

Amplified Inductive Sensors 930





AMPLIFIED INDUCTIVE SENSORS INCREASED RANGE 12+30 VDC 4 WIRES PROGRAMMABLE OUTPUT

- Four-wire sensors
- Increased range, shielded, not shielded
- Range, 15 mm to 20 mm
 Programmable outputs: NPN/PNP, NO or NC
 Cable or M12 quick connect models
 Nickel plated brass
- Operation LED
- 200 mA max output



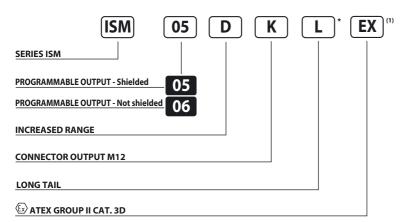






ISM Series

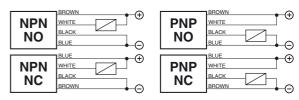
Identification code



^{*} Long tail option not available with option "K".

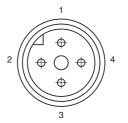
| | SHIELDED | NOT SHIELDED | |
|---------------------------------|---|--------------|--|
| NOMINAL SWITCHING DISTANCE (Sn) | 15 mm | 20 mm | |
| NOMINAL VOLTAGE | 12 ÷ 30 VDC (-15/+10%) | | |
| RESIDUAL RIPPLE | ≤ 10% | | |
| HYSTERESIS | < 10% | | |
| OUTPUT | NPN or PNP (may be selected) | | |
| CONTACT | NO or NC (may be selected) | | |
| MAX. CURRENT OUTPUT | 200 mA | | |
| ABSORPTION AT 24 VDC | < 1.2 mA | | |
| VOLTAGE DROP (Sensor ON) | < 1,8 V (I = 100 mA) | | |
| OPERATION LED | Yellow | | |
| SWITCHING FREQUENCY | 200 Hz | | |
| START UP DELAY | ≤ 50 mS | | |
| REPEATABILITY | ≤ 3% | | |
| SHORT CIRCUIT PROTECTION | Present (self-resetting) | | |
| ELECTRIC PROTECTIONS | Against polarity reversal - inductive loads | | |
| TEMPERATURE LIMITS | - 25 ÷ +70 °C | | |
| PROTECTION DEGREE | IP 67 | | |
| CABLE LENGTH | 2 m | | |
| CABLE SECTION | 4 x 0.25 mm ² | | |
| HOUSING MATERIAL | Nickel-plated brass | | |
| WEIGHT - Cable output - | 210 g | | |
| WEIGHT - K connector output - | 170 g | | |
| | | | |

Wiring diagrams



Thanks to the output status which is not paired with the rest of the circuit, the sensors of this kind of availability give enormous advantages, such as the possibility of obtaining the four output configurations (NPN-NO, NPN NC, PNP-NO, PNP-NC,) on the same model.

Connection with connector M12 (K)

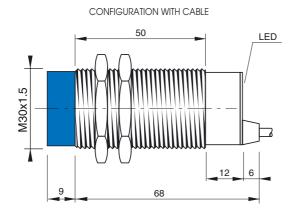


View of quadripole male connector.

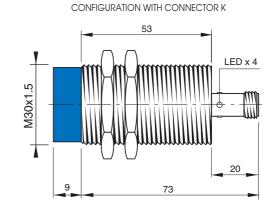
CONTACTS CONFIGURATION

| | Output | Contacts numbers | | | |
|--|--------|------------------|----|---|----|
| | | 1 | 2 | 3 | 4 |
| | NPN NO | + | NO | _ | _ |
| | NPN NC | _ | NC | + | _ |
| | PNP NO | + | + | _ | NO |
| | PNP NC | _ | + | + | NC |

Dimensions (mm)



Note: the front part in blue refers to not shielded models



 $^{^{(1)}}$ Device marking $\ensuremath{\mathbb{G}}\mbox{\sc II}$ 3D IP67 T6X.