

DESCRIPTION: INDUCTIVE SENSORS IAS

The series 10 contains inductive 3-wire proximity sensors with digital output **pnp** with NO or NC-function. Electronic circuits, PLC's, relays and our power supplies of series 130 can be directly activated. Analog sensors with 4...20 mA output are also available. The operating range of these analog sensors is adjustable by means of a potentiometer and they can be actuated by analog interfaces with internal resistance $R_i < 300 \text{ ohm}$. The sensors are reverse polarity protected, overload protected and have electronic short-circuit protection.

StEx-Sensors for use in Zone 20 with ATEX-certificate complete this series.


The series 20 contains inductive 3-wire proximity sensors with digital output **npn** with NO or NC-function. Electronic circuits, PLC's, relays and our power supplies of series 130 can be directly activated. The sensors are reverse-polarity protected, overload-protected and have electronic short-circuit protection.

StEx-Sensors for use in Zone 20 with ATEX-certificate complete this series.

The series 30 contains inductive 2-wire proximity signal generators according to **NAMUR DIN 60947-5-6**. These sensors can be mounted in explosion hazardous areas when they are connected to approved isolating switching amplifiers with intrinsically safe control circuits. [EExia] or [EExib], our series N-131... Depending on which isolating switching amplifier is used the NAMUR-sensors of this series can be used up to zone 1. The data specified in the certificate of conformity of the isolating switching amplifier used must be taken into consideration.

StEx-Sensors for use in Zone 20 with ATEX-certificate complete this series.

ATEX/StEx SERIES 10/20

I T E M	Sensing distance [mm]		Diameter [mm] or with thread	Housing Material	Electrical Version DC 10...30 V  II 1 D IP 67 T 101°C II 2G EEx m II T4 DMT 01 ATEX E 157 NPN [20], PNP [10] Selection NO [S] and Antivalent [A] see data sheets	Connection	Pages
	Flush	Non-flush		brass stainless steel [VA]			
1	2	-	M12 x 1 - A12	[VA]	10, 20	Cable	6
2	5	-	M18 x 1 - A13	brass	10,20	Cable	7
3	10	-	M30 x 1,5 - A24	brass	10, 20	Cable	8

All specifications are subject to change without notice. (07/2004)



Certificate: DMT 01 ATEX E 157



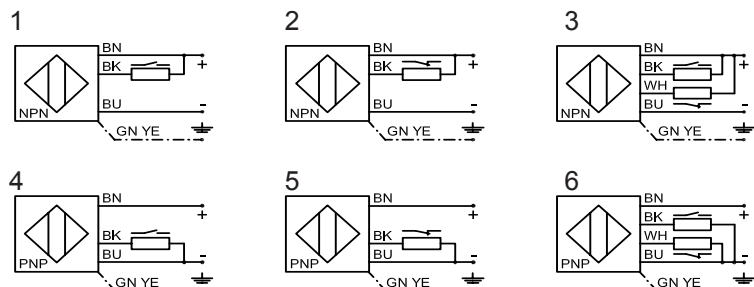
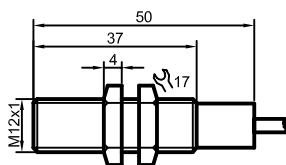
Inductive Sensors Series 20 - NPN-StEx-ATEX Series 10 - PNP-StEx-ATEX

Housing M12 x 1

- Ex II 1/2 D IP 67 T 101°C
- For use in zone 20
- Ex II 2G EEx m II T4
- Housing material: stainless steel VA
- Flush mountable
- Sensing distance S_n 2 mm

Technical data

Operating distance S_n [mm], flush mounting	2, yes
Electrical version	4-wire DC
Output	NO
Type NPN	IAS-20-A12-S-StEx
Art.-No.	IA 0138
Connection diagram No.	1
Type PNP	IAS-10-A12-S-StEx
Art.-No.	IA 0111
Connection diagram No.	4
Operating voltage (U_B)	10...30 V DC
Output current max. (I_o)	150 mA
Load current min.	-
Voltage drop max. (U_d)	≤ 2.5 V
Permitted residual ripple max.	10 %
No-load current (I_o)	typ. 15 mA
Frequency of operating cycles max.	2 kHz
Permitted ambient temperature	-20...+90°C
LED-display	yellow
Protective circuit	built-in
Degree of protection IEC 529	IP 67
Connection cable	2 m 4 x 0.14 mm ²
Housing material	VA No. 1.4305
Active surface	PTFE
Lid	PC



