

M30 Capacitive Proximity Sensors

Standard Length

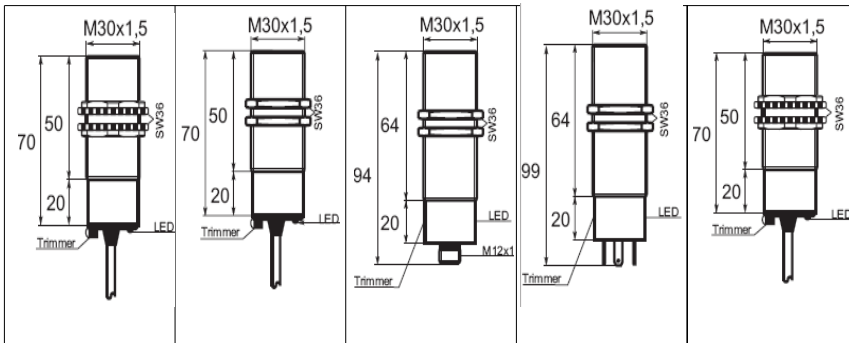
Metal Housing

3 Wire DC

2 Wire AC

NAMUR

ABS and Teflon housing available



NAMUR

(3) CPM723015C

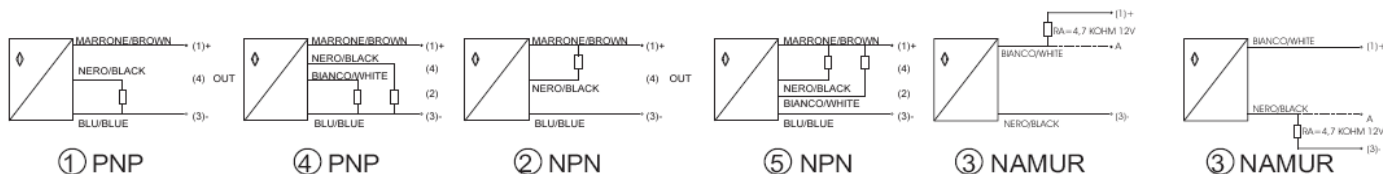
3 Wire DC	PNP – Normally Open	(1)		CPM323020C	CPM323020M12	CPM323020P	CPM323020C.A
	PNP – Normally Closed	(1)		CPM333020C	CPM333020M12	CPM333020P	CPM333020C.A
	PNP – Selectable	(4)		CPM343020C	CPM343020M12	CPM343020P	CPM343020C.A
	NPN – Normally Open	(2)		CPM223020C	CPM223020M12	CPM223020P	CPM223020C.A
	NPN – Normally Closed	(2)		CPM233020C	CPM233020M12	CPM233020P	CPM233020C.A
	NPN – Selectable	(5)		CPM243020C	CPM243020M12	CPM243020P	CPM243020C.A
2 Wire DC	Normally Open	-	-	-	-	-	-
	Normally Closed	-	-	-	-	-	-
2 Wire AC	Normally Open	-	-	-	-	-	-
	Normally Closed	-	-	-	-	-	-

