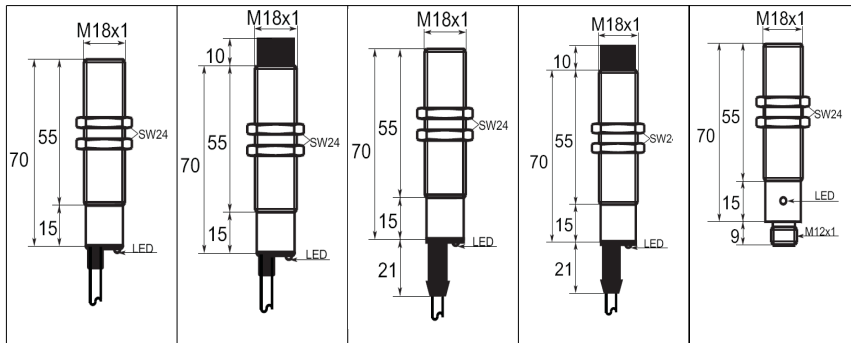


## M18 Inductive Proximity Sensors

- Standard Length
- "Mini's"
- Extended Sensing
- 3 Wire DC
- 2 Wire DC
- 2 Wire AC



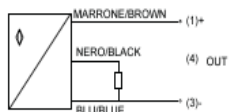
(Wiring Schematic)

3 Wire DC	PNP – Normally Open	(1)	IMM32185C	IMM35188C	IMN32185C	IMN35188C	IMN32185M12
	PNP – Normally Closed	(1)	IMM33185C	IMM36188C	IMN33185C	IMN36188C	IMN33185M12
	PNP – Selectable	(4)	IMM34185C	IMM37188C	IMN34185C	IMN37188C	IMN34185M12
	NPN – Normally Open	(2)	IMM22185C	IMM25188C	IMN22185C	IMN25188C	IMN22185M12
	NPN – Normally Closed	(2)	IMM23185C	IMM26188C	IMN23185C	IMN26188C	IMN23185M12
	NPN – Selectable	(5)	IMM24185C	IMM27188C	IMN24185C	IMN27188C	IMN24185M12
2 Wire DC	Normally Open	-	-	-	-	-	-
	Normally Closed	-	-	-	-	-	-
2 Wire AC	Normally Open	-	-	-	-	-	-
	Normally Closed	-	-	-	-	-	-

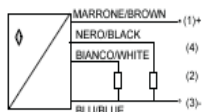
Mating cables / connectors

Form	M18 Shielded	M18 Non-Shielded	M18 Shielded	M18 Non-Shielded	M18 Shielded
Nominal Sensing Distance (Sn)	5mm	8mm	5mm	8mm	5mm
Housing Material	Nickel Plated Brass				
Termination Type	2.0 Meter Cable	2.0 Meter Cable	2.0 Meter Cable	2.0 Meter Cable	M12 Connector
Min / Max Supply Voltage	10 to 30Vdc				
Max. Load Current (Ir)	200mA				
Max ripple factor (Vr)	≤ 10%				
Voltage Drop (Ud)	≤ 3V @ 200mA				
Power Consumption (Io)	≤ 10mA				
Switching Frequency (Hz)	700 Hz	700 Hz	700 Hz	700 Hz	700 Hz
Repeatability	< 2% nominal sensing distance				
Hysteresis	≤ 10% Sn				
Short Circuit Protection	Yes				
Output LED	Yes				
Operating Temperature	-25 to +70 C				
IP Rating	IP67 (with connector mounted)				

