# Amplified Inductive Sensors 9 12

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

- Four-wire, shielded sensors
- Increased range, shielded, not shielded Range, 4 mm to 8 mm
- Programmable outputs: NPN/PNP, NO or NC
  Cable or M12 quick-connect
  Nickel plated brass

- Operation LED
  200 mA max output

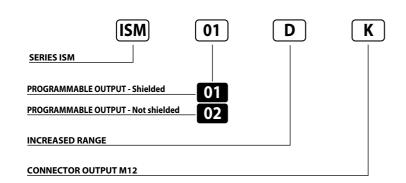




**ISM Series** 

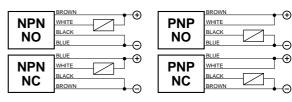


#### **Identification code**



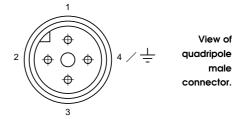
	SHIELDED	NOT SHIELDED	
NOMINAL SWITCHING DISTANCE (Sn)	4 mm	8 mm	
NOMINAL VOLTAGE	12 ÷ 30 VDC (-15/+10%)		
RESIDUAL RIPPLE	≤ 10%		
HYSTERESIS	< 10%		
OUTPUT	NPN or PNP (may be selected)		
CONTACT	NO or NC (may be selected)		
MAX. CURRENT OUTPUT	200 mA		
ABSORPTION AT 24 VDC	< 1.2 mA		
VOLTAGE DROP (Sensor ON)	< 1,8 V (I = 100 mA)		
OPERATION LED	Yellow		
SWITCHING FREQUENCY	500 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 mm2		
HOUSING MATERIAL	Nickel-plated brass		
WEIGHT - Cable output -	110 g		
WEIGHT - K connector output -	60 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 and the possibility of obtaining serial or parallel connections without any practical numerical limit.

## Connection with connector M12 (K)



### **CONTACTS CONFIGURATION**

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

Note: The K plug is compatible with the following connectors VAUDEHA, BINDER, HIRSCHMANN, LUMBERG, AMPHENOL-TUCHEL.

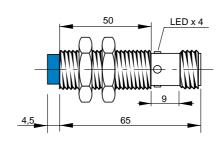
## **Dimensions (mm)**

#### CONFIGURATION WITH CABLE

# LED 40 16 68

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

#### CONFIGURATION WITH CONNECTOR K



To locate additional product specifications and technical drawings go to www.asi-ez.com