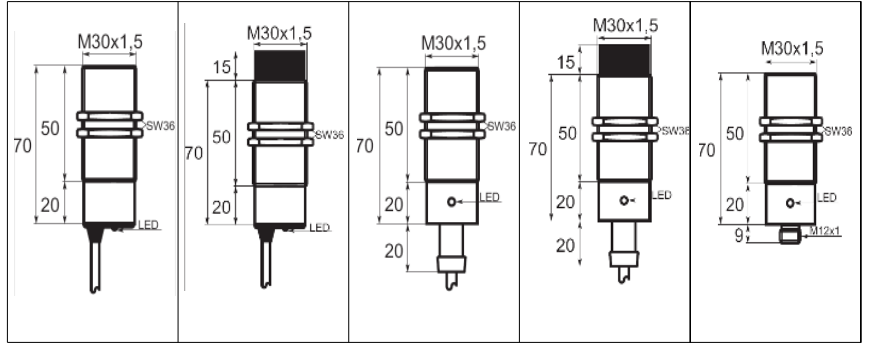


M30 Inductive Proximity Sensors

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



(Wiring Schematic)

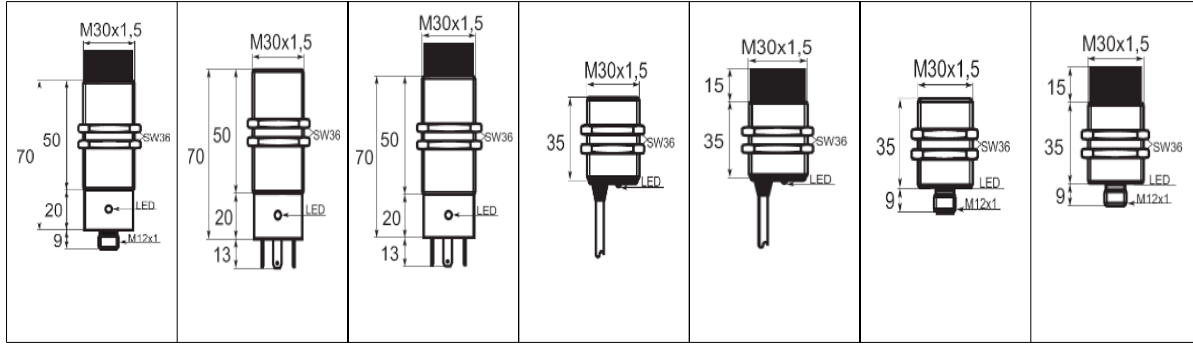
| | | | | | | | |
|-----------|-----------------------|-----|------------|------------|------------|------------|--------------|
| 3 Wire DC | PNP – Normally Open | (1) | IMM323010C | IMM353015C | IMN323010C | IMN353015C | IMN323010M12 |
| | PNP – Normally Closed | (1) | IMM333010C | IMM363015C | IMN333010C | IMN363015C | IMN333010M12 |
| | PNP – Selectable | (4) | IMM343010C | IMM373015C | IMN343010C | IMN373015C | IMN343010M12 |
| | NPN – Normally Open | (2) | IMM223010C | IMM253015C | IMN223010C | IMN253015C | IMN223010M12 |
| | NPN – Normally Closed | (2) | IMM233010C | IMM263015C | IMN233010C | IMN263015C | IMN233010M12 |
| | NPN – Selectable | (5) | IMM243010C | IMM273015C | IMN243010C | IMN273015C | IMN243010M12 |
| 2 Wire DC | Normally Open | - | - | - | - | - | - |
| | Normally Closed | - | - | - | - | - | - |
| 2 Wire AC | Normally Open | - | - | - | - | - | - |
| | Normally Closed | - | - | - | - | - | - |

Mating cables / connectors

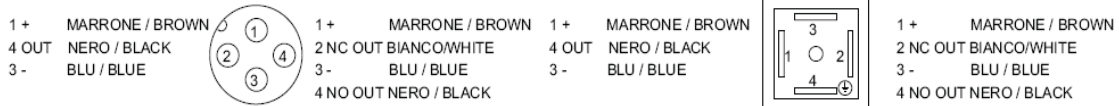
| | | | | | |
|-------------------------------|-------------------------------|------------------|-----------------|------------------|---------------|
| Form | M30 Shielded | M30 Non-Shielded | M30 Shielded | M30 Non-Shielded | M30 Shielded |
| Nominal Sensing Distance (Sn) | 10mm | 15mm | 10mm | 15mm | 10mm |
| 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) | 200 Hz | 200 Hz | 200 Hz | 200 Hz | 200 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



