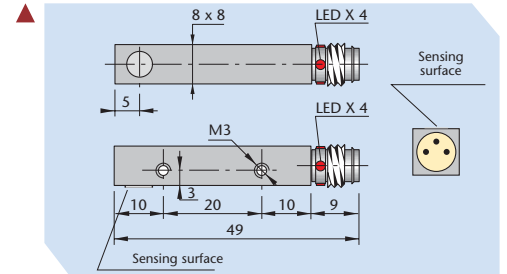
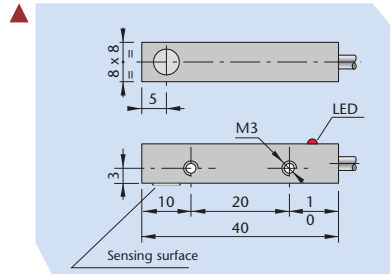


RECTANGULAR INDUCTIVE SENSORS SIPA8 - SIPC8 - SIP10



3 WIRES D.C.
CONFORMING TO EN 50044
VERSION-C

▲ EMBEDDABLE (FLUSH MOUNTING)

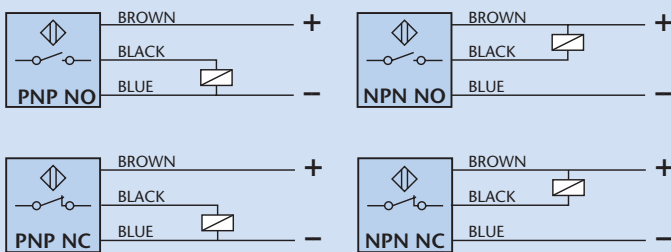


TECHNICAL CHARACTERISTICS

Dimensions mm

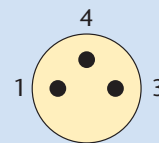
AMPLIFIED 3 WIRES D.C.	NPN	NO	SIPA8 - C2 NPN NO	SIPA8 - C2 NPN NO H 1
		NC	SIPA8 - C2 NPN NC	SIPA8 - C2 NPN NC H 1
	PNP	NO	SIPA8 - C2 PNP NO	SIPA8 - C2 PNP NO H 1
		NC	SIPA8 - C2 PNP NC	SIPA8 - C2 PNP NC H 1
Switching distance (Sn)	mm	2		2
Continuous voltage (residual ripple ≤10%)	V			6 ÷ 30
Hysteresis (%Sn)	mm			< 10%
Switching frequency	Hz			2000
Repeatability	% of Sn			≤ 3
Max output current	mA			200
Absorption at 24Vdc	mA			< 12
Voltage drop (sensor ON)	V			< 1.8
Short circuit protection				Incorporated
Led				Incorporated
Temperature limits	°C			- 25 ÷ + 70
Degree of protection	IP	67		Depending on connector
Housing		Anodized aluminium		
Cable PVC	2m	3 x 0.14 mm ²		
Connector plug				H1

WIRING DIAGRAMS



N.B.: On request is available cable for sensors with different length
3.5 - 7.5 - 5 - 10 metres.

CONNECTION WITH H1 PLUG FOR THE CONNECTORS SEE PAGE 85



VIEW OF MALE CONNECTOR H1:

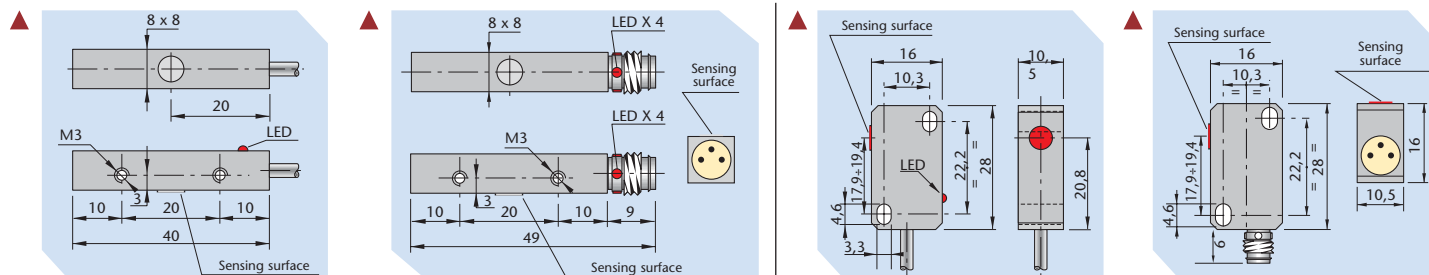
- 1 = Brown / +
- 3 = Blue / -
- 4 = Black / output NPN-PNP / NO-NC

RECTANGULAR INDUCTIVE SENSORS SIPA8 - SIPC8 - SIP10



3 WIRES D.C.
CONFORMING TO EN 50044
VERSION-C

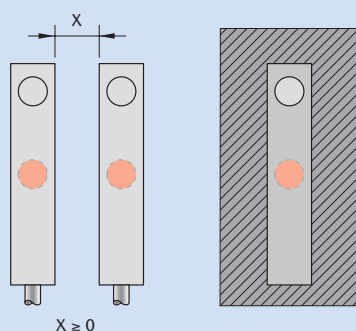
INDUCTIVE



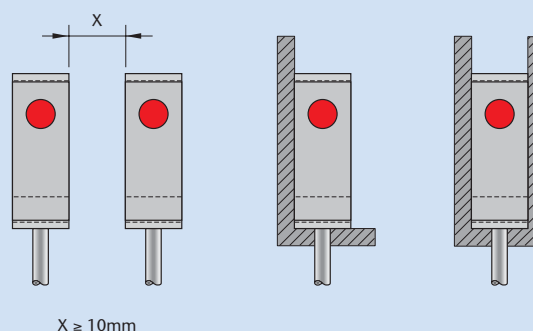
SIPC8 - C2 NPN NO	SIPC8 - C2 NPN NO H1	SIP10 - C2 NPN NO	SIP10 - C2 NPN NO H1
SIPC8 - C2 NPN NC	SIPC8 - C2 NPN NC H1	SIP10 - C2 NPN NC	SIP10 - C2 NPN NC H1
SIPC8 - C2 PNP NO	SIPC8 - C2 PNP NO H1	SIP10 - C2 PNP NO	SIP10 - C2 PNP NO H1
SIPC8 - C2 PNP NC	SIPC8 - C2 PNP NC H1	SIP10 - C2 PNP NC	SIP10 - C2 PNP NC H1
2	2	2	2
6 ÷ 30		6 ÷ 30	
<10%		< 10%	
2000		1000	
≤ 3		≤ 3	
200		200	
<12		< 12	
<1.8		< 1.8	
Incorporated		Incorporated	
Incorporated		Incorporated	
- 25 ÷ + 70		- 25 ÷ + 70	
67	Depending on connector	67	Depending on connector
Anodized aluminium		Plastic	
3 x 0.14 mm ²		3 x 0.14 mm ²	
H1		H1	

INSTRUCTIONS FOR CORRECT INSTALLATION

TYPE SIPA8 - SIPC8



TYPE SIP10



RECTANGULAR INDUCTIVE SENSORS SIP12 - SIP17 - SIP25

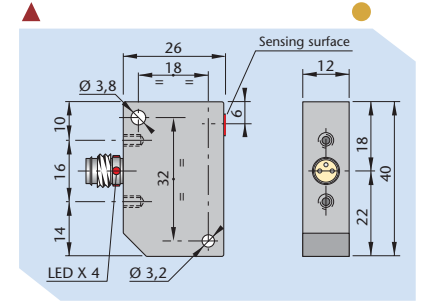
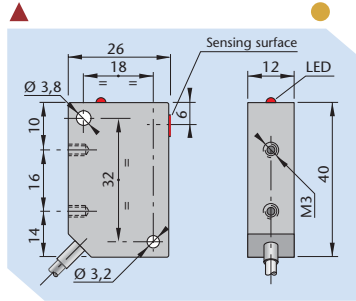


3/4 WIRES D.C.
CONFORMING TO EN 50044
VERSION-C

- ▲ **EMBEDDABLE** (FLUSH MOUNTING)
- **NOT EMBEDDABLE** (NON FLUSH MOUNTING)