All specifications are subject to change without notice. (07/2004)



Inductive Sensors
Series 20 - NPN-StEx-ATEX
Series 10 - PNP-StEx-ATEX

Housing M18 x 1

- Ex II 1/2 D IP 67 T 101°C
- For use in zone 20
- Ex II 2G EEx m II T4
- Housing material: brass
- Flush mountable
- Sensing distance S_n 5 mm

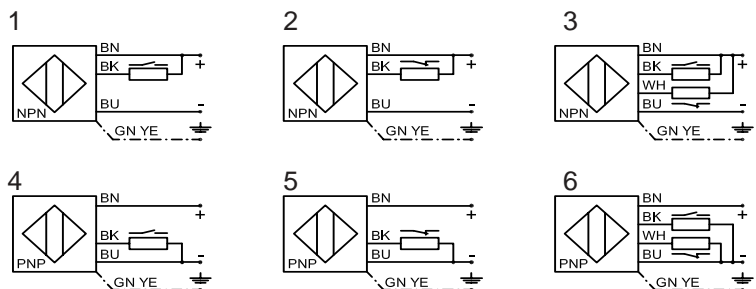
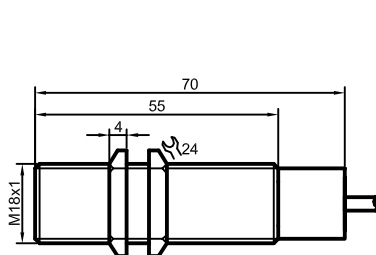
Certificate: DMT 01 ATEX E 157



Technical data

Operating distance S_n [mm], flush mounting	5, yes
Electrical version	5-wire DC
Output	Antivalent
Type NPN	IAS-20-A13-A-StEx
Art.-No.	IA 0136
Connection diagram No.	3
Type PNP	IAS-10-A13-A-StEx
Art.-No.	IA 0110
Connection diagram No.	6
Operating voltage (U_B)	10...30 V DC
Output current max. (I_o)	2 x 200 mA
Load current min.	-
Voltage drop max. (U_d)	≤ 2.5 V
Permitted residual ripple max.	10 %
No-load current (I_o)	typ. 15 mA
Frequency of operating cycles max.	2 kHz
Permitted ambient temperature	-20...+90°C
LED-display	green/yellow
Protective circuit	built-in
Degree of protection IEC 529	IP 67
Connection cable	2 m 5 x 0.14 mm ²
Housing material	brass
Active surface	PTFE
Lid	PC

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Inductive Sensors Series 20 - NPN-StEx-ATEX Series 10 - PNP-StEx-ATEX

Housing M30 x 1.5

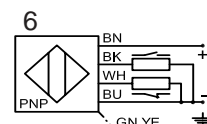
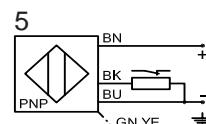
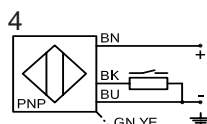
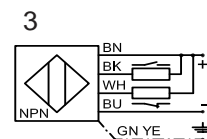
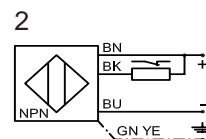
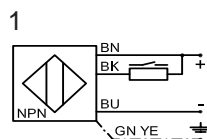
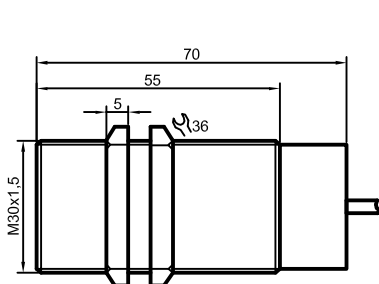
- Ex II 1/2 D IP 67 T 101°C
- For use in zone 20
- Ex II 2G EEx m II T4
- Housing material: brass
- Flush mountable
- Sensing distance S_n 10 mm

