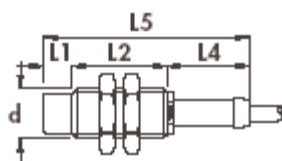


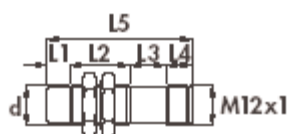
M12 12mm NAMUR Miniature Inductive (no LED) 2mm/4mm ranges



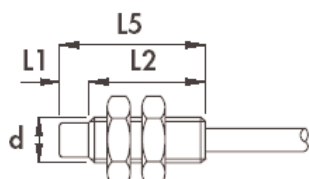
M12 12mm NAMUR Miniature Inductive Proximity Sensor w/o LED
2 mm shielded range
4 mm unshielded range
2 wire 5-30VDC
miniaturized body design
2 meter standard integrated cable
IP67 protection degree
protection from electrical damages
NBT nickel plated brass housing



M1



K1



M2

(shielded/unshielded)

L1	M1 (7mm/0mm) K1 (7mm/0mm) M2 (7mm/0mm)
L2	M1 (30mm/23mm) K1 (30mm/23mm) M2 (30mm/23mm)
L3	M1 (na) K1 (10mm/10mm) M2 (na)
L4	M1 (20mm/0mm) K1 (8mm/8mm) M2 (na)
L5	M1 (50mm/30mm) K1 (48mm/18mm) M2 (30/30mm)

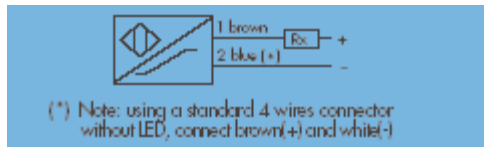
Parts Matrix

PARTS INDEX

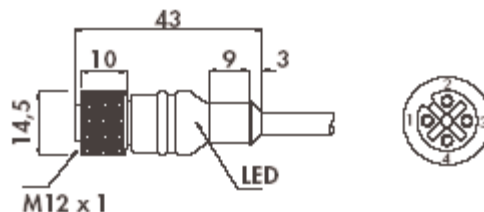
SPECIFICATIONS

inductive sensor series	X	X	X12NB2O2SM1B X12NB2O2UM1B	PNP/NPN NC SHIELDED M1 PNP/NPN NC UNSHIELDED M1
M12 12mm diameter body	12	12	X12NB2O2SK1B X12NB2O2UK1B	PNP/NPN NC SHIELDED K1 PNP/NPN NC UNSHIELDED K1
NAMUR-standard ranges	N	N	X12NB2O2SM2B X12NB2O2UM2B	PNP/NPN NC SHIELDED M2 PNP/NPN NC UNSHIELDED M2
NBT nickel plated brass	B	B		
2 wire device	2	2		
PNP/NPN output	O	O		
NC normally closed (only)	2	2		
shielded	S			
unshielded		U		
2m standard integrated cable	M1	M1		
M12 4 Pin 12mm connector	K1	K1		
2m standard integrated cable with tang	M2	M2		
range (mm)	2mm	4mm		

Wiring Diagram



K1 Connection Diagram



TECHNICAL SPECIFICATIONS

Nominal Sensing Distance Sn	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 NC	NAMUR 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
Housing Material	NBT	NBT
Sensing Face Material	PBT	PBT
Tightening Torque	2Nm	2Nm