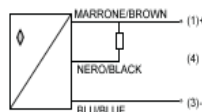
Wiring Diagram



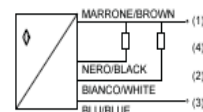
① PNP



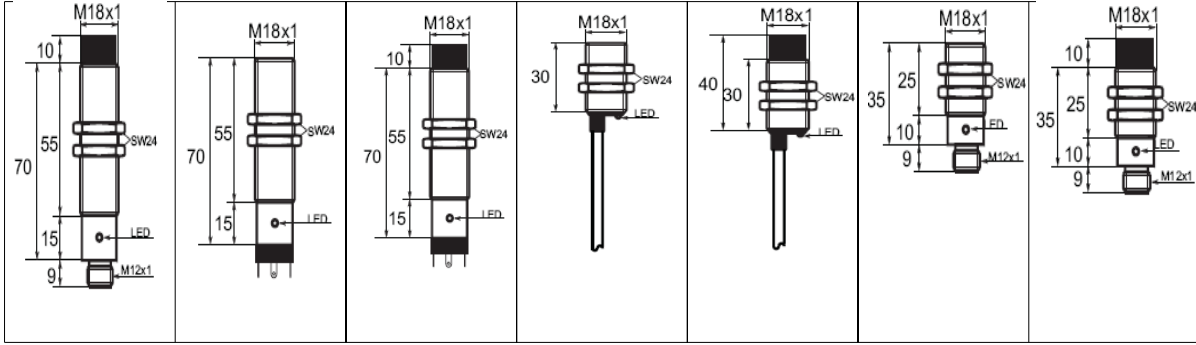
④ PNP



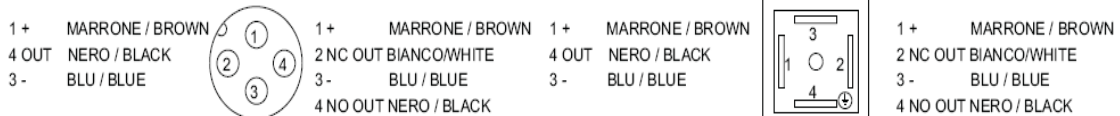
② NPN



⑤ NPN

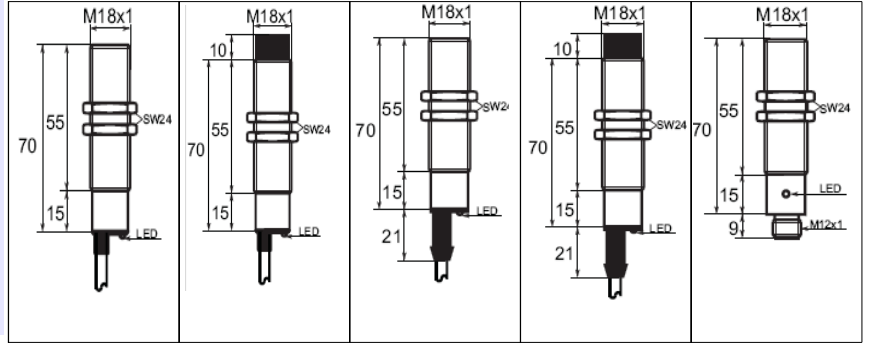


PNP – NO	IMN35188M12	IMN32185P	IMN35188P	IMC32185C	IMC35188C	IMC32185M12	IMC35188M12
PNP – NC	IMN36188M12	IMN33185P	IMN36188P	IMC33185C	IMC36188C	IMC33185M12	IMC36188M12
PNP – NO/NC	IMN37188M12	IMN34185P	IMN37188P	IMC34185C	IMC37188C	IMC34185M12	IMC37188M12
NPN – NO	IMN25188M12	IMN22185P	IMN25188P	IMC22185C	IMC25188C	IMC22185M12	IMC25188M12
NPN – NC	IMN26188M12	IMN23185P	IMN26188P	IMC23185C	IMC26188C	IMC23185M12	IMC26188M12
NPN – NO/NC	IMN27188M12	IMN24185P	IMN27188P	IMC24185C	IMC27188C	IMC24185M12	IMC27188M12
2W DC NO	-	-	-	-	-	-	-
2W DC NC	-	-	-	-	-	-	-
2W AC NO	-	-	-	-	-	-	-
2W AC NC	-	-	-	-	-	-	-
Mates							
Form	M18 Non-Shielded	M18 Shielded	M18 Non-Shielded	M18 Shielded	M18 Non-Shielded	M18 Shielded	M18 Non-Shielded
Sn	8mm	5mm	8mm	5mm	8mm	5mm	8mm
Housing	Nickel Plated Brass						
Termination	M12 Connector	Sub-Base Plug	Sub-Base Plug	2.0 Meter Cable	2.0 Meter Cable	M12 Connector	M12 Connector
Supply Vdc	10 to 30Vdc						
Max Load	200mA						
Max ripple	≤ 10%						
Ud	≤ 3V @ 200mA						
Io	≤ 10mA						
Hz	700 Hz	700 Hz	700 Hz	1.2kHz	1kHz	1.2kHz	1kHz
Repeatability	< 2% nominal sensing distance						
Hysteresis	≤ 10% Sn						
Short Protection	Yes						
LED	Yes						
Op Temp	-25 to +70 C						
IP Rating	IP67 (with connector mounted)						



## M18 Inductive Proximity Sensors

**Standard Length  
"Mini's"**  
**Extended Sensing**  
**3 Wire DC**  
**2 Wire DC**  
**2 Wire AC**



(Wiring Schematic)

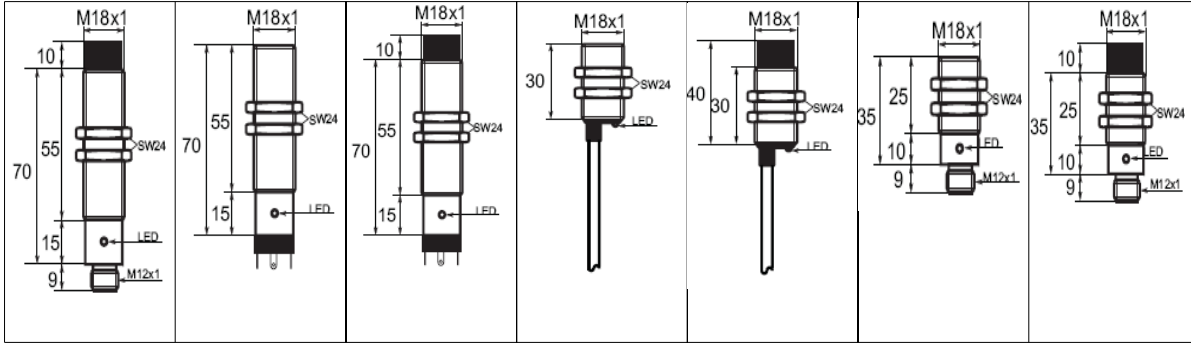
3 Wire DC	PNP – Normally Open	(1)	IMM32188C	IMM351816C	IMN32188C	IMN351816C	IMN32188M12
	PNP – Normally Closed	(1)	IMM33188C	IMM361816C	IMN33188C	IMN361816C	IMN33188M12
	PNP – Selectable	(4)	-	-	-	-	-
	NPN – Normally Open	(2)	IMM22188C	IMM251816C	IMN22188C	IMN251816C	IMN22188M12
	NPN – Normally Closed	(2)	IMM23188C	IMM261816C	IMN23188C	IMN261816C	IMN23188M12
	NPN – Selectable	(5)	-	-	-	-	-
2 Wire DC	Normally Open	-	-	-	-	-	-
	Normally Closed	-	-	-	-	-	-
2 Wire AC	Normally Open	-	-	-	-	-	-
	Normally Closed	-	-	-	-	-	-

Mating cables / connectors

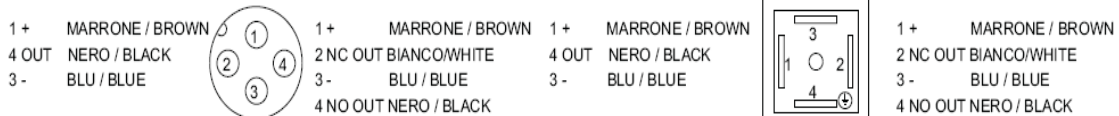
Form	M18 Shielded	M18 Non-Shielded	M18 Shielded	M18 Non-Shielded	M18 Shielded
Nominal Sensing Distance (Sn)	8mm	16mm	8mm	16mm	8mm
Housing Material	Nickel Plated Brass				
Termination Type	2.0 Meter Cable	2.0 Meter Cable	2.0 Meter Cable	2.0 Meter Cable	M12 Connector
Min / Max Supply Voltage	10 to 30Vdc				
Max. Load Current (I <sub>r</sub> )	200mA				
Max ripple factor (V <sub>r</sub> )	≤ 10%				
Voltage Drop (U <sub>d</sub> )	≤ 3V @ 200mA				
Power Consumption (I <sub>o</sub> )	≤ 10mA				
Switching Frequency (Hz)	700 Hz	400 Hz	700 Hz	400 Hz	700 Hz
Repeatability	< 2% nominal sensing distance				
Hysteresis	≤ 10% Sn				
Short Circuit Protection	Yes				
Output LED	Yes				
Operating Temperature	-25 to +70 C				
IP Rating	IP67 (with connector mounted)				

