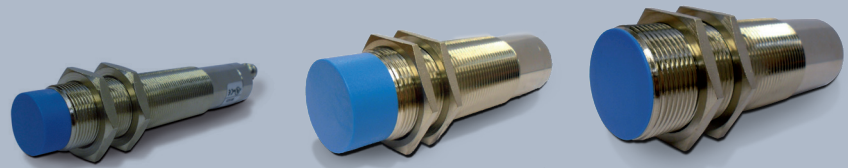
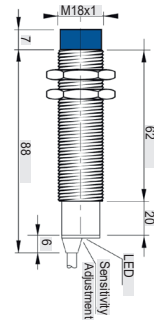
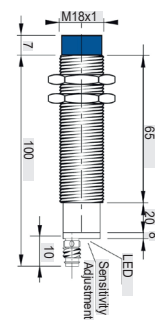
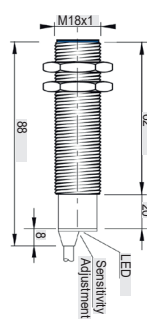
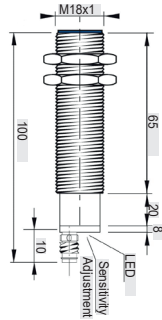


CAPACITIVE

BASIC, CAPACITIVE A.C., MULTIVOLTAGE



CAPACITIVE BASIC M18

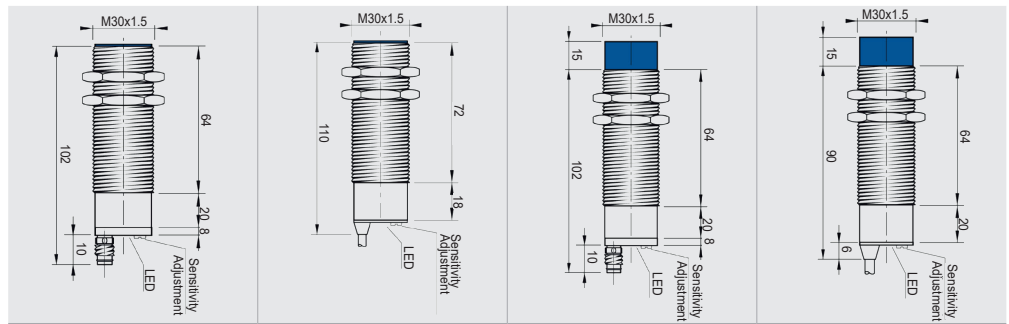
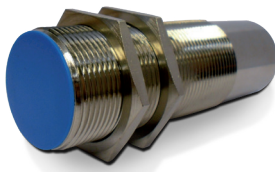


STANDARD

				FLUSH		NON FLUSH	
				M8 conn	cable	M8 conn	cable
NOMINAL SWITCHING DISTANCE				1...5 mm	1...5 mm	1...10 mm	1...10 mm
10-30 Vdc	PNP/NPN NO-NC	4 wires	order No.	---	---	---	---
10-30 Vdc	PNP NO	3 wires	order No.	---	---	---	---
10-30 Vdc	PNP NC	3 wires	order No.	---	---	---	---
10-30 Vdc	NPN NO	3 wires	order No.	---	---	---	---
10-30 Vdc	NPN NC	3 wires	order No.	---	---	---	---
10-30 Vdc	PNP NO-NC	4 wires	order No.	CS08K2 958901040	CS08 958901020	CS14K2 958901270	CS14 958901120
10-30 Vdc	NPN NO-NC	4 wires	order No.	CS07K2 958901000	CS07 958901160	CS13K2 958901250	CS13 958901100
10-30 Vdc	NO-NC	2 wires	order No.	---	---	---	---
20-250 Vac/Vdc	NO	2 wires	order No.	---	---	---	---
20-250 Vac/Vdc	NC	2 wires	order No.	---	---	---	---
20-250 Vac	NO	2/3 wires	order No.	---	---	---	---
10-30 Vdc	Analog 0-20 mA	3 wires	order No.	---	---	---	---
NAMUR amplifier	NAMUR	2 wires	order No.	---	---	---	---

