

**M18 18mm Inductive Metal Short Body Series
5mm/8mm ranges Harsh Duty IP68**



**M18 18mm Metal Body
Inductive Proximity Sensor
Harsh Duty IP68
5 mm shielded range**

8 mm unshielded range

3 wire 5-40VDC

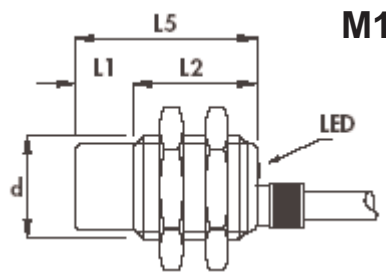
miniaturized body design

2 meter standard integrated cable

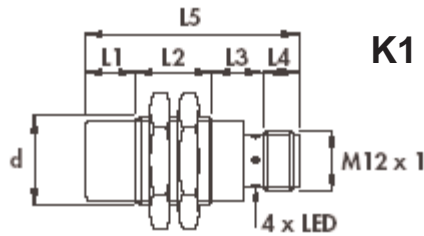
IP68 protection degree

protection from electrical damages

NBT metal housing



M1



K1

shielded/unshielded

L1

M1 (na/10mm) K1 (na/10mm)

L2

M1 (30mm/20mm) K1 (25mm/15mm)

L3

M1 (na/na) K1 (15mm/5mm)

L4

M1 (na/na) K1 (8mm/8mm)

L5

M1 (30mm/30mm) K1 (48mm/48mm)

Parts Matrix

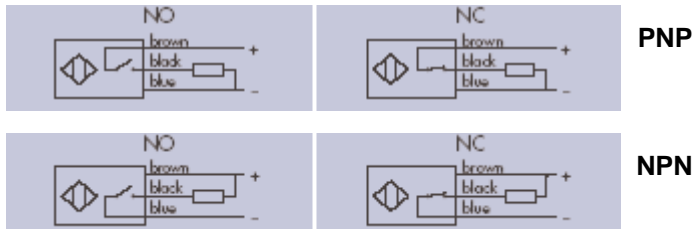
inductive sensor series	X	X
M12 12mm diameter body	18	18
short diameter- standard ranges	S	S
NBT metal housing	B	B
3 wire device	3	3
PNP output	P	P
NPN output	N	N
NO normally open	1	1
NC normally closed	2	2
shielded	S	
unshielded		U
2m standard integrated cable	M1	M1
M12 4 pin connector	K1	K1
range (mm)	5mm	8mm
new series/IP68 version	(B68)	(B68)

PARTS INDEX

SPECIFICATIONS

X18SB3P1SM1B68	PNP NO SHIELDED M1
X18SB3P2SM1B68	PNP NC SHIELDED M1
X18SB3N1SM1B68	NPN NO SHIELDED M1
X18SB3N2SM1B68	NPN NC SHIELDED M1
X18SB3P1UM1B68	PNP NO UNSHIELDED M1
X18SB3P2UM1B68	PNP NC UNSHIELDED M1
X18SB3N1UM1B68	NPN NO UNSHIELDED M1
X18SB3N2UM1B68	NPN NC UNSHIELDED M1
X18SB3P1SK1B68	PNP NO SHIELDED K1
X18SB3P2SK1B68	PNP NC SHIELDED K1
X18SB3N1SK1B68	NPN NO SHIELDED K1
X18SB3N2SK1B68	NPN NC SHIELDED K1
X18SB3P1UK1B68	PNP NO UNSHIELDED K1
X18SB3P2UK1B68	PNP NC UNSHIELDED K1
X18SB3N1UK1B68	NPN NO UNSHIELDED K1
X18SB3N2UK1B68	NPN NC UNSHIELDED K1

Wiring Diagram



TECHNICAL SPECIFICATIONS

Nominal Sensing Distance S_n	5 mm	8 mm
Operating Distance	-	-
Differential Travel	10% Typ	10% Typ
Repeat Accuracy R	2%	2%
Operating Voltage U_b	5-40VDC	5-40VDC
Ripple U_{pp}	<20% U_b	<20% U_b
No-load Supply	20mA	20mA
Load Current I_a	<200mA	<200mA
Leakage Current	<10uA	<10uA
Voltage Drop U_d	1.2V max.	1.2V max.
Output Type	PNP or NPN NO or NC	PNP or NPN NO or NC
Switching Frequency	.8KHz	.6KHz
Time Delay Before Availability t_v	100ms	100ms
Supply Electrical Protections	polarity reversal, transient	polarity reversal, transient
Output Electrical Protections	short circuit protection (autoreset)	short circuit protection (autoreset)
Ambient Temperature T_a	-20--+75C	-20--+75C
Temperature Drift	+/- 10% SR	+/- 10% SR
Protection Degree (DIN 40 050)	IEC IP68	IEC IP68
Housing Material	NBT	NBT
Sensing Face Material	PBT	PBT
Weight (approximate)	110g (M1) 70g (K1)	110g (M1) 70g (K1)