

IA

Технические характеристики

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Иваново (4932)77-34-06	Мурманск (8152)59-64-93	Саратов (845)249-38-78	Челябинск (351)202-03-61
Ижевск (3412)26-03-58	Набережные Челны (8552)20-53-41	Севастополь (8692)22-31-93	Череповец (8202)49-02-64
Иркутск (395)279-98-46	Нижний Новгород (831)429-08-12	Симферополь (3652)67-13-56	Ярославль (4852)69-52-93
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Proximity Sensors Inductive Long Body, Stainless Steel Types IA, M8



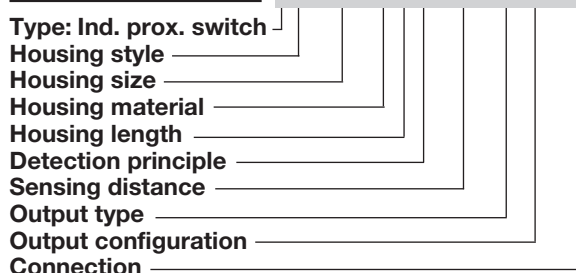
- Miniature stainless steel housing (cable or M8/M12 plug)
- Long body
- Sensing distance: 1,5 mm or 2,5 mm
- Power supply: 10 to 30 VDC
- Output: Transistor NPN/PNP, normally open or normally closed
- Protection: Short-circuit
- LED-indication for output ON
- 2 m PVC cable, M8 or M12 plug



Product Description

Inductive proximity sensor with long body. Output configuration for NPN/PNP with both NO and NC types as standard. M8 stainless steel housing with 2 m PVC cable or M8/M12 plug.

Ordering Key IA 08 BLF 15 NO M5



Type Selection

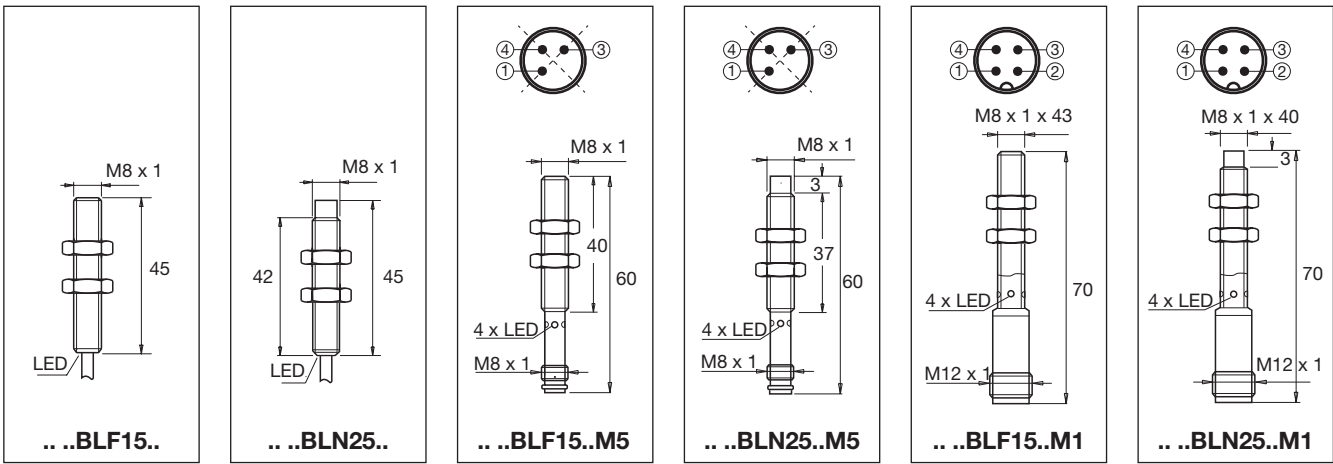
Rated operating dist. (S _n)	Conn. type	Ordering no. Transistor NPN Normally open	Ordering no. Transistor NPN Normally closed	Ordering no. Transistor PNP Normally open	Ordering no. Transistor PNP Normally closed
1.5 mm ¹⁾	Cable	IA 08 BLF 15 NO	IA 08 BLF 15 NC	IA 08 BLF 15 PO	IA 08 BLF 15 PC
1.5 mm ¹⁾	Plug M8	IA 08 BLF 15 NO M5		IA 08 BLF 15 PO M5	IA 08 BLF 15 PC M5
2.5 mm	Cable	IA 08 BLN 25 NO	IA 08 BLN 25 NC	IA 08 BLN 25 PO	IA 08 BLN 25 PC
2.5 mm	Plug M8	IA 08 BLN 25 NO M5		IA 08 BLN 25 PO M5	IA 08 BLN 25 PC M5
1.5 mm ¹⁾	Plug M12	IA 08 BLF 15 NO M1	IA 08 BLF 15 NC M1	IA 08 BLF 15 PO M1	IA 08 BLF 15 PC M1
2.5 mm	Plug M12	IA 08 BLN 25 NO M1	IA 08 BLN 25 NC M1	IA 08 BLN 25 PO M1	IA 08 BLN 25 PC M1

¹⁾ For flush mounting in metal

Specifications

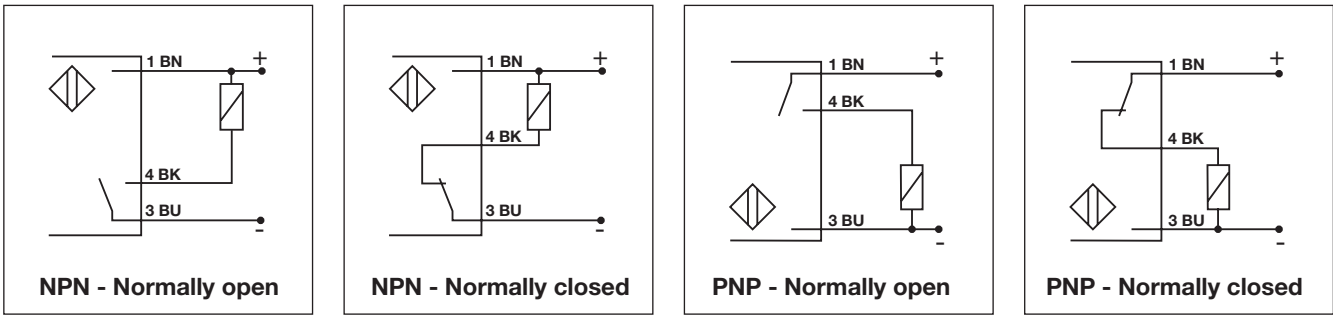
Rated operational volt. (U _B)	10 to 30 VDC (ripple included)	Ambient temperature	
Ripple	≤ 10%	Operating	-25° to +70°C (-13° to +158°F)
Rated operational current (I _a)		Storage	-30° to +75°C (-22° to +167°F)
Continuous	≤ 200 mA @ + 25°C (+75°F)	Degree of protection	IP 67 (Nema 1, 3, 4, 6, 13)
No-load supply current (I _o)	≤ 10 mA (ON)	Housing material	Stainless steel, AISI 303
Voltage drop (U _d)	< 2,5 V (@ I _{max})	CE-marking	Yes
Protection	Short circuit	Connection	
Frequency of operating cycles (f)	2000 Hz	IA08BL....O/C	Cable, 2 m, PVC, AWG 26, oil proof
Indication for output ON	LED, yellow	IA08BL....O/C M5	Plug M8, CONB53 series
Repeat Accuracy	≤ 5%	IA08BL....O/C M1	Plug M12, CONB1 series
Effective operating dist. (S _r)	0.9 x S _n ≤ S _r ≤ 1.1 x S _n	Weight (cables/nuts included)	
Usable operating dist. (S _u)	0.85 x S _r ≤ S _u ≤ 1.15 x S _r	Al...	36 g
		Al...M1/M5	11 g