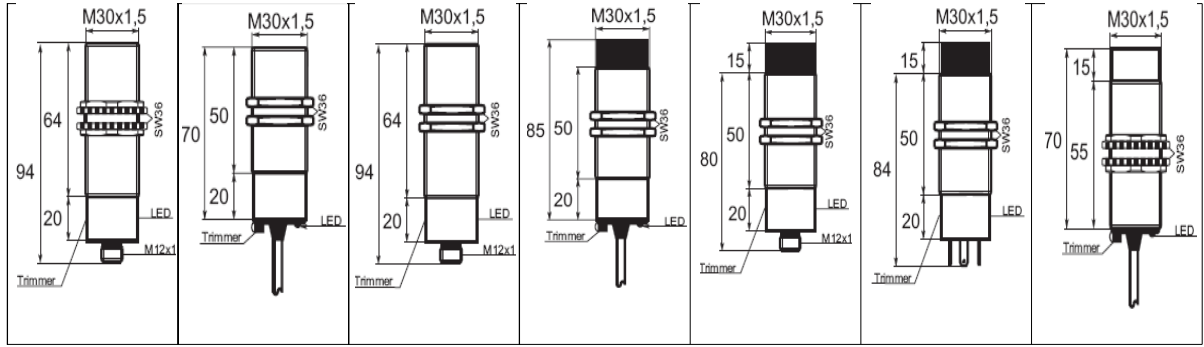
Mating cables / connectors

Form	M30 Non-Shielded	M30 Shielded	M30 Shielded	M30 Shielded	M30 Shielded
Nominal Sensing Distance (Sn)	2 to 15mm	2 to 20mm	2 to 20mm	2 to 20mm	2 to 20mm
Housing Material	ABS		Nickel Plated Brass		ABS
Termination Type	2.0 Meter Cable	2.0 Meter Cable	M12 Connector	Sub-Base Plug	2.0 Meter Cable
Min / Max Supply Voltage	5 to 24Vdc		10 to 30Vdc		
Max. Load Current (I _r)	-		200mA		
Max ripple factor (V _r)	≤ 10%		≤ 10%		
Voltage Drop (U _d)	-		≤ 3V @ 200mA		
Power Consumption (I _o)	*		≤ 15mA		
Switching Frequency (Hz)	100 Hz	100 Hz	100 Hz	100 Hz	100 Hz
Repeatability	< 10% nominal sensing distance				
Hysteresis	≤ 2-15% Sn				
Short Circuit Protection	No	Yes	Yes	Yes	Yes
Output LED	No	Yes	Yes	Yes	Yes
Operating Temperature	-25 to +70 C				
IP Rating	IP65 (with connector mounted)				

* <1mA with object present >4mA without object

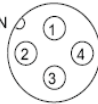
Wiring Diagram





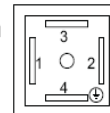
PNP – NO	CPM323020M12.A	CPM323020C.F	CPM323020M12.F	CPM353030C	CPM353030M12	CPM353030P	CPM353030C.A
PNP – NC	CPM333020M12.A	CPM333020C.F	CPM333020M12.F	CPM363030C	CPM363030M12	CPM363030P	CPM363030C.A
PNP – NO/NC	CPM343020M12.A	CPM343020C.F	CPM343020M12.F	CPM373030C	CPM373030M12	CPM373030P	CPM373030C.A
NPN – NO	CPM223020M12.A	CPM223020C.F	CPM223020M12.F	CPM253030C	CPM253030M12	CPM253030P	CPM253030C.A
NPN – NC	CPM233020M12.A	CPM233020C.F	CPM233020M12.F	CPM263030C	CPM263030M12	CPM263030P	CPM263030C.A
NPN – NO/NC	CPM243020M12.A	CPM243020C.F	CPM243020M12.F	CPM273030C	CPM273030M12	CPM273030P	CPM273030C.A
2W DC NO	-	-	-	-	-	-	-
2W DC NC	-	-	-	-	-	-	-
2W AC NO	-	-	-	-	-	-	-
2W AC NC	-	-	-	-	-	-	-
Mates							
Form	M30 Shielded	M30 Shielded	M30 Shielded	M30 Non-Shielded	M30 Non-Shielded	M30 Non-Shielded	M30 Non-Shielded
Sn	2 to 20mm	2 to 20mm	2 to 20mm	3 to 30mm	3 to 30mm	3 to 30mm	3 to 30mm
Housing	ABS	PTFE – Teflon	PTFE – Teflon	Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass	ABS
Termination	M12 Connector	2.0 Meter Cable	M12 Connector	2.0 Meter Cable	M12 Connector	Sub-Base Plug	2.0 Meter Cable
Supply Vdc	10 to 30Vdc						
Max Load	200mA						
Max ripple	≤ 10%						
Ud	≤ 3V @ 200mA						
Io	≤ 15mA						
Hz	100 Hz	100 Hz	100 Hz	100 Hz	100 Hz	100 Hz	100 Hz
Repeatability	< 10% nominal sensing distance						
Hysteresis	≤ 2 to 15% Sn						
Short Protection	Yes						
LED	Yes						
Op Temp	-25 to +70 C						
IP Rating	IP65 (with connector mounted)						

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



1+ MARRONE / BROWN
2 NC OUT BIANCO/WHITE
3- BLU / BLUE
4 NO OUT NERO / BLACK

1+ MARRONE / BROWN
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1+ MARRONE / BROWN
2 NC OUT BIANCO/WHITE
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M30 Capacitive Proximity Sensors

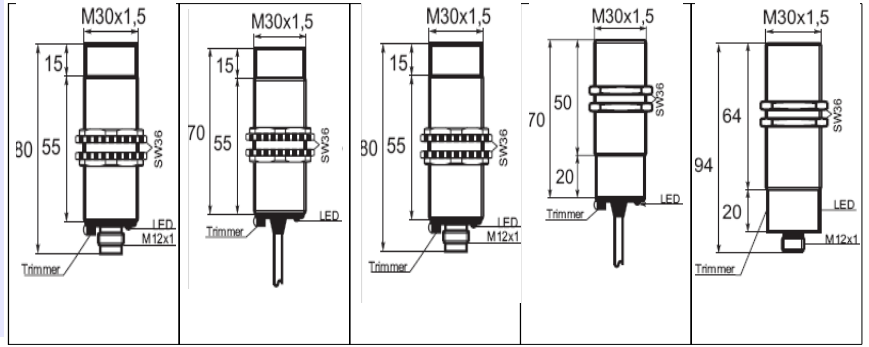
**Standard Length
Metal Housing**

3 Wire DC

2 Wire AC

NAMUR

ABS and Teflon housing available



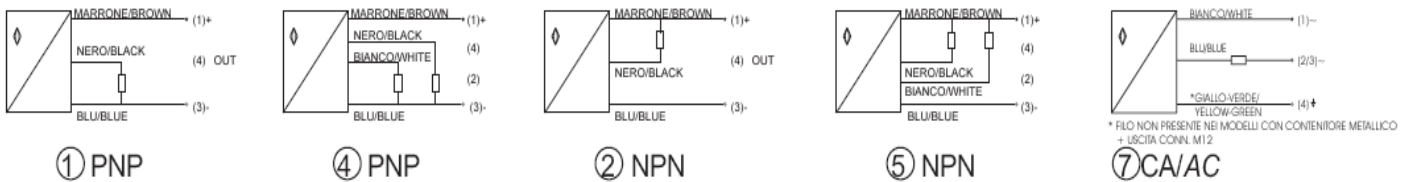
(Wiring Schematic)

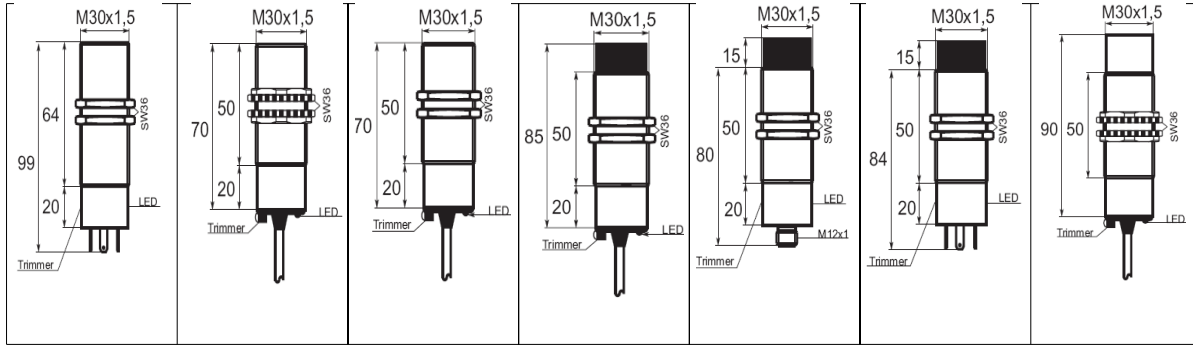
3 Wire DC	PNP – Normally Open	(1)	CPM353030M12.A	CPM353030C.F	CPM353030M12.F	-	-
	PNP – Normally Closed	(1)	CPM363030M12.A	CPM363030C.F	CPM363030M12.F	-	-
	PNP – Selectable	(4)	CPM373030M12.A	CPM373030C.F	CPM373030M12.F	-	-
	NPN – Normally Open	(2)	CPM253030M12.A	CPM253030C.F	CPM253030M12.F	-	-
	NPN – Normally Closed	(2)	CPM263030M12.A	CPM263030C.F	CPM263030M12.F	-	-
	NPN – Selectable	(5)	CPM273030M12.A	CPM273030C.F	CPM273030M12.F	-	-
2 Wire DC	Normally Open	-	-	-	-	-	-
	Normally Closed	-	-	-	-	-	-
2 Wire AC	Normally Open	-	-	-	CPM623015C	CPM623015M12	
	Normally Closed	-	-	-	CPM633015C	CPM633015M12	