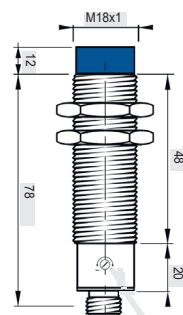
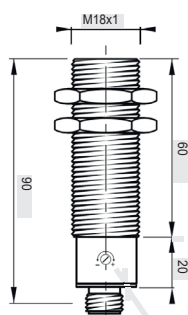
Nominal Voltage	12-30Vdc(-15/10%)	12-30Vdc(-15/10%)	12-30Vdc(-15/10%)	12-30Vdc(-15/10%)
Residual Ripple	<10%	<10%	<10%	<10%
Hysteresis	depends on the sensing distance	depends on the sensing distance	depends on the sensing distance	depends on the sensing distance
Max. Output Current	200 mA	200 mA	200 mA	200 mA
Residual Current	< 10 mA	< 10 mA	< 10 mA	< 10 mA
Voltage Drop	< 1,8 V (I=100 mA)	< 1,8 V (I=100 mA)	< 1,8 V (I=100 mA)	< 1,8 V (I=100 mA)
Setting	sensitivity adjustment trimmer	sensitivity adjustment trimmer	sensitivity adjustment trimmer	sensitivity adjustment trimmer
Operation Led	Yellow	Yellow	Yellow	Yellow
Switching Frequency	10 Hz	10 Hz	10 Hz	10 Hz
Start Up Delay	< 100 ms	< 100 ms	< 100 ms	< 100 ms
Repeatability	≤ 5%	≤ 5%	≤ 5%	≤ 5%
Short Circuit Protection	Present(self-resetting)	Present(self-resetting)	Present(self-resetting)	Present(self-resetting)
Electric Protections	Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads
Temperature Limits	- 25 +70 C	- 25 +70 C	- 25 +70 C	- 25 +70 C
Protection Degree	IP67	IP67	IP67	IP67
Cable Length	---	2 m	---	2 m
Cable Section	---	4x 0,25 mm ²	---	4x 0,25 mm ²
Housing Material	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass
Weight - Cable Output	---	160 g	---	160 g
Weight - Connector Output	120 g	---	120 g	---

CAPACITIVE BASIC M30



				STANDARD			
				FLUSH		NON FLUSH	
				M8 conn	cable	M8 conn	cable
NOMINAL SWITCHING DISTANCE				1...15 mm	1...15 mm	1...25 mm	1...25 mm
10-30 Vdc	PNP/NPN NO-NC	4 wires	order No.	---	---	---	---
10-30 Vdc	PNP NO	3 wires	order No.	---	---	---	---
10-30 Vdc	PNP NC	3 wires	order No.	---	---	---	---
10-30 Vdc	NPN NO	3 wires	order No.	---	---	---	---
10-30 Vdc	NPN NC	3 wires	order No.	---	---	---	---
10-30 Vdc	PNP NO-NC	4 wires	order No.	CS10K2 958901080	CS10 958901060	CS16K2 958901330	CS16 958901140
10-30 Vdc	NPN NO-NC	4 wires	order No.	CS09K2 958901230	CS09 958901180	CS15K2 958901300	CS15 958901200
10-30 Vdc	NO-NC	2 wires	order No.	---	---	---	---
20-250 Vac/Vdc	NO	2 wires	order No.	---	---	---	---
20-250 Vac/Vdc	NC	2 wires	order No.	---	---	---	---
20-250 Vac	NO	2/3wires	order No.	---	---	---	---
10-30 Vdc	Analog 0-20 mA	3 wires	order No.	---	---	---	---
NAMUR amplifier	NAMUR	2 wires	order No.	---	---	---	---
Nominal Voltage				12-30Vdc(-15/10%)	12-30Vdc(-15/10%)	12-30Vdc(-15/10%)	12-30Vdc(-15/10%)
Residual Ripple				<10%	<10%	<10%	<10%
Hysteresis				depends on the sensing distance	depends on the sensing distance	depends on the sensing distance	depends on the sensing distance
Max. Output Current				200 mA	200 mA	200 mA	200 mA
Residual Current				< 10 mA	< 10 mA	< 10 mA	< 10 mA
Voltage Drop				< 1,8 V (I=100 mA)	< 1,8 V (I=100 mA)	< 1,8 V (I=100 mA)	< 1,8 V (I=100 mA)
Setting				sensitivity adjustment trimmer	sensitivity adjustment trimmer	sensitivity adjustment trimmer	sensitivity adjustment trimmer
Operation Led				Yellow	Yellow	Yellow	Yellow
Switching Frequency				10 Hz	10 Hz	10 Hz	10 Hz
Start Up Delay				< 100 ms	< 100 ms	< 100 ms	< 100 ms
Repeatability				≤ 5%	≤ 5%	≤ 5%	≤ 5%
Short Circuit Protection				Present(self-resetting)	Present(self-resetting)	Present(self-resetting)	Present(self-resetting)
Electric Protections				Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads	Against polarity reversal inductive loads
Temperature Limits				- 25 +70 C	- 25 +70 C	- 25 +70 C	- 25 +70 C
Protection Degree				IP67	IP67	IP67	IP67
Cable Length				---	2 m	---	2 m
Cable Section				---	4x 0,25 mm ²	---	4x 0,25 mm ²
Housing Material				Nickel-plated brass	Nickel-plated brass	Nickel-plated brass	Nickel-plated brass
Weight - Cable Output				---	250 g	---	250 g
Weight - Connector Output				210 g	---	210 g	---

