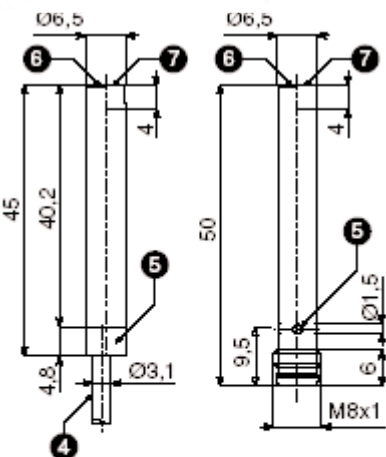
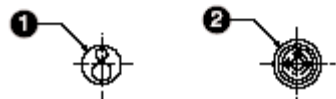


M65 6.5mm Short Body / Long Range 2mm/4mm ranges Miniature Inductive



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



M65 6.5mm
Short Body Long Range
Miniature Inductive Proximity Sensor

2 mm shielded range
4 mm unshielded range

3 wire 10-30VDC

miniaturized body design

2 meter standard integrated cable

IP67 protection degree

protection from electrical damages

stainless steel housing

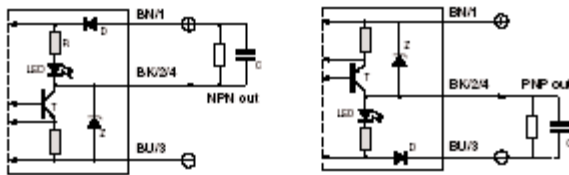
Parts Matrix

PARTS INDEX

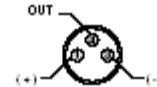
SPECIFICATIONS

| | | | | |
|------------------------------|-------|-------|--|--|
| inductive sensor series | X | X | X65CS3P1SM1 X65CS3P2SM1 X65CS3N1SM1 X65CS3N2SM1 | PNP NO SHIELDED M1 PNP NC SHIELDED M1 NPN NO SHIELDED M1 NPN NC SHIELDED M1 |
| M65 6.5mm diameter body | 65 | 65 | | |
| short body long ranges | C | C | X65CS3P1UM1 X65CS3P2UM1 X65CS3N1UM1 X65CS3N2UM1 | PNP NO UNSHIELDED M1 PNP NC UNSHIELDED M1 NPN NO UNSHIELDED M1 NPN NC UNSHIELDED M1 |
| stainless steel | S | S | | |
| 3 wire device | 3 | 3 | | |
| PNP output | P | P | X65CS3P1SE1 X65CS3P2SE1 | PNP NO SHIELDED E1 PNP NC SHIELDED E1 |
| NPN output | N | N | X65CS3N1SE1 X65CS3N2SE1 | NPN NO SHIELDED E1 NPN NC SHIELDED E1 |
| NO normally open | 1 | 1 | | |
| NC normally closed | 2 | 2 | X65CS3P1UE1 X65CS3P2UE1 X65CS3N1UE1 X65CS3N2UE1 | PNP NO UNSHIELDED E1 PNP NC UNSHIELDED E1 NPN NO UNSHIELDED E1 NPN NC UNSHIELDED E1 |
| shielded | S | | | |
| unshielded | | U | | |
| 2m standard integrated cable | M1 | M1 | | |
| M8 3 Pin 8mm connector | E1 | E1 | | |
| range (mm) | 2mm | 4mm | | |
| load current | 200mA | 200mA | | |

Wiring Diagram



E1 Connection Diagram



TECHNICAL SPECIFICATIONS

| | | |
|--------------------------------------|-----------------------------------|-----------------------------------|
| Nominal Sensing Distance S_n | 2 mm | 4 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 | 3KHz |
| 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 | stainless steel | stainless steel |
| Sensing Face Material | PBT | PBT |
| Tightening Torque | - | - |
| Weight (approximate) | 35g (M1) 7g (E1) | 35g (M1) 7g (E1) |