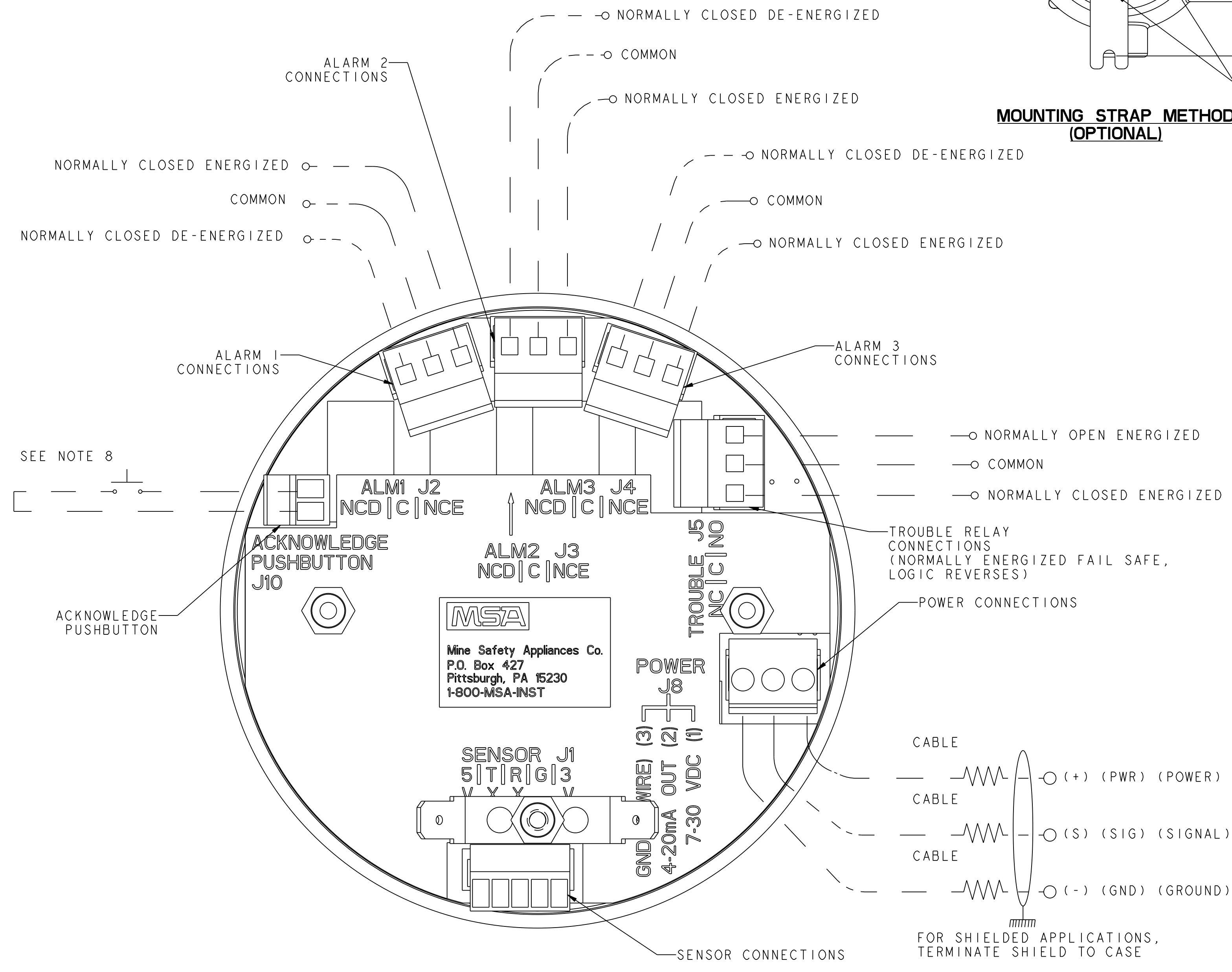


MAXIMUM CABLE LENGTH AND 4-20 mA SIGNAL LOAD

POWER SUPPLY	24 VOLTS		12 VOLTS	
	NO RELAYS	RELAYS INSTALLED	NO RELAYS	RELAYS INSTALLED
18 AWG CABLE (6.6 OHMS/1000 FT.)	2000 FT.	1500 FT.	300 FT.	250 FT.
16 AWG CABLE (4.2 OHMS/1000 FT.)	3500 FT.	2500 FT.	500 FT.	400 FT.
14 AWG CABLE (2.6 OHMS/1000 FT.)	5000 FT.	4000 FT.	900 FT.	600 FT.
MAXIMUM LOAD ON 4-20 mA SIGNAL	600 OHMS		300 OHMS	

MAXIMUM CURRENT DRAW

VOLTAGE SUPPLIED (AS MEASURED AT J8)	CONFIGURATION	
	NO RELAYS	RELAYS INSTALLED
24 VOLTS	200 mA	250 mA
12 VOLTS	350 mA	500 mA
7 VOLTS	600 mA	750 mA



CUSTOMER _____

P.O. # _____

MSA # _____

LOCATION _____

TAG # _____

TOTAL NO. OF UNITS _____

- NOTES:
1. INSTRUMENT WEIGHT = 10.6 LBS (4.8 KG).
 2. INSTRUMENT HOUSING IS MADE OF 316 STAINLESS STEEL.
 3. DIMENSIONS SHOWN IN INCHES (MILLIMETERS).
 4. MOUNT UNIT WITH SENSOR ORIENTATION AS SHOWN.
 5. CHECK TAG FOR AREA CLASSIFICATION.
 6. - - - - - INDICATES FIELD CONNECTIONS BY OTHERS.
 7. CHECK SENSOR LABEL FOR GAS TYPE, RANGE, AND ATO ORDERING NUMBER.
 8. CUSTOMER INSTALLED NORMALLY OPEN PUSH BUTTON SWITCH, MAX. 16 AWG CABLE.
 9. P/N 697281 IS OPTIONAL MOUNTING STRAP.