Wiring Diagram



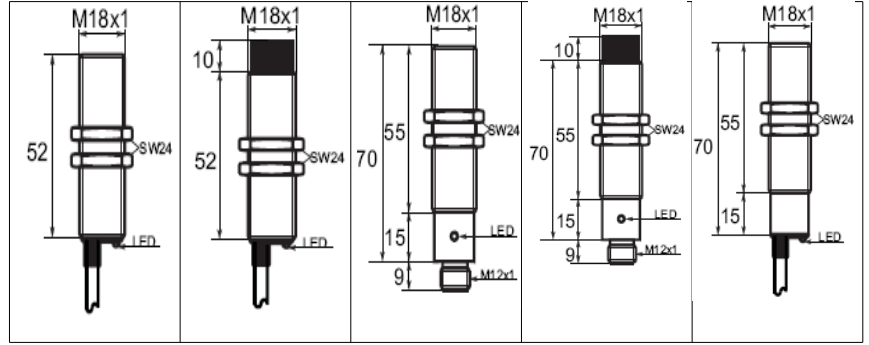


PNP – NO	IMN351816M12	IMN32188P	IMN351816P	IMC32188C	IMC351816C	IMC32188M12	IMC351816M12
PNP – NC	IMN361816M12	IMN33188P	IMN361816P	IMC33188C	IMC361816C	IMC33188M12	IMC361816M12
PNP – NO/NC	-	-	-	-	-	-	-
NPN – NO	IMN251816M12	IMN22188P	IMN251816P	IMC22188C	IMC251816C	IMC22188M12	IMC251816M12
NPN – NC	IMN261816M12	IMN23188P	IMN261816P	IMC23188C	IMC261816C	IMC23188M12	IMC261816M12
NPN – NO/NC	-	-	-	-	-	-	-
2W DC NO	-	-	-	-	-	-	-
2W DC NC	-	-	-	-	-	-	-
2W AC NO	-	-	-	-	-	-	-
2W AC NC	-	-	-	-	-	-	-
Mates							
Form	M18 Non-Shielded	M18 Shielded	M18 Non-Shielded	M18 Shielded	M18 Non-Shielded	M18 Shielded	M18 Non-Shielded
Sn	16mm	8mm	16mm	8mm	16mm	8mm	16mm
Housing	Nickel Plated Brass						
Termination	M12 Connector	Sub-Base Plug	Sub-Base Plug	2.0 Meter Cable	2.0 Meter Cable	M12 Connector	M12 Connector
Supply Vdc	10 to 30Vdc						
Max Load	200mA						
Max ripple	≤ 10%						
Ud	≤ 3V @ 200mA			≤ 1.8V			
Io	≤ 10mA						
Hz	400 Hz	700 Hz	400 Hz	700Hz	400Hz	700Hz	400Hz
Repeatability	< 2% nominal sensing distance						
Hysteresis	≤ 10% Sn						
Short Protection	Yes						
LED	Yes						
Op Temp	-25 to +70 C						
IP Rating	IP67 (with connector mounted)						



## M18 Inductive Proximity Sensors

**Standard Length  
"Mini's"**  
**Extended Sensing**  
**3 Wire DC**  
**2 Wire DC**  
**2 Wire AC**



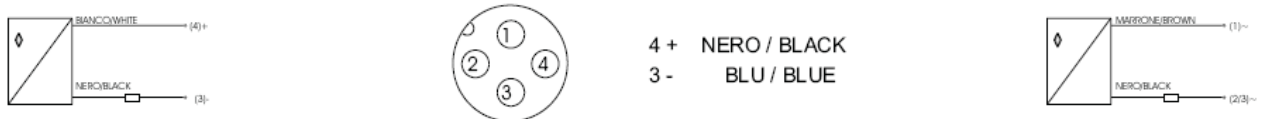
(Wiring Schematic)

