

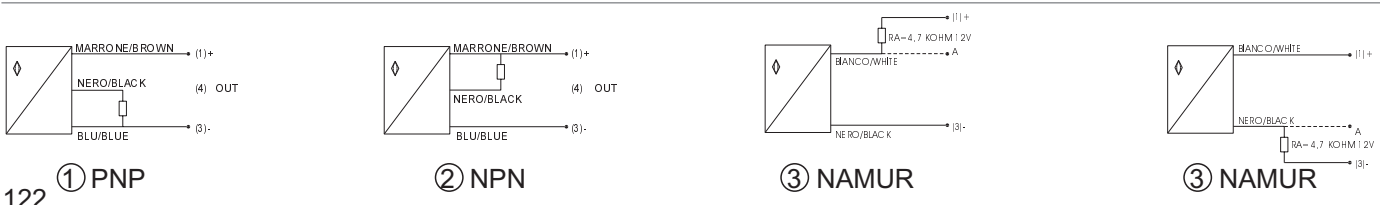
Negli interruttori di prossimità ad anello il rilevamento avviene all'interno dell'anello stesso. Il campo di azione è regolabile mediante vite potenziometrica.

TIPI - TYPES	Ø 1	Ø 1	Ø 1
Anelli Rings			
CARATTERISTICHE FEATURES			
Schermato - <i>Shielded</i>			
Non schermato - <i>Unshielded</i>	●	●	●
Diametro foro - <i>Hole diameter</i>	1 mm	1 mm	1 mm
Tensione di alimentazione - <i>Supply voltage</i>	3 ÷ 24 Vdc	10 ÷ 30 Vdc	10 ÷ 30 Vdc
Ondulazione residua - <i>Ripple</i>	≤ 10%	≤ 10%	
Corrente massima di carico - <i>Maximum load current</i>	-	200 mA	
Caduta di tensione - <i>Voltage drop</i>	-	≤ 1,8 Vdc	
Assorbimento - <i>Power consumption</i>	*	≤ 10 mA	
Ripetibilità - <i>Repeatability</i>		< 0,3 mm	
Frequenza di commutazione - <i>Switching frequency</i>	< 0,3 mm	1,5 kHz	
Protezione al corto circuito - <i>Short circuit protection</i>	1,5 Hz	Sì - Yes	
Led di segnalazione - <i>Status output led</i>	-	Sì - Yes	
Temperatura di funzionamento - <i>Working temperature</i>	-	-25 ÷ +70 °C	
Grado di protezione - <i>IP rating</i>	IP67 (con connettore montato - <i>with connector mounted</i>)		
Custodia - <i>Housing</i>	ABS		
Connessione - <i>Connection</i>	Cavo 2 m 2 m cable	Cavo 2 m 2 m cable	Connettore M8 M8 connector
Collegamento - <i>Linking</i>	2x0,14 mm ²	3x0,14 mm ²	V1-V2-V6-V7
PNP-NO	(1)	-	B01AN1PO
PNP-NC	(1)	-	B01AN1PC
NPN-NO	(2)	-	B01AN1NO
NPN-NC	(2)	-	B01AN1NC
NAMUR	(3)	A01AN1	-

* < 1 mA in presenza di oggetto; *with object* > 4 mA in assenza di oggetto; *without object*.

Versioni temporizzate : aggiungere la lettera T ed il valore della temporizzazione dopo il riferimento scelto. Es. **B01AN10PO T = 100 ms**.
 Delay versions: add letter T with time delay after code. E.g. **B01AN10PO T = 100ms**.

SCHEMI DI COLLEGAMENTO - CONNECTION DIAGRAMS



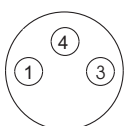
The ring types of inductive sensors are used to detect any object coming inside its hole.
Using the trimmer it is possible to adjust the sensitivity.

Ø 1	Ø 3	Ø 3	Ø 3
●	●	●	●
1 mm	3 mm	3 mm	3 mm
10 ÷ 30 Vdc	3 ÷ 24 Vdc	10 ÷ 30 Vdc	10 ÷ 30 Vdc
≤ 10%	≤ 10%	≤ 10%	
200 mA	-	200 mA	
≤ 1,8 Vdc	-	≤ 1,8 Vdc	
≤ 10 mA	*	≤ 10 mA	
< 0,3 mm	< 0,3 mm	< 0,3 mm	
1,5 kHz	1,5 kHz	1,5 kHz	
Si - Yes	-	Si - Yes	
Si - Yes	-	Si - Yes	
-25° ÷ +70°C			
IP67 (con connettore montato - with connector mounted)			
ABS			
Connettore M12 M12 connector	Cavo 2 m 2 m cable	Cavo 2 m 2 m cable	Connettore M8 M8 connector
C5-C6-C7-L7	2x0,14mm ²	3x0,14mm ²	V1-V2-V6-V7
B01AN1POC5	-	B01AN3PO	B01AN3POV6
B01AN1PCC5	-	B01AN3PC	B01AN3PCV6
B01AN1NOC5	-	B01AN3NO	B01AN3NOV6
B01AN1NCC5	-	B01AN3NC	B01AN3NCV6
-	A01AN3	-	-

* < 1 mA in presenza di oggetto; with object > 4 mA in assenza di oggetto; without object.

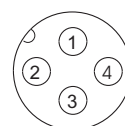
Versioni temporizzate : aggiungere la lettera T ed il valore della temporizzazione dopo il riferimento scelto. Es. **B01AN10PO T = 100 ms**.
Delay versions: add letter T with time delay after code. E.g. **B01AN10PO T = 100ms**.

SCHEMI DI COLLEGAMENTO - CONNECTION DIAGRAMS



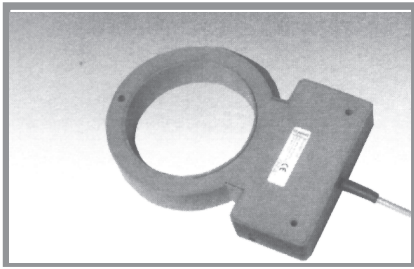
1 + MARRONE / BROWN
4 OUT NERO / BLACK
3 - BLU / BLUE