Mating cables / connectors

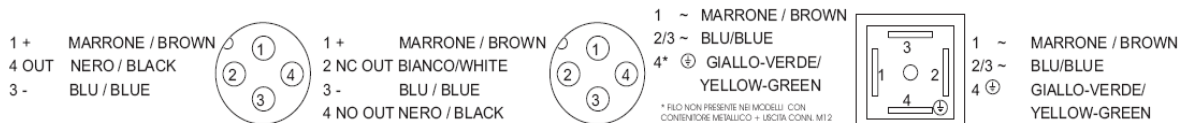
Form	M30 Non-Shielded	M30 Non-Shielded	M30 Non-Shielded	M30 Shielded	M30 Shielded
Nominal Sensing Distance (Sn)	3 to 30mm	3 to 30mm	3 to 30mm	2 to 15mm	2 to 15mm
Housing Material	ABS	PTFE – Teflon	PTFE – Teflon	Nickel Plated Brass	Nickel Plated Brass
Termination Type	M12 Connector	2.0 Meter Cable	M12 Connector	2.0 Meter Cable	M12 Connector
Min / Max Supply Voltage	10 to 30Vdc	10 to 30Vdc	10 to 30Vdc	20 to 220 Vac	20 to 220 Vac
Max. Load Current (I _r)	200mA	200mA	200mA	15 to 400mA	15 to 400mA
Max ripple factor (V _r)	≤ 10%	≤ 10%	≤ 10%	-	-
Voltage Drop (U _d)	≤ 3V @ 200mA	≤ 3V @ 200mA	≤ 3V @ 200mA	< 4.5V	< 4.5V
Power Consumption (I _o)	≤ 15mA	≤ 15mA	≤ 15mA	< 2.5mA	< 2.5mA
Switching Frequency (Hz)	100 Hz	100 Hz	100 Hz	15 Hz	15 Hz
Repeatability	< 10% nominal sensing distance				
Hysteresis	≤ 2 to 15% Sn				
Short Circuit Protection	Yes	Yes	Yes	No	No
Output LED	Yes	Yes	Yes	Yes	Yes
Operating Temperature	-25 to +70 C				
IP Rating	IP65 (with connector mounted)				