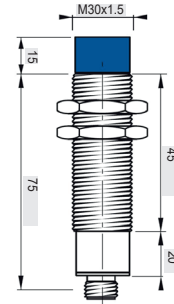
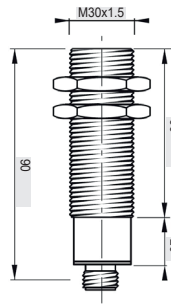
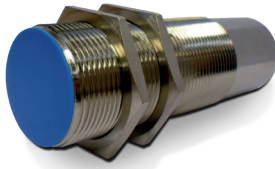
CAPACITIVE A.C. M18



STANDARD

				FLUSH	NON FLUSH
				M12 conn	M12 conn
NOMINAL SWITCHING DISTANCE				2...8 mm	2...15 mm
10-30 Vdc	PNP/NPN NO-NC	4 wires	order No.	---	---
10-30 Vdc	PNP NO	3 wires	order No.	---	---
10-30 Vdc	PNP NC	3 wires	order No.	---	---
10-30 Vdc	NPN NO	3 wires	order No.	---	---
10-30 Vdc	NPN NC	3 wires	order No.	---	---
10-30 Vdc	PNP NO-NC	4 wires	order No.	---	---
10-30 Vdc	NPN NO-NC	4 wires	order No.	---	---
10-30 Vdc	NO-NC	2 wires	order No.	---	---
20-250 Vac/Vdc	NO	2 wires	order No.	CSP40K4 958901380	CSP41K4 958901390
20-250 Vac/Vdc	NC	2 wires	order No.	---	---
20-250 Vac	NO	2/3wires	order No.	---	---
10-30 Vdc	Analog 0-20 mA	3 wires	order No.	---	---
NAMUR amplifier	NAMUR	2 wires	order No.	---	---
Nominal Voltage				20-250 Vac (-15/10%)-5A source current	20-250 Vac (-15/10%)-5A source current
Residual Ripple				<10%	<10%
Hysteresis				< 15%	< 15%
Max. Output Current				300 mA	300 mA
Min. Output Current				2,5 mA	2,5 mA
Residual Current				< 2,5 mA	< 2,5 mA
Setting				sensitivity adjustment trimmer	sensitivity adjustment trimmer
Operation Led				Yellow	Yellow
Switching Frequency				25 Hz	25 Hz
Start Up Delay				---	---
Repeatability				< 5%	< 5%
Short Circuit Protection				Present(self-resetting)	Present(self-resetting)
Electric Protection				Against polarity reversal inductive loads	Against polarity reversal inductive loads
Temperature Limit				- 25 +70 C	- 25 +70 C
Protection Degree				IP67	IP67
Cable Length				---	---
Cable Section				---	---
Housing Material				Plastic (PBT)	Plastic (PBT)
Weight - Cable Output				---	---
Weight - Connector Output				80 g	80 g

CAPACITIVE A.C. M30

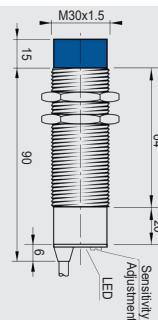
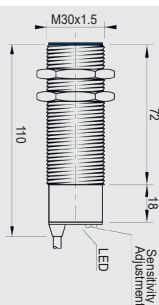
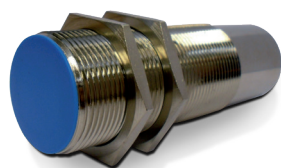


