imall

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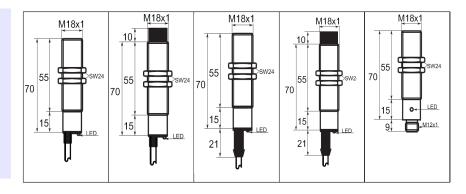
Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





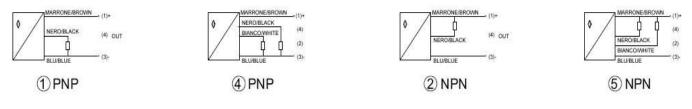
M18 Inductive Proximity Sensors

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

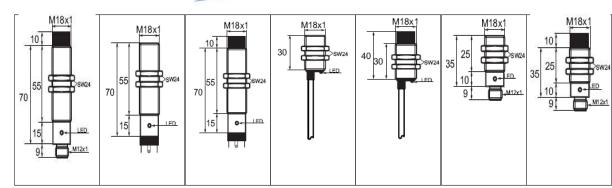


| | (| Wiring Schematic) | | | | | | |
|-----------|-------------------------------|-------------------------------|---------------------|------------------|---------------------|------------------|---------------|--|
| 3 Wire DC | PNP – Normally Open | (1) | IMM32185C | IMM35188C | IMN32185C | IMN35188C | 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 mou | inted) | | |

Wiring Diagram







| 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 | | | | $\leq 10\%$ | | | | | |
| Ud | | | | ≤3V @ 200mA | | | | | |
| lo | | | | $\leq 10 \text{mA}$ | | | | | |
| Hz | 700 Hz | 700 Hz | 700 Hz | 1.2kHz | 1kHz | 1.2kHz | 1kHz | | |
| Repeatability | | | < 2% | nominal sensing dis | tance | | | | |
| Hysteresis | | | | ≤ 10% Sn | | | | | |
| Short Protection | | | | Yes | | | | | |
| LED | | | | Yes | | | | | |
| Op Temp | | | | -25 to +70 C | | | | | |
| IP Rating | | | IP67 | (with connector mou | nted) | | | | |
| | | | | | | | | | |

MARRONE / BROWN 1+ 4 OUT NERO / BLACK

3 -BLU / BLUE

1+ MARRONE / BROWN 1 + 1 2 3 -3

BLU / BLUE 4 NO OUT NERO / BLACK

MARRONE / BROWN (4) 2 NC OUT BIANCO/WHITE 4 OUT NERO / BLACK 3 - BLU / BLUE

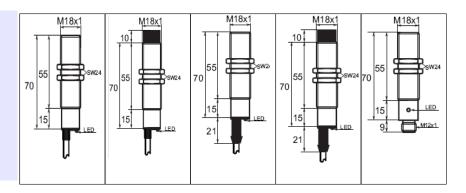


MARRONE / BROWN 1+ 2 NC OUT BIANCO/WHITE 3 -BLU / BLUE 4 NO OUT NERO / BLACK



M18 Inductive Proximity Sensors

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

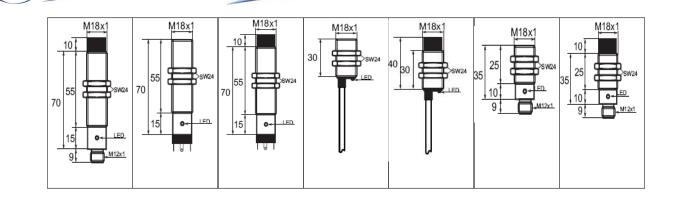


| | | (Wiring Schematic) | | | | | | |
|-----------|-------------------------------|--------------------|-------------------------------|------------------|-----------------|------------------|---------------|--|
| 3 Wire DC | PNP – Normally Open | (1) | IMM32188C | IMM351816C | IMN32188C | IMN351816C | 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 (Ir) | 200mA | | | | | | |
| | Max ripple factor (Vr) | ≤ 10% | | | | | | |
| | Voltage Drop (Ud) | \leq 3V @ 200mA | | | | | | |
| | Power Consumption (Io) | | $\leq 10 \text{mA}$ | | | | | |
| | 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 | | | | $\leq 10\%$ | | | | | | |
| Ud | | ≤3V @ 200mA | | | $\leq 1.8 V$ | | | | | |
| lo | | | | $\leq 10 \text{mA}$ | | | | | | |
| Hz | 400 Hz | 700 Hz | 400 Hz | 700Hz | 400Hz | 700Hz | 400Hz | | | |
| Repeatability | | | < 2% | nominal sensing dis | tance | | | | | |
| Hysteresis | | | | ≤ 10% Sn | | | | | | |
| Short Protection | | | | Yes | | | | | | |
| LED | | | | Yes | | | | | | |
| Op Temp | | | | -25 to +70 C | | | | | | |
| IP Rating | | | IP67 | (with connector mou | inted) | | | | | |
| - | | | | | | | | | | |

MARRONE / BROWN 1+ 4 OUT NERO / BLACK

3 -BLU / BLUE

1+ MARRONE / BROWN 1 + 1 (4) 2 NC OUT BIANCO/WHITE 4 OUT NERO / BLACK 3 -3

2

BLU / BLUE 4 NO OUT NERO / BLACK

MARRONE / BROWN 3 - BLU / BLUE

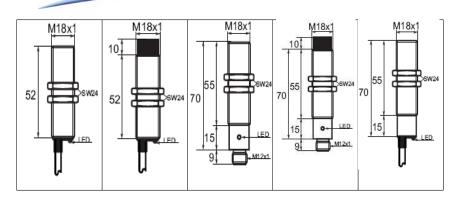


MARRONE / BROWN 1+ 2 NC OUT BIANCO/WHITE 3 -BLU / BLUE 4 NO OUT NERO / BLACK



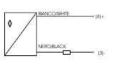
M18 Inductive Proximity Sensors

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



| | 1 | (Wiring Schematic) | | 1 | | | | | |
|-----------|---|--------------------|-------------------------------|------------------|---------------|------------------|-----------------|--|--|
| 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) | 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) Housing Material Termination Type | | 5mm | 8mm | 5mm | 8mm | 5mm | | |
| | | | Nickel Plated Brass | | | | | | |
| | | | 2.0 Meter Cable | 2.0 Meter Cable | M12 Connector | M12 Connector | 2.0 Meter Cable | | |
| | Min / Max Supply Voltage | | 20 to 220 Vac | | | | | | |
| | Max. Load Current (Ir) | | | 400 mA | | | | | |
| | Max ripple factor (Vr) | | | - | | | | | |
| | Voltage Drop (Ud) | | | \leq 4.5Vac | | | | | |
| | Power Consumption (Io) | | $\leq 0.7 \text{mA}$ | | | | \leq 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 | | | No | | | | | |
| | Output LED | | Yes Yes | | | | | | |
| | Operating Temperature | | -25 to +70 C | | | | | | |
| | IP Rating | | IP67 (with connector mounted) | | | | | | |

Wiring Diagram

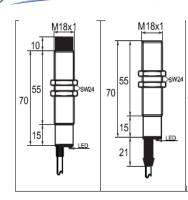


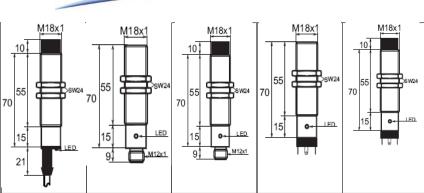


4 + NERO / BLACK 3 - BLU / BLUE

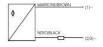
WARRONE/BROWN 0







| PNP – NO | - | - | - | - | - | - | - | | | | |
|------------------|------------------|---------------------|-------------------------------|---------------------|------------------|---------------|-----------------|--|--|--|--|
| PNP – NC | c <u>-</u> - | | - | - | - | - | - | | | | |
| PNP – NO/NC | c | | - | - | - | - | - | | | | |
| NPN – NO | o | | - | - | - | - | - | | | | |
| 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 | | | | | | | <u>.</u> | | | | |
| Form | M18 Non-Shielded | M18 Shielded | M18 Non-Shielded | M18 Shielded | M18 Non-Shielded | M18 Shielded | M18 Non-Shielde | | | | |
| 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 | | | | \leq 4.5Vac | | | | | | | |
| lo | | | | \leq 2.5mA | | | | | | | |
| Hz | 20 Hz | 20 Hz | 20 Hz | 20 Hz | 20 Hz | 20 Hz | 20 Hz | | | | |
| Repeatability | | | < 2% | nominal sensing dis | tance | | | | | | |
| Hysteresis | | | | ≤ 10% Sn | | | | | | | |
| Short Protection | | | | No | | | | | | | |
| LED | | | | Yes | | | | | | | |
| Op Temp | | | | -25 to +70 C | | | | | | | |
| IP Rating | | | IP67 (with connector mounted) | | | | | | | | |





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



1~

MARRONE / BROWN 2/3 ~ BLU / BLUE