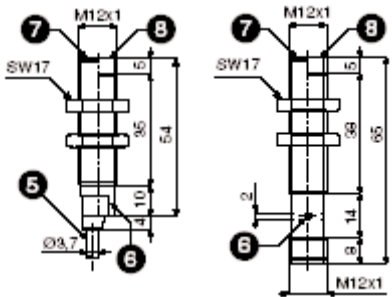
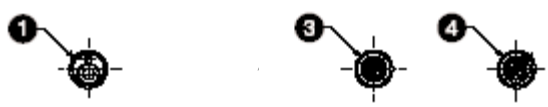


M12 12mm Long Range Inductive Metal Housing 4mm/8mm ranges (2X)

M12 12mm (2X) Long Range Inductive Sensor
4 mm shielded range
8 mm unshielded range
3 wire 10-30VDC
miniaturized body design
2 meter standard integrated cable
IP67 protection degree
protection from electrical damages
NBT nickel plated brass housing



- 1 M1 axial cable
- 3 K1 M12 4 pin 12mm
- 4 M1 cable 3x0.055mm, 3.1mm diameter, PUR, 2m
- 5 LED status indicator (NO output energized)
- 6 Shielded version
- 7 Unshielded version



Parts Matrix

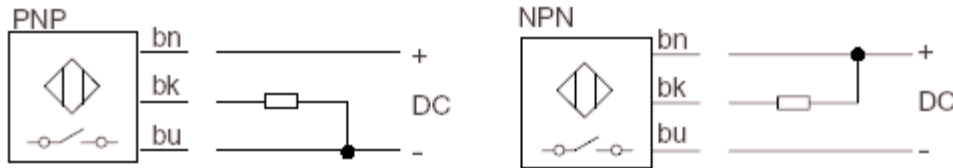
inductive sensor series	X	X
M12 12mm diameter body	12	12
standard diameter-long range	L	L
nickel plated brass	B	B
3 wire device	3	3
PNP output	P	P
NPN output	N	N
NO normally open	1	1
NC normally closed	2	2
shielded	S	
unshielded		U
2m standard integrated cable	M1	M1
M12 4 Pin 12mm connector	K1	K1
range (mm)	4mm	8mm
load current	300mA	300mA

PARTS INDEX

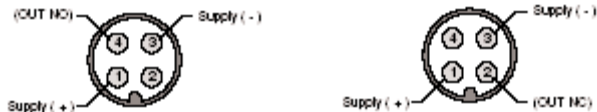
SPECIFICATIONS

X12LB3P1SM1	PNP NO SHIELDED M1
X12LB3P2SM1	PNP NC SHIEDLED M1
X12LB3N1SM1	NPN NO SHIELDED M1
X12LB3N2SM1	NPN NC SHIELDED M1
X12LB3P1UM1	PNP NO UNSHIELDED M1
X12LB3P2UM1	PNP NC UNSHIELDED M1
X12LB3N1UM1	NPN NO UNSHIELDED M1
X12LB3N2UM1	NPN NC UNSHIELDED M1
X12LB3P1SK1	PNP NO SHIELDED K1
X12LB3P2SK1	PNP NC SHIEDLED K1
X12LB3N1SK1	NPN NO SHIELDED K1
X12LB3N2SK1	NPN NC SHIELDED K1
X12LB3P1UK1	PNP NO UNSHIELDED K1
X12LB3P2UK1	PNP NC UNSHIELDED K1
X12LB3N1UK1	NPN NO UNSHIELDED K1
X12LB3N2UK1	NPN NC UNSHIELDED K1

Wiring Diagram



K1 Connection Diagram



TECHNICAL SPECIFICATIONS

Nominal Sensing Distance S_n	4 mm	8 mm
Operating Distance	-	-
Differential Travel	10% Typ	10% Typ
Repeat Accuracy R	5%	5%
Operating Voltage U_b	10-30VDC	10-30VDC
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	1KHz	1KHz
Time Delay Before Availability t_v	100ms	100ms
Supply Electrical Protections	polarity reversal, transient	polarity reversal, transient
Output Electrical Protections	short circuit protection (autore-	short circuit protection (autore-
Ambient Temperature T_a	-20--+70C	-20--+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	-	-
Weight (approximate)	30-70G (M1)(K1)	30-70G (M1)(K1)