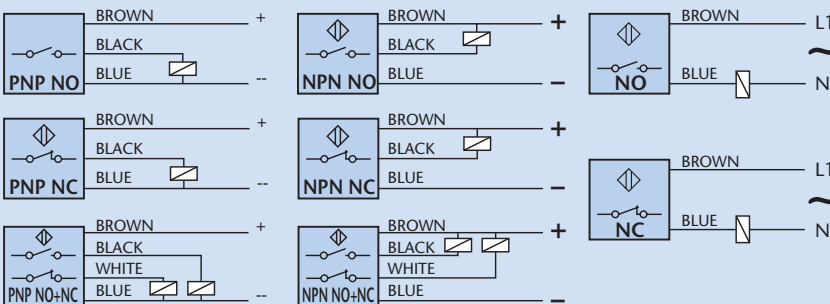
TECHNICAL CHARACTERISTICS

Dimensions mm



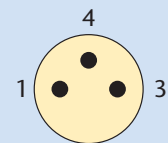
AMPLIFIED 3 WIRES D.C.	NPN	NO			SIP12 - C2 NPN NO H1	SIP12 - CE4 NPN NO H1
		NC			SIP12 - C2 NPN NC H1	SIP12 - CE4 NPN NC H1
	PNP	NO			SIP12 - C2 PNP NO H1	SIP12 - CE4 PNP NO H1
		NC			SIP12 - C2 PNP NC H1	SIP12 - CE4 PNP NC H1
AMP. 4 WIRES D.C. ANTI-PHASE	NPN	NO+NC	SIP12 - C2 NPN NO + NC	SIP12 - CE4 NPN NO + NC		
	PNP	NO+NC	SIP12 - C2 PNP NO + NC	SIP12 - CE4 PNP NO + NC		
AMPLIFIED 2 WIRES A.C.		NO				
		NC				
Switching distance (Sn)	mm		2	4	2	4
Continuous voltage (residual ripple ≤10%)	V				10 ÷ 30	
Alternating voltage 50÷60 Hz	V					
Hysteresis (%Sn)	mm				<10%	
Switching frequency	Hz				1000	
Repeatability	% of Sn				≤ 3	
Max output current	mA				200	
Min output current	mA					
Max peak current for 20 ms	A					
Absorption at 24Vdc	mA				<15	
Residual current	mA					
Voltage drop (sensor ON)	V				<1.8	
Short circuit protection					Incorporated	
Led					Incorporated	
Temperature limits	°C				- 25 ÷ + 70	
Degree of protection	IP				67	
Housing					Plastic	
Cable PVC	2m		4 x 0.25 mm ²			
Connector plug						H1

WIRING DIAGRAMS



N.B.: On request is available cable for sensors with different length 3.5 - 7.5 - 5 - 10 metres.

CONNECTION WITH H1 PLUG FOR THE CONNECTORS SEE PAGE 85



VIEW OF MALE CONNECTOR H1:

- 1 = Brown / +
- 3 = Blue / -
- 4 = Black / output NPN-PNP / NO-NC

RECTANGULAR INDUCTIVE SENSORS SIP12 - SIP17 - SIP25



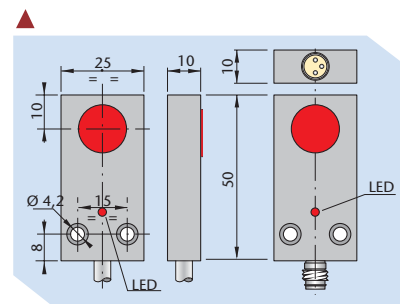
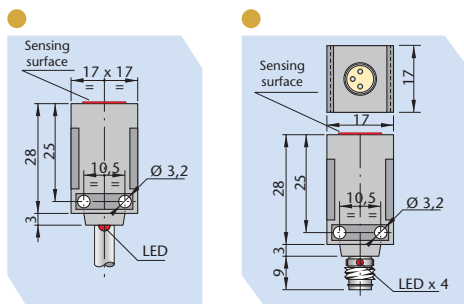
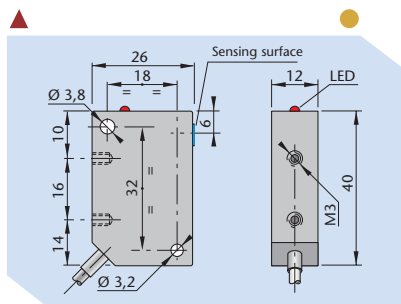
2 WIRES A.C.

CONFORMING TO EN 50044
VERSION-A

3/4 WIRES D.C.

CONFORMING TO EN 50044
VERSION-C

INDUCTIVE



			SIP17 - CE5 NPN NO H1		SIP25 - C5 NPN NO H1
			SIP17 - CE5 NPN NC H1		SIP25 - C5 NPN NC H1
			SIP17 - CE5 PNP NO H1		SIP25 - C5 PNP NO H1
			SIP17 - CE5 PNP NC H1		SIP25 - C5 PNP NC H1
		SIP17 - CE5 NPN NO + NC		SIP25 - C5 NPN NO + NC	
		SIP17 - CE5 PNP NO + NC		SIP25 - C5 PNP NO + NC	
SIP12 - A2 NO	SIP12 - AE4 NO				
SIP12 - A2 NC	SIP12 - AE4 NC				
2	4	5	5	5	5
		10 ÷ 30		10 ÷ 30	
		<10%		<10%	
		12		1000	
		≤ 3		≤ 3	
		300		200	
		5			
		1.5			
		<15		<15	
		<1		<1.8	
		<6		<1.8	
		Incorporated		Incorporated	
		Incorporated		Incorporated	
		- 25 ÷ + 70		- 25 ÷ + 70	
		67	67	67	Depending on connector
		Plastic	Plastic	Nickelled brass	
		2 x 0.25 mm ²	4 x 0.25 mm ²	4 x 0.25 mm ²	
			H1		H1