Dimensions

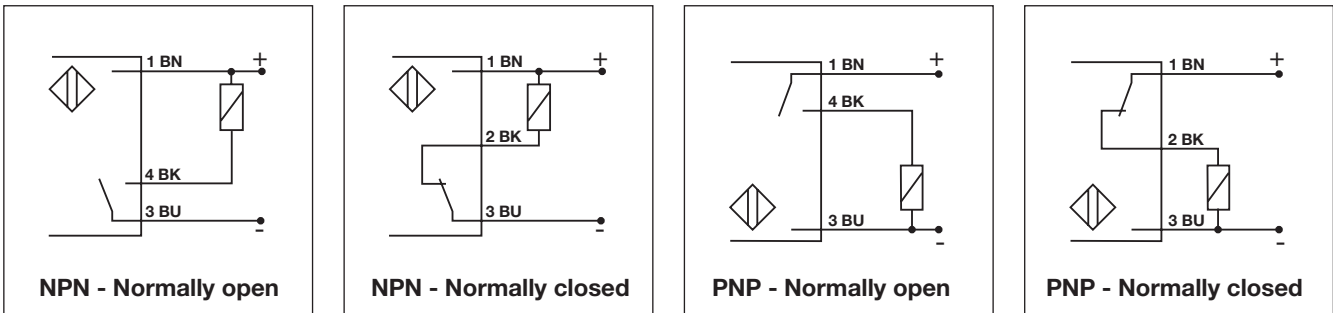


Wiring Diagrams

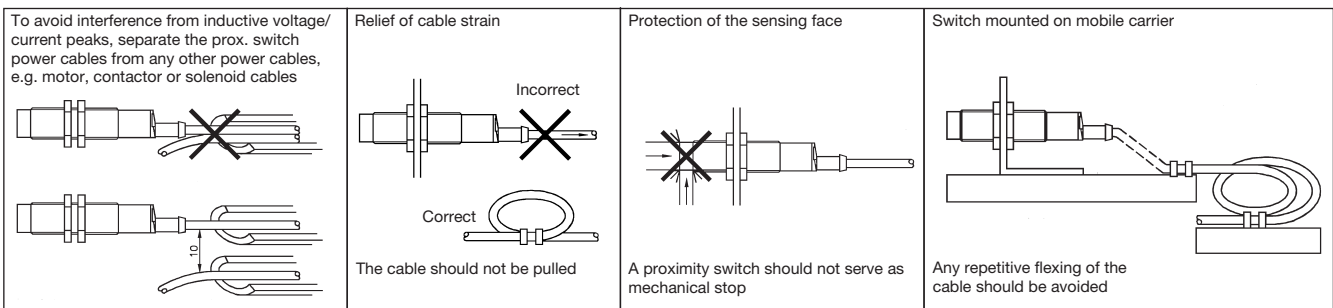
IA08BL..... - IA08BL.....M5



IA08BL.....M1



Installation Hints



Proximity Sensors Inductive Analogue Voltage Output, Nickel-plated Brass Housing Types IA, M18, M30

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- Nickel-plated brass housing
- Housing diameter: 18 and 30 mm
- Sensing distance: 0 - 5 mm, 3.5 - 11 mm
- Power supply: 12/17 to 30 VDC
- Output: 0-1.6 V, 0-10 V
- Protection degree IP67
- 2 m PVC cable

Product Description

Inductive proximity sensor with analogue 0-1.6 or 0-10 V voltage output. The analogue signal can be directly connected to measuring systems.

Nickel-plated brass housing, M18 and M30. Connection with 2 m PVC cable.

Ordering Key

IA 18 ALC 05 AH-K

Type: Ind. prox. switch
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 - 5 mm	0-1.6 V	M18	Cable, 2 m	IA 18 ALC 05 AH-K
3.5 - 11 mm	0-10 V	M30	Cable, 2 m	IA 30 ASC 11 AK-K

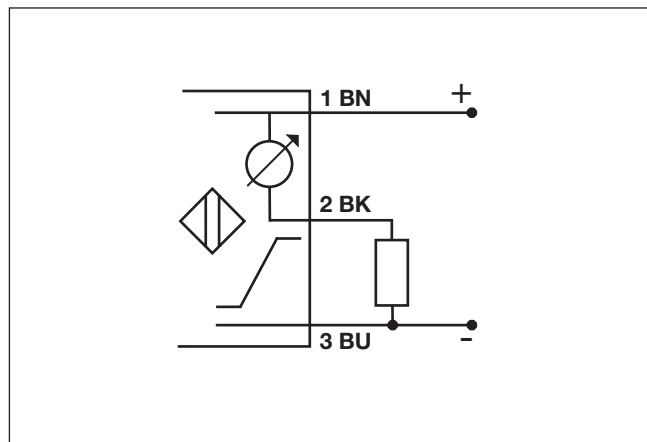
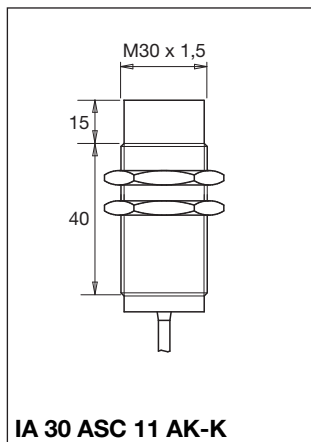
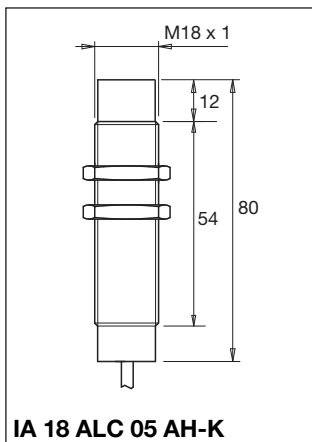
Both types for non-flush mounting

Specifications

Rated operational volt. (U_B) IA 18 ALC 05 AH-K IA 30 ASC 11 AK-K	12 to 30 VDC (ripple incl.) 17 to 30 VDC (ripple incl.)	Temperature drift IA 18 ALC 05 AH-K IA 30 ASC 11 AK-K	< 10% < 4%
Ripple	≤ 10%	Ambient temperature Operating IA 18 ALC 05 AH-K IA 30 ASC 11 AK-K Storage	-25° to +70°C (-13° to +158°F) 0° to +60°C (32° to +140°F) -30° to +75°C (-22° to +167°F)
Output voltage IA 18 ALC 05 AH-K IA 30 ASC 11 AK-K	0 to 1.6 V 0 to 10 V	Degree of protection	IP 67 (Nema 1, 3, 4, 6, 13)
No-load supply current (I_o) IA 18 ALC 05 AH-K IA 30 ASC 11 AK-K	< 25 mA < 33 mA	Housing material	Nickel-plated brass
Load	> 1 kΩ	CE-marking	Yes
Detecting range IA 18 ALC 05 AH-K IA 30 ASC 11 AK-K	0 - 5 mm 3.5 - 11 mm	Connection Cable	2 m, PVC, AWG 22
Linearity error IA 18 ALC 05 AH-K IA 30 ASC 11 AK-K	< 5% < 1.5%		
Frequency of operating Cycles (f)	100 Hz		
Rate of rise	≥ 9 mm/ms		

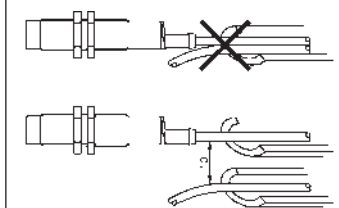
Dimensions

Wiring Diagram

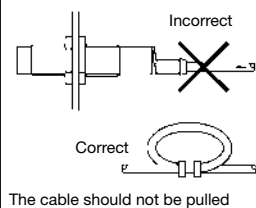


Installation Hints

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

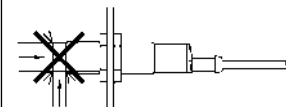


Relief of cable strain



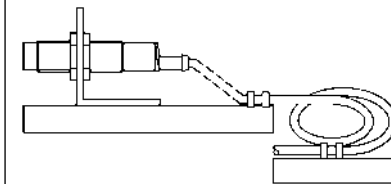
The cable should not be pulled

Protection of the sensing face



A proximity switch should not serve as mechanical stop

Switch mounted on mobile carrier



Any repetitive flexing of the cable should be avoided

Proximity Inductive Sensors Nickel-Plated Brass Housing Types IA, M18 and M30

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- Sensing distance: 5 to 15 mm
- Flush and non-flush types
- Long and short body versions
- Rated operational voltage: 10 - 40 VDC
- Output: DC 200 mA, NPN or PNP
- Normally open and Normally closed function
- Output indication: by yellow LED
- Protection: reverse polarity, short circuit, transients
- Cable and plug versions

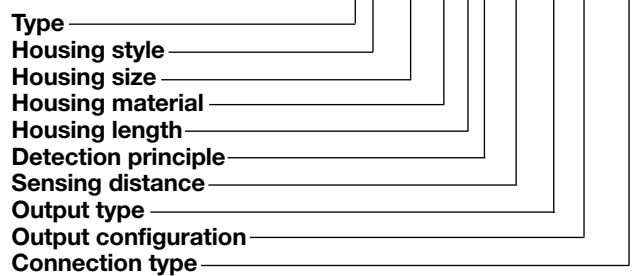
Product Description

A family of proximity inductive switches in industrial standard nickel-plated brass housings (M18 and M30 types).
Output indication: by yellow LED.