V1-V2-V6-V7 CC/DC



1 + MARRONE / BROWN
4 OUT NERO / BLACK
3 - BLU / BLUE

C5-C6-C7-L7 CC/DC



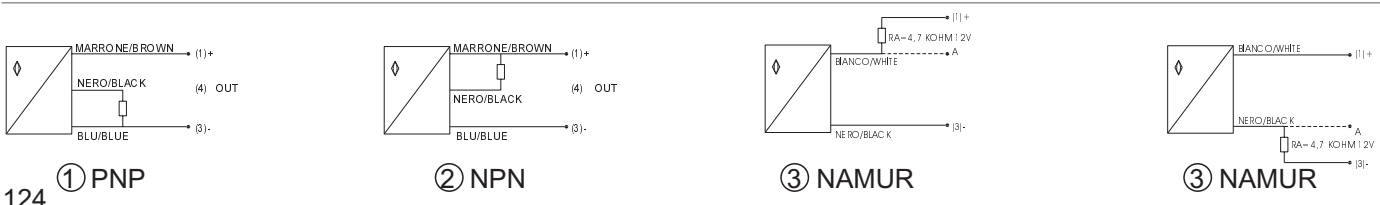
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TIPI - TYPES	Ø 3	Ø 5	Ø 5
Anelli Rings			
CARATTERISTICHE FEATURES			
Schermato - <i>Shielded</i>			
Non schermato - <i>Unshielded</i>	●	●	●
Diametro foro - <i>Hole diameter</i>	3 mm	5 mm	5 mm
Tensione di alimentazione - <i>Supply voltage</i>	10 ÷ 30 Vdc	3 ÷ 24 Vdc	10 ÷ 30 Vdc
Ondulazione residua - <i>Ripple</i>		≤ 10%	
Corrente massima di carico - <i>Maximum load current</i>	200 mA	-	200 mA
Caduta di tensione - <i>Voltage drop</i>	≤ 1,8 Vdc	-	≤ 1,8 Vdc
Assorbimento - <i>Power consumption</i>	≤ 10 mA	*	≤ 10 mA
Ripetibilità - <i>Repeatability</i>	< 0,3 mm	< 0,3 mm	< 0,3 mm
Frequenza di commutazione - <i>Switching frequency</i>	1,5 kHz	1,5 kHz	1,5 kHz
Protezione al corto circuito - <i>Short circuit protection</i>	Sì - Yes	-	Sì - Yes
Led di segnalazione - <i>Status output led</i>	Sì - Yes	-	Sì - Yes
Temperatura di funzionamento - <i>Working temperature</i>	-25 ÷ +70 °C		
Grado di protezione - <i>IP rating</i>	IP67 (con connettore montato - <i>with connector mounted</i>)		
Custodia - <i>Housing</i>	ABS		
Connessione - <i>Connection</i>	Connettore M12 <i>M12 connector</i>	Cavo 2 m <i>2 m cable</i>	Cavo 2 m <i>2 m cable</i>
Collegamento - <i>Linking</i>	C5-C6-C7-L7	2x0,14 mm ²	3x0,14 mm ²
PNP-NO	(1)	B01AN3POC5	B01AN5PO
PNP-NC	(1)	B01AN3PCC5	B01AN5PC
NPN-NO	(2)	B01AN3NOC5	B01AN5NO
NPN-NC	(2)	B01AN3NCC5	B01AN5NC
NAMUR	(3)	-	A01AN5

* < 1 mA in presenza di oggetto; *with object* > 4 mA in assenza di oggetto; *without object*.

Versioni temporizzate : aggiungere la lettera T ed il valore della temporizzazione dopo il riferimento scelto. Es. **B01AN10PO T = 100 ms**.
Delay versions: add letter T with time delay after code. E.g. B01AN10PO T = 100ms.

SCHEMI DI COLLEGAMENTO - CONNECTION DIAGRAMS



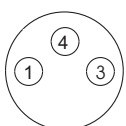
The ring types of inductive sensors are used to detect any object coming inside its hole.
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Ø 5		Ø 5		Ø 10		Ø 10	
●		●		●		●	
5 mm		5 mm		10 mm		10 mm	
10 ÷ 30 Vdc		10 ÷ 30 Vdc		3 ÷ 24 Vdc		10 ÷ 30 Vdc	
≤ 10%				≤ 10%			
200 mA				-		200 mA	
≤ 1,8 Vdc				-		≤ 1,8 Vdc	
≤ 10 mA				*		≤ 10 mA	
< 0,3 mm				< 0,3 mm		< 0,3 mm	
1,5 kHz				1,5 kHz		1,5 kHz	
Si - Yes				-		Si - Yes	
Si - Yes				-		Si - Yes	
-25° ÷ +70°C							
IP67 (con connettore montato - <i>with connector mounted</i>)							
ABS							
Connettore M8 M8 connector		Connettore M12 M12 connector		Cavo 2 m 2 m cable		Cavo 2 m 2 m cable	
V1-V2-V6-V7		C5-C6-C7-L7		2x0,14mm ²		3x0,14mm ²	
B01AN5POV6		B01AN5POC5		-		B01AN10PO	
B01AN5PCV6		B01AN5PCC5		-		B01AN10PC	
B01AN5NOV6		B01AN5NOC5		-		B01AN10NO	
B01AN5NCV6		B01AN5NCC5		-		B01AN10NC	
-		-		A01AN10		-	

* < 1 mA in presenza di oggetto; *with object* > 4 mA in assenza di oggetto; *without object*.

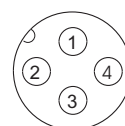
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SCHEMI DI COLLEGAMENTO - CONNECTION DIAGRAMS



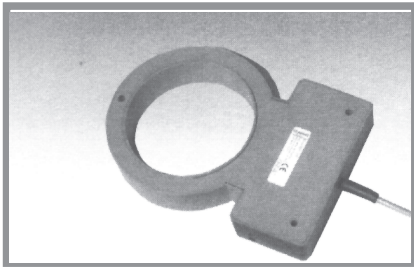
1 + MARRONE / BROWN
4 OUT NERO / BLACK
3 - BLU / BLUE

V1-V2-V6-V7 CC/DC



1 + MARRONE / BROWN
4 OUT NERO / BLACK
3 - BLU / BLUE

C5-C6-C7-L7 CC/DC



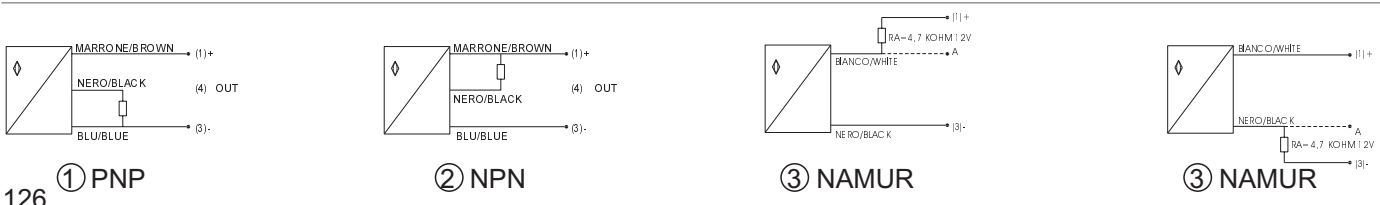
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TIPI - TYPES	Ø 10	Ø 10	Ø 15
Anelli Rings			
LED	Si - Yes	Si - Yes	Si - Yes
Trimmer	Si - Yes	Si - Yes	Si - Yes
M8x1	Si - Yes	Si - Yes	Si - Yes
M12x1	Si - Yes	Si - Yes	Si - Yes
Ø 4	Si - Yes	Si - Yes	Si - Yes
Ø 10	Si - Yes	Si - Yes	Si - Yes
Ø 15	Si - Yes	Si - Yes	Si - Yes
ABS	ABS		
Connettore M8	Connettore M8 M8 connector	Connettore M12 M12 connector	Cavo 2 m 2 m cable
Collegamento - Linking	V1-V2-V6-V7	C5-C6-C7-L7	2x0,14 mm ²
PNP-NO	(1) B01AN10POV6	B01AN10POC5	-
PNP-NC	(1) B01AN10PCV6	B01AN10PCC5	-
NPN-NO	(2) B01AN10NOV6	B01AN10NOC5	-
NPN-NC	(2) B01AN10NCV6	B01AN10NCC5	-
NAMUR	(3) -	-	A01AN15
Schermato - Shielded			
Non schermato - Unshielded	●	●	●
Diametro foro - Hole diameter	10 mm	10 mm	15 mm
Tensione di alimentazione - Supply voltage	10 ÷ 30 Vdc	10 ÷ 30 Vdc	3 ÷ 24 Vdc
Ondulazione residua - Ripple	≤ 10%		≤ 10%
Corrente massima di carico - Maximum load current	200 mA		-
Caduta di tensione - Voltage drop	≤ 1,8 Vdc		-
Assorbimento - Power consumption	≤ 10 mA		*
Ripetibilità - Repeatability	< 0,3 mm		< 0,3 mm
Frequenza di commutazione - Switching frequency	1,5 kHz		1 kHz
Protezione al corto circuito - Short circuit protection	Si - Yes		-
Led di segnalazione - Status output led	Si - Yes		-
Temperatura di funzionamento - Working temperature	-25 ÷ +70 °C		
Grado di protezione - IP rating	IP67 (con connettore montato - with connector mounted)		

* < 1 mA in presenza di oggetto; with object > 4 mA in assenza di oggetto; without object.

Versioni temporizzate : aggiungere la lettera T ed il valore della temporizzazione dopo il riferimento scelto. Es. **B01AN10PO T = 100 ms**.
Delay versions: add letter T with time delay after code. E.g. **B01AN10PO T = 100ms**.

SCHEMI DI COLLEGAMENTO - CONNECTION DIAGRAMS



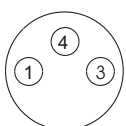
The ring types of inductive sensors are used to detect any object coming inside its hole. Using the trimmer it is possible to adjust the sensitivity.

Ø 15		Ø 15		Ø 15		Ø 22	
●		●		●		●	
15 mm		15 mm		15 mm		22 mm	
		10 ÷ 30 Vdc				3 ÷ 24 Vdc	
		≤ 10%				≤ 10%	
		200 mA				-	
		≤ 1,8 Vdc				-	
		≤ 10 mA				*	
		< 0,3 mm				< 0,3 mm	
		1 kHz				1 kHz	
		Si - Yes				-	
		Si - Yes				-	
-25° ÷ +70°C							
IP67 (con connettore montato - with connector mounted)							
ABS							
Cavo 2 m 2 m cable		Connettore M8 M8 connector		Connettore M12 M12 connector		Cavo 2 m 2 m cable	
3 x 0,14 mm ²		V1-V2-V6-V7		C5-C6-C7-L7		2x0,14mm ²	
B01AN15PO		B01AN15POV6		B01AN15POC5		-	
B01AN15PC		B01AN15PCV6		B01AN15PCC5		-	
B01AN15NO		B01AN15NOV6		B01AN15NOC5		-	
B01AN15NC		B01AN15NCV6		B01AN15NCC5		-	
-		-		-		A01AN22	

* < 1 mA in presenza di oggetto; with object > 4 mA in assenza di oggetto; without object.

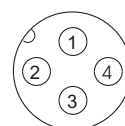
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Delay versions: add letter T with time delay after code. E.g. **B01AN10PO T = 100ms**.

SCHEMI DI COLLEGAMENTO - CONNECTION DIAGRAMS



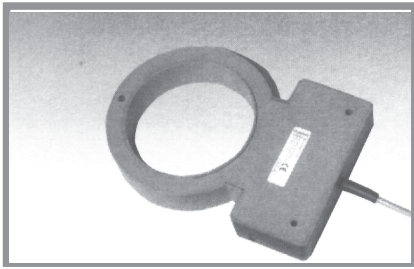
1 + MARRONE / BROWN
4 OUT NERO / BLACK
3 - BLU / BLUE

V1-V2-V6-V7 CC/DC



1 + MARRONE / BROWN
4 OUT NERO / BLACK
3 - BLU / BLUE

C5-C6-C7-L7 CC/DC



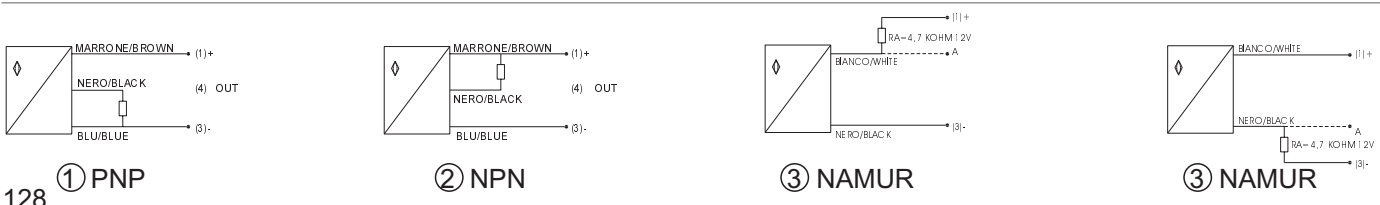
Negli interruttori di prossimità ad anello il rilevamento avviene all'interno dell'anello stesso. Il campo di azione è regolabile mediante vite potenziometrica.

TIPI - TYPES	Ø 22	Ø 22	Ø 22
Anelli Rings			
CARATTERISTICHE FEATURES			
Schermato - <i>Shielded</i>			
Non schermato - <i>Unshielded</i>	●	●	●
Diametro foro - <i>Hole diameter</i>	22 mm	22 mm	22 mm
Tensione di alimentazione - <i>Supply voltage</i>	10 ÷ 30 Vdc	10 ÷ 30 Vdc	10 ÷ 30 Vdc
Ondulazione residua - <i>Ripple</i>		≤ 10%	
Corrente massima di carico - <i>Maximum load current</i>		200 mA	
Caduta di tensione - <i>Voltage drop</i>		≤ 1,8 Vdc	
Assorbimento - <i>Power consumption</i>		≤ 10 mA	
Ripetibilità - <i>Repeatability</i>		< 0,3 mm	
Frequenza di commutazione - <i>Switching frequency</i>		1 kHz	
Protezione al corto circuito - <i>Short circuit protection</i>		Sì - Yes	-
Led di segnalazione - <i>Status output led</i>		Sì - Yes	-
Temperatura di funzionamento - <i>Working temperature</i>		-25 ÷ +70 °C	
Grado di protezione - <i>IP rating</i>	IP67 (con connettore montato - <i>with connector mounted</i>)		
Custodia - <i>Housing</i>	ABS		
Connessione - <i>Connection</i>	Cavo 2 m 2 m cable	Connettore M8 M8 connector	Connettore M12 M12 connector
Collegamento - <i>Linking</i>	3x0,14 mm ²	V1-V2-V6-V7	C5-C6-C7-L7
PNP-NO	(1)	B01AN22POV6	B01AN22POC5
PNP-NC	(1)	B01AN22PCV6	B01AN22PCC5
NPN-NO	(2)	B01AN22NOV6	B01AN22NOC5
NPN-NC	(2)	B01AN22NCV6	B01AN22NCC5
NAMUR	(3)	-	-

* < 1 mA in presenza di oggetto; *with object* > 4 mA in assenza di oggetto; *without object*.