Certificate: DMT 01 ATEX E 157



Technical data

Operating distance S_n [mm], flush mounting	10, yes
Electrical version	5-wire DC
Output	Antivalent
Type NPN	IAS-20-A14-A-StEx
Art.-No.	IA 0137
Connection diagram No.	3
Type PNP	IAS-10-A14-A-StEx
Art.-No.	IA 0109
Connection diagram No.	6
Operating voltage (U_B)	10...30 V DC
Output current max. (I_o)	2 x 200 mA
Load current min.	-
Voltage drop max. (U_d)	≤ 2.5 V
Permitted residual ripple max.	10 %
No-load current (I_o)	typ. 15 mA
Frequency of operating cycles max.	1 kHz
Permitted ambient temperature	-20...+90°C
LED-display	green/yellow
Protective circuit	built-in
Degree of protection IEC 529	IP 67
Connection cable	2 m 5 x 0.34 mm ²
Housing material	brass
Active surface	PTFE
Lid	PC



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ATEX AND ATEX/StEx SERIES 30 (NAMUR)

I T E M	Sensing distance [mm]		Diameter [mm] or with thread	Housing material	Electrical Version $U_i = 15 \text{ V DC NAMUR [30]}$ DMT 03 ATEX E 048	Connection	Pages
	flush	non-flush					
1	0.8	-	4	VA	30	Cable	10
2	0.8	-	M5 x 0.5	VA	30	Cable	11
3	1.5	-	6.5	VA	30	Cable	12
4	1.5	-	M8 x 1	VA	30	Cable	13
5	-	5	11	PA	30	Cable	14
6	2	4	M12 x 1 - A12/A22	Brass	30, 30-StEx	Cable	15-16
7	5	8	M18 x 1 - A13/A23	Brass	30, 30-StEx	Cable	17-18
8	10	15	M30 x 1.5 - A14/A24	Brass	30, 30-StEx	Cable	19-20
9	10	15	M32 x 1.5	Brass, PA	30, 30-StEx	Cable	21-22

All specifications are subject to change without notice. (06/2004)



Inductive Sensors Series 30 - NAMUR

Housing Ø 4 mm

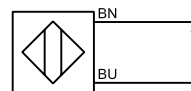
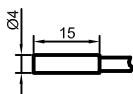
- Ex II 2 G EEx ia IIC T1-T6
- For use in areas where there is a risk of explosion
- Housing material: stainless steel VA
- Flush mountable
- Sensing distance $S_n = 0.8$ mm

Certificate: DMT 03 ATEX E 048



Technical data

Operating distance S_n [mm], flush mounting	0.8, yes
Electrical version	2-wire DC
Output	NAMUR DIN 60947-5-6
Type	IAS-30-04-N
Art.-No.	300 700
Connection diagram No.	see below
Operating voltage (U_b)	$U_1 = 15$ V DC
Output current active surface free	> typ. 2 mA
Output current active surface covered	< typ. 1.5 mA
Self-inductance (L)	2mH
Self-capacitance (C)	250 nF
Permitted residual ripple max.	5 %
Frequency of operating cycles max.	500 Hz
Permitted ambient temperature	-25...+70°C
LED-display	-
Degree of protection IEC 529	IP 67
Connection cable	2 m 2 x 0.14 mm ²
Housing material	VA No. 1.4305
Active surface	-
Lid	-



All specifications are subject to change without notice. (07/2004)



Inductive Sensors Series 30 - NAMUR

Housing M5 x 0.5

- Ex II 2 G EEx ia IIC T1-T6
- For use in areas where there is a risk of explosion
- Housing material: stainless steel VA
- Flush mountable
- Sensing distance $S_n = 0.8 \text{ mm}$

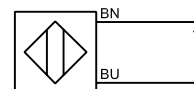
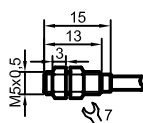
Certificate: DMT 03 ATEX E 048

