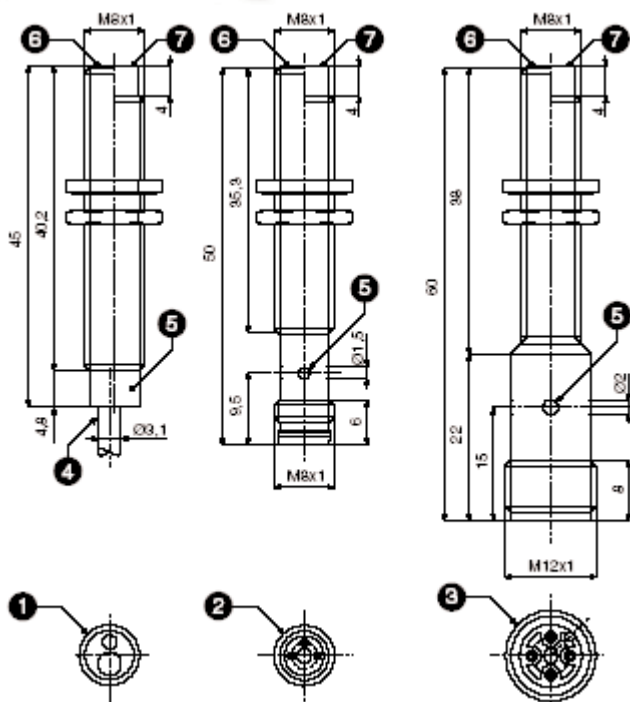


M8 8mm Miniature Inductive Metal Housing 1.5mm/2.5mm ranges



- 1
- 2
- 3
- 4
- 5
- 6
- 7

| |
|--|
| M8 8mm Miniature Inductive Proximity Sensor |
| 1.5 mm shielded range |
| 2.5 mm unshielded range |
| 3 wire 10-30VDC |
| miniaturized body design |
| 2 meter standard integrated cable |
| IP67 protection degree |
| protection from electrical damages |
| NBT nickel plated brass housing |

- 1 M1 axial cable
- 2 E1 M8 3 pin 8mm
- 3 K1 M12 4 pin 12mm
- 4 M1 cable 3x0.055mm, 3.1mm diameter, PUR, 2m
- 5 LED status indicator (NO output energized)
- 6 Shielded version
- 7 Unshielded version

Parts Matrix

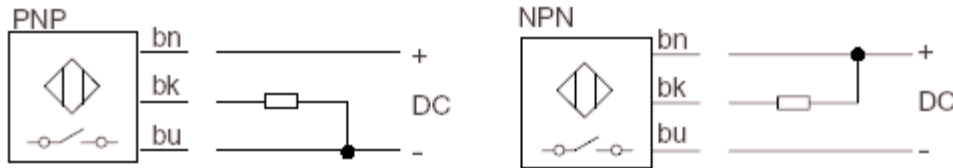
| | | |
|-----------------------------------|-------|-------|
| inductive sensor series | X | X |
| M8 8mm diameter body | 08 | 08 |
| standard diameter-standard ranges | D | D |
| nickel plated brass | B | B |
| 3 wire device | 3 | 3 |
| PNP output | P | P |
| NPN output | N | N |
| NO normally open | 1 | 1 |
| NC normally closed | 2 | 2 |
| shielded | S | |
| unshielded | | U |
| 2m standard integrated cable | M1 | M1 |
| M8 3 Pin 8mm connector | E1 | E1 |
| M12 4 Pin 12mm connector | K1 | K1 |
| range (mm) | 1.5mm | 2.5mm |
| load current | 200mA | 200mA |

PARTS INDEX

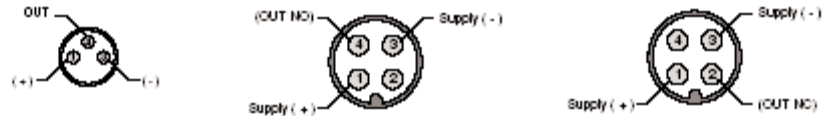
SPECIFICATIONS

| | |
|--------------|----------------------|
| X08DB3P1SM1 | PNP NO SHIELDED M1 |
| X08DB3P2SM1 | PNP NC SHIELDED M1 |
| X08DB3N1SM1 | NPN NO SHIELDED M1 |
| X08DB3N2SM1 | NPN NC SHIELDED M1 |
| X08DB3P1UM1 | PNP NO UNSHIELDED M1 |
| X08DB3P2UM1 | PNP NC UNSHIELDED M1 |
| X08DB3N1UM1 | NPN NO UNSHIELDED M1 |
| X08DB3N2UM1 | NPN NC UNSHIELDED M1 |
| X08DBS3P1SE1 | PNP NO SHIELDED E1 |
| X08DB3P2SE1 | PNP NC SHIELDED E1 |
| X08DB3N1SE1 | NPN NO SHIELDED E1 |
| X08DB3N2SE1 | NPN NC SHIELDED E1 |
| X08DB3P1UE1 | PNP NO UNSHIELDED E1 |
| X08DB3P2UE1 | PNP NC UNSHIELDED E1 |
| X08DB3N1UE1 | NPN NO UNSHIELDED E1 |
| X08DB3N2UE1 | NPN NC UNSHIELDED E1 |
| X08DB3P1SK1 | PNP NO SHIELDED K1 |
| X08DB3P2SK1 | PNP NC SHIELDED K1 |
| X08DB3N1SK1 | NPN NO SHIELDED K1 |
| X08DB3N2SK1 | NPN NC SHIELDED K1 |
| X08DB3P1UK1 | PNP NO UNSHIELDED K1 |
| X08DB3P2UK1 | PNP NC UNSHIELDED K1 |
| X08DB3N1UK1 | NPN NO UNSHIELDED K1 |
| X08DB3N2UK1 | NPN NC UNSHIELDED K1 |

Wiring Diagram



E1/K1 Connection Diagram



TECHNICAL SPECIFICATIONS

| | | |
|--------------------------------------|-----------------------------------|-----------------------------------|
| Nominal Sensing Distance S_n | 1.5 mm | 2.5 mm |
| Operating Distance | - | - |
| Differential Travel | 10% Typ | 10% Typ |
| Repeat Accuracy R | 2% | 2% |
| Operating Voltage U_b | 10-30VDC | 10-30VDC |
| Ripple U_{pp} | <20% U_b | <20% U_b |
| No-load Supply | 20mA | 20mA |
| Load Current I_a | <200mA | <200mA |
| Leakage Current | <10uA | <10uA |
| Voltage Drop U_d | 1.2V max. | 1.2V max. |
| Output Type | PNP or NPN NO or NC | PNP or NPN NO or NC |
| Switching Frequency | 3KHz | 2.5KHz |
| Time Delay Before Availability t_v | 100ms | 100ms |
| Supply Electrical Protections | polarity reversal, transient | polarity reversal, transient |
| Output Electrical Protections | short circuit protection (autore- | short circuit protection (autore- |
| Ambient Temperature T_a | -25--+70C | -25--+75C |
| 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) | 43g (M1) 16g (E1) 20g (K1) | 43g (M1) 16g (E1) 20g (K1) |