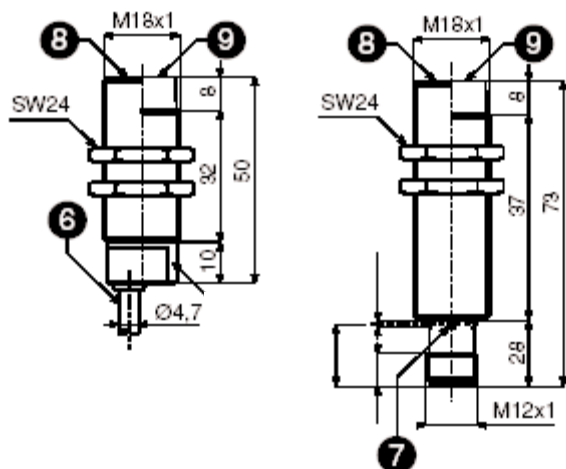


M18 18mm Analog Inductive Metal Housing 2-6mm/3-8mm ranges 4-20mA & 016mA Output



M18 18mm Miniature Inductive Proximity Sensor
Analog Output 4-20mA & 4-16mA
2-6mm/3-8mm ranges
2/3 wire 15-40VDC
miniaturized body design
2 meter standard integrated cable
IP67 protection degree
protection from electrical damages
NBT nickel plated brass housing



- 6 M1 cable 3x0.055mm, 3.1mm diameter, PUR, 2m
- 7 K1 4 pin 12mm connector
- 8 Shielded version
- 9 Unshielded version

Parts Matrix

inductive sensor series	X
M18 18mm diameter body	18
standard diameter-standard ranges	D
nickel plated brass	B
3(2) wire device	3
Analog Output 4-20mA & 4-16mA	K
inversely proportional	5
directly proportional	6
shielded	S
unshielded	U
2m standard integrated cable	M1
M12 4 Pin 12mm connector	K1
range (mm)	2-6 3-8

PARTS INDEX	SPECIFICATIONS
X18DB3K5SM1B	M1 CABLE SHIELDED INVERSE
X18DB3K6SK1B	K1 CONNECTOR SHIELDED DIRECT
X18DB3K5UM1B	M1 CABLE UNSHIELDED INVERSE
X18DB3K6UK1B	K1 CONNECTOR UNSHIELDED DIRECT

Wiring Diagram*

K1 Connection Diagram

*see page 3



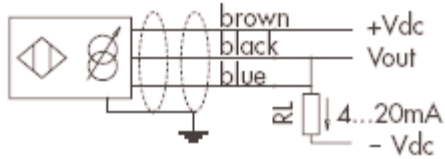
Technical Specifications

Sensing Distance S _d	2-6mm/3-8MM
Operating Distance	-
Differential Travel	10% Typ
Standard Target	18x18x1mm
Repeat Accuracy R	.5%
Supply Voltage Range U _b	14-40 VDC
Max Switching Freq.	250Hz
Ripple U _{pp}	<20% U _b
No-load Supply	4mA
Load Current I _a	<10mA
Leakage Current	<10uA
Voltage Drop U _d	-
Output Type	analog 4-20mA & 4-16mA
Supply Electrical Protections	polarity reversal, transient
Output Electrical Protections	short circuit protection (autoreset)
Ambient Temperature T _a	-25--+70C
Temperature Drift	<10%
Protection Degree (DIN 40 050)	IEC IP67
Housing Material	Chrome Plated Brass
Sensing Face Material	PBT
Tightening Torque	-

Wiring Diagram*

K1 Connection Diagram

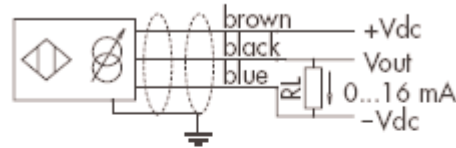
2 wires connection



Vout (V)	RL (ohm)	Vcc (min)
0,04 ... 0,2	10	15
0,4 ... 2	100	15
2 ... 10	500	20
4 ... 20	1000	30

$$RL \text{ (max)} = \frac{[V_{cc}-12]}{20} \text{ K}$$

3 wires connection



Vout (V)	RL (ohm)	Vcc (min)
0 ... 1	62,5	15
0 ... 10	625	18
0 ... 16	1000	24
0 ... 20	1250	28
0 ... 30	1875	38

$$RL \text{ (max)} = \frac{[V_{cc}-2]}{16} \text{ K}$$



Typical curves