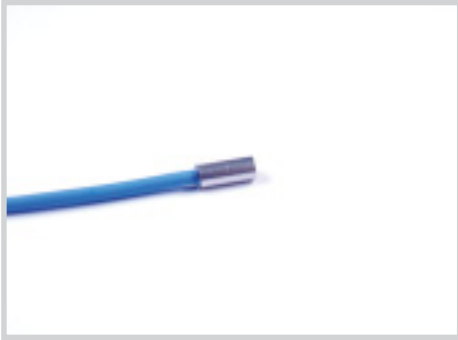


Technical data

Operating distance S_n [mm], flush mounting	0.8 , yes
Electrical version	2-wire DC
Output	NAMUR DIN 60947-5-6
Type	IAS-30-M5-N
Art.-No.	300 800
Connection diagram No.	see below
Operating voltage (U_B)	$U_i = 15 \text{ V DC}$
Output current active surface free	> typ. 2 mA
Output current active surface covered	< typ. 1.5 mA
Self-inductance (L)	2mH
Self-capacitance (C)	250 nF
Permitted residual ripple max.	5 %
Frequency of operating cycles max.	500 Hz
Permitted ambient temperature	-25...+70°C
LED-display	-
Degree of protection IEC 529	IP 67
Connection cable	2 m 2 x 0.14 mm ²
Housing material	VA No. 1.4305
Active surface	PA
Lid	-

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Inductive Sensors Serie 30 - NAMUR

Housing Ø 6.5 mm

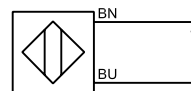
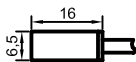
- Ex II 2 G EEx ia IIC T1-T6
- For use in areas where there is a risk of explosion
- Housing material: stainless steel VA
- Flush mountable
- Sensing distance $S_n = 1.5 \text{ mm}$

Certificate: DMT 03 ATEX E 048



Technical data

Operating distance S_n [mm], flush mounting	1.5 , yes
Electrical version	2-wire DC
Output	NAMUR DIN 60947-5-6
Type	IAS-30-6.5-N
Art.-No.	300 900
Connection diagram No.	see below
Operating voltage (U_b)	$U_1 = 15 \text{ V DC}$
Output current active surface free	> typ. 2 mA
Output current active surface covered	< typ. 1.5 mA
Self-inductance (L)	2mH
Self-capacitance (C)	250 nF
Permitted residual ripple max.	5 %
Frequency of operating cycles max.	500 Hz
Permitted ambient temperature	-25...+70°C
LED-display	-
Degree of protection IEC 529	IP 67
Connection cable	2 m 2 x 0.14 mm ²
Housing material	VA No. 1.4305
Active surface	PVC
Lid	PC



All specifications are subject to change without notice. (08/2004)



Inductive Sensors Series 30 - NAMUR

Housing M8 x 1

- Ex II 2 G EEx ia IIC T1-T6
- For use in areas where there is a risk of explosion
- Housing material: stainless steel VA
- Flush mountable
- Sensing distance $S_n = 1.5 \text{ mm}$

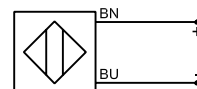
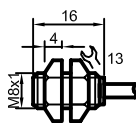
Certificate: : DMT 03 ATEX E 048



Technical data

Operating distance S_n [mm], flush mounting	1.5, yes
Electrical version	2-wire DC
Output	NAMUR DIN 60947-5-6
Type	IAS-30-M8-N
Art.-No.	301 000
Connection diagram No.	see below
Operating voltage (U_B)	$U_i = 15 \text{ V DC}$
Output current active surface free	> typ. 2 mA
Output current active surface covered	< typ. 1.5 mA
Self-inductance (L)	2mH
Self-capacitance (C)	250 nF
Permitted residual ripple max.	5 %
Frequency of operating cycles max.	500 Hz
Permitted ambient temperature	-25...+70°C
LED-display	-
Degree of protection IEC 529	IP 67
Connection cable	2 m 2 x 0.14 mm ²
Housing material	VA No. 1.4305
Active surface	PVC
Lid	PC

All specifications are subject to change without notice. (08/2004)