 10. RELAY AND POWER CABLES NOT TO EXCEED 12 AWG.

AUTHORIZED COUNTRY	MSA	MINE SAFETY APPLIANCES CO. PITTSBURGH, PA 15230, USA	THIS DRAWING IS THE PROPERTY OF MSA AND IS MADE AVAILABLE TO YOU IN CONFIDENCE AND SUBJECT TO THE FOLLOWING: NO PERMISSION IS GRANTED TO PUBLISH, USE, REPRODUCE, TRANSMIT OR DISCLOSE THIS DRAWING, OR ANY INFORMATION CONTAINED THEREIN TO OTHERS WITHOUT THE PRIOR WRITTEN CONSENT OF MSA EXCEPT FOR THE MANUFACTURE OF ARTICLES FOR MSA. SCHUTZVERMERK NACH DIN 34 BEACHTEN. MSA AUER GmbH.	DO NOT SCALE DWG.
MSA STANDARD SHOP PRACTICES APPLY		JOB NO. 30002140 PH0718	APPROVAL AGENCY CODE: NO NIOSH ATTR. DOC.:	
CRITICAL	MAJOR A	MAJOR B	100% INSPECTION	
CODE SYMBOLS		MINOR (NO MARK)	TOLERANCES UNLESS OTHERWISE SPECIFIED	
DRAWN BY WJE		CHECKED BY S. TURNER	FRACTIONAL ± 1/64	<p>INSTALLATION OUTLINE, ULTIMA XE WITH Xlr SENSOR</p> <p>CADD REF: 10000015283</p> <p>SCALE: 0.500</p>
DATE 10-22-02		PROJ. ENGR. M. SHOMALI	2 PL DEC. ± 0.01	
11-13-02		PROJ. ENGR. J. DANNHARDT	3 PL DEC. ± 0.005	
ANGULAR ± 1 deg.		MANUFACTURING R. SMIDL	SEE MSA STANDARD SHOP PRACTICES FOR DRILLED HOLE TOLERANCES	DOCUMENT NO. D SK 10000015283
				SHEET 1 OF 1