Versioni temporizzate : aggiungere la lettera T ed il valore della temporizzazione dopo il riferimento scelto. Es. **B01AN10PO T = 100 ms**.
 Delay versions: add letter T with time delay after code. E.g. **B01AN10PO T = 100ms**.

SCHEMI DI COLLEGAMENTO - CONNECTION DIAGRAMS



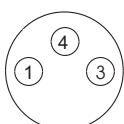
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Ø 30		Ø 30		Ø 30		Ø 30	
●		●		●		●	
30 mm		30 mm		30 mm		30 mm	
3 ÷ 24 Vdc				10 ÷ 30 Vdc			
≤ 10%				≤ 10%			
-				200 mA			
-				≤ 1,8 Vdc			
*				≤ 10 mA			
< 0,3 mm				< 0,3 mm			
1 kHz				1,5 kHz			
-				Si - Yes			
-				Si - Yes			
-25° ÷ +70°C							
IP67 (con connettore montato - with connector mounted)							
ABS							
Cavo 2 m 2 m cable		Cavo 2 m 2 m cable		Connettore M8 M8 connector		Connettore M12 M12 connector	
2 x 0,14 mm ²		3 x 0,14 mm ²		V1-V2-V6-V7		C5-C6-C7-L7	
-		B01AN30PO		B01AN30POV6		B01AN30POC5	
-		B01AN30PC		B01AN30PCV6		B01AN30PCC5	
-		B01AN30NO		B01AN30NOV6		B01AN30NOC5	
-		B01AN30NC		B01AN30NCV6		B01AN30NCC5	
A01AN30		-		-		-	

* < 1 mA in presenza di oggetto; with object > 4 mA in assenza di oggetto; without object.

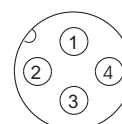
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SCHEMI DI COLLEGAMENTO - CONNECTION DIAGRAMS



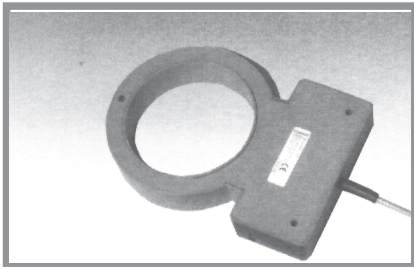
1 + MARRONE / BROWN
4 OUT NERO / BLACK
3 - BLU / BLUE

V1-V2-V6-V7 CC/DC



1 + MARRONE / BROWN
4 OUT NERO / BLACK
3 - BLU / BLUE

C5-C6-C7-L7 CC/DC



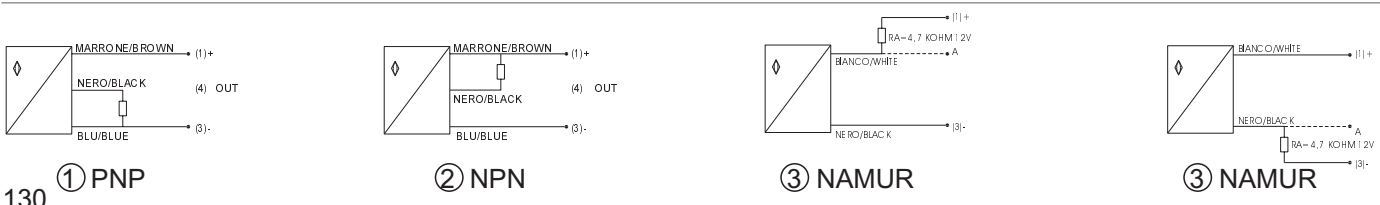
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TIPI - TYPES	Ø 44	Ø 44	Ø 44
<p>Anelli Rings</p> <p>CARATTERISTICHE FEATURES</p>			
Schermato - <i>Shielded</i>			
Non schermato - <i>Unshielded</i>	●	●	●
Diametro foro - <i>Hole diameter</i>	44 mm	44 mm	44 mm
Tensione di alimentazione - <i>Supply voltage</i>	3 ÷ 24 Vdc	10 ÷ 30 Vdc	10 ÷ 30 Vdc
Ondulazione residua - <i>Ripple</i>	≤ 10%	≤ 10%	≤ 10%
Corrente massima di carico - <i>Maximum load current</i>	-	200 mA	200 mA
Caduta di tensione - <i>Voltage drop</i>	-	≤ 1,8 Vdc	≤ 1,8 Vdc
Assorbimento - <i>Power consumption</i>	*	≤ 10 mA	≤ 10 mA
Ripetibilità - <i>Repeatability</i>	< 0,3 mm	< 0,3 mm	< 0,3 mm
Frequenza di commutazione - <i>Switching frequency</i>	500 kHz	500 Hz	500 Hz
Protezione al corto circuito - <i>Short circuit protection</i>	-	Si - Yes	-
Led di segnalazione - <i>Status output led</i>	-	Si - Yes	-
Temperatura di funzionamento - <i>Working temperature</i>	-25 ÷ +70 °C		
Grado di protezione - <i>IP rating</i>	IP67 (con connettore montato - <i>with connector mounted</i>)		
Custodia - <i>Housing</i>	ABS		
Connessione - <i>Connection</i>	Cavo 2 m 2 m cable	Cavo 2 m 2 m cable	Connettore M12 M12 connector
Collegamento - <i>Linking</i>	2x0,35 mm ²	3x0,35 mm ²	C5-C6-C7-L7
PNP-NO	(1)	-	B01AN44PO
PNP-NC	(1)	-	B01AN44PC
NPN-NO	(2)	-	B01AN44NO
NPN-NC	(2)	-	B01AN44NC
NAMUR	(3)	A01AN44	-

* < 1 mA in presenza di oggetto; *with object* > 4 mA in assenza di oggetto; *without object*.

Versioni temporizzate : aggiungere la lettera T ed il valore della temporizzazione dopo il riferimento scelto. Es. **B01AN10PO T = 100 ms**.
Delay versions: add letter T with time delay after code. E.g. B01AN10PO T = 100ms.

SCHEMI DI COLLEGAMENTO - CONNECTION DIAGRAMS



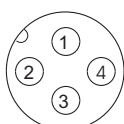
The ring types of inductive sensors are used to detect any object coming inside its hole.
Using the trimmer it is possible to adjust the sensitivity.

Ø 44	Ø 63	Ø 63	Ø 63
●	●	●	●
44 mm	63 mm	63 mm	63 mm
10 ÷ 30 Vdc	3 ÷ 24 Vdc	10 ÷ 30 Vdc	
≤ 10%			
200 mA	-	200 mA	
≤ 1,8 Vdc	-	≤ 1,8 Vdc	
≤ 10 mA	*	≤ 10 mA	
< 0,3 mm	< 0,3 mm	< 0,3 mm	
500 Hz	200 Hz	200 Hz	
Si - Yes	-	Si - Yes	
Si - Yes	-	Si - Yes	
-25° ÷ +70°C			
IP67 (con connettore montato - with connector mounted)			
ABS			
Connettore C4 C4 connector	Cavo 2 m 2 m cable	Cavo 2 m 2 m cable	Connettore M12 M12 connector
C4	2 x 0,35 mm ²	3 x 0,35 mm ²	C5-C6-C7-L7
B01AN44POC4	-	B01AN63PO	B01AN63POC5
B01AN44PCC4	-	B01AN63PC	B01AN63PCC5
B01AN44NOC4	-	B01AN63NO	B01AN63NOC5
B01AN44NCC4	-	B01AN63NC	B01AN63NCC5
-	A01AN63	-	-

* < 1 mA in presenza di oggetto; with object > 4 mA in assenza di oggetto; without object.

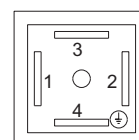
Versioni temporizzate : aggiungere la lettera T ed il valore della temporizzazione dopo il riferimento scelto. Es. **B01AN10PO T = 100 ms**.
Delay versions: add letter T with time delay after code. E.g. **B01AN10PO T = 100ms**.

SCHEMI DI COLLEGAMENTO - CONNECTION DIAGRAMS



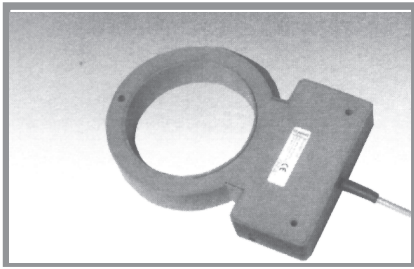
C5-C6-C7-L7 CC/DC

1 + MARRONE / BROWN
4 OUT NERO / BLACK
3 - BLU / BLUE



1 + MARRONE / BROWN
4 OUT NERO / BLACK
3 - BLU / BLUE

C4 CC/DC



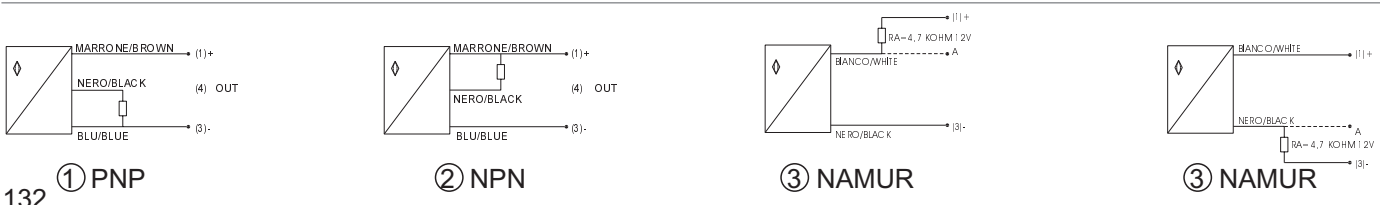
Negli interruttori di prossimità ad anello il rilevamento avviene all'interno dell'anello stesso. Il campo di azione è regolabile mediante vite potenziometrica.

TIPI - TYPES	Ø 63	Ø 100	Ø 100
Anelli Rings CARATTERISTICHE FEATURES			
	Schermato - <i>Shielded</i>		
Non schermato - <i>Unshielded</i>	●	●	●
Diametro foro - <i>Hole diameter</i>	63 mm	100 mm	100 mm
Tensione di alimentazione - <i>Supply voltage</i>	10 ÷ 30 Vdc	3 ÷ 24 Vdc	10 ÷ 30 Vdc
Ondulazione residua - <i>Ripple</i>		≤ 10%	
Corrente massima di carico - <i>Maximum load current</i>	200 mA	-	200 mA
Caduta di tensione - <i>Voltage drop</i>	≤ 1,8 Vdc	-	≤ 1,8 Vdc
Assorbimento - <i>Power consumption</i>	≤ 10 mA	*	≤ 10 mA
Ripetibilità - <i>Repeatability</i>	< 0,3 mm	< 0,3 mm	< 0,3 mm
Frequenza di commutazione - <i>Switching frequency</i>	200 Hz	100 Hz	100 Hz
Protezione al corto circuito - <i>Short circuit protection</i>	Sì - Yes	-	Sì --Yes
Led di segnalazione - <i>Status output led</i>	Sì - Yes	-	Sì --Yes
Temperatura di funzionamento - <i>Working temperature</i>	-25 ÷ +70 °C		
Grado di protezione - <i>IP rating</i>	IP67 (con connettore montato - <i>with connector mounted</i>)		
Custodia - <i>Housing</i>	ABS		
Connessione - <i>Connection</i>	Connettore C4 <i>C4 connector</i>	Cavo 2 m <i>2 m cable</i>	Cavo 2 m <i>2 m cable</i>
Collegamento - <i>Linking</i>	C4	2x0,35 mm ²	3x0,35 mm ²
PNP-NO	(1) B01AN63POC4	-	B01AN100PO
PNP-NC	(1) B01AN63PCC4	-	B01AN100PC
NPN-NO	(2) B01AN63NOC4	-	B01AN100NO
NPN-NC	(2) B01AN63NCC4	-	B01AN100NC
NAMUR	(3) -	A01AN100	-

* < 1 mA in presenza di oggetto; *with object* > 4 mA in assenza di oggetto; *without object*.

Versioni temporizzate : aggiungere la lettera T ed il valore della temporizzazione dopo il riferimento scelto. Es. **B01AN10PO T = 100 ms**.
Delay versions: add letter T with time delay after code. E.g. B01AN10PO T = 100ms.

SCHEMI DI COLLEGAMENTO - CONNECTION DIAGRAMS



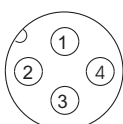
The ring types of inductive sensors are used to detect any object coming inside its hole.
Using the trimmer it is possible to adjust the sensitivity.

Ø 100		Ø 100	
●	●		
100 mm	100 mm		
10 ÷ 30 Vdc			
≤ 10%			
200 mA			
≤ 1,8 Vdc			
≤ 10 mA			
< 0,3 mm			
100 Hz			
Si - Yes			
Si - Yes			
-25° ÷ +70°C			
IP67 (con connettore montato - with connector mounted)			
ABS			
Connettore M12 M12 connector	Connettore C4 C4 connector		
C5-C6-C7-L7	C4		
B01AN100POC5	B01AN100POC4		
B01AN100PCC5	B01AN100PCC4		
B01AN100NOC5	B01AN100NOC4		
B01AN100NCC5	B01AN100NCC4		
-	-		

* < 1 mA in presenza di oggetto; with object > 4 mA in assenza di oggetto; without object.

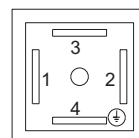
Versioni temporizzate : aggiungere la lettera T ed il valore della temporizzazione dopo il riferimento scelto. Es. **B01AN10PO T = 100 ms**.
Delay versions: add letter T with time delay after code. E.g. **B01AN10PO T = 100ms**.

SCHEMI DI COLLEGAMENTO - CONNECTION DIAGRAMS



1 + MARRONE / BROWN
4 OUT NERO / BLACK
3 - BLU / BLUE

C5-C6-C7-L7 CC/DC



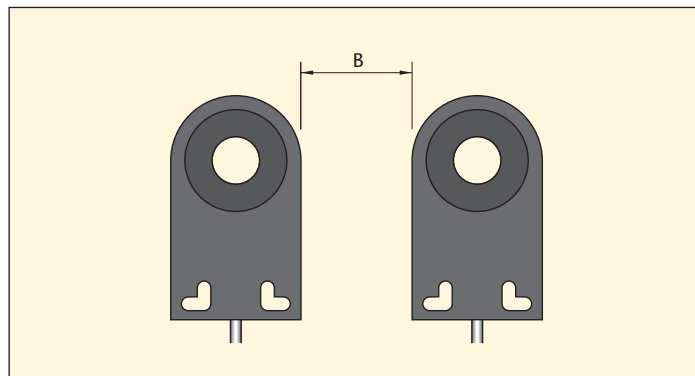
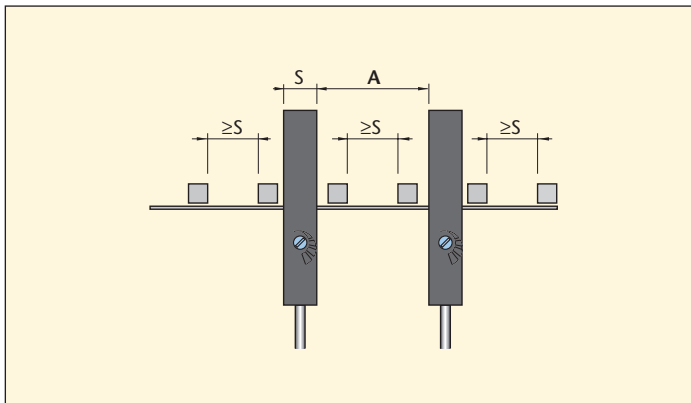
1 + MARRONE / BROWN
4 OUT NERO / BLACK
3 - BLU / BLUE

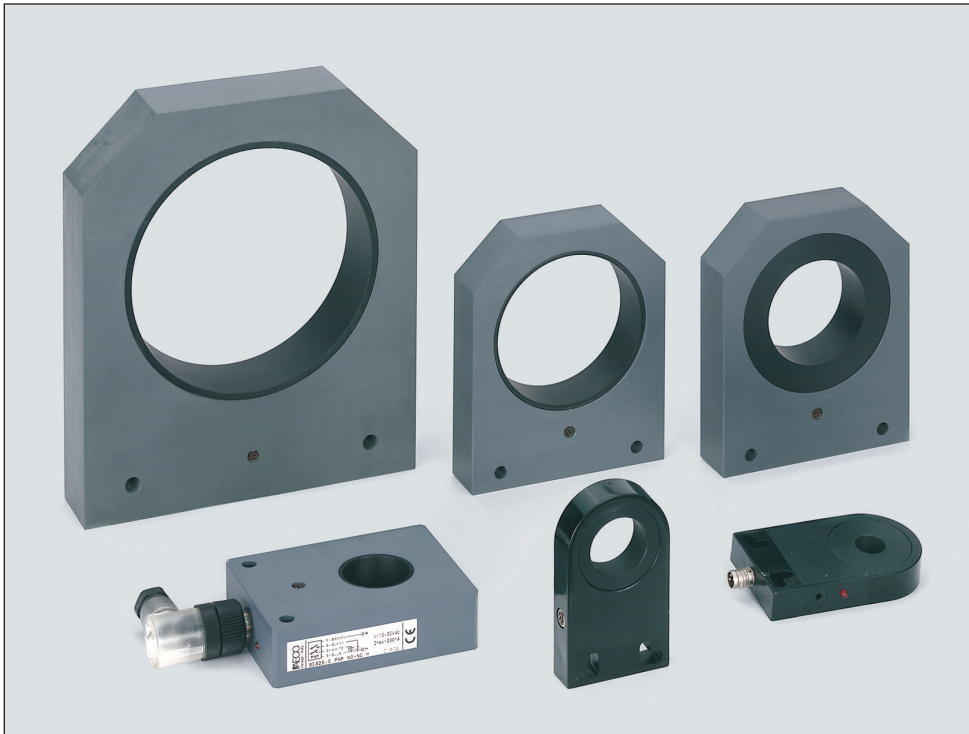
C4 CC/DC

INDUCTIVE RING SENSORS



MINIMUM DISTANCE BETWEEN SENSORS								
Type	5NO	10NO	15NO	22NO	30NO	44NO	63NO	100NO
A (Fig. 1) mm	25	30	30	60	60	300	300	600
B (Fig. 2) mm	10	10	10	20	20	250	250	650





GENERAL CHARACTERISTICS

In ring sensors, sensing is made within the ring itself. The sensor is activated when a metallic object is introduced within it.

They are particularly suitable for applications where detection of small metal objects such as screws, nuts, washers etc... is requested and also for break detection of continuous metal wires that pass through it. The sensor's housing is made of plastic and the electrical attachments are available by means of a cable or M8 and M12 connectors depending on the models.

They are supplied with fixed timing impulse (100mS) insertable by means of an ON/OFF switch, that makes them ideal for detection of fast moving small metal objects.

They are available with internal diameter of 5-12-15-22-25-30-44-63-100 mm and supplied with NPN or PNP output, sensibility regulation, insertion/disinsertion of impulse retention time and LED state of condition.

All ring sensors have antivalent output (NO+NC) accept for the types with H1 connectors.

SELECTION OF RING SENSOR

Selection should be made based on the minimum hole diameter required. In this way the sensitivity adjustment can be made within normal parameters and need not be pushed to the maximum risking the proper functioning of the unit.

USE WITH A DELAYED AMPLIFIERS

All types of ring sensor can work in combination with a delayed amplifier of the programmable ALTP series which ensures the sensing of small objects in rapid movement.

SENSITIVITY ADJUSTMENT

After having followed the instructions regarding to the choice of the most suitable unit it is recommended that the sensitivity adjustment be carried out when the sensor is installed in the final position taking into account how much metal mass is close by which could alter its functioning. The sensitivity increases turning the trimmer clockwise and reduces by turning it anti-clockwise.

EFFECTS OF METAL IN THE CLOSE VICINITY

If a moving metal part is close to the sensing area the functioning can be disturbed.

In order to avoid this, install the units some distance from metallic objects. Ensure that this does not interfere with the functioning.

USE OF SENSOR

A distance equal to the width of the sensor should be left between each object that passes through the sensor. If more than one sensor is to be installed in close vicinity, the minimum distance indicated between sensors should be observed.

MINIMUM DISTANCE BETWEEN SENSORS

Type	SIA05	SIA12	SIA15	SIA22	SIA30	SIA44	SIA63	SIA100
A (Fig. 1) mm	25	30	30	60	60	300	300	600
B (Fig. 2) mm	10	10	10	20	20	250	250	650

Fig. 1

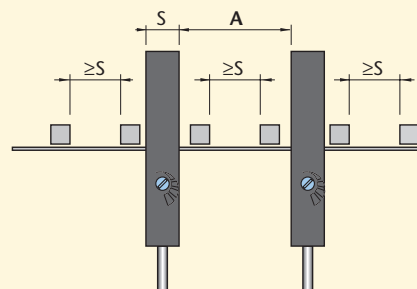
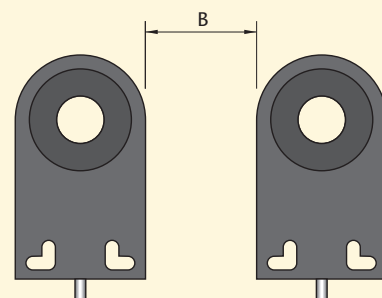


Fig. 2



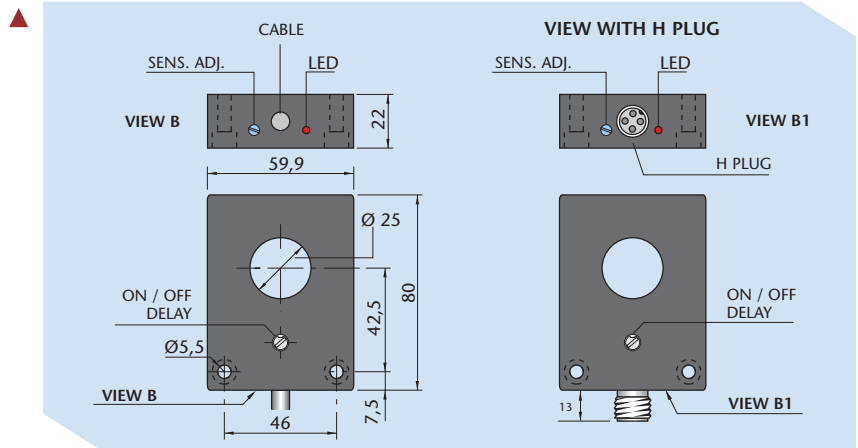
INDUCTIVE RING SENSORS



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

ON/OFF SWITCH WITH DELAY
ON DE-ENERGIZATION 100mS.
ADJUSTABLE SENSITIVITY ON ALL MODELS

▲ EMBEDDABLE (FLUSH MOUNTING)



TECHNICAL CHARACTERISTICS

Dimensions mm

MODELS WITH CABLE	NPN	NO+NC	SIA25-C NPN NO+NC R
	PNP	NO+NC	SIA25-C PNP NO+NC R
MODELS WITH H PLUG	NPN	NO+NC	SIA25-C NPN NO+NC H R
	PNP	NO+NC	SIA25-C PNP NO+NC H R
Hole diameter Ø		mm	25
Continuos voltage (residual ripple ≤ 10%)		V	10 ÷ 30
Hysteresis		mm	In relation to Sn
Switching frequency		Hz	See table
Delay on de-energization		ms	100
Repeatability		mm	< 0.3
Max output current		mA	200
Absorption at 24 Vdc (sensor ON)		mA	< 15
Voltage drop (sensor ON)		V	< 1.8
Short circuit protection			Incorporated
Led			Incorporated
Temperature limits		°C	-20 ÷ +60
IP rating		IP	65
Housing			Plastic
PVC cable		2m	4 x 0.25 mm ²
Plug type			H

TYPE SIA25-C FLUSH MOUNTING

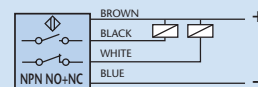
This inductive ring sensor has been created to solve shielding problems caused by other metallic elements.

It is well shielded against mutipl interference created by other sensors installed close to each other.

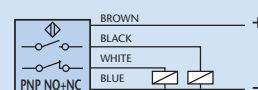
For applications where these sensors have to be installed very close to each other lets say at less than 3 cm it will be necessary to order them with two different frequencies that we can call A and B. When installing these sensors types A and B must be placed in alternating positions.

WIRING DIAGRAMS

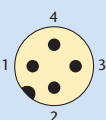
STANDARD MODEL - 4 WIRE CABLE



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



CONNECTION WITH H PLUG FOR THE CONNECTORS SEE PAGE 85



VIEW OF MALE CONNECTOR
1 = Brown / +
3 = Blue / -
4 = Black / output NPN-PNP / NO
2 = White / output NPN-PNP / NC

MIN. DIMENSIONS OF THE OBJECT TO DETECT Fe37

Model	SIA25	
Length	mm	7
Diameter	mm	4

SWITCHING FREQUENCY

The switching frequency of inductive ring sensors depends on delayed impulse time (when inserted) according to the formula:

$$\text{Switching frequency (Hz)} = \frac{1}{(T \text{ impulse} + 10) \text{ mS}}$$

Vice versa, the switching frequency will be between 600÷800 Hz.

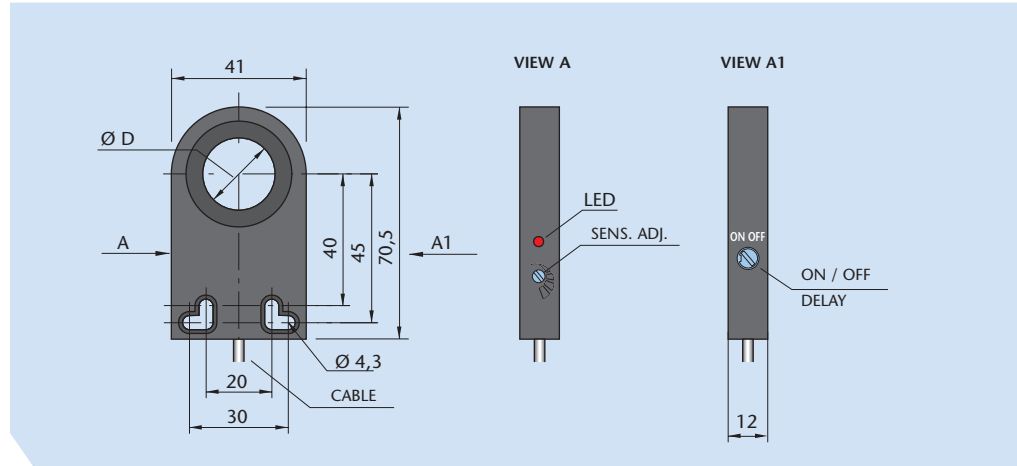
INDUCTIVE RING SENSORS



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

● **NOT EMBEDDABLE**
(NON FLUSH MOUNTING)

● **Ø D = 5-12-15-22-30**



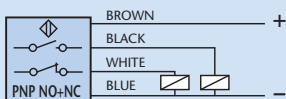
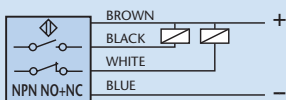
TECHNICAL CHARACTERISTICS