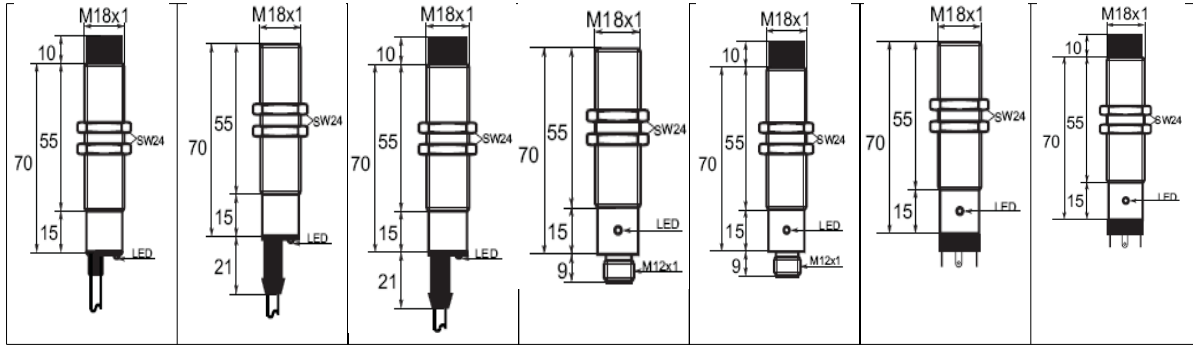
3 Wire DC	PNP – Normally Open	(1)	-	-	-	-	-
	PNP – Normally Closed	(1)	-	-	-	-	-
	PNP – Selectable	(4)	-	-	-	-	-
	NPN – Normally Open	(2)	-	-	-	-	-
	NPN – Normally Closed	(2)	-	-	-	-	-
2 Wire DC	Normally Open	(6)	IMM42185C	IMM45188C	IMN42185M12	IMN45188M12	-
	Normally Closed	(6)	IMM43185C	IMM46188C	IMN43185M12	IMN46188M12	-
2 Wire AC	Normally Open	(7)	-	-	-	-	IMM62185C
	Normally Closed	(7)	-	-	-	-	IMM63185C

Mating cables / connectors

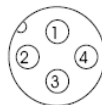
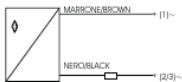
Form	M18 Shielded	M18 Non-Shielded	M18 Shielded	M18 Non-Shielded	M18 Shielded
Nominal Sensing Distance (Sn)	5mm	8mm	5mm	8mm	5mm
Housing Material	Nickel Plated Brass				
Termination Type	2.0 Meter Cable	2.0 Meter Cable	M12 Connector	M12 Connector	2.0 Meter Cable
Min / Max Supply Voltage	10 to 30Vdc				20 to 220 Vac
Max. Load Current (I <sub>r</sub> )	100mA				400 mA
Max ripple factor (V <sub>r</sub> )	≤ 10%				-
Voltage Drop (U <sub>d</sub> )	≤ 7 Vdc				≤ 4.5Vac
Power Consumption (I <sub>o</sub> )	≤ 0.7mA				≤ 2.5mA
Switching Frequency (Hz)	700 Hz	400 Hz	700 Hz	400 Hz	20 Hz
Repeatability	< 2% nominal sensing distance				
Hysteresis	≤ 10% Sn				
Short Circuit Protection	Yes				No
Output LED	Yes				Yes
Operating Temperature	-25 to +70 C				
IP Rating	IP67 (with connector mounted)				

Wiring Diagram

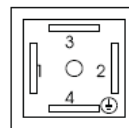




PNP – NO	-	-	-	-	-	-	-
PNP – NC	-	-	-	-	-	-	-
PNP – NO/NC	-	-	-	-	-	-	-
NPN – NO	-	-	-	-	-	-	-
NPN – NC	-	-	-	-	-	-	-
NPN – NO/NC	-	-	-	-	-	-	-
2W DC NO	-	-	-	-	-	-	-
2W DC NC	-	-	-	-	-	-	-
2W AC NO	IMM65188C	IMN62185C	IMN65188C	IMN62185M12	IMN65188M12	IMN62185P	IMN65188P
2W AC NC	IMM66188C	IMN63185C	IMN66188C	IMN63185M12	IMN66188M12	IMN63185P	IMN66188P
Mates							
Form	M18 Non-Shielded	M18 Shielded	M18 Non-Shielded	M18 Shielded	M18 Non-Shielded	M18 Shielded	M18 Non-Shielded
Sn	16mm	8mm	16mm	8mm	16mm	8mm	16mm
Housing	Nickel Plated Brass						
Termination	2.0 Meter Cable	2.0 Meter Cable	2.0 Meter Cable	M12 Connector	M12 Connector	Sub-Base Plug	Sub-Base Plug
Supply Vdc	20 to 220Vac						
Max Load	400mA						
Max ripple	-						
Ud	≤ 4.5Vac						
Io	≤ 2.5mA						
Hz	20 Hz	20 Hz	20 Hz	20 Hz	20 Hz	20 Hz	20 Hz
Repeatability	< 2% nominal sensing distance						
Hysteresis	≤ 10% Sn						
Short Protection	No						
LED	Yes						
Op Temp	-25 to +70 C						
IP Rating	IP67 (with connector mounted)						



1 ~ MARRONE / BROWN  
2/3 ~ BLU / BLUE



1 ~ MARRONE / BROWN  
2/3 ~ BLU / BLUE