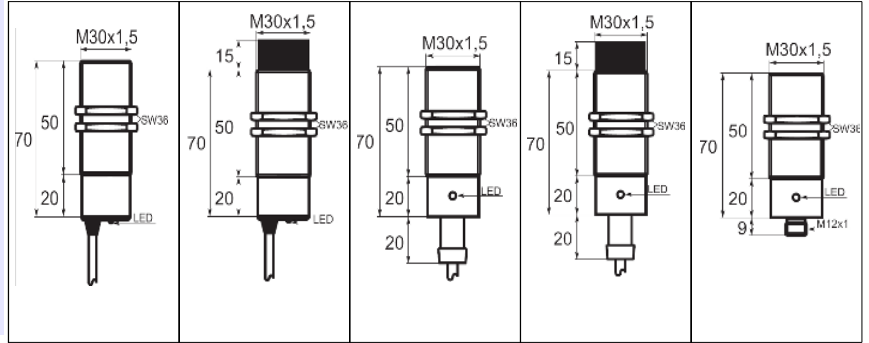


| | | | | | | | |
|------------------|-------------------------------|---------------|------------------|-----------------|------------------|---------------|------------------|
| PNP – NO | IMN353015M12 | IMN323010P | IMN353015P | IMC323010C | IMC353015C | IMC323010M12 | IMC353015M12 |
| PNP – NC | IMN363015M12 | IMN333010P | IMN363015P | IMC333010C | IMC363015C | IMC333010M12 | IMC363015M12 |
| PNP – NO/NC | IMN373015M12 | IMN343010P | IMN373015P | IMC343010C | IMC373015C | IMC343010M12 | IMC373015M12 |
| NPN – NO | IMN253015M12 | IMN223010P | IMN253015P | IMC223010C | IMC253015C | IMC223010M12 | IMC253015M12 |
| NPN – NC | IMN263015M12 | IMN233010P | IMN263015P | IMC233010C | IMC263015C | IMC233010M12 | IMC263015M12 |
| NPN – NO/NC | IMN273015M12 | IMN243010P | IMN273015P | IMC243010C | IMC273015C | IMC243010M12 | IMC273015M12 |
| 2W DC NO | - | - | - | - | - | - | - |
| 2W DC NC | - | - | - | - | - | - | - |
| 2W AC NO | - | - | - | - | - | - | - |
| 2W AC NC | - | - | - | - | - | - | - |
| Mates | | | | | | | |
| Form | M30 Non-Shielded | M30 Shielded | M30 Non-Shielded | M30 Shielded | M30 Non-Shielded | M30 Shielded | M30 Non-Shielded |
| Sn | 15mm | 10mm | 15mm | 10mm | 15mm | 10mm | 15mm |
| 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 | 200 Hz | 200 Hz | 200 Hz | 200 Hz | 200 Hz | 200 Hz | 200 Hz |
| 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) | | | | | | |



M30 Inductive Proximity Sensors

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



(Wiring Schematic)

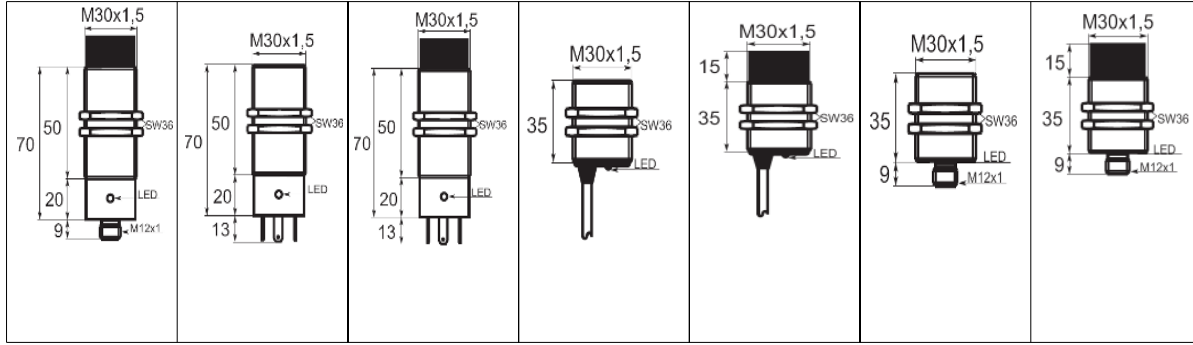
| | | | | | | | |
|-----------|-----------------------|-----|------------|------------|------------|------------|--------------|
| 3 Wire DC | PNP – Normally Open | (1) | IMM323020C | IMM353035C | IMN323020C | IMN353035C | IMN323020M12 |
| | PNP – Normally Closed | (1) | IMM333020C | IMM363035C | IMN333020C | IMN363035C | IMN333020M12 |
| | PNP – Selectable | (4) | - | - | - | - | - |
| | NPN – Normally Open | (2) | IMM223020C | IMM253035C | IMN223020C | IMN253035C | IMN223020M12 |
| | NPN – Normally Closed | (2) | IMM233020C | IMM263035C | IMN233020C | IMN263035C | IMN233020M12 |
| | NPN – Selectable | (5) | - | - | - | - | - |
| 2 Wire DC | Normally Open | - | - | - | - | - | - |
| | Normally Closed | - | - | - | - | - | - |
| 2 Wire AC | Normally Open | - | - | - | - | - | - |
| | Normally Closed | - | - | - | - | - | - |

