

**M18 18mm Analog Inductive Metal Housing
0-10mm range 0-10VDC & 4-20mA Output**



M18 18mm
Miniature Inductive Proximity Sensor

Analog Output 0-10V & 4-20mA

0-10mm range

4 wire 10-30VDC

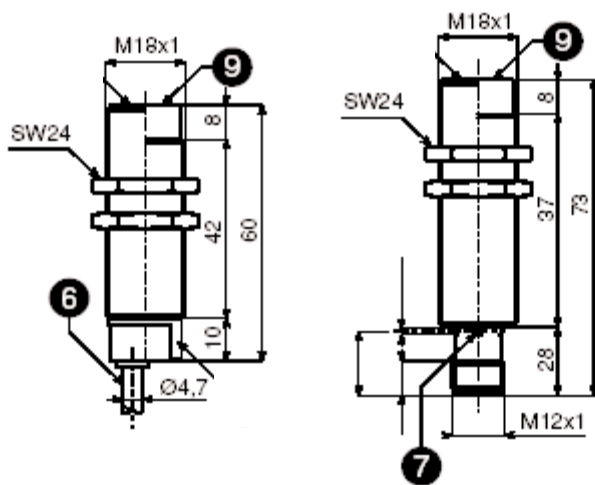
miniaturized body design

2 meter standard integrated cable

IP67 protection degree

protection from electrical damages

NBT nickel plated brass housing



6
7
9

M1 cable 3x0.055mm, 3.1mm diameter, PUR, 2m

K1 4 pin 12mm connector

Quasi-shielded version

Parts Matrix

inductive sensor series	X
M18 18mm diameter body	18
standard diameter-standard ranges	D
nickel plated brass	B
4 wire device	4
Analog Output 0-10V & 4-20mA	Y
shielded (quasi)	S
2m standard integrated cable	M1
M12 4 Pin 12mm connector	K1
range (mm)	0-10mm

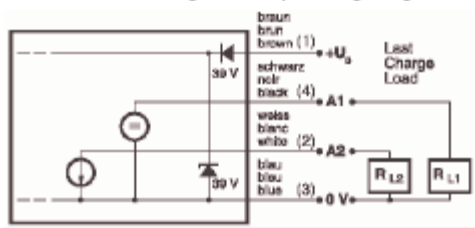
PARTS INDEX

X18DB4YSM1
X18DB4YSK1

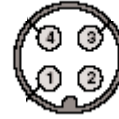
SPECIFICATIONS

M1 CABLE
K1 CONNECTOR

Wiring Diagram



K1 Connection Diagram



Technical Specifications

Sensing Distance S_d	0-10mm
Operating Distance	-
Differential Travel	10% Typ
Standard Target	30x30x1mm
Repeat Accuracy R	0.3mm ($U_b = 20-30VDC$ $T_A = 23$ degree C ± 5 degree C)
Supply Voltage Range U_b	10-30VDC
Output Voltage A1	
S = 0mm	+0 V \pm 0.4V (23C) 4mA \pm 0.8mA (23C)
S = $\frac{1}{2}S_d$	+5.2 V \pm 0.4V (23C) 20mA \pm 0.8mA (23C)
S = S_d	+10 V \pm 0.4V (23C)
Output Current A2	
S = 0mm	4mA \pm 0.8mA (23C)
S = S_d	20mA \pm 0.8mA (23C)
Ripple U_{pp}	<20% U_b
No-load Supply	12mA
Load Current I_a	<10mA
Leakage Current	<10uA
Voltage Drop U_d	1.2V max.
Output Type	analog 0-10V & 4-20mA
Cut Off Frequency (-3dB $\frac{1}{2}S_d$)	500Hz
Time Delay Before Availability t_v	50ms
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	-