: 12,44 €*</b>
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	<b>AA212</b> Connection cable M12/M12 4P PUR 5m IP67	<b>Unit price: 13,22 €*</b>
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## Accessories: M12/M12 connection cable | 4-pin | PUR | IP69K


	<b>AA206</b> Connection cable M12/M12 4P PUR 10m IP69K	<b>Unit price: 25,20 €*</b>
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	<b>AA205</b> Connection cable M12/M12 4P PUR 10m IP69K	<b>Unit price: 22,15 €*</b>
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	<b>AA204</b> Connection cable M12/M12 4P PUR 5m IP69K	<b>Unit price: 20,65 €*</b>
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	<b>AA202</b> Connection cable M12/M12 4P PUR 5m IP69K	<b>Unit price: 17,28 €*</b>
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	<b>AA203</b> Connection cable M12/M12 4P PUR 2m IP69K	<b>Unit price: 17,48 €*</b>
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	<b>AA201</b> Connection cable M12/M12 4P PUR 2m IP69K	<b>Unit price: 14,11 €*</b>
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## Accessories: M12 sensor cable | 4-pin | PUR | IP67


	<b>AA052</b> Sensor cable M12 4P PUR 2m IP67	<b>Unit price: 6,07 €*</b>
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	<b>AA054</b> Sensor cable M12 4P PUR 2m IP67	<b>Unit price: 6,45 €*</b>
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	<b>AA053</b> Sensor cable M12 4P PUR 5m IP67	<b>Unit price: 8,15 €*</b>
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	<b>AA055</b> Sensor cable M12 4P PUR 5m IP67	<b>Unit price: 8,65 €*</b>
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## Accessories: M12 sensor cable | 4-pin | PVC | IP67


	<b>AA042</b> Sensor cable M12 4P PVC 10m IP67	<b>Unit price: 10,97 €*</b>
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	<b>AA039</b> Sensor cable M12 4P PVC 10m IP67	<b>Unit price: 10,58 €*</b>
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	<b>AA041</b> Sensor cable M12 4P PVC 5m IP67	<b>Unit price: 8,22 €*</b>
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	<b>AA038</b> Sensor cable M12 4P PVC 5m IP67	<b>Unit price: 7,80 €*</b>
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	<b>AA040</b> Sensor cable M12 4P PVC 2m IP67	<b>Unit price: 6,00 €*</b>
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	<b>AA037</b> Sensor cable M12 4P PVC 2m IP67	<b>Unit price: 5,97 €*</b>
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**AA064**Sensor cable M12 4P PVC 2m  
IP67**Unit price: 4,52 €\*** **AA066**Sensor cable M12 4P PVC 2m  
IP67**Unit price: 4,83 €\*** **AA065**Sensor cable M12 4P PVC 5m  
IP67**Unit price: 6,05 €\*** **AA067**Sensor cable M12 4P PVC 5m  
IP67**Unit price: 6,43 €\*** **Accessories: M12 sensor cable | 4-pin | PVC | IP69K****AA025**Sensor cable M12 4P PVC 25m  
IP69K**Unit price: 23,59 €\*** **AA027**Sensor cable M12 4P PVC 10m  
IP69K**Unit price: 17,04 €\*** **AA024**Sensor cable M12 4P PVC 10m  
IP69K**Unit price: 15,12 €\*** **AA026**Sensor cable M12 4P PVC 5m  
IP69K**Unit price: 14,35 €\*** **AA023**Sensor cable M12 4P PVC 5m  
IP69K**Unit price: 12,31 €\*** **AA032**Sensor cable M12 4P PVC 2m  
IP69K**Unit price: 12,72 €\*** **AA031**Sensor cable M12 4P PVC 2m  
IP69K**Unit price: 12,04 €\*** **AA028**Sensor cable M12 4P PVC 25m  
IP69K**Unit price: 26,04 €\*** **Accessories: M12 sensor cable | 4-pin | PUR | IP69K****AA018**Sensor cable M12 4P PUR 10m  
IP69K**Unit price: 15,55 €\*** **AA017**Sensor cable M12 4P PUR 10m  
IP69K**Unit price: 13,44 €\*** **AA008**Sensor cable M12 4P PUR 5m  
IP69K**Unit price: 12,84 €\*** **AA006**Sensor cable M12 4P PUR 5m  
IP69K**Unit price: 10,92 €\*** **AA007**Sensor cable M12 4P PUR 2m  
IP69K**Unit price: 11,23 €\*** **AA005**Sensor cable M12 4P PUR 2m  
IP69K**Unit price: 9,36 €\*** **Accessories: M12 connector | 4-pin | plug****AA946**

Wireable connector angled M12

**Unit price: 7,01 €\*** **AA921**

Wireable connector M12

**Unit price: 7,01 €\*** **AA961**Wireable connector angled M12  
IP69k**Unit price: 15,00 €\*** **AA959**Wireable connector straight M12  
IP69k**Unit price: 15,00 €\*** **Accessories: M12 connector | 4-pin | socket****AA947**

Wireable socket angled M12

**Unit price: 6,91 €\*** **AA939**

Wireable socket M12

**Unit price: 6,91 €\*** **AA962**

Wireable socket angled M12 IP69k

**Unit price: 15,00 €\*** **AA960**Wireable socket straight M12  
IP69k**Unit price: 15,00 €\*** **Accessories: Passive splitter****Order online at**  
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**AA501**

Passive splitter 4x M12 5 m PUR

**Unit price: 40,56 €\*****AA503**

Passive splitter 4x M12 10 m PUR

**Unit price: 54,43 €\*****AA502**

Passive splitter 8x M12 5 m PUR

**Unit price: 56,65 €\*****AA504**

Passive splitter 8x M12 10 m PUR

**Unit price: 74,03 €\***

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**Accessories: PNP-NPN converter**

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**AA033**PNP-NPN converter 5 m PUR M12  
BKout**Unit price: 12,84 €\***

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**Accessories: Y-distributor**

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**AA046**

Y-splitter cable M12/2xM12

**Unit price: 18,67 €\*****AA922**

Y distributor M12/2xM12

**Unit price: 12,27 €\***

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