

# Instruction Bulletin

Replaces 6008347001B dated 4/96

## Solid-State Sensors Wiring Instructions for Cables and Connectors

### INTRODUCTION

This bulletin contains wiring instructions for a broad range of Telemecanique solid-state sensors.

### CABLE WIRING

#### **⚠ DANGER**

##### HAZARDOUS VOLTAGE

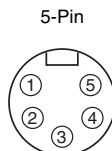
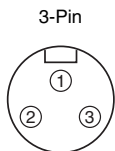
Disconnect all power before wiring or servicing equipment.

**Electric shock will result in death or serious injury.**

Cable	Sensor		Outputs	Connections
	Model	Suffix		
3', #16-3 SJTO (3-Wire Cable)	SGO-8003, 8026, SGOB-8114, SGA-8005, 8040, 8018	320 321 351	N.O. (blk) N.O. (wht) ⊥ (grn)	L1 Load ⊥
	SG1-8004, SG1B-8147		N.C. (blk) N.C. (wht) ⊥ (grn)	L1 Load ⊥
	SGO-8079, SG1-8056		- (blk) + (wht) ⊥ (grn)	Load + ⊥
	XSF-A		1 (blk) 2 (wht) ⊥ (grn)	L1 Load ⊥
3', #16-4 SJTO (4-Wire Cable)	SGC	420 421 451	Com (blk) N.O. (wht) N.C. (red) ⊥ (grn)	L1 Load Load ⊥
	SGO-8110		1 (blk) 2 (red) 3 (wht) ⊥ (grn)	L1 Load L2-heater ⊥
3', #16-5 SJTO (5-Wire Cable)	XSF-H, J	520 521 551	1 (blk) 2 (org) 3 (wht) 4 (red) ⊥ (grn)	+ N.C. - N.O. ⊥

N.O. = Normally Open, N.C. = Normally Closed, Com = Common, ⊥ = Ground

### WIRING FOR MAGNETIC SENSORS



Sensor		Mini-Receptacle Connections				
Model	Suffix	1	2	3	4	5
SGO-8003, 8026, SGOB-8114, SGO-8110, SGA-8005, 8040, 8018	347	⊥ (grn)	N.O. (red)	N.O. (red)		
SG1-8004, SG1B-8147		⊥ (grn)	N.C. (red)	N.C. (red)		
SGO-8079, SG1-8056		⊥ (grn)	- (red)	+ (red)		
SGC-8027, 8025	547	N.O. (wht)	N.C. (red)	⊥ (grn)	N/C (org)	Com (blk)
SGO-8110		3 (wht)	2 (red)	⊥ (grn)	N/C (org)	1 (blk)

N.O. = Normally Open, N.C. = Normally Closed, N/C = No Connection, Com = Common, ⊥ = Ground

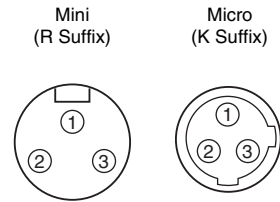
### CONNECTORS FOR MATCHING FEMALE CORDS

Connector	Catalog No.
3-pin mini style AC	XSZ-CA9**
3-pin micro style AC	XSZ-CK1**
4-pin micro style DC	XSZ-CD***
5-pin mini style AC	BH20-5***

For more details on ordering parts, please refer to the Square D Digest

**WIRING FOR INDUCTIVE AND PHOTOELECTRIC SENSORS**

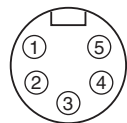
**3-Pin Connector Receptacles**



Sensor		Screw Terminal Connections			
Model	Suffix	1 (Grn)	2 (Red)	3 (Red)	
XUE-H3000, ZUE-Z04H7	R3	N/C	A1	A2	
XUJ-M1000	R3	N/C	1	3	
XUJ-LM1503	R3	N/C	1	2	
XUE-H, ZUE-Z03H7, XUR-H	R3P*	P	+	-	
	R3N	N	+	-	
	R3LP*	5	3	1	
XUJ-K	DC	R3LN	4	3	1
		R3DP	5	2	1
		R3DN	4	2	1
		K3L0*	3	1, 6	4
		K3L1	3	1, 6	5
XUJ-M/T	AC Thru-Beam & Retroreflective	K3D0	2	1, 6	4
		K3D1	2	1, 6	5
		K3L0*	2	1, 6	4
		K3L1	2	1, 6	5
		K3D0	3	1, 6	4
XUJ-LM	AC	K3D1	3	1, 6	5
		K30*	2	1, 4	5
		K31	2	1, 4	3
XSB-A		R30*	N/C	3	4
		R31	N/C	1	2
XSF-A		R30*	$\perp$	1	2
		R31	$\perp$	1	4
		K30*	$\perp$	1	2
		K31	$\perp$	1	4
XSB-C		R3	N/C	1	4
XSD-C***139		R3	N/C	3	4
XSC-A/M/T, XSD-A/M/T		R3	N/C	5	6
XSF-H/J		R30*	4	1	3
		R31	2	1	3
XS-7/8 (factory set jumper; N.O. for R30/K30, N.C. for R31/K31)	AC	R30/31	N/C	5	6
		K30/31	N/C	5	6
XS-7/8 C40 PC/NC, XSC-H/J	DC	R30*	4	1	3
		R31	2	1	3

N/C = No Connection  
Suffixes: \* = Default wiring option, R = Mini, K = Micro, P = PNP, N = NPN, L = Light, D = Dark, 0 = N.O., 1 = N.C.

**5-Pin Connector Receptacles**



Sensor		Screw Terminal Connections					
Model	Suffix	1 (Wht)	2 (Red)	3 (Grn)	4 (Org)	5 (Blk)	
XUE-F, ZUE-Z02H7	R5	A1	13	11	12	A2	
XUE-T, ZUE-Z05H7	R5	A1	18	15	16	A2	
XUJ-K	Thru-Beam & Retroreflective	R5D	2	5	6	4	1
		R5L*	3	5	6	4	1
	Proximity(Diffuse)	R5D	3	5	6	4	1
		R5L*	2	5	6	4	1
	Analog	R5	3	5	6	4	1
XUJ-M/T	Thru-Beam & Retroreflective	R5D*	1	4	6	5	2
		R5L	1	4	6	5	3
	Proximity(Diffuse)	R5D*	1	4	6	5	3
		R5L	1	4	6	5	2
XUJ-LM	Light Mode Only	R5L	1	5	4	3	2
XSC-H/J, XSD-H/J, XS7/8 C40 PC/NC		R5	3	4	N/C	2	1
XSF-H/J		R5	3	4	$\perp$	2	1

N/C = No Connection  
Suffixes: \* = Default wiring option, R = Mini, K = Micro, D = Dark, L = Light

**PNP & NPN Inductive Sensors with N.O. & N.C. Outputs and 4-Pin Receptacles**

Sensor		Screw Terminal Connections				Receptacle (Micro DC)
Model	Suffix	1 (Brn)	2 (Wht)	3 (Blu)	5 (Blk)	
XS-7/8 C40 PC/NC, XSF-H/J, XSD-H/J	D4	1	2	3	4	

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