Outputs are open collector NPN or PNP transistors. Available with cable and M12 plug.

Ordering Key

IA18ASF05NOM1



Type Selection

Housing diameter	Conne- ction	Housing style	Rated operating distance S_n	Ordering no. NPN Normally open	Ordering no. PNP Normally open	Ordering no. NPN Normally closed	Ordering no. PNP Normally closed
M18	Cable	Short	5 mm ¹⁾	IA 18 DSF 05 NO	IA 18 DSF 05 PO	IA 18 DSF 05 NC	IA 18 DSF 05 PC
M18	Plug	Short	5 mm ¹⁾	IA 18 ASF 05 NOM1	IA 18 ASF 05 POM1	IA 18 ASF 05 NCM1	IA 18 ASF 05 PCM1
M18	Cable	Long	5 mm ¹⁾		IA 18 DLF 05 PO		IA 18 DLF 05 PC
M18	Plug	Long	5 mm ¹⁾		IA 18 ALF 05 POM1		IA 18 ALF 05 PCM1
M18	Cable	Short	8 mm ²⁾	IA 18 DSN 08 NO	IA 18 DSN 08 PO	IA 18 DSN 08 NC	IA 18 DSN 08 PC
M18	Plug	Short	8 mm ²⁾	IA 18 ASN 08 NOM1	IA 18 ASN 08 POM1	IA 18 ASN 08 NCM1	IA 18 ASN 08 PCM1
M30	Cable	Short	10 mm ¹⁾	IA 30 DSF 10 NO	IA 30 DSF 10 PO		
M30	Plug	Short	10 mm ¹⁾	IA 30 ASF 10 NOM1	IA 30 ASF 10 POM1		
M30	Cable	Long	10 mm ¹⁾		IA 30 DLF 10 PO		IA 30 DLF 10 PC
M30	Plug	Long	10 mm ¹⁾		IA 30 ALF 10 POM1		
M30	Cable	Short	15 mm ²⁾	IA 30 DSN 15 NO	IA 30 DSN 15 PO		
M30	Plug	Short	15 mm ²⁾	IA 30 ASN 15 NOM1	IA 30 ASN 15 POM1		

¹⁾ For flush mounting in metal ²⁾ For non-flush mounting in metal

Specifications

Rated operational voltage (U_B)	10 to 40 VDC (ripple incl.)	Operating frequency (f)	IA18 IA30	≤ 1500 Hz ≤ 700 Hz
Ripple	$\leq 10\%$	Indication for output ON	LED, yellow	
Output current (I_o)	≤ 200 mA @ 50°C (≤ 150 mA @ 50-70°C)	Operating sensing distance (S_a)	$0 \leq S_a \leq 0.81 \times S_n$	
No load supply current (I_o)	≤ 10 mA	Effective operating distance (S_r)	$0.9 \times S_n \leq S_r \leq 1.1 \times S_n$	
Voltage drop (U_d)	Max. 2.5 VDC @ 200 mA	Usable operating distance (S_u)	$0.9 \times S_r \leq S_u \leq 1.1 \times S_r$	
Protection	Reverse polarity, short-circuit, transients	Repeated accuracy (R)	$\leq 5\%$	
Voltage transient	1 kV/0.5 J			
Power ON delay (t_v)	50 ms			

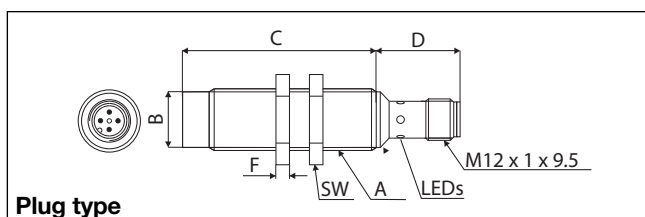
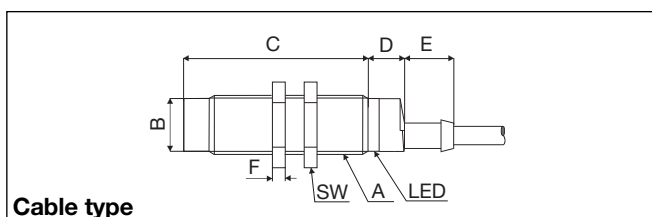


Specifications (cont.)

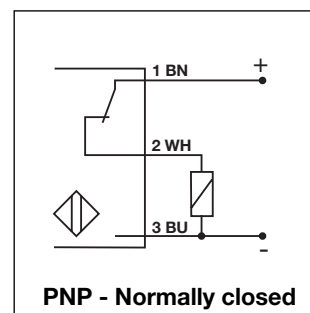
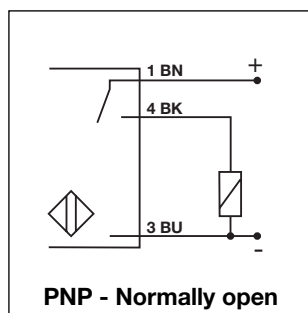
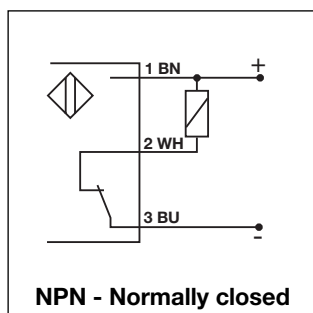
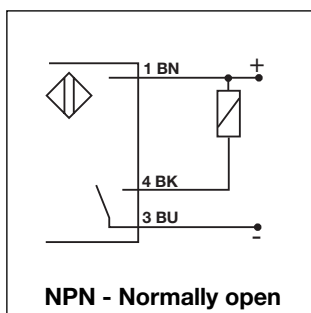
Differential travel (H) (Hysteresis)	1 to 20% of sensing dist.	Degree of protection	IP 67
Ambient temperature		Weight	
Operating	-25° to +70°C (-13° to +158°F)	IA18xS	120 g
Storage	-30° to +80°C (-22° to +176°F)	IA18xL	130 g
Housing material		IA30xS	185 g
Body	Nickel-plated brass	IA30xL	195 g
Front	Grey thermoplastic polyester	Dimensions	See diagrams below
Backpart		Tightening torque	
Plug	NPB	IA 18	27.5 Nm
Cable	PBTP (black polyester)	IA 30	50.0 Nm
Nuts	NPB	Approvals	UL, CSA
Connection		CE-marking	Yes
Cable	2 m, 3 x 0.3 mm ² , Grey PVC, oil proof		
Plug	M12 x 1		
Cables for plug (-1)	CONH1A/CONH10 series		

Dimensions

Type	A	B mm	C mm	D mm	E mm	F mm	SW mm
IA 18 DSF 05 xx	M18 x 1 x 30	16.7	30	11.6	15.4	4	24
IA 18 ASF 05 xx M1	M18 x 1 x 30	16.7	30	25.0		4	24
IA 18 DLF 05 xx	M18 x 1 x 50	16.7	50	11.6	15.4	4	24
IA 18 ALF 05 xx M1	M18 x 1 x 50	16.7	50	25.0		4	24
IA 18 DSN 08 xx	M18 x 1 x 30	16.7	38	11.6	15.4	4	24
IA 18 ASN 08 xx M1	M18 x 1 x 30	16.7	38	25.0		4	24
IA 30 DSF 10 xx	M30 x 1.5 x 30	28	30	13.6	15.4	5	36
IA 30 ASF 10 xx M1	M30 x 1.5 x 30	28	30	25.0		5	36
IA 30 DLF 10 xx	M30 x 1.5 x 50	28	50	13.6	15.4	5	36
IA 30 ALF 10 xx M1	M30 x 1.5 x 50	28	50	25.0		5	36
IA 30 DSN 15 xx	M30 x 1.5 x 30	28	42	13.6	15.4	5	36
IA 30 ASN 15 xx M1	M30 x 1.5 x 30	28	42	25.0		5	36

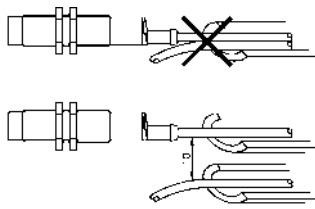


Wiring Diagrams

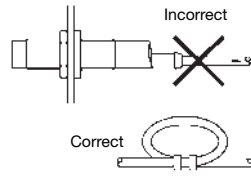


Installation Hints

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

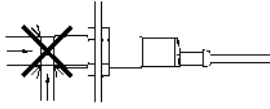


Relief of cable strain



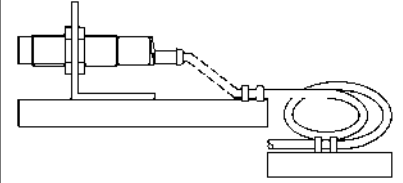
The cable should not be pulled

Protection of the sensing face



A proximity switch should not serve as mechanical stop

Switch mounted on mobile carrier



Any repetitive flexing of the cable should be avoided

Delivery Contents

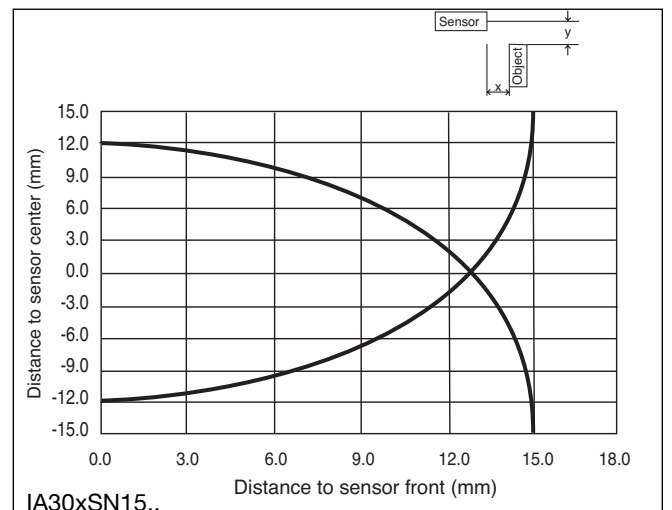
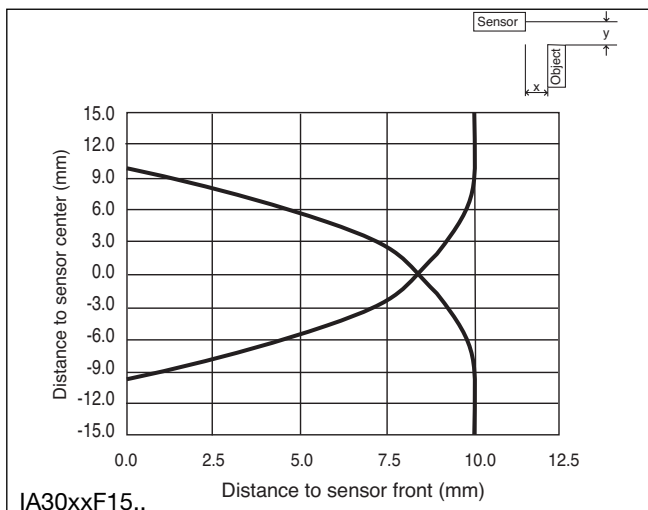
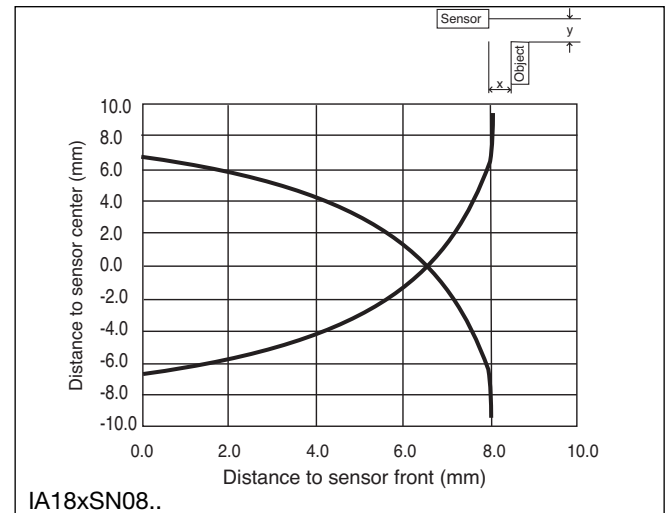
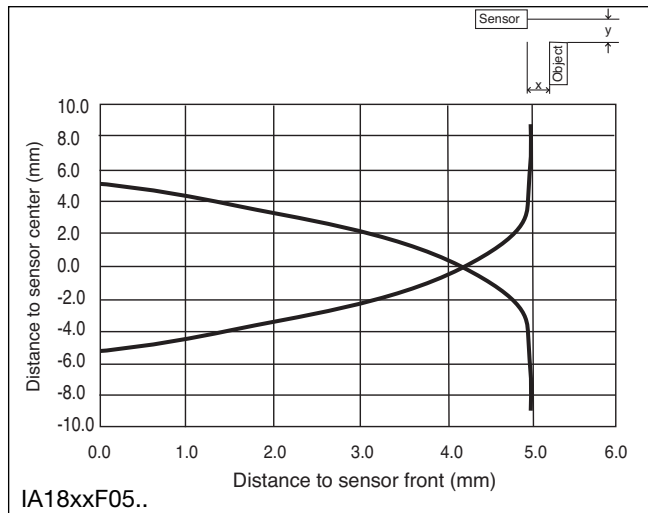
- Inductive proximity switch IA..
- 2 nuts NPB
- Packaging: plastic bag

Accessories

M12 connector

- | | |
|-----------|-----------------------|
| CONH10-A2 | (90°, 2 m cable) |
| CONH10-A5 | (90°, 5 m cable) |
| CONH10-S2 | (straight, 2 m cable) |
| CONH10-S5 | (straight, 5 m cable) |

Detection Diagrams



Proximity Sensors Inductive Extended Range, Nickel-Plated Brass Housing Types IA, M18 and M30

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- Sensing distance: 8 to 22 mm
- Flush and non-flush types
- Long and short body
- Rated operational voltage: 10 - 40 VDC
- Output: DC 200 mA, NPN or PNP
- Normally open / Normally closed function
- LED-indication
- Protection: reverse polarity, short circuit, transients
- Cable and plug versions

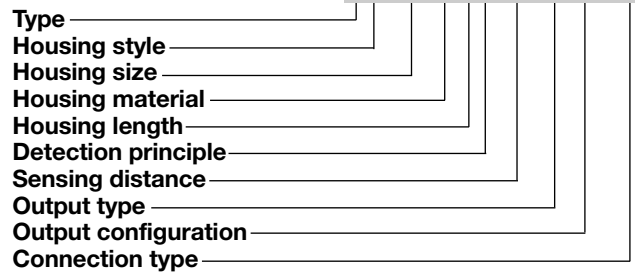
Product Description

A family of Extended range inductive proximity switches in industrial standard nickel-plated brass housings. M18 and M30 types. They are able to handle applications

where high sensing range is requested. Output are open collector NPN or PNP transistors. Available with cable and M12 plug.

Ordering Key

IA18ASF08NOM1



Type Selection

Housing diameter	Connection	Body style	Rated operating distance S_n	Ordering no. NPN Normally open	Ordering no. PNP Normally open	Ordering no. PNP Normally closed
M18	Cable	Short	8 mm ¹⁾	IA 18 DSF 08 NO	IA 18 DSF 08 PO	
M18	Plug	Short	8 mm ¹⁾	IA 18 ASF 08 NOM1	IA 18 ASF 08 POM1	
M18	Cable	Short	14 mm ²⁾	IA 18 DSN 14 NO	IA 18 DSN 14 PO	
M18	Plug	Short	14 mm ²⁾	IA 18 ASN 14 NOM1	IA 18 ASN 14 POM1	
M30	Cable	Short	15 mm ¹⁾	IA 30 DSF 15 NO	IA 30 DSF 15 PO	IA 30 DSF 15 PC
M30	Plug	Short	15 mm ¹⁾	IA 30 ASF 15 NOM1	IA 30 ASF 15 POM1	
M30	Cable	Short	22 mm ²⁾	IA 30 DSN 22 NO	IA 30 DSN 22 PO	
M30	Plug	Short	22 mm ²⁾	IA 30 ASN 22 NOM1	IA 30 ASN 22 POM1	

¹⁾ For flush mounting in metal

²⁾ For non-flush mounting in metal

Specifications

Rated operational voltage (U_B)	10 to 40 VDC (ripple incl.)	Operating frequency (f)	IA18 ..F 08 ≥ 1400 Hz IA18 ..N 14 ≥ 700 Hz IA30 ..F 15 ≥ 700 Hz IA30 ..N 22 ≥ 500 Hz
Ripple	$\leq 10\%$	Indication for output ON	LED, yellow
Output current (I_e)	≤ 200 mA @ 50°C (≤ 150 mA @ 50-70°C)	Assured operating sensing distance (S_a)	$0 \leq S_a \leq 0.81 \times S_n$
No load supply current (I_o)	IA 18 ≤ 10 mA IA 30 ≤ 10 mA	Effective operating distance (S_r)	$0.9 \times S_n \leq S_r \leq 1.1 \times S_n$
Voltage drop (U_d)	Max. 2.5 VDC @ 200 mA	Usable operating distance (S_u)	$0.85 \times S_r \leq S_u \leq 1.15 \times S_r$
Protection	Reverse polarity, short-circuit, transients	Repeat accuracy (R)	$\leq 5\%$
Transient voltage	1 kV/0.5 J	Differential travel (H) (Hysteresis)	1 to 20% of sensing dist.
Power ON delay (t_v)	50 ms		

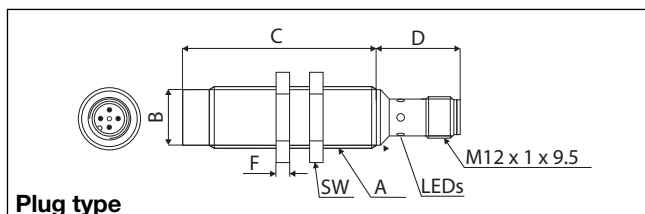
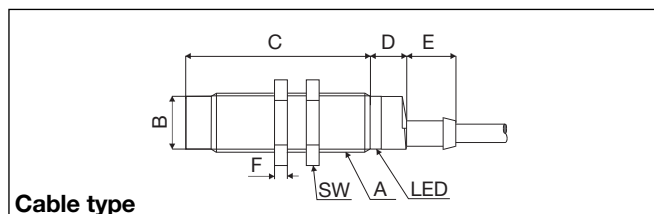


Specifications (cont.)

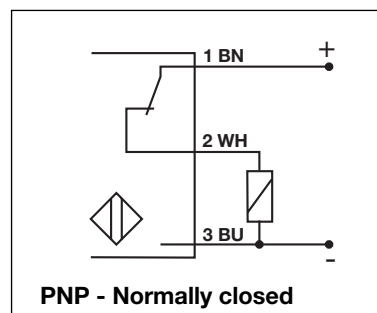
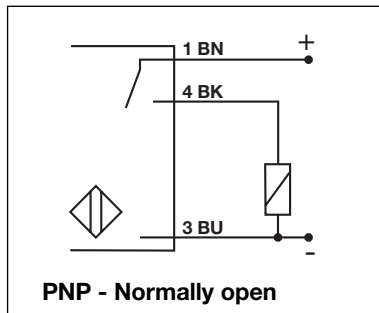
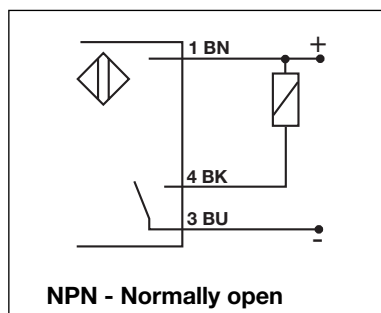
Ambient temperature		Degree of protection	IP 67
Operating	-25° to +70°C (-13° to +158°F)	Weight (cable/nuts included)	
Storage	-30° to +80°C (-22° to +176°F)	IA 18 .S.	120 g
Housing material		IA 30 .S.	185 g
Body	Nickel-plated brass	Tightening torque	
Front	Grey thermoplastic polyester	IA 18	27.5 Nm
Backpart		IA 30	50.0 Nm
Plug	NPB	Approvals	UL, CSA
Cable	PBTP (black polyester)	CE-marking	Yes
Nuts	NPB		
Connection			
Cable	2 m, 3 x 0.3 mm ² , grey PVC, oil proof		
Plug	M12 x 1		
Cables for plug (-1)	CONM13NF series		

Dimensions

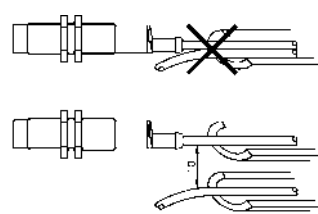
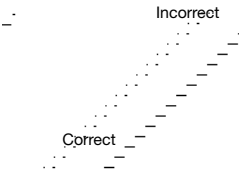
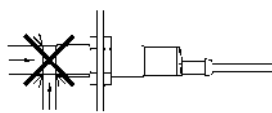
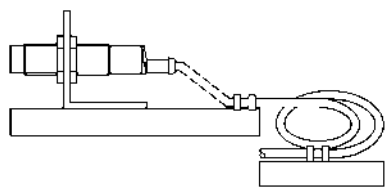
Type	A	B Ø mm	C mm	D mm	E mm	F mm	SW mm
IA 18 DSF 08 .O	M18 x 1 x 30	16.7	30	11.6	15.4	4	24
IA 18 ASF 08 .O M1	M18 x 1 x 30	16.7	30	25.0		4	24
IA 18 DSN 14 .O	M18 x 1 x 30	16.7	38	11.6	15.4	4	24
IA 18 ASN 14 .O M1	M18 x 1 x 30	16.7	38	25.0		4	24
IA 30 DSF 15 xx	M30 x 1.5 x 30	28	30	13.6	15.4	5	36
IA 30 ASF 15 .O M1	M30 x 1.5 x 30	28	30	25.0		5	36
IA 30 DSN 22 .O	M30 x 1.5 x 30	28	42	13.6	15.4	5	36
IA 30 ASN 22 .O M1	M30 x 1.5 x 30	28	42	25.0		5	36



Wiring Diagrams



Installation Hints

<p><i>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</i></p> 	<p><i>Relief of cable strain</i></p>  <p>The cable should not be pulled</p>	<p><i>Protection of the sensing face</i></p>  <p>A proximity switch should not serve as mechanical stop</p>	<p><i>Switch mounted on mobile carrier</i></p>  <p>Any repetitive flexing of the cable should be avoided</p>
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Delivery Contents

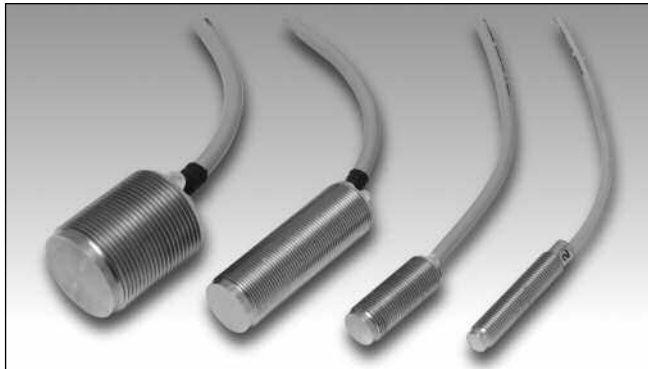
- Inductive proximity switch IA..
- 2 nuts NPB
- Packaging: plastic bag

Accessories

M 12 connector

- | | |
|-------------|-----------------------|
| CONM13NF-A2 | (90°, 2 m cable) |
| CONM13NF-A5 | (90°, 5 m cable) |
| CONM13NF-S2 | (straight, 2 m cable) |
| CONM13NF-S5 | (straight, 5 m cable) |

