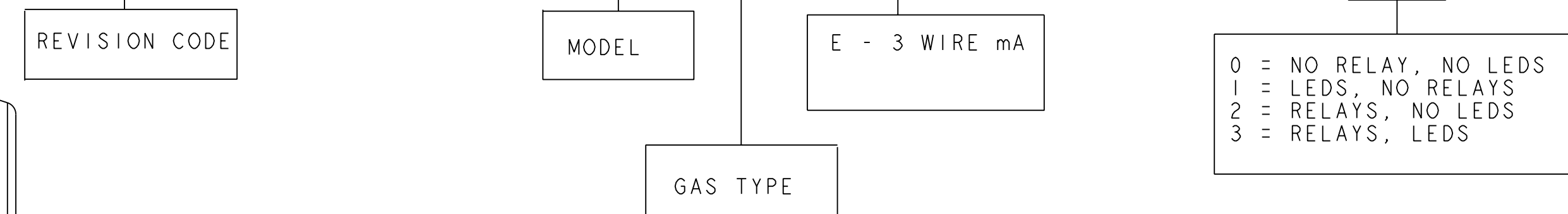


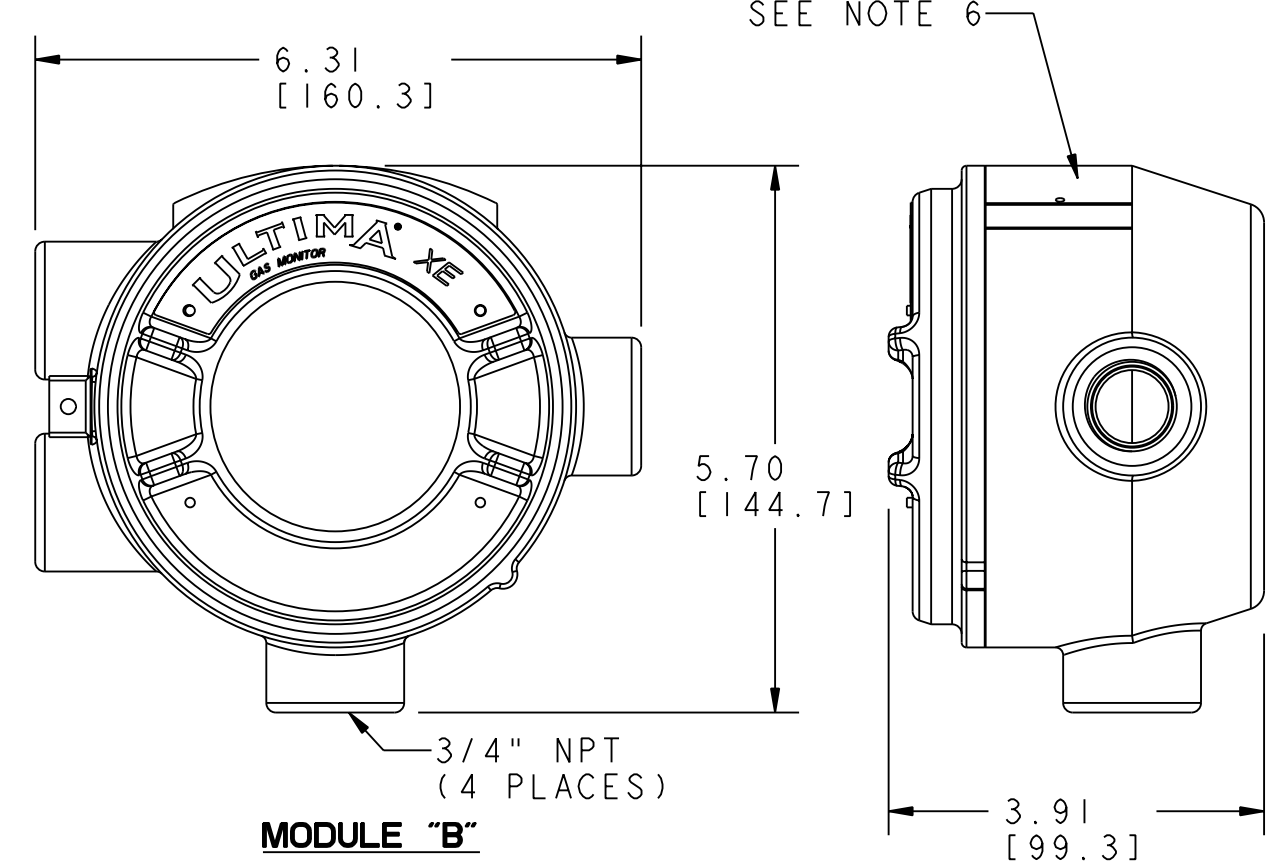
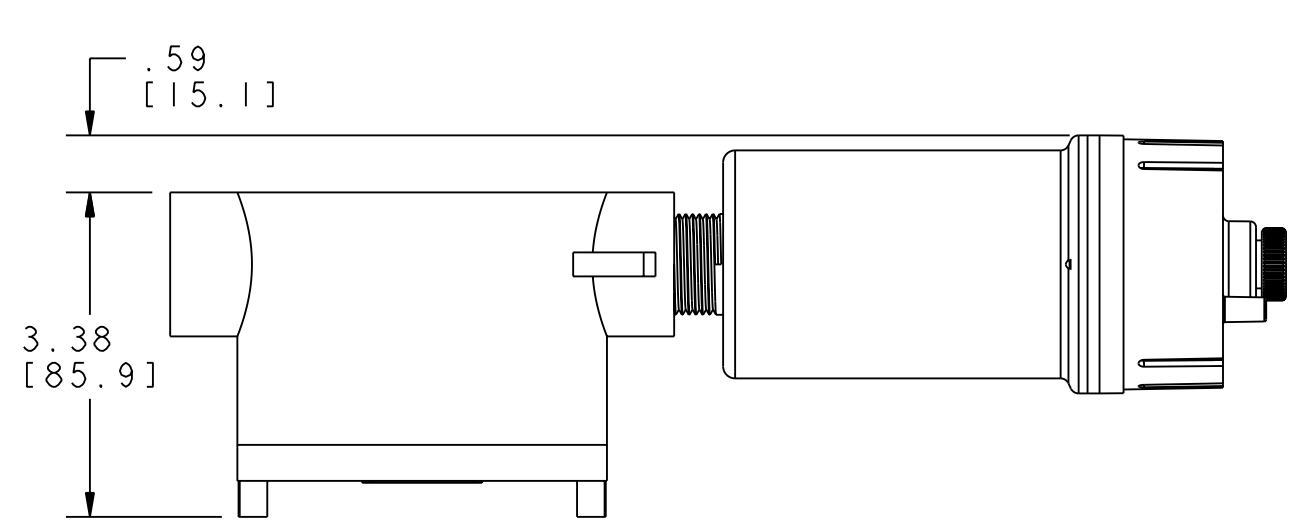
# A - ULTIMAX - E - [ ] - E - I - D - O - [ ]



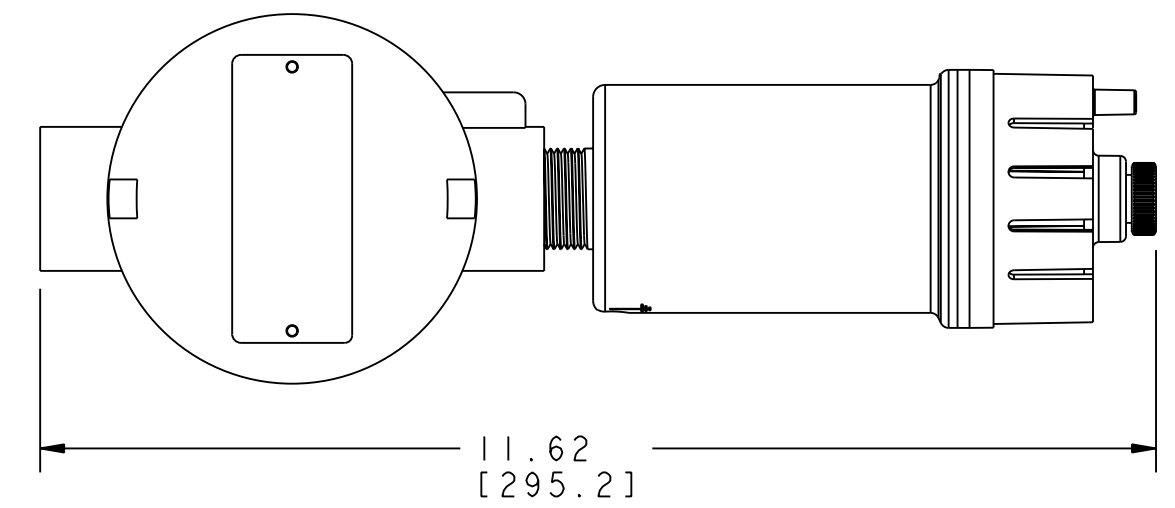
0 = NO RELAY, NO LEDS  
1 = LEDS, NO RELAYS  
2 = RELAYS, NO LEDS  
3 = RELAYS, LEDS

