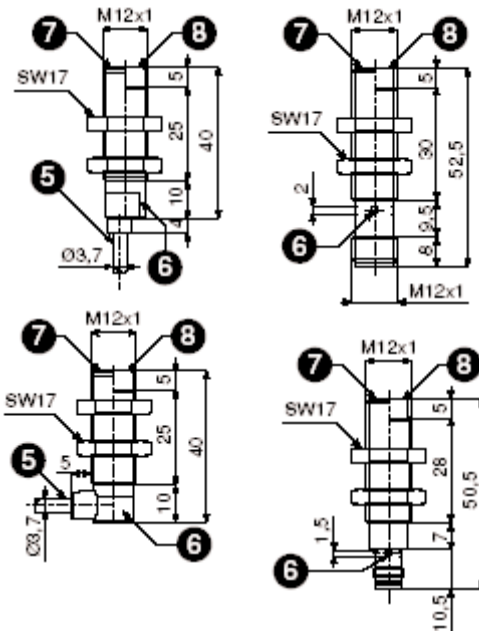


M12 12mm Short Body Inductive Metal Housing 2mm/4mm ranges



- 4 K1 M12 4 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



M12 12mm Short Body Inductive Sensor
2 mm shielded range
4 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

Parts Matrix

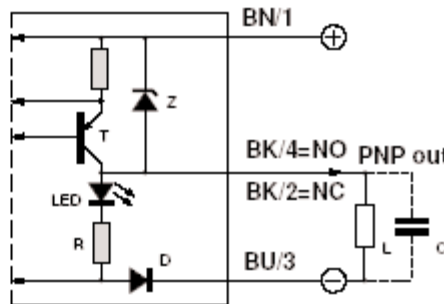
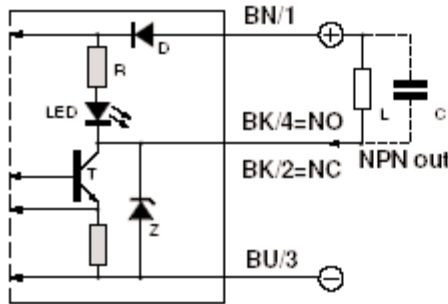
inductive sensor series	X	X
M12 12mm diameter body	12	12
short body-standard range	S	S
nickel plated brass	B	B
3 wire device	3	3
PNP output	P	P
NPN output	N	N
NO normally open	1	1
NC normally closed	2	2
shielded	S	
unshielded		U
2m standard integrated cable	M1	M1
2m integrated cable 90 degree exit	A1	A1
M12 4 Pin 12mm connector	K1	K1
M8 4 Pin 8mm connector	E1	E1
range (mm)	2mm	4mm
load current	200mA	200mA

PARTS INDEX

- X12SB3P1SM1
- X12SB3P2SM1
- X12SB3N1SM1
- X12SB3N2SM1
- X12SB3P1UM1
- X12SB3P2UM1
- X12SB3N1UM1
- X12SB3N2UM1
- X12SB3P1SK1
- X12SB3P2SK1
- X12SB3N1SK1
- X12SB3N2SK1
- X12SB3P1UK1
- X12SB3P2UK1
- X12SB3N1UK1
- X12SB3N2UK1
- X12SB3P1SA1
- X12SB3P2SA1
- X12SB3N1SA1
- X12SB3N2SA1
- X12SB3P1UA1
- X12SB3P2UA1
- X12SB3N1UA1
- X12SB3N2UA1
- X12SB3P1SE1
- X12SB3P2SE1
- X12SB3N1SE1
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- X12SB3P2UE1
- X12SB3N1UE1
- X12SB3N2UE1

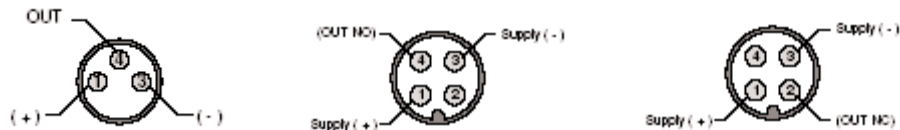
SPECIFICATIONS

- PNP NO SHIELDED M1
- PNP NC SHIEDLED M1
- NPN NO SHIELDED M1
- NPN NC SHIELDED M1
- PNP NO UNSHIELDED M1
- PNP NC UNSHIELDED M1
- NPN NO UNSHIELDED M1
- NPN NC UNSHIELDED M1
- PNP NO SHIELDED K1
- PNP NC SHIEDLED K1
- NPN NO SHIELDED K1
- NPN NC SHIELDED K1
- PNP NO UNSHIELDED K1
- PNP NC UNSHIELDED K1
- NPN NO UNSHIELDED K1
- NPN NC UNSHIELDED K1
- PNP NO SHIELDED A1
- PNP NC SHIEDLED A1
- NPN NO SHIELDED A1
- NPN NC SHIELDED A1
- PNP NO UNSHIELDED A1
- PNP NC UNSHIELDED A1
- NPN NO UNSHIELDED A1
- NPN NC UNSHIELDED A1
- PNP NO SHIELDED E1
- PNP NC SHIEDLED E1
- NPN NO SHIELDED E1
- NPN NC SHIELDED E1
- PNP NO UNSHIELDED E1
- PNP NC UNSHIELDED E1
- NPN NO UNSHIELDED E1
- NPN NC UNSHIELDED E1



Wiring Diagram

E1/K1 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	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	2KHz	2KHz
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	-25--+70C	-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	-	-
Weight (approximate)	25-65G (M1)(K1)(A1)(E1)	25-65G (M1)(K1)(A1)(E1)