Proximity Inductive Sensors DC Metal Face Types IA, M8, M12, M18 and M30



- Sensing distance: 1 to 15 mm
- Flush and non-flush types
- Long and short housing
- Rated operational voltage: 10 - 30 VDC
- Output: DC 100 mA, NPN or PNP
- Normally open, Normally closed
- Output indication: by yellow LED
- Protection: reverse polarity, short circuit, transients
- Cable and plug versions

Product Description

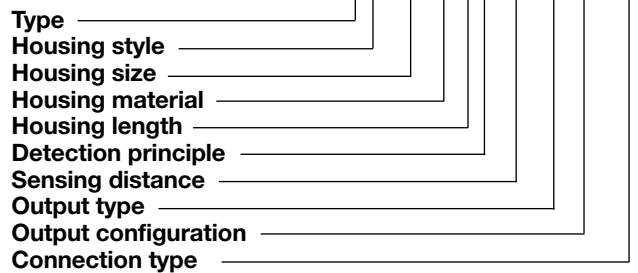
A family of metal face inductive proximity switches in industrial standard stainless steel housings (M8, M12, M18 and M30 types). Output indication: by yellow LED. Outputs are open collector NPN or PNP transistors. Available with cable and M8 or M12 plug.

These sensors stand up to

abrasion and impact caused by flying metal chips, grit and misaligned or vibrating targets. In addition, the stainless steel body resists against corrosion and chemical attack, by offering a higher level of protection for more reliable operation and longer life in harsh environments.

Ordering Key

IA08FLF01NOM5



Type Selection M8, M12 and M18

Housing diameter	Connection	Housing style	Rated operating distance S_n	Ordering no. NPN Normally open	Ordering no. PNP Normally open	Ordering no. NPN Normally closed	Ordering no. PNP Normally closed
M8	Cable	Short	1 mm ¹⁾	IA 08 FSF 01 NO	IA 08 FSF 01 PO	IA 08 FSF 01 NC	IA 08 FSF 01 PC
M8	Plug	Short	1 mm ¹⁾	IA 08 FSF 01 NOM5	IA 08 FSF 01 POM5	IA 08 FSF 01 NCM5	IA 08 FSF 01 PCM5
M8	Cable	Long	1 mm ¹⁾	IA 08 FLF 01 NO	IA 08 FLF 01 PO	IA 08 FLF 01 NC	IA 08 FLF 01 PC
M8	Plug	Long	1 mm ¹⁾	IA 08 FLF 01 NOM5	IA 08 FLF 01 POM5	IA 08 FLF 01 NCM5	IA 08 FLF 01 PCM5
M8	Cable	Short	2 mm ²⁾	IA 08 FSN 02 NO	IA 08 FSN 02 PO	IA 08 FSN 02 NC	IA 08 FSN 02 PC
M8	Plug	Short	2 mm ²⁾	IA 08 FSN 02 NOM5	IA 08 FSN 02 POM5	IA 08 FSN 02 NCM5	IA 08 FSN 02 PCM5
M8	Cable	Long	2 mm ²⁾	IA 08 FLN 02 NO	IA 08 FLN 02 PO	IA 08 FLN 02 NC	IA 08 FLN 02 PC
M8	Plug	Long	2 mm ²⁾	IA 08 FLN 02 NOM5	IA 08 FLN 02 POM5	IA 08 FLN 02 NCM5	IA 08 FLN 02 PCM5
M12	Cable	Short	2 mm ¹⁾	IA 12 FSF 02 NO	IA 12 FSF 02 PO	IA 12 FSF 02 NC	IA 12 FSF 02 PC
M12	Plug	Short	2 mm ¹⁾	IA 12 FSF 02 NOM1	IA 12 FSF 02 POM1	IA 12 FSF 02 NCM1	IA 12 FSF 02 PCM1
M12	Cable	Long	2 mm ¹⁾	IA 12 FLF 02 NO	IA 12 FLF 02 PO	IA 12 FLF 02 NC	IA 12 FLF 02 PC
M12	Plug	Long	2 mm ¹⁾	IA 12 FLF 02 NOM1	IA 12 FLF 02 POM1	IA 12 FLF 02 NCM1	IA 12 FLF 02 PCM1
M12	Cable	Short	4 mm ²⁾	IA 12 FSN 04 NO	IA 12 FSN 04 PO	IA 12 FSN 04 NC	IA 12 FSN 04 PC
M12	Plug	Short	4 mm ²⁾	IA 12 FSN 04 NOM1	IA 12 FSN 04 POM1	IA 12 FSN 04 NCM1	IA 12 FSN 04 PCM1
M12	Cable	Long	4 mm ²⁾	IA 12 FLN 04 NO	IA 12 FLN 04 PO	IA 12 FLN 04 NC	IA 12 FLN 04 PC
M12	Plug	Long	4 mm ²⁾	IA 12 FLN 04 NOM1	IA 12 FLN 04 POM1	IA 12 FLN 04 NCM1	IA 12 FLN 04 PCM1
M18	Cable	Short	5 mm ¹⁾	IA 18 FSF 05 NO	IA 18 FSF 05 PO	IA 18 FSF 05 NC	IA 18 FSF 05 PC
M18	Plug	Short	5 mm ¹⁾	IA 18 FSF 05 NOM1	IA 18 FSF 05 POM1	IA 18 FSF 05 NCM1	IA 18 FSF 05 PCM1
M18	Cable	Long	5 mm ¹⁾	IA 18 FLF 05 NO	IA 18 FLF 05 PO	IA 18 FLF 05 NC	IA 18 FLF 05 PC
M18	Plug	Long	5 mm ¹⁾	IA 18 FLF 05 NOM1	IA 18 FLF 05 POM1	IA 18 FLF 05 NCM1	IA 18 FLF 05 PCM1
M18	Cable	Short	8 mm ²⁾	IA 18 FSN 08 NO	IA 18 FSN 08 PO	IA 18 FSN 08 NC	IA 18 FSN 08 PC
M18	Plug	Short	8 mm ²⁾	IA 18 FSN 08 NOM1	IA 18 FSN 08 POM1	IA 18 FSN 08 NCM1	IA 18 FSN 08 PCM1
M18	Cable	Long	8 mm ²⁾	IA 18 FLN 08 NO	IA 18 FLN 08 PO	IA 18 FLN 08 NC	IA 18 FLN 08 PC
M18	Plug	Long	8 mm ²⁾	IA 18 FLN 08 NOM1	IA 18 FLN 08 POM1	IA 18 FLN 08 NCM1	IA 18 FLN 08 PCM1

¹⁾ For flush mounting in metal ²⁾ For non-flush mounting in metal

Type Selection M30

Housing diameter	Connection	Housing style	Rated operating distance S_n	Ordering no. NPN Normally open	Ordering no. PNP Normally open	Ordering no. NPN Normally closed	Ordering no. PNP Normally closed
M30	Cable	Short	10 mm ¹⁾	IA 30 FSF 10 NO	IA 30 FSF 10 PO	IA 30 FSF 10 NC	IA 30 FSF 10 PC
M30	Plug	Short	10 mm ¹⁾	IA 30 FSF 10 NOM1	IA 30 FSF 10 POM1	IA 30 FSF 10 NCM1	IA 30 FSF 10 PCM1
M30	Cable	Long	10 mm ¹⁾	IA 30 FLF 10 NO	IA 30 FLF 10 PO	IA 30 FLF 10 NC	IA 30 FLF 10 PC
M30	Plug	Long	10 mm ¹⁾	IA 30 FLF 10 NOM1	IA 30 FLF 10 POM1	IA 30 FLF 10 NCM1	IA 30 FLF 10 PCM1
M30	Cable	Short	15 mm ²⁾	IA 30 FSN 15 NO	IA 30 FSN 15 PO	IA 30 FSN 15 NC	IA 30 FSN 15 PC
M30	Plug	Short	15 mm ²⁾	IA 30 FSN 15 NOM1	IA 30 FSN 15 POM1	IA 30 FSN 15 NCM1	IA 30 FSN 15 PCM1
M30	Cable	Long	15 mm ²⁾	IA 30 FLN 15 NO	IA 30 FLN 15 PO	IA 30 FLN 15 NC	IA 30 FLN 15 PC
M30	Plug	Long	15 mm ²⁾	IA 30 FLN 15 NOM1	IA 30 FLN 15 POM1	IA 30 FLN 15 NCM1	IA 30 FLN 15 PCM1