Inductive Sensors Series 30 - NAMUR

Housing \varnothing 11 mm

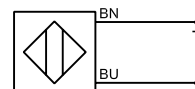
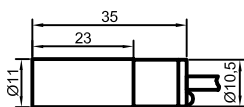
- Ex II 2 G EEx ia IIC T1-T6
- For use in areas where there is a risk of explosion
- Housing material: PA
- Non-flush mountable
- Sensing distance $S_n = 5$ mm

Certificate: DMT 03 ATEX E 048



Technical data

Operating distance S_n [mm], flush mounting	5, no
Electrical version	2-wire DC
Output	NAMUR DIN 60947-5-6
Type	IAS-30-14-N
Art.-No.	301 500
Connection diagram No.	see below
Operating voltage (U_b)	$U_1 = 15$ V DC
Output current active surface free	> typ. 2 mA
Output current active surface covered	< typ. 1.5 mA
Self-inductance (L)	2mH
Self-capacitance (C)	250 nF
Permitted residual ripple max.	5 %
Frequency of operating cycles max.	1 kHz
Permitted ambient temperature	-25...+70°C
LED-display	yellow
Degree of protection IEC 529	IP 67
Connection cable	2 m 2 x 0.14 mm ²
Housing material	PA
Active surface	PA
Lid	PA



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Inductive Sensors Series 30 - NAMUR

Housing M12 x 1

- $\text{Ex II 2 G EEx ia IIC T1-T6}$
- $\text{Ex II 1 D IP 67 T 101}^\circ\text{C}$
- For use in areas where there is a risk of explosion
- Flush mountable
- Sensing distance $S_n = 2 \text{ mm}$

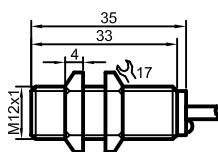
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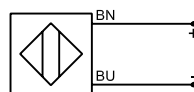
Technical data

Operating distance S_n [mm], flush mounting	2, yes	
Electrical version	2-wire DC	3-wire DC
Output	NAMUR DIN 60947-5-6	
Type	IAS-30-A12-N	IAS-30-A12-N-StEx
Application/Marking	Ex II 2 G EEx ia IIC T1-T6	
		Ex II 1 D IP 67 T 101°C
Art.-No.	300 100	IA 0091
Connection diagram No.	1	2
Operating voltage (U_g)	$U_i = 15 \text{ V DC}$	
Output current active surface free	> typ. 2 mA	
Output current active surface covered	< typ. 1.5 mA	
Self-inductance (L)	2mH	
Self-capacitance (C)	250 nF	
Permitted residual ripple max.	5 %	
Frequency of operating cycles max.	1.5 kHz	
Permitted ambient temperature	-25...+70°C	-20...+90°C
LED-display	yellow	
Degree of protection IEC 529	IP 67	
Connection cable	2 m 2 x 0.14 mm ²	2 m 3 x 0.14 mm ²
Housing material	brass	
Active surface	PA	PTFE
Lid	PA	PC

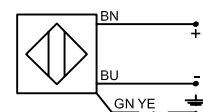
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No. 1



No. 2





Certificate: DMT 03 ATEX E 048



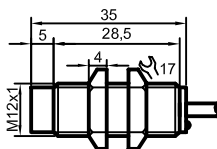
Inductive Sensors Series 30 - NAMUR

Housing M12 x1

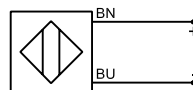
- $\text{Ex II 2 G EEx ia IIC T1-T6}$
- $\text{Ex II 1 D IP 67 T 101}^\circ\text{C}$
- For use in areas where there is a risk of explosion
- Housing material: brass
- Non-flush mountable
- Sensing distance $S_n = 4 \text{ mm}$

Technical data

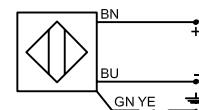
Operating distance S_n [mm], flush mounting	4, no	
Electrical version	2-wire DC	3-wire DC
Output	NAMUR DIN 60947-5-6	
Type	IAS-30-A22-N	IAS-30-A22-N-StEx
Application/Marking	Ex II 2 G EEx ia IIC T1-T6	
		Ex II 1 D IP 67 T 101°C
Art.-No.	300 200	IA 0090
Connection diagram No.	1	2
Operating voltage (U_B)	$U_i = 15 \text{ V DC}$	
Output current active surface free	> typ. 2 mA	
Output current active surface covered	< typ. 1.5 mA	
Self-inductance (L)	2mH	
Self-capacitance (C)	250 nF	
Permitted residual ripple max.	5 %	
Frequency of operating cycles max.	1.5 kHz	
Permitted ambient temperature	-25...+70°C	-20...+90°C
LED-display	yellow	
Degree of protection IEC 529	IP 67	
Connection cable	2 m 2 x 0.14 mm ²	2 m 3 x 0.14 mm ²
Housing material	brass	
Active surface	PA	PTFE
Lid	PA	PC



No. 1



No. 2



All specifications are subject to change without notice. (07/2004)



Inductive Sensors Series 30 - NAMUR

Housing M18 x 1

- $\text{Ex II 2 G EEx ia IIC T1-T6}$
- $\text{Ex II 1 D IP 67 T 101}^\circ\text{C}$
- For use in areas where there is a risk of explosion
- Housing material: brass
- Flush mountable
- Sensing distance $S_n = 5 \text{ mm}$

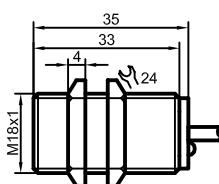
Certificate: DMT 03 ATEX E 048



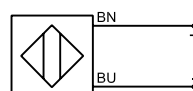
Technical data

Operating distance S_n [mm], flush mounting	5, yes	
Electrical version	2-wire DC	3-wire DC
Output	NAMUR DIN 60947-5-6	
Type	IAS-30-A13-N	IAS-30-A13-N-StEx
Application/Marking	Ex II 2 G EEx ia IIC T1-T6	
		Ex II 1 D IP 67 T 101°C
Art.-No.	300 300	IA 0092
Connection diagram No.	1	2
Operating voltage (U_g)	$U_i = 15 \text{ V DC}$	
Output current active surface free	> typ. 2 mA	
Output current active surface covered	< typ. 1.5 mA	
Self-inductance (L)	2mH	
Self-capacitance (C)	250 nF	
Permitted residual ripple max.	5 %	
Frequency of operating cycles max.	1.5 kHz	
Permitted ambient temperature	-25...+70°C	-20...+90°C
LED-display	yellow	
Degree of protection IEC 529	IP 67	
Connection cable	2 m 2 x 0.34 mm ²	2 m 3 x 0.34 mm ²
Housing material	brass	
Active surface	PA	PTFE
Lid	PA	PC

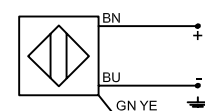
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No. 1



No. 2





Certificate: DMT 03 ATEX E 048



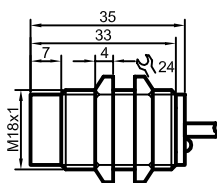
Inductive Sensors Series 30 - NAMUR

Housing M18 x 1

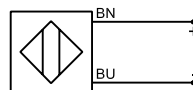
- $\text{Ex II 2 G EEx ia IIC T1-T6}$
- $\text{Ex II 1 D IP 67 T 101}^\circ\text{C}$
- For use in areas where there is a risk of explosion
- Housing material: brass
- Non-flush mountable
- Sensing distance $S_n = 8 \text{ mm}$

Technical data

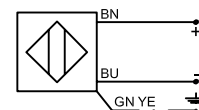
Operating distance S_n [mm], flush mounting	8, no	
Electrical version	2-wire DC	3-wire DC
Output	NAMUR DIN 60947-5-6	
Type	IAS-30-A23-N	IAS-30-A23-N-StEx
Application/Marking	Ex II 2 G EEx ia IIC T1-T6	
		Ex II 1 D IP 67 T 101°C
Art.-No.	300 400	IA 0094
Connection diagram No.	1	2
Operating voltage (U_b)	$U_i = 15 \text{ V DC}$	
Output current active surface free	> typ. 2 mA	
Output current active surface covered	< typ. 1.5 mA	
Self-inductance (L)	2mH	
Self-capacitance (C)	250 nF	
Permitted residual ripple max.	5 %	
Frequency of operating cycles max.	1.5 kHz	
Permitted ambient temperature	-25...+70°C	-20...+90°C
LED-display	yellow	
Degree of protection IEC 529	IP 67	
Connection cable	2 m 2 x 0.34 mm ²	2 m 3 x 0.34 mm ²
Housing material	brass	
Active surface	PA	PTFE
Lid	PA	PC