INSTRUCTIONS FOR CORRECT INSTALLATION

TYPE SIP12

▲ X ≥ 6 mm
● X ≥ 12 mm
▲ = Possible
● = Not possible
▲ Y ≥ 0
● Y ≥ 6 mm

TYPE SIP17

● X ≥ 20 mm
● Y ≥ 6 mm

TYPE SIP25

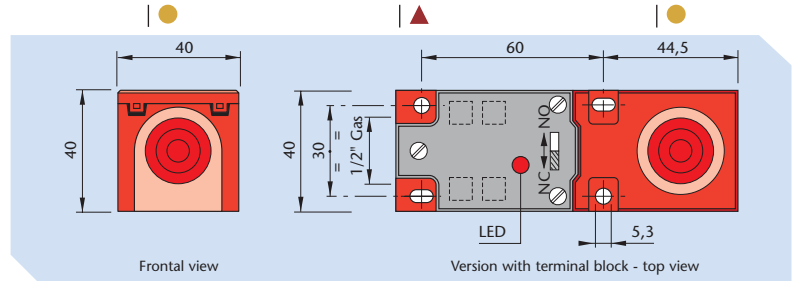
▲ X ≥ 5 mm

RECTANGULAR INDUCTIVE SENSORS SIP40



4 WIRES D.C.
CONFORMING TO EN 50025 - EN 50044
VERSION-C

- ▲ **EMBEDDABLE** (FLUSH MOUNTING)
- **NOT EMBEDDABLE** (NON FLUSH MOUNTING)

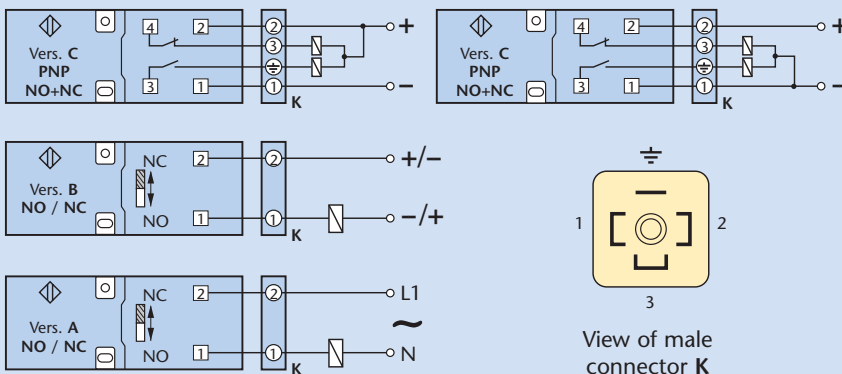


TECHNICAL CHARACTERISTICS

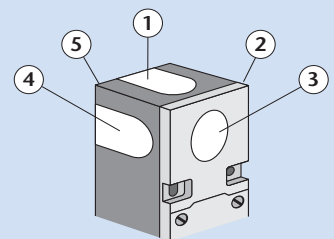
Dimensions mm

AMPLIFIED 4 WIRES D.C. ANTIPHASE	NPN	NO+NC	SIP40 - C15 NPN NO + NC	SIP40 - CE20 NPN NO + NC	SIP40 - C15 NPN NO + NC K	SIP40 - CE20 NPN NO + NC K
	PNP	NO+NC	SIP40 - C15 PNP NO + NC	SIP40 - CE20 PNP NO + NC	SIP40 - C15 PNP NO + NC K	SIP40 - CE20 PNP NO + NC K
AMPLIFIED 2 WIRES D.C. PROGR.		NO/NC				
AMPLIFIED 2 WIRES A.C. PROGR.		NO/NC				
Switching distance Sn		mm	15	20	15	20
Continuous voltage (residual ripple $\leq 10\%$)		V	10 ÷ 55			
Alternating voltage 50÷60 Hz		V				
Hysteresis (%Sn)		mm	< 10%			
Switching frequency		Hz	300			
Repeatability		% of Sn	≤ 3			
Max output current		mA	200			
Min output current		mA				
Max peak current for 20 mS		A				
Absorption at 24Vdc		mA	< 10			
Residual current		mA				
Voltage drop (sensor ON)		V	< 1.8			
Short circuit protection			Incorporated			
Led			Incorporated			
Temperature limits		°C	- 25 ÷ + 70			
Degree of protection		IP	65 (Cable version IP67)			
Housing			Red plastic			
Type of connection			Terminal block			
Connector plug					K (type 12)	

TYPES OF CONNECTIONS WITH TERMINAL BLOCK OR CONNECTOR K (type 12 - page 85)



ADJUSTABLE SENSITIVITY



NOTE: In the SIP 40 sensor the oscillator is contained in a module which clips into the body whose surface can then be sensitive on five different positions. The surface chosen can be identified by applying the circular adhesive label.