STANDARD

				FLUSH	NON FLUSH
				M12 conn	M12 conn
NOMINAL SWITCHING DISTANCE				2...20 mm	2...30 mm
10-30 Vdc	PNP/NPN NO-NC	4 wires	order No.	---	---
10-30 Vdc	PNP NO	3 wires	order No.	---	---
10-30 Vdc	PNP NC	3 wires	order No.	---	---
10-30 Vdc	NPN NO	3 wires	order No.	---	---
10-30 Vdc	NPN NC	3 wires	order No.	---	---
10-30 Vdc	PNP NO-NC	4 wires	order No.	---	---
10-30 Vdc	NPN NO-NC	4 wires	order No.	---	---
10-30 Vdc	NO-NC	2 wires	order No.	---	---
20-250 Vac/Vdc	NO	2 wires	order No.	CSP50K4 958901400	CSP51K4 958901410
20-250 Vac/Vdc	NC	2 wires	order No.	---	---
20-250 Vac	NO	2/3 wires	order No.	---	---
10-30 Vdc	Analog 0-20 mA	3 wires	order No.	---	---
NAMUR amplifier	NAMUR	2 wires	order No.	---	---

Nominal Voltage	20-250 Vac (-15/10%)-5A source current	20-250 Vac (-15/10%)-5A source current
Residual Ripple	<10%	<10%
Hysteresis	< 15%	< 15%
Max. Output Current	300 mA	300 mA
Min. Output Current	2,5 mA	2,5 mA
Residual Current	< 2,5 mA	< 2,5 mA
Setting	sensitivity adjustment trimmer	sensitivity adjustment trimmer
Operation Led	Yellow	Yellow
Switching Frequency	25 Hz	25 Hz
Start Up Delay	---	---
Repeatability	< 5%	< 5%
Short Circuit Protection	Present(self-resetting)	Present(self-resetting)
Electric Protection	Against polarity reversal inductive loads	Against polarity reversal inductive loads
Temperature Limit	- 25 +70 C	- 25 +70 C
Protection Degree	IP67	IP67
Cable Length	---	---
Cable Section	---	---
Housing Material	Plastic (PBT)	Plastic (PBT)
Weight - Cable Output	---	---
Weight - Connector Output	200 g	200 g

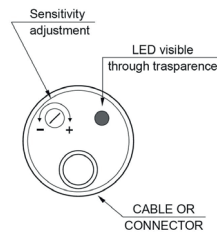
CAPACITIVE MULTIVOLTAGE M30



STANDARD (TIMER TRIMMER)

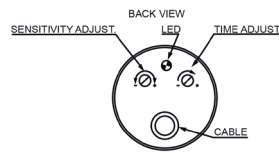
				FLUSH		NON FLUSH	
				M12 conn		M12 conn	
NOMINAL SWITCHING DISTANCE				20 mm		30 mm	
10-30 Vdc	PNP/NPN NO-NC	4 wires	order No.	---	---	---	---
10-30 Vdc	PNP NO	3 wires	order No.	---	---	---	---
10-30 Vdc	PNP NC	3 wires	order No.	---	---	---	---
10-30 Vdc	NPN NO	3 wires	order No.	---	---	---	---
10-30 Vdc	NPN NC	3 wires	order No.	---	---	---	---
10-30 Vdc	PNP NO-NC	4 wires	order No.	---	---	---	---
10-30 Vdc	NPN NO-NC	4 wires	order No.	---	---	---	---
10-30 Vdc	NO-NC	2 wires	order No.	---	---	---	---
20-250 Vac/Vdc	NO	2 wires	order No.	---	---	---	---
18...230 VAC/DC	relay SPDT	6 wires	order No.	CS31 958901150	CS32 958901220	CS31TD5 958901360	CS31TE5 958901210
18...230 Vac/dc	relay SPDT (delay ON)	6wires	order No.	---	---	---	---
18...230 VAC/DC	relay SPDT (delay OFF)	6 wires	order No.	---	---	---	---
NAMUR amplifier	NAMUR	2 wires	order No.	---	---	---	---
Nominal Voltage				18-230Vac/dc (-15/10%)		18-230Vac/dc (-15/10%)	
Residual Ripple				<10%		<10%	
Hysteresis				<10%		<10%	
Max. Output Current				3A 30 Vac- 1A 220 Vac (90 W, 360 VA)		3A 30 Vac- 1A 220 Vac (90 W, 360 VA)	
Absorption				2,5 VA		2,5 VA	
Residual Current				---		---	
Setting				sensitivity and time adj. trimmer		sensitivity and time adj. trimmer	
Operation Led				Yellow		Yellow	
Switching Frequency				10 Hz		10 Hz	
Start Up Delay				<300 ms		<300 ms	
Repeatability				<5%		<5%	
Short Circuit Protection				Present (self-resetting)		Present (self-resetting)	
Electric Protection				Against polarity reversal inductive loads		Against polarity reversal inductive loads	
Temperature Limit				- 25 +70 C		- 25 +70 C	
Protection Degree				IP65		IP65	
Cable Length				2 m		2 m	
Cable Section				6x0,30 mm ²		6x0,30 mm ²	
Housing Material				Nickel-plated brass		Nickel-plated brass	
Weight - Cable Output				250 g		250 g	
Weight - Connector Output				---		---	