No. 1



No. 2



All specifications are subject to change without notice. (07/2004)



Inductive Sensors Series 30 - NAMUR

Housing M30 x 1.5

- Ex II 2 G EEx ia IIC T1-T6
- Ex II 1 D IP 67 T 101°C
- For use in areas where there is a risk of explosion
- Housing material: brass
- Flush mountable
- Sensing distance $S_n = 10$ mm

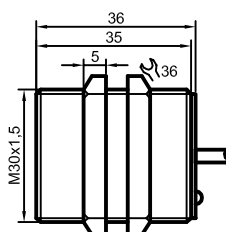
Certificate: DMT 03 ATEX E 048



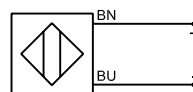
Technical data

Operating distance S_n [mm], flush mounting	10, yes	
Electrical version	2-wire DC	3-wire DC
Output	NAMUR DIN 60947-5-6	
Type	IAS-30-A14-N	IAS-30-A14-N-StEx
Application/Marking	Ex II 2 G EEx ia IIC T1-T6	
		Ex II 1 D IP 67 T 101°C
Art.-No.	300 500	IA 0095
Connection diagram No.	1	2
Operating voltage (U_B)	$U_i = 15$ V DC	
Output current active surface free	> typ. 2 mA	
Output current active surface covered	< typ. 1.5 mA	
Self-inductance (L)	2mH	
Self-capacitance (C)	250 nF	
Permitted residual ripple max.	5 %	
Frequency of operating cycles max.	1 kHz	
Permitted ambient temperature	-25...+70°C	-20...+90°C
LED-display	yellow	
Degree of protection IEC 529	IP 67	
Connection cable	2 m 2 x 0.75 mm ²	2 m 3 x 0.75 mm ²
Housing material	brass	
Active surface	PVC	PTFE
Lid	PA	PC

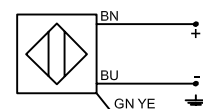
All specifications are subject to change without notice. (07/2004)



No. 1



No. 2





Inductive Sensors Series 30 - NAMUR

Housing M 30 x 1.5

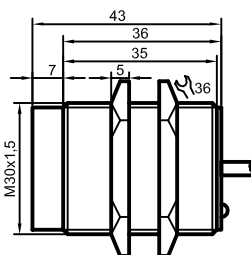
- $\text{Ex II 2 G EEx ia IIC T1-T6}$
- $\text{Ex II 1 D IP 67 T 101}^\circ\text{C}$
- For use in areas where there is a risk of explosion
- Housing material: brass
- Non-flush mountable
- Sensing distance $S_n = 15 \text{ mm}$

Certificate: DMT 03 ATEX E 048

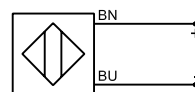


Technical data

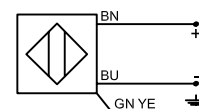
Operating distance S_n [mm], flush mounting	15, no	
Electrical version	2-wire DC	3-wire DC
Output	NAMUR DIN 60947-5-6	
Type	IAS-30-A24-N	IAS-30-A24-N-StEx
Application/Marking	Ex II 2 G EEx ia IIC T1-T6	
		Ex II 1 D IP 67 T 101°C
Art.-No.	300 600	IA 0096
Connection diagram No.	1	2
Operating voltage (U_b)	$U_i = 15 \text{ V DC}$	
Output current active surface free	> typ. 2 mA	
Output current active surface covered	< typ. 1.5 mA	
Self-inductance (L)	2mH	
Self-capacitance (C)	250 nF	
Permitted residual ripple max.	5 %	
Frequency of operating cycles max.	1 kHz	
Permitted ambient temperature	-25...+70°C	-20...+90°C
LED-display	yellow	
Degree of protection IEC 529	IP 67	
Connection cable	2 m 2 x 0.75 mm ²	2 m 3 x 0.75 mm ²
Housing material	brass	
Active surface	PVC	PTFE
Lid	PA	PC



No. 1



No. 2



All specifications are subject to change without notice. (07/2004)



Inductive Sensors Series 30 - NAMUR

Housing M32 x 1.5

- $\text{Ex II 2 G EEx ia IIC T1-T6}$
- $\text{Ex II 1 D IP 67 T 101}^\circ\text{C}$
- For use in areas where there is a risk of explosion
- Housing material: brass
- Flush mountable
- Sensing distance $S_n = 10 \text{ mm}$

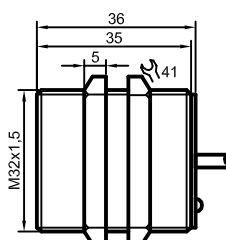
Certificate: DMT 03 ATEX E 048



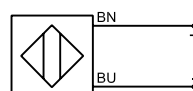
Technical data

Operating distance S_n [mm], flush mounting	10, yes	
Electrical version	2-wire DC	3-wire DC
Output	NAMUR DIN 60947-5-6	
Type	IAS-30-30-N-M32	IAS-30-30-N-M32-StEx
Application/Marking	Ex II 2 G EEx ia IIC T1-T6	
		Ex II 1 D IP 67 T 101°C
Art.-No.	302 400	IA 0097
Connection diagram No.	1	2
Operating voltage (U_B)	$U_i = 15 \text{ V DC}$	
Output current active surface free	> typ. 2 mA	
Output current active surface covered	< typ. 1.5 mA	
Self-inductance (L)	2mH	
Self-capacitance (C)	250 nF	
Permitted residual ripple max.	5 %	
Frequency of operating cycles max.	1 kHz	
Permitted ambient temperature	-25...+70°C	-20...+90°C
LED-display	yellow	
Degree of protection IEC 529	IP 67	
Connection cable	2 m 2 x 0.75 mm ²	2 m 3 x 0.75 mm ²
Housing material	brass	
Active surface	PVC	PTFE
Lid	PVC	PC

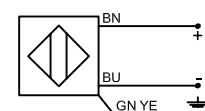
All specifications are subject to change without notice. (07/2004)



No. 1



No. 2





Inductive Sensors Serie 30 - NAMUR

Housing M 32 x 1.5

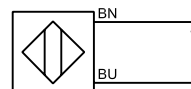
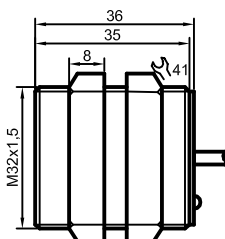
- Ex II 2 G EEx ia IIC T1-T6
- Ex II 1 D IP 67 T 101°C
- For use in areas where there is a risk of explosion
- Housing material: PA
- Non-flush mountable
- Sensing distance $S_n = 15 \text{ mm}$

Certificate: DMT 03 ATEX E 048



Technical data

Operating distance S_n [mm], flush mounting	15, no	
Electrical version	2-wire DC	
Output	NAMUR DIN 60947-5-6	
Type	IAS-30-35-N-M32	IAS-30-35-N-M32-StEx
Application/Marking	Ex II 2 G EEx ia IIC T1-T6	
		Ex II 1 D IP 67 T 101°C
Art.-No.	302 800	IA 0098
Connection diagram No.	see below	
Operating voltage (U_B)	$U_i = 15 \text{ V DC}$	
Output current active surface free	> typ. 2 mA	
Output current active surface covered	< typ. 1.5 mA	
Self-inductance (L)	2mH	
Self-capacitance (C)	250 nF	
Permitted residual ripple max.	5 %	
Frequency of operating cycles max.	1 kHz	
Permitted ambient temperature	-25...+70°C	-20...+90°C
LED-display	yellow	
Degree of protection IEC 529	IP 67	
Connection cable	2 m 2 x 0.75 mm ²	
Housing material	PA	
Active surface	PA	
Lid	PA	PC



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