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	

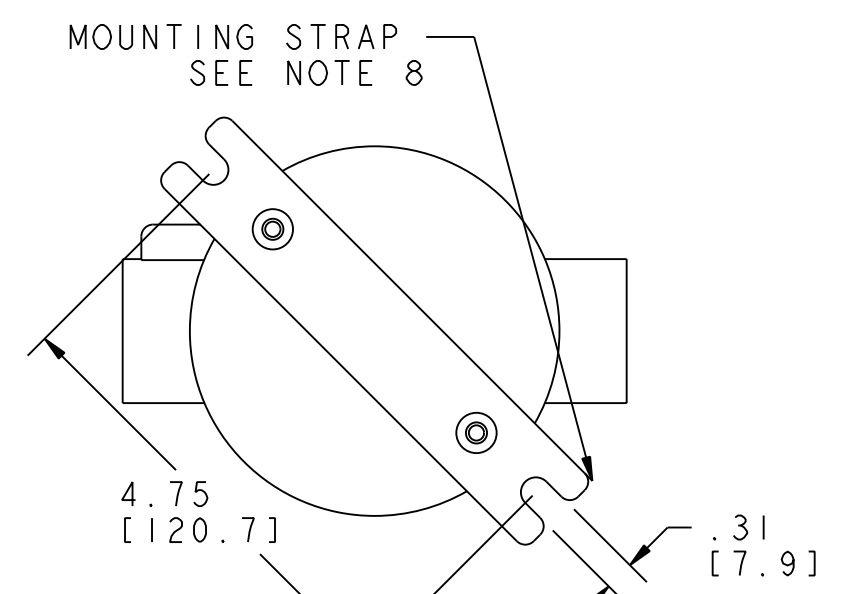
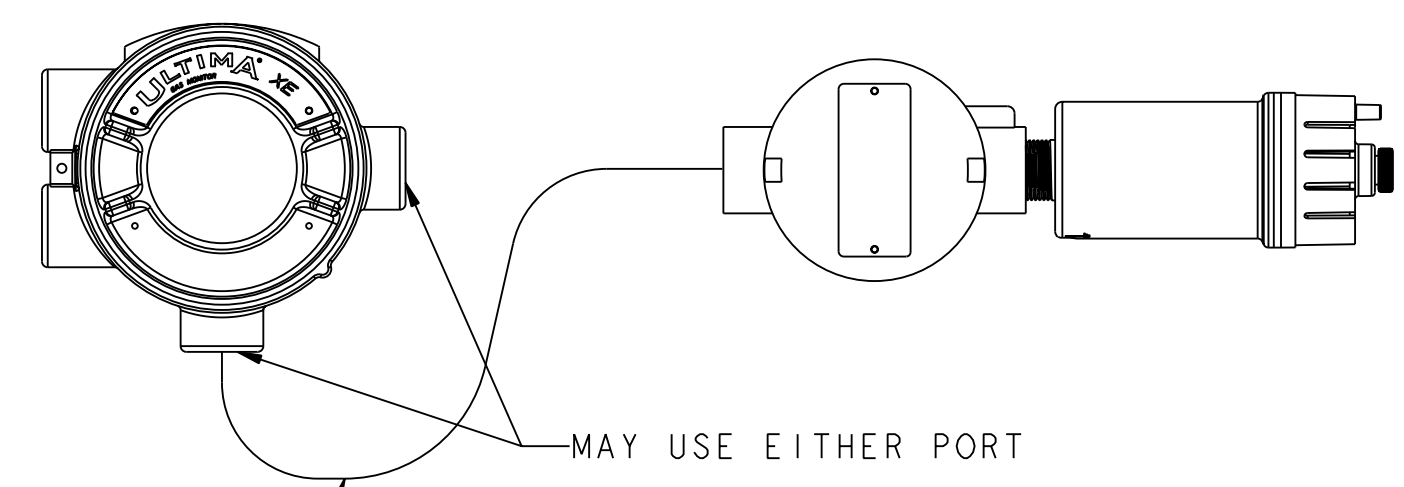
VOLTAGE SUