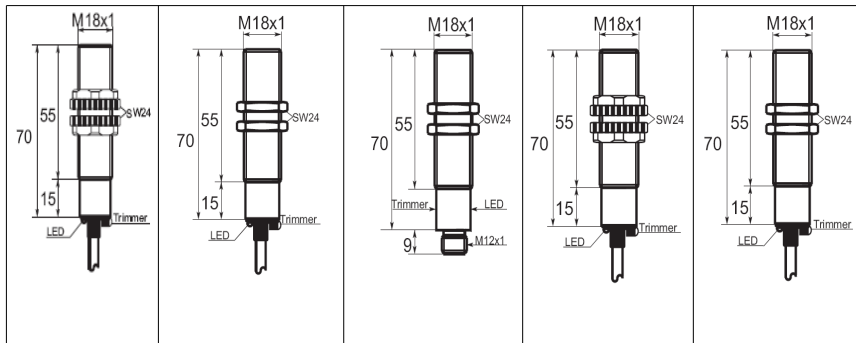


M18 Capacitive Proximity Sensors

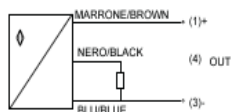
**Standard Length
NAMUR**

**3 Wire DC
ABS Material
PTFE Material**

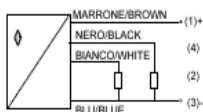


| NAMUR | | (Wiring Schematic) | (3) | CPN72185C | | | | |
|-------------------------------|-----------------------|--------------------|--------------------------------|---------------------|---------------------|-----------------|---------------|--|
| 3 Wire DC | PNP – Normally Open | (1) | | CPN32188C | CPN32188M12 | CPN32188C.A | CPN32188C.F | |
| | PNP – Normally Closed | (1) | | CPN33188C | CPN33188M12 | CPN33188C.A | CPN33188C.F | |
| | PNP – Selectable | (4) | | CPN34188C | CPN34188M12 | CPN34188C.A | CPN34188C.F | |
| | NPN – Normally Open | (2) | | CPN22188C | CPN252188M12 | CPN22188C.A | CPN22188C.F | |
| | NPN – Normally Closed | (2) | | CPN23188C | CPN23188M12 | CPN23188C.A | CPN23188C.F | |
| | NPN – Selectable | (5) | | CPN24188C | CPN24188M12 | CPN24188C.A | CPN24188C.F | |
| 2 Wire DC | Normally Open | | - | - | - | - | - | |
| | Normally Closed | | - | - | - | - | - | |
| 2 Wire AC | Normally Open | | - | - | - | - | - | |
| | Normally Closed | | - | - | - | - | - | |
| Mating cables / connectors | | | | | | | | |
| Form | | | M18 Shielded | M18 Shielded | M18 Shielded | M18 Shielded | M18 Shielded | |
| Nominal Sensing Distance (Sn) | | | 1 to 5mm | 1 to 8mm | 1 to 8mm | 1 to 8mm | 1 to 8mm | |
| Housing Material | | | ABS | Nickel Plated Brass | Nickel Plated Brass | ABS | Teflon – PTFE | |
| 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) | | | ≤ 15mA | | | | | |
| Switching Frequency (Hz) | | | 100 Hz | 100 Hz | 100 Hz | 100 Hz | 100 Hz | |
| Repeatability | | | < 10% nominal sensing distance | | | | | |
| Hysteresis | | | 2 to 15% Sn | | | | | |
| Short Circuit Protection | | | Yes | | | | | |
| Output LED | | | Yes | | | | | |
| Operating Temperature | | | -20 to +70 C | | | | | |
| IP Rating | | | IP65 (with connector mounted) | | | | | |

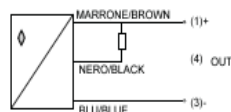
Wiring Diagram



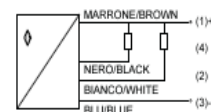
① PNP



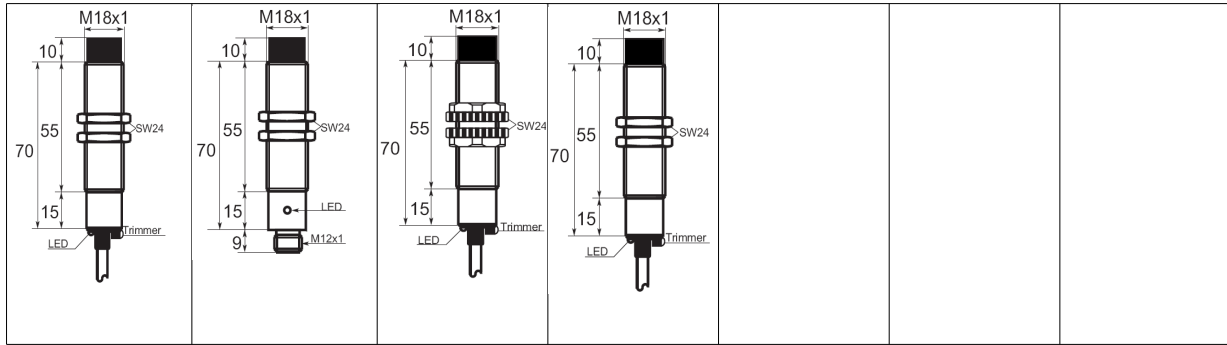
④ PNP



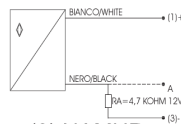
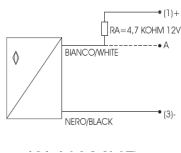
② NPN



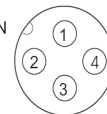
⑤ NPN



| | | | | | | | |
|------------------|--------------------------------|---------------------|------------------|------------------|---|---|---|
| PNP – NO | CPN351815C | CPN351815M12 | CPN351815C.A | CPN351815C.F | - | - | - |
| PNP – NC | CPN361815C | CPN361815M12 | CPN361815C.A | CPN361815C.F | - | - | - |
| PNP – NO/NC | CPN371815C | CPN371815M12 | CPN371815C.A | CPN371815C.F | - | - | - |
| NPN – NO | CPN251815C | CPN2351815M12 | CPN251815C.A | CPN251815C.F | - | - | - |
| NPN – NC | CPN261815C | CPN261815M12 | CPN261815C.A | CPN261815C.F | - | - | - |
| NPN – NO/NC | CPN271815C | CPN271815M12 | CPN271815C.A | CPN271815C.F | - | - | - |
| 2W DC NO | - | - | - | - | - | - | - |
| 2W DC NC | - | - | - | - | - | - | - |
| 2W AC NO | - | - | - | - | - | - | - |
| 2W AC NC | - | - | - | - | - | - | - |
| Mates | | | | | | | |
| Form | M18 Non-Shielded | M18 Non-Shielded | M18 Non-Shielded | M18 Non-Shielded | | | |
| Sn | 2 to 15mm | 2 to 15mm | 2 to 15mm | 2 to 15mm | | | |
| Housing | Nickel Plated Brass | Nickel Plated Brass | ABS | PTFE | | | |
| Termination | 2.0 Meter Cable | M12 Connector | 2.0 Meter Cable | 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 | | | |
| Repeatability | < 10% nominal sensing distance | | | | | | |
| Hysteresis | ≤ 10% Sn | | | | | | |
| Short Protection | Yes | | | | | | |
| LED | Yes | | | | | | |
| Op Temp | -20 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

