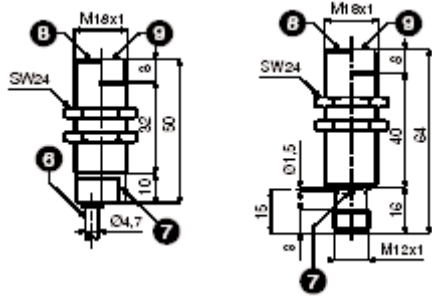


M18 18mm Programmable Inductive 2 Wire 5mm/8mm ranges Non-Polarized



| |
|---|
| M18 18mm Programmable Inductive Proximity Sensor |
| 5 mm shielded range |
| 8 mm unshielded range |
| 2 wire 10-55VDC |
| non polarized |
| 2 meter standard integrated cable |
| IP67 protection degree |
| protection from electrical damages |
| NBT nickel plated brass housing |



- 1 M1 axial cable
- 4 K1 M12 4 pin 12mm
- 6 M1 cable 3x0.055mm, 3.1mm diameter, PUR, 2m
- 7 LED status indicator (NO output energized)
- 8 Shielded version
- 9 Unshielded version



Parts Matrix

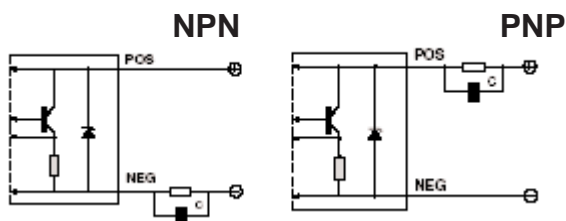
| | | |
|-----------------------------------|-------|-------|
| inductive sensor series | X | X |
| M18 18mm diameter body | 18 | 18 |
| standard diameter-standard ranges | D | D |
| nickel plated brass | B | B |
| 2 wire device | 2 | 2 |
| Programmable Output PNP & NPN | O | O |
| NO normally open | 1 | 1 |
| NC normally closed | 2 | 2 |
| shielded | S | |
| unshielded | | U |
| 2m standard integrated cable | M1 | M1 |
| M12 4 Pin 12mm connector | K1 | K1 |
| non polarized | BN | BN |
| integrated LED | L | L |
| fully threaded body | T | T |
| range (mm) | 5mm | 8mm |
| load current | 100mA | 100mA |

PARTS INDEX

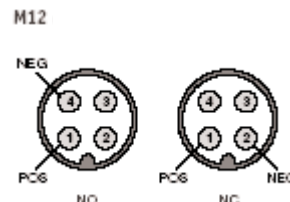
SPECIFICATIONS

| | |
|-----------------|--------------------------|
| X18DB201SM1BNLT | PNP/NPN NO SHIELDED M1 |
| X18DB201UM1BNLT | PNP/NPN NO UNSHIELED M1 |
| X18DB202SM1BNLT | PNP/NPN NC SHIELDED M1 |
| X18DB202UM1BNLT | PNP/NPN NC UNSHIELDED M1 |
| X18DB201SK1BNL | PNP/NPN NO SHIELDED K1 |
| X18DB201UK1BNL | PNP/NPN NO UNSHIELED K1 |
| X18DB202SK1BNL | PNP/NPN NC SHIELDED K1 |
| X18DB202UK1BNL | PNP/NPN NC UNSHIELDED K1 |

Wiring Diagram



K1 Connection Diagram



TECHNICAL SPECIFICATIONS

| | | |
|--------------------------------------|--------------------------------------|--------------------------------------|
| Nominal Sensing Distance S_n | 5 mm | 8 mm |
| Operating Distance | - | - |
| Differential Travel | 10% Typ | 10% Typ |
| Repeat Accuracy R | 2% | 2% |
| Operating Voltage U_b | 10-55VDC | 10-55VDC |
| Ripple U_{pp} | <20% U_b | <20% U_b |
| No-load Supply | 20mA | 20mA |
| Load Current I_a | <100mA | <100mA |
| Leakage Current | <10uA | <10uA |
| Voltage Drop U_d | 1.2V max. | 1.2V max. |
| Output Type | PNP/NPN NO or NC Programmable | PNP/NPN NO or NC Programmable |
| Switching Frequency | 3KHz | 3KHz |
| Time Delay Before Availability t_v | 50ms | 50ms |
| Supply Electrical Protections | polarity reversal, transient | polarity reversal, transient |
| Output Electrical Protections | short circuit protection (autoreset) | short circuit protection (autoreset) |
| Ambient Temperature T_a | -20--+70C | -20--+70C |
| Temperature Drift | +/- 10% SR | +/- 10% SR |
| Protection Degree (DIN 40 050) | IEC IP67 | IEC IP67 |
| LED Indicators | Yellow (NO output energized) | Yellow (NO output energized) |
| Housing Material | NBT | NBT |
| Sensing Face Material | PBT | PBT |
| Tightening Torque | - | - |
| Weight (approximate) | 30-70G (M1)(K1) | 30-70G (M1)(K1) |