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# Amplified Inductive Sensors 9 18





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

- Four-wire sensors
- Increased range, shielded, not shielded
- Range, 8 mm to 14 mm Programmable outputs: NPN/PNP, NO or NC Cable or M12 quick connect models

- 200 mA max output
- Nickel plated brass Operation LED



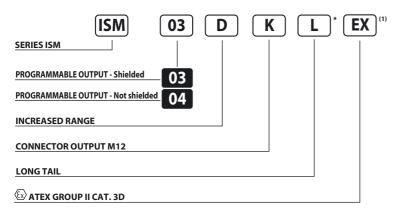






**ISM Series** 



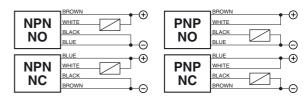


\* Long tail option not available with option "K".

	SHIELDED	NOT SHIELDED	
NOMINAL SWITCHING DISTANCE (Sn)	8 mm	14 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	400 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 <sup>2</sup>		
HOUSING MATERIAL	Nickel-plated brass		
WEIGHT - Cable output -	145 g		
WEIGHT - K connector output -	95 g		

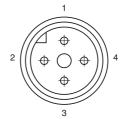
<sup>&</sup>lt;sup>(1)</sup> Device marking ( II 3D IP67 T6X.

# **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)



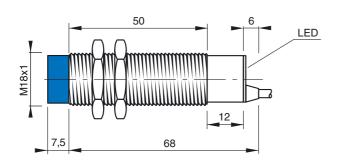
View of auadripole male connector.

#### **CONTACTS CONFIGURATION**

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

# **Dimensions (mm)**

# CONFIGURATION WITH CABLE



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

### CONFIGURATION WITH CONNECTOR K