Mating cables / connectors

| | | | | | |
|-------------------------------------|-------------------------------|------------------|-----------------|------------------|---------------|
| Form | M30 Shielded | M30 Non-Shielded | M30 Shielded | M30 Non-Shielded | M30 Shielded |
| Nominal Sensing Distance (Sn) | 20mm | 35mm | 20mm | 35mm | 20mm |
| 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 _r) | 200mA | | | | |
| Max ripple factor (V _r) | ≤ 10% | | | | |
| Voltage Drop (U _d) | ≤ 3V @ 200mA | | | | |
| Power Consumption (I _o) | ≤ 10mA | | | | |
| Switching Frequency (Hz) | 200 Hz | 100 Hz | 200 Hz | 100 Hz | 200 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) | | | | |

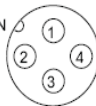
Wiring Diagram





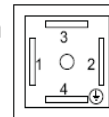
| | | | | | | | |
|------------------|-------------------------------|---------------|------------------|-----------------|------------------|---------------|------------------|
| PNP – NO | IMN353035M12 | IMN323020P | IMN353035P | IMC323020C | IMC353035C | IMC323020M12 | IMC353035M12 |
| PNP – NC | IMN363035M12 | IMN333020P | IMN363035P | IMC333020C | IMC363035C | IMC333020M12 | IMC363035M12 |
| PNP – NO/NC | - | - | - | - | - | - | - |
| NPN – NO | IMN253035M12 | IMN223020P | IMN253035P | IMC223020C | IMC253035C | IMC223020M12 | IMC253035M12 |
| NPN – NC | IMN263035M12 | IMN233020P | IMN263035P | IMC233020C | IMC263035C | IMC233020M12 | IMC263035M12 |
| NPN – NO/NC | - | - | - | - | - | - | - |
| 2W DC NO | - | - | - | - | - | - | - |
| 2W DC NC | - | - | - | - | - | - | - |
| 2W AC NO | - | - | - | - | - | - | - |
| 2W AC NC | - | - | - | - | - | - | - |
| Mates | | | | | | | |
| Form | M30 Non-Shielded | M30 Shielded | M30 Non-Shielded | M30 Shielded | M30 Non-Shielded | M30 Shielded | M30 Non-Shielded |
| Sn | 35mm | 20mm | 35mm | 20mm | 35mm | 20mm | 35mm |
| 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 | | | ≤ 1.8Vdc | | | |
| Io | ≤ 10mA | | | | | | |
| Hz | 100Hz | 200Hz | 100Hz | 200Hz | 100Hz | 200Hz | 100Hz |
| 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) | | | | | | |

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

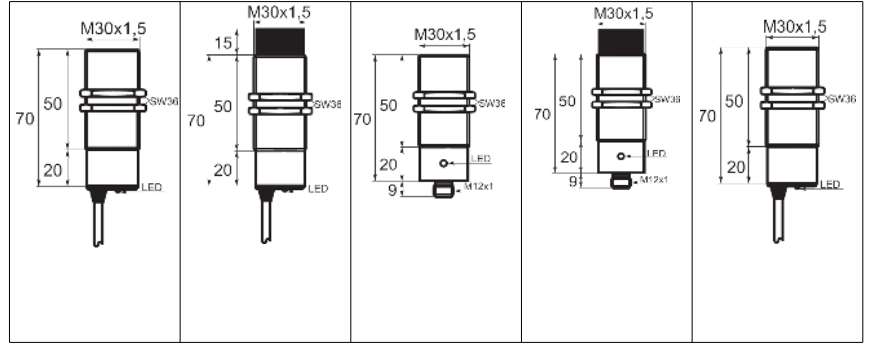
1+ MARRONE / BROWN
4 OUT NERO / BLACK
3- BLU / BLUE