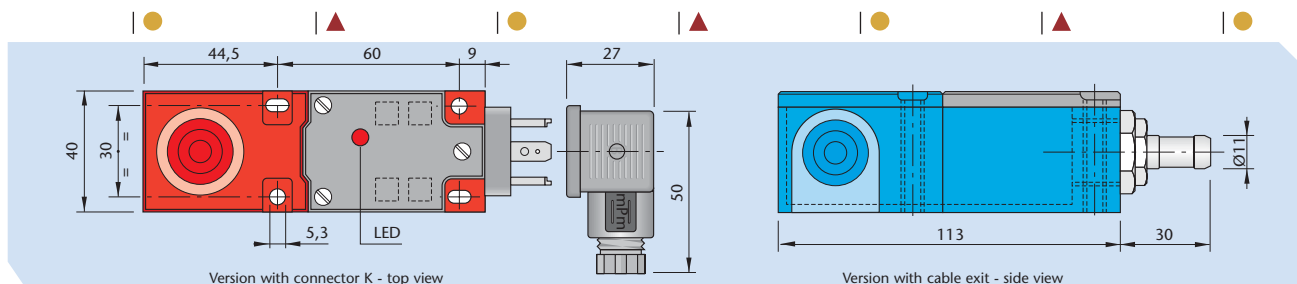
RECTANGULAR INDUCTIVE SENSORS SIP 40



2 WIRES D.C.
CONFORMING TO EN 50044
VERSION-B

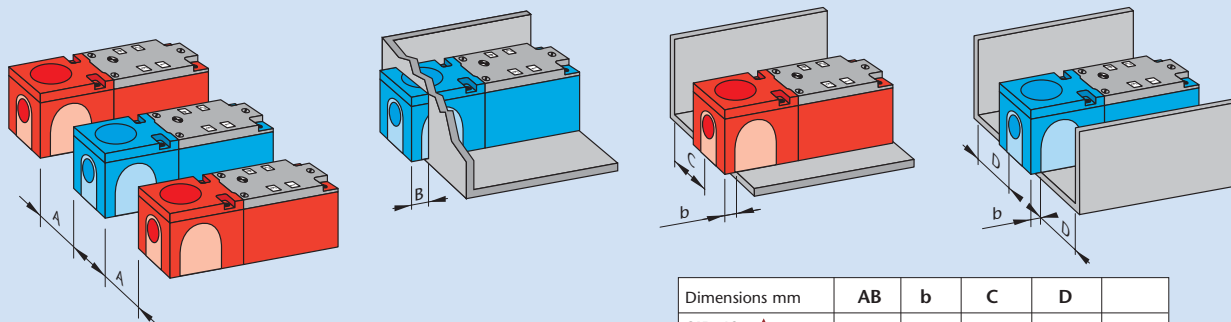
2 WIRES A.C.
CONFORMING TO EN 50037 EN 50044
VERSION-A

INDUCTIVE



SIP40-B15 NO/NC	SIP40-BE20 NO/NC	SIP40-B15 NO/NC K	SIP40-BE20 NO/NC K	SIP40-A15 NO/NC	SIP40-AE20 NO/NC	SIP40-A15 NO/NC K	SIP40-AE20 NO/NC K
15	20	15	20	15	20	15	20
10 ÷ 55				20 ÷ 250			
< 10%				< 10%			
300				12			
≤ 3				≤ 3			
100				300			
1.5				5			
				1.5			
< 0.6				< 1			
< 6.5				< 6			
Incorporated				Incorporated			
Incorporated				Incorporated			
- 25 ÷ + 70				- 25 ÷ + 70			
65 (Cable version IP67)				65 (Cable version IP67)			
Red plastic				Blue plastic			
Terminal block		K (type 12)		Terminal block		K (type 12)	

INSTRUCTIONS FOR CORRECT INSTALLATION



• The installation example makes reference to the areas marked red.

Dimensions mm	AB	b	C	D	
SIP 40 ▲	≥30	≥6	≥0	≥0	≥0
SIP 40 ●	≥50	≥40	≥15	≥10	≥15