Dimensions mm

MODELS WITH CABLE	NPN	NO+NC	SIA05-CE NPN NO+NC R	SIA12-CE NPN NO+NC R	SIA15-CE NPN NO+NC R	SIA22-CE NPN NO+NC R
	PNP	NO+NC	SIA05-CE PNP NO+NC R	SIA12-CE PNP NO+NC R	SIA15-CE PNP NO+NC R	SIA22-CE PNP NO+NC R
MODELS WITH H PLUG	NPN	NO+NC	SIA05-CE NPN NO+NC H R	SIA12-CE NPN NO+NC H R	SIA15-CE NPN NO+NC H R	SIA22-CE NPN NO+NC H R
	PNP	NO+NC	SIA05-CE PNP NO+NC H R	SIA12-CE PNP NO+NC H R	SIA15-CE PNP NO+NC H R	SIA22-CE PNP NO+NC H R
Hole diameter Ø	mm		5	12	15	22
Continuous voltage (residual ripple ≤ 10%)	V		10 ÷ 30			
Hysteresis	mm		In relation to Sn			
Switching frequency	Hz		See table			
Delay on de-energization	ms		100			
Repeatability	mm		< 0.3			
Max output current	mA		200			
Absorption at 24 Vdc (sensor ON)	mA		< 15			
Voltage drop (sensor ON)	V		< 1.8			
Short circuit protection			Incorporated			
Led			Incorporated			
Temperature limits	°C		-20 ÷ +60			
IP rating	IP		65			
Housing			Plastic			
PVC cable	2m		4 x 0.25 mm ²			
Plug type			H			

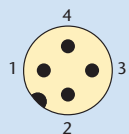
WIRING DIAGRAMS

STANDARD MODEL - 4 WIRE CABLE

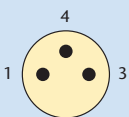


N.B.: Upon request cable for sensors with different lengths 3.5 - 5 - 7.5 - 10 metres is available.

CONNECTION WITH H1-H PLUGS FOR THE CONNECTORS SEE PAGE 85

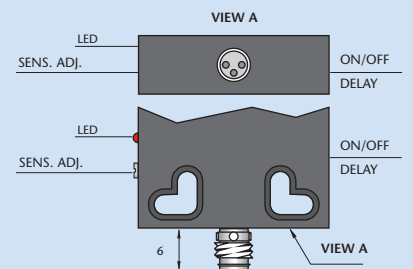


VIEW OF MALE CONNECTOR H
1 = Brown / +
3 = Blue / -
4 = Black / output NPN-PNP / NO
2 = White / output NPN-PNP / NC



VIEW OF MALE CONNECTOR H1
1 = Brown / +
3 = Blue / -
4 = Black / output NPN-PNP / NO-NC

MODELS WITH H1 PLUG (M8)



On request is available the H1 plug for SIA05-12-15-22 models. This versions can be supplied with NO or NC output only.

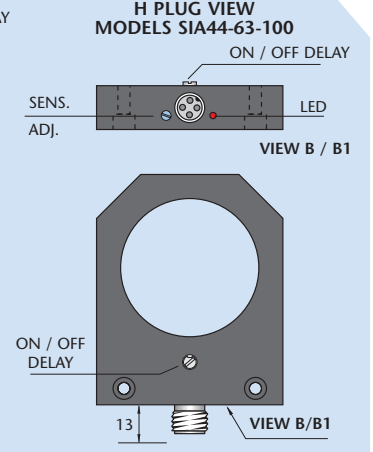
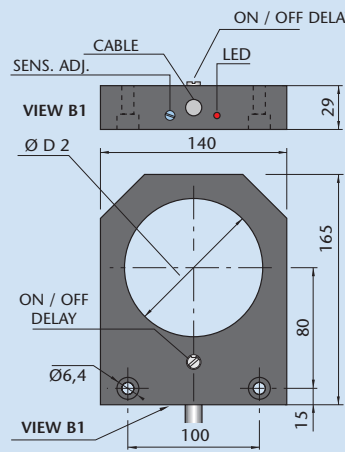
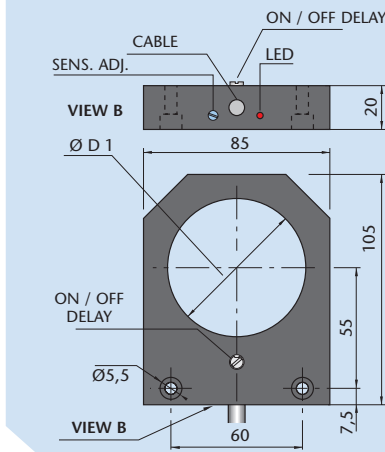
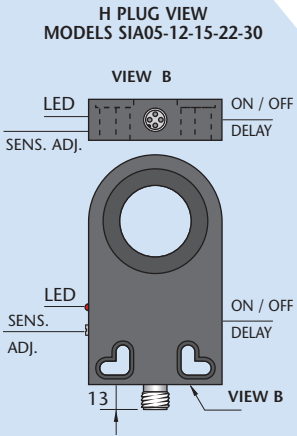
INDUCTIVE RING SENSORS



ON/OFF SWITCH WITH DELAY ON DE-ENERGIZATION 100mS.
 ADJUSTABLE SENSITIVITY ON ALL MODELS
 MODELS WITH H PLUG FOR CONNECTOR

● Ø D1 = 44-63

Ø D2 = 100



SIA30-CE NPN NO+NC R

SIA44-CE NPN NO+NC R

SIA63-CE NPN NO+NC R

SIA100-CE NPN NO+NC R

SIA30-CE PNP NO+NC R

SIA44-CE PNP NO+NC R

SIA63-CE PNP NO+NC R

SIA100-CE PNP NO+NC R

SIA30-CE NPN NO+NC H R

SIA44-CE NPN NO+NC H R

SIA63-CE NPN NO+NC H R

SIA100-CE NPN NO+NC H R

SIA30-CE PNP NO+NC H R

SIA44-CE PNP NO+NC H R

SIA63-CE PNP NO+NC H R

SIA100-CE PNP NO+NC H R

30

44

63

100

10 ÷ 30

In relation to Sn

See table

100

< 0.3

200

< 15

< 1.8

Incorporated

Incorporated

-20 ÷ +60

65

Plastic

4 x 0.25 mm²

H

MIN. DIMENSION OF THE OBJECT TO DETECT Fe360

Models	SIA05	SIA12	SIA15	SIA22	SIA30	SIA44	SIA63	SIA100
Length mm	1	2	2	6	7	9	12	20
Diameter mm	0.7	1.2	1.2	3	4	5	6	12

SWITCHING FREQUENCY

The switching frequency of inductive ring sensors depends on delayed impulse time (when inserted) according to the formula:

$$\text{Switching frequency (Hz)} = \frac{1}{(T \text{ impulse} + 10) \text{ mS}}$$

Vice versa, switching frequency will be as per chart:

Models	SIA05	SIA12	SIA15	SIA22	SIA30	SIA44	SIA63	SIA100
Sw. Frequency Hz	600÷1500	600÷1000	600÷1000	600÷1000	600÷800	250÷600	100÷200	100