1) For flush mounting in metal 2) For non-flush mounting in metal

Specifications

Rated operational voltage (U_B)	10 to 30 VDC	Housing material	Body, Front	Stainless steel AISI 304
Ripple	< 10%		Backpart	
Output current (I_o)	≤ 100 mA @ 50°C	Connection	Plug	PA-66
No load supply current (I_o)	IA08, IA12FxF, IA18FxN, IA30FxN		Cable	
	IA12FxN, IA18FxN, IA30FxN	< 10 mA	Nuts	Stainless steel
Voltage drop (U_d)	IA08	Cable	IA08	2 m, 3 x 0.15 mm ² , Ø 3 mm, Grey PVC
	IA12, IA18, IA30		IA12, IA18	
Protection	Reverse polarity, short-circuit, transients	IA30		2 m, 3 x 0.50 mm ² , Ø 5.8 mm, Grey PVC
Voltage transient	1 kV	Plug		
Power ON delay (t_v)	< 10 ms	IA08		M8 x 1
Operating frequency (f)	IA08FxNxxxxx	IA12, IA18, IA30		M12 x 1
	IA12FxNxxxx	Cables for plug (-1)		CONH1A/CONH1O series
	IA18FxNxxxx			
	IA18FxNxx			
	IA18FxNxxM1			
	IA18FxNxxM1			
	IA30FSFxx			
	IA30FSNxx			
	IA30FLFxx			
	IA30FLNxx			
	IA30FxNxxM1			
	IA30FxNxxM1			
Indication for output ON	LED, yellow	Degree of protection	IP 67	
Operating sensing distance (S_a)	$0 \leq S_a \leq 0.81 \times S_n$	Weight	IA08FSFxx	33 g
Effective operating distance (S_r)	$0.9 \times S_n \leq S_r \leq 1.1 \times S_n$	IA08FSFxxM5	33 g	
Usable operating distance (S_u)	$0.9 \times S_r \leq S_u \leq 1.1 \times S_r$	IA08FLFxx	33 g	
Repeated accuracy (R)	$\leq 5\%$	IA08FLFxxM5	18 g	
Differential travel (H) (Hysteresis)	1 to 20% of sensing dist.	IA08FSNxx	32 g	
		IA08FSNxxM5	32 g	
Ambient temperature	Operating Storage Humidity (non-condensing)	IA08FLNxx	32 g	
		IA08FLNxxM5	17 g	
		IA12FSFxx	31 g	
		IA12FSFxxM1	40 g	
		IA12FLFxx	67 g	
		IA12FLFxxM1	153 g	
		IA12FSNxx	30 g	
		IA12FSNxxM1	38 g	
		IA12FLNxx	65 g	
		IA12FLNxxM1	144 g	
		IA18FSFxx	110 g	
		IA18FSFxxM1	74 g	
IA18FLFxx	153 g			
IA18FLFxxM1	94 g			
IA18FSNxx	92 g			
IA18FSNxxM1	70 g			
IA18FLNxx	144 g			
IA18FLNxxM1	91 g			

Specifications (cont.)

Weight (cont.)

IA30FSFxx	146 g
IA30FSFxxM1	200 g
IA30FLFxx	217 g
IA30FLFxxM1	187 g
IA30FSNxx	138 g
IA30FSNxxM1	200 g
IA30FLNxx	207 g
IA30FLNxxM1	179 g