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

M30 Inductive Proximity Sensors

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



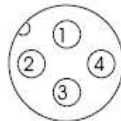
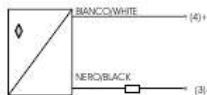
(Wiring Schematic)

| | | | | | | | |
|-----------|-----------------------|-----|------------|------------|--------------|--------------|------------|
| 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) | IMM423010C | IMM453015C | IMN423010M12 | IMN453015M12 | IMM623010C |
| | Normally Closed | (6) | IMM433010C | IMM463015C | IMN433010M12 | IMN463015M12 | IMM633010C |
| 2 Wire AC | Normally Open | (7) | - | - | - | - | - |
| | Normally Closed | (7) | - | - | - | - | - |

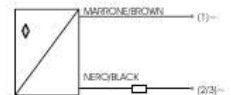
Mating cables / connectors

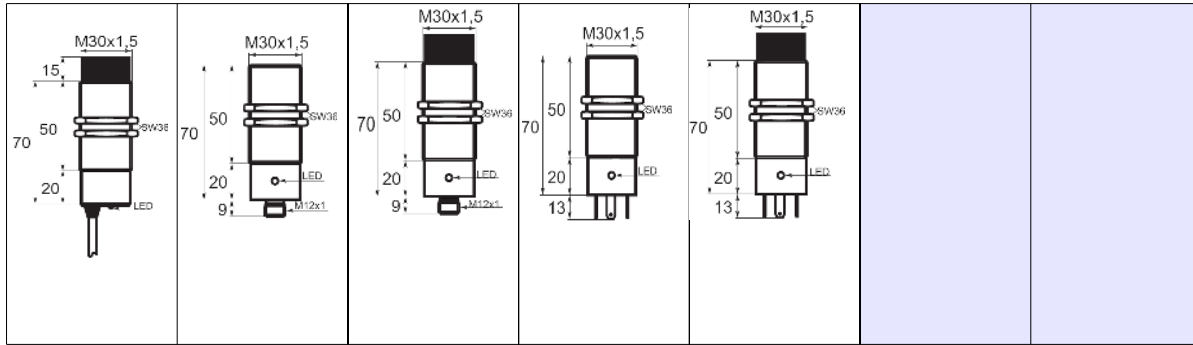
| Form | M30 Shielded | M30 Non-Shielded | M30 Shielded | M30 Non-Shielded | M30 Shielded |
|-------------------------------------|-------------------------------|------------------|---------------|------------------|-----------------|
| Nominal Sensing Distance (Sn) | 10mm | 15mm | 10mm | 15mm | 10mm |
| 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 _r) | 100mA | | | | 400 mA |
| Max ripple factor (V _r) | ≤ 10% | | | | - |
| Voltage Drop (U _d) | ≤ 7.5 Vdc | | | | ≤ 4.5Vac |
| Power Consumption (I _o) | ≤ 0.7mA | | | | ≤ 2.5mA |
| Switching Frequency (Hz) | 200 Hz | 200 Hz | 200 Hz | 200 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



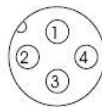
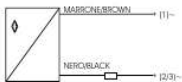
4 + NERO / BLACK
3 - BLU / BLUE



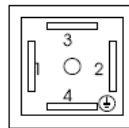


| | | | | | | | |
|-------------|------------|--------------|--------------|------------|------------|---|---|
| PNP – NO | - | - | - | - | - | - | - |
| PNP – NC | - | - | - | - | - | - | - |
| PNP – NO/NC | - | - | - | - | - | - | - |
| NPN – NO | - | - | - | - | - | - | - |
| NPN – NC | - | - | - | - | - | - | - |
| NPN – NO/NC | - | - | - | - | - | - | - |
| 2W DC NO | - | - | - | - | - | - | - |
| 2W DC NC | - | - | - | - | - | - | - |
| 2W AC NO | IMM653015C | IMN623010M12 | IMN653015M12 | IMN623010P | IMN653015P | - | - |
| 2W AC NC | IMM663015C | IMN633010M12 | IMN663015M12 | IMN633010P | IMN663015P | - | - |

| | | | | | | | |
|------------------|-------------------------------|---------------|------------------|---------------|------------------|---|---|
| Mates | | | | | | | |
| Form | M30 Non-Shielded | M30 Shielded | M30 Non-Shielded | M30 Shielded | M30 Non-Shielded | - | - |
| Sn | 15mm | 10mm | 15mm | 10mm | 15mm | - | - |
| Housing | Nickel Plated Brass | | | | | | |
| Termination | 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 | | |
| 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