Wiring Diagram





PNP – NO	-	-	-	-	-	-	-
PNP – NC	-	-	-	-	-	-	-
PNP – NO/NC	-	-	-	-	-	-	-
NPN – NO	-	-	-	-	-	-	-
NPN – NC	-	-	-	-	-	-	-
NPN – NO/NC	-	-	-	-	-	-	-
2W DC NO	-	-	-	-	-	-	-
2W DC NC	-	-	-	-	-	-	-
2W AC NO	CPM623015P	CPM623015C.A	CPM623015C.F	CPM653030C	CPM653030M12	CPM653030P	CPM653030C.A
2W AC NC	CPM633015P	CPM633015C.A	CPM633015C.F	CPM663030C	CPM663030M12	CPM663030P	CPM663030C.A
Mates							
Form	M30 Shielded	M30 Shielded	M30 Shielded	M30 Non-Shielded	M30 Non-Shielded	M30 Non-Shielded	M30 Non-Shielded
Sn	2 to 15mm	2 to 15mm	2 to 15mm	3 to 30mm	3 to 30mm	3 to 30mm	3 to 30mm
Housing	Nickel Plated Brass	ABS	PTFE – Teflon	Nickel Plated Brass	Nickel Plated Brass	Nickel Plated Brass	ABS
Termination	Sub-Base Plug	Sub-Base Plug	2.0 Meter Cable	2.0 Meter Cable	M12 Connector	Sub-Base Plug	2.0 Meter Cable
Supply Vdc	20 to 220 Vac						
Max Load	15 to 400mA						
Max ripple	-						
Ud	< 4.5V						
Io	< 2.5mA						
Hz	15 Hz	15 Hz	15 Hz	15 Hz	15 Hz	15 Hz	15 Hz
Repeatability	< 10% nominal sensing distance						
Hysteresis	≤ 2 to 15% Sn						
Short Protection	No						
LED	Yes						
Op Temp	-25 to +70 C						
IP Rating	IP65 (with connector mounted)						



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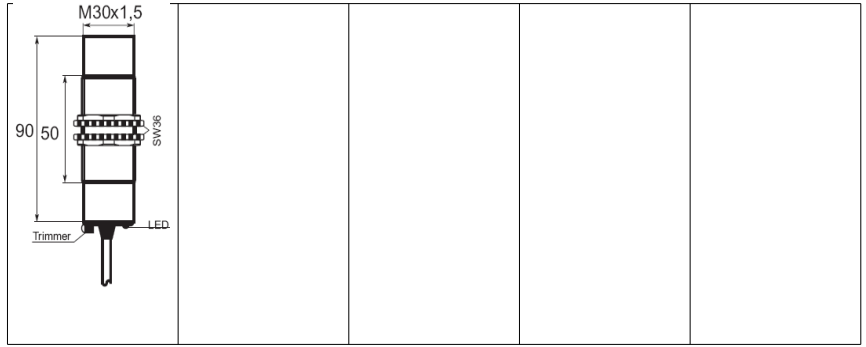
**Standard Length
Metal Housing**

3 Wire DC

2 Wire AC

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ABS and Teflon housing available



(Wiring Schematic)

3 Wire DC	PNP – Normally Open	(1)	-	-	-	-	-
	PNP – Normally Closed	(1)	-	-	-	-	-
	PNP – Selectable	(4)	-	-	-	-	-
	NPN – Normally Open	(2)	-	-	-	-	-
	NPN – Normally Closed	(2)	-	-	-	-	-
	NPN – Selectable	(5)	-	-	-	-	-
2 Wire DC	Normally Open	(6)					
	Normally Closed	(6)					
2 Wire AC	Normally Open	(7)	CPM653030C.F	-	-	-	-
	Normally Closed	(7)	CPM663030C.F	-	-	-	-

Mating cables / connectors

Form	M30 Non-Shielded
Nominal Sensing Distance (Sn)	10mm
Housing Material	PTFE – Teflon
Termination Type	2.0 Meter Cable
Min / Max Supply Voltage	20 to 220 Vac
Max. Load Current (I _r)	15 to 400mA
Max ripple factor (V _r)	-
Voltage Drop (U _d)	< 4.5V
Power Consumption (I _o)	< 2.5mA
Switching Frequency (Hz)	15 Hz
Repeatability	< 10% nominal sensing distance
Hysteresis	≤ 2 to 15% Sn
Short Circuit Protection	No
Output LED	Yes
Operating Temperature	-25 to +70 C
IP Rating	IP65 (with connector mounted)

Wiring Diagram