CAPACITIVE SETTINGS & CONNECTIONS



Sensitivity adjustment

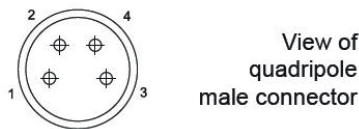
The sensitivity adjustment must be done when the sensor is installed in a definite and steady position. The regulation must be done in a position half way between minimum and maximum, because, being air dielectric, a strong humidity variation could cause, if the regulation is very light, nuisance tripping. The sensing distance of the sensor depends on the materials to detect, on its dimension and conductivity. The distance could change according to temperature variations.



Timer adjustment

The timer trimmer allows to set a delay, on the activation (delay ON) or in the de-activation of the output, depends on the model, after the detection of the object. The output will remain active (or inactive) proportionally to the setting point of the screw, starting from 1 second up to 5 minutes.

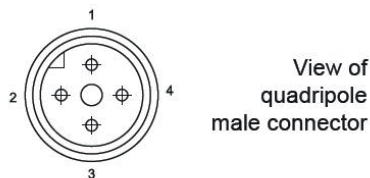
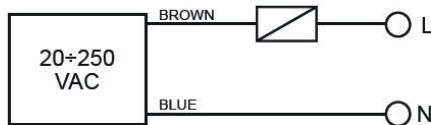
M8 4-pole NO-NC models



CONTACTS CONFIGURATION

Output	Contacts numbers			
	1	2	3	4
NPN/PNP NO+NC	+	NC	-	NO

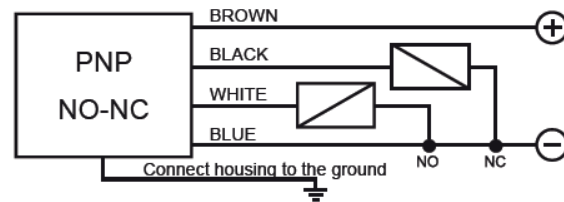
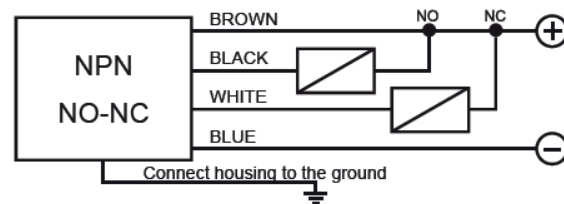
2 wires Vac models



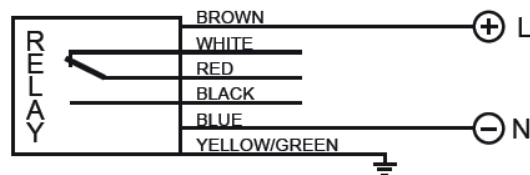
CONTACTS CONFIGURATION

Available	Contacts numbers			
	1	2	3	4
NO	L		N	

4 wires NO-NC Vdc model



6 wires Multivoltage models



2, 3, 4 wires

M12, M8 connector

Axial or radial 90°

Shielded or unshielded

Double key

A.C. cable

3, 5, 7, 10, 15, 25m cable