Tightening torque

IA08	4.5 Nm
IA12	25.0 Nm
IA18	60.0 Nm
IA30	230.0 Nm

CE-marking

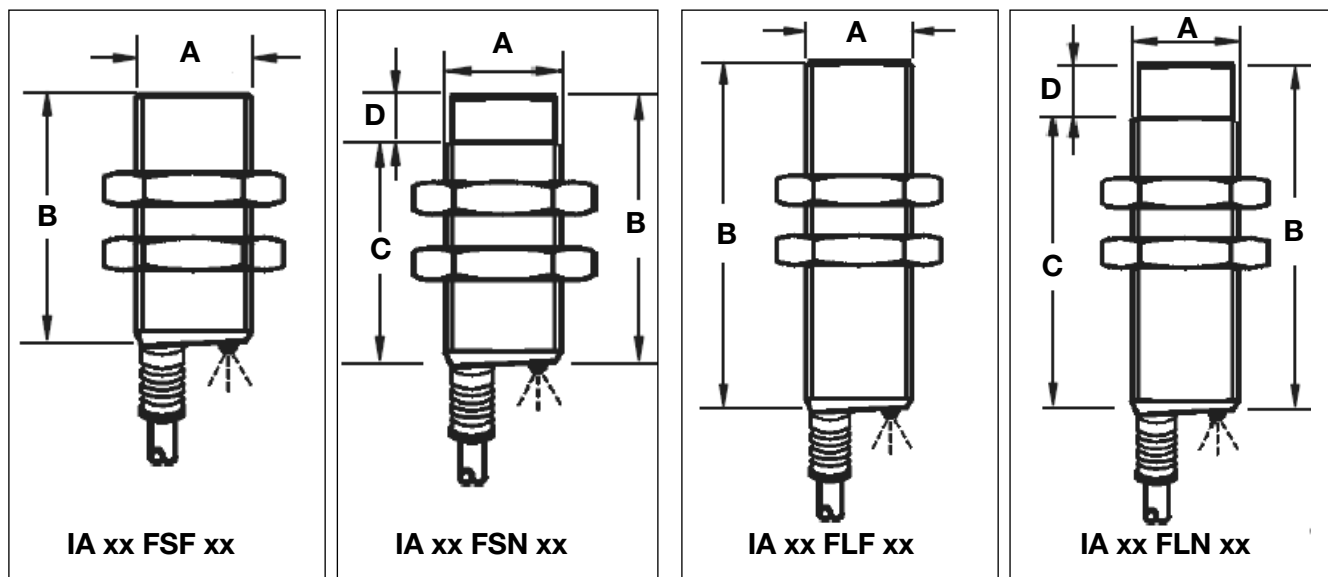
Yes

Dimensions

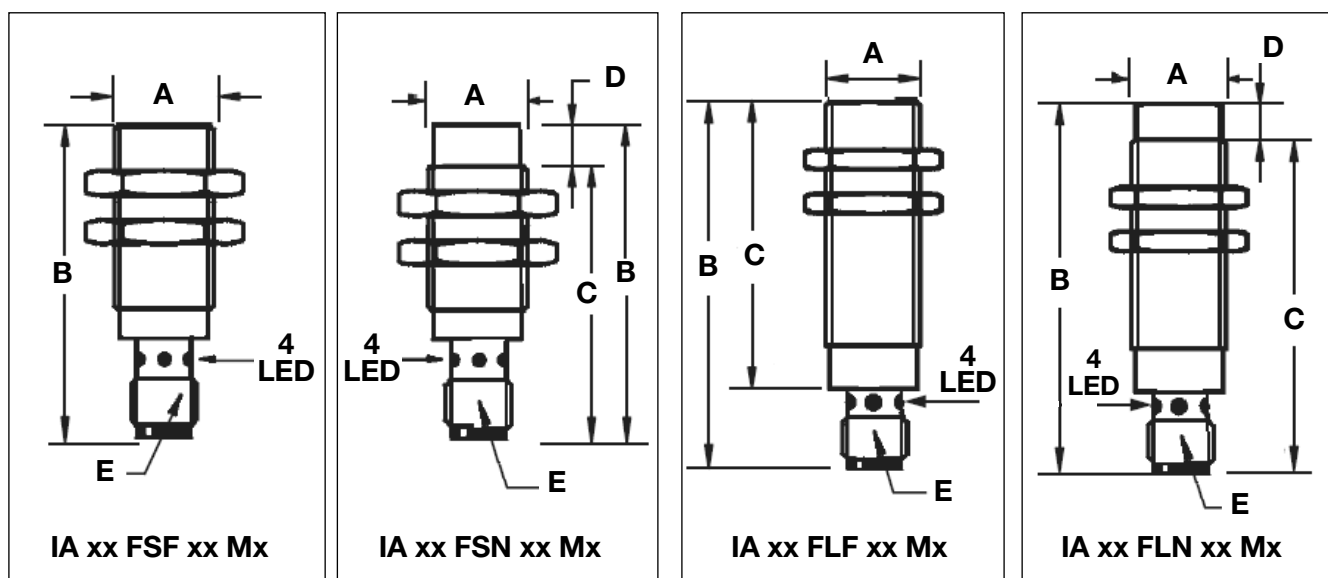
Type	Description	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
IA 08 FSF 01 xx	M8 x 1 x 30	M8 x 1	30	-	-	-
IA 08 FSF 01 xx M5	M8 x 1 x 45	M8 x 1	45	-	-	M8 x 1
IA 08 FLF 01 xx	M8 x 1 x 45	M8 x 1	45	-	-	-
IA 08 FLF 01 xx M5	M8 x 1 x 60	M8 x 1	60	40	-	M8 x 1
IA 08 FSN 02 xx	M8 x 1 x 30	M8 x 1	30	26	4	-
IA 08 FSN 02 xx M5	M8 x 1 x 45	M8 x 1	45	41	4	M8 x 1
IA 08 FLN 02 xx	M8 x 1 x 45	M8 x 1	45	41	4	-
IA 08 FLN 02 xx M5	M8 x 1 x 60	M8 x 1	60	56	4	M8 x 1
IA 12 FSF 02 xx	M12 x 1 x 30	M12 x 1	30	-	-	-
IA 12 FSF 02 xx M1	M12 x 1 x 50	M12 x 1	50	-	-	M12 x 1
IA 12 FLF 02 xx	M12 x 1 x 50	M12 x 1	50	-	-	-
IA 12 FLF 02 xx M1	M12 x 1 x 68	M12 x 1	68	42	-	M12 x 1
IA 12 FSN 04 xx	M12 x 1 x 30	M12 x 1	30	22	8	-
IA 12 FSN 04 xx M1	M12 x 1 x 50	M12 x 1	50	42	8	M12 x 1
IA 12 FLN 04 xx	M12 x 1 x 50	M12 x 1	50	42	8	-
IA 12 FLN 04 xx M1	M12 x 1 x 68	M12 x 1	68	60	8	M12 x 1
IA 18 FSF 05 xx	M18 x 1 x 35	M18 x 1	35	-	-	-
IA 18 FSF 05 xx M1	M18 x 1 x 48	M18 x 1	48	-	-	M12 x 1
IA 18 FLF 05 xx	M18 x 1 x 55	M18 x 1	55	-	-	-
IA 18 FLF 05 xx M1	M18 x 1 x 79	M18 x 1	79	65	-	M12 x 1
IA 18 FSN 08 xx	M18 x 1 x 35	M18 x 1	35	23	12	-
IA 18 FSN 08 xx M1	M18 x 1 x 48	M18 x 1	48	36	12	M12 x 1
IA 18 FLN 08 xx	M18 x 1 x 55	M18 x 1	55	43	12	-
IA 18 FLN 08 xx M1	M18 x 1 x 79	M18 x 1	79	67	12	M12 x 1
IA 30 FSF 10 xx	M30 x 1.5 x 35	M30 x 1.5	35	-	-	-
IA 30 FSF 10 xx M1	M30 x 1.5 x 48	M30 x 1.5	48	-	-	M12 x 1
IA 30 FLF 10 xx	M30 x 1.5 x 55	M30 x 1.5	55	-	-	-
IA 30 FLF 10 xx M1	M30 x 1.5 x 78	M30 x 1.5	78	-	-	M12 x 1
IA 30 FSN 15 xx	M30 x 1.5 x 35	M30 x 1.5	35	25	10	-
IA 30 FSN 15 xx M1	M30 x 1.5 x 48	M30 x 1.5	48	38	10	M12 x 1
IA 30 FLN 15 xx	M30 x 1.5 x 55	M30 x 1.5	55	45	10	-
IA 30 FLN 15 xx M1	M30 x 1.5 x 78	M30 x 1.5	78	68	10	M12 x 1



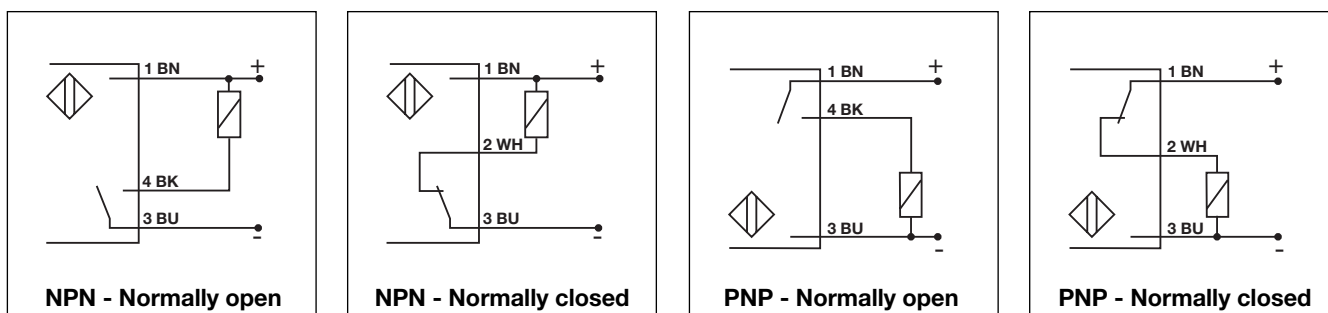
Dimensions: cable type



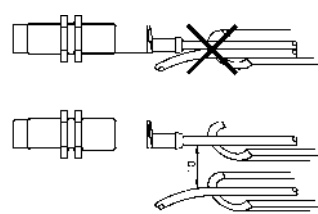
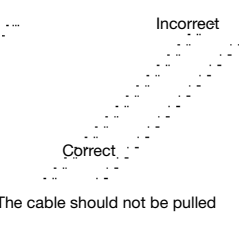
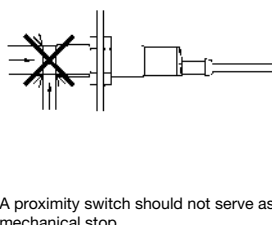
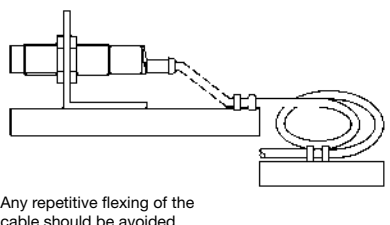
Dimensions: plug type



Wiring Diagrams



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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Delivery Contents

- Inductive proximity switch IA..
- 2 stainless steel nuts
- 1 stainless steel washer
- Packaging: plastic bag

По вопросам продаж и поддержки обращайтесь:

Алматы (7273)495-231	Казань (843)206-01-48	Новокузнецк (3843)20-46-81	Смоленск (4812)29-41-54
Архангельск (8182)63-90-72	Калининград (4012)72-03-81	Новосибирск (383)227-86-73	Сочи (862)225-72-31
Астрахань (8512)99-46-04	Калуга (4842)92-23-67	Омск (3812)21-46-40	Ставрополь (8652)20-65-13
Барнаул (3852)73-04-60	Кемерово (3842)65-04-62	Орел (4862)44-53-42	Сургут (3462)77-98-35
Белгород (4722)40-23-64	Киров (8332)68-02-04	Оренбург (3532)37-68-04	Тверь (4822)63-31-35
Брянск (4832)59-03-52	Краснодар (861)203-40-90	Пенза (8412)22-31-16	Томск (3822)98-41-53
Владивосток (423)249-28-31	Красноярск (391)204-63-61	Пермь (342)205-81-47	Тула (4872)74-02-29
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Вологда (8172)26-41-59	Липецк (4742)52-20-81	Рязань (4912)46-61-64	Ульяновск (8422)24-23-59
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Иваново (4932)77-34-06	Мурманск (8152)59-64-93	Саратов (845)249-38-78	Челябинск (351)202-03-61
Ижевск (3412)26-03-58	Набережные Челны (8552)20-53-41	Севастополь (8692)22-31-93	Череповец (8202)49-02-64
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Россия (495)268-04-70	Киргизия (996)312-96-26-47	Казахстан (7172)727-132	

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