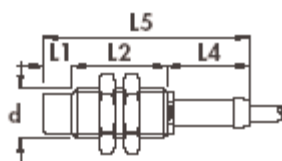
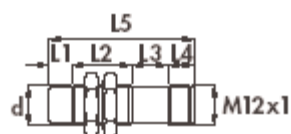


M12 12mm NAMUR Miniature Inductive (LED) 2mm/4mm ranges



M1



K1

M12 12mm NAMUR Miniature Inductive Proximity Sensor with LED 2 mm shielded range
4 mm unshielded range
2 wire 5-30VDC
miniaturized body design
2 meter standard integrated cable
IP67 protection degree
protection from electrical damages
NBT nickel plated brass housing

(shielded/unshielded)

L1	M1 (7mm/0mm) K1 (7mm/0mm)
L2	M1 (30mm/23mm) K1 (30mm/23mm)
L3	M1 (na) K1 (10mm/10mm)
L4	M1 (20mm/0mm) K1 (8mm/8mm)
L5	M1 (50mm/30mm) K1 (48mm/18mm)

Parts Matrix

inductive sensor series	X	X
M12 12mm diameter body	12	12
NAMUR-standard ranges	N	N
NBT nickel plated brass	B	B
2 wire device	2	2
PNP/NPN output	O	O
NO normally open	1	1
NC normally closed	2	2
shielded	S	
unshielded		U
2m standard integrated cable	M1	M1
M12 4 Pin 12mm connector	K1	K1
range (mm)	2mm	4mm
with LED	BL	BL

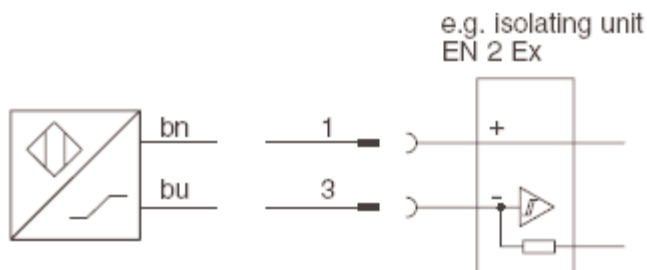
PARTS INDEX

X12NB2O1SM1BL
X12NB2O2SM1BL
X12NB2O1UM1BL
X12NB2O2UM1BL
X12NB2O1SK1BL
X12NB2O2SK1BL
X12NB2O1UK1BL
X12NB2O2UK1BL

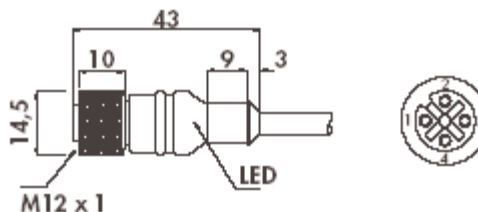
SPECIFICATIONS

PNP/NPN NO SHIEDLED M1
PNP/NPN NC SHIEDLED M1
PNP/NPN NO UNSHIELDED M1
PNP/NPN NC UNSHIELDED M1
PNP/NPN NO SHIEDLED K1
PNP/NPN NC SHIEDLED K1
PNP/NPN NO UNSHIELDED K1
PNP/NPN NC UNSHIELDED K1

Wiring Diagram



K1 Connection Diagram



TECHNICAL SPECIFICATIONS

Nominal Sensing Distance S_n	2mm	4mm
Supply Voltage NAMUR	7.7-9VDC	7.7-9VDC
Operating Voltage U_b	5-30VDC	5-30VDC
Ripple U_{pp}	<10% U_b	<10% U_b
Internal Capacitance	<180nF	<180nF
Internal Inductance	<100uH	<100uH
Output Type	NAMUR PNP/NPN NO PNP/NPN NC	NAMUR PNP/NPN NO PNP/NPN NC
Switching Frequency	2KHz	1KHz
Time Delay Before Availability t_v	10ms	10ms
Power Consumption attenuated	<1.0mA	<1.0mA
Power Consumption unattenuated	<2.2mA	<2.2mA
Ambient Temperature T_a	-25--+75C	-25--+75C
Temperature Drift	+/- 10% SR	+/- 10% SR
Protection Degree (DIN 40 050)	IEC IP67	IEC IP67
LED Indicators	Yellow (NO output energized)	Yellow (NO output energized)
Housing Material	NBT	NBT
Sensing Face Material	PBT	PBT
Tightening Torque	2Nm	2Nm