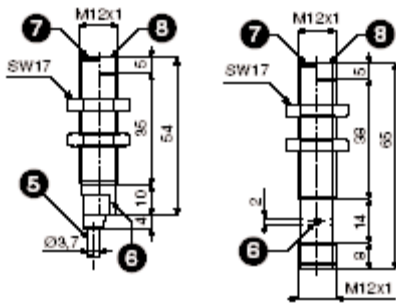
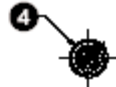


M12 12mm 20-253 VAC Inductive Sensor 2mm/4mm ranges

M12 12mm AC Inductive 20-253VAC Inductive Proximity Sensor
2 mm shielded range
4 mm unshielded range
2 wire 20-253VAC
miniaturized body design
2 meter standard integrated cable
IP67 protection degree
protection from electrical damages
NBT nickel plated brass housing



- 1 M1 axial cable
- 4 K1 M12 4 pin 12mm/K5 M12 3 pin 12mm
- 5 M1 cable 3x0.055mm, 3.1mm diameter, PUR, 2m
- 6 LED status indicator (NO output energized)
- 7 Shielded version
- 8 Unshielded version



Parts Matrix

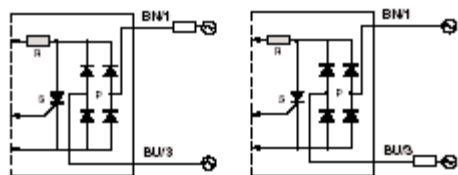
inductive sensor series	X	X
M12 12mm diameter body	12	12
standard diameter-standard ranges	D	D
nickel plated brass	B	B
2 wire device	2	2
AC	A	A
NO normally open	1	1
NC normally closed	2	2
shielded	S	
unshielded		U
2m standard integrated cable	M1	M1
M12 3 Pin 12mm connector	K5	K5
M12 4 Pin 12mm connector	K1	K1
range (mm)	2mm	4mm
load current	500mA	500mA

PARTS INDEX

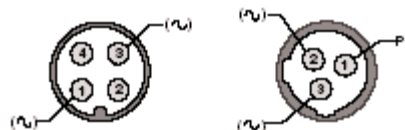
SPECIFICATIONS

X12DB2A1SM1	NO SHIELDED M1
X12DB2A1UM1	NC UNSHIEDLED M1
X12DB2A2SM1	NO SHIELDED M1
X12DB2A2UM1	NC UNSHIELDED M1
X12DB2A1SK1	NO SHIELDED K1
X12DB2A1UK1	NC UNSHIEDLED K1
X12DB2A2SK1	NO SHIELDED K1
X12DB2A2UK1	NC UNSHIELDED K1
X12DB2A1SK5	NO SHIELDED K5
X12DB2A1UK5	NC UNSHIEDLED K5
X12DB2A2SK5	NO SHIELDED K5
X12DB2A2UK5	NC UNSHIELDED K5

Wiring Diagram



K1/K5 Connection Diagram



TECHNICAL SPECIFICATIONS

Nominal Sensing Distance S_n	2 mm	4 mm
Operating Distance	-	-
Differential Travel	10% Typ	10% Typ
Repeat Accuracy R	5%	5%
Operating Voltage U_b	20-253VAC	20-253VAC
Ripple U_{pp}	<20% U_b	<20% U_b
In Rush	7A	7A
Load Current I_a	<300mA	<300mA
Leakage Current	<10uA	<10uA
Voltage Drop U_a	1.2V max.	1.2V max.
Output Type	PNP/NPN NO or NC Programmable	PNP/NPN NO or NC Programmable
Switching Frequency	25KHz	25KHz
Time Delay Before Availability t_v	200ms	200ms
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--+70C	-20--+70C
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)(K5)	30-70G (M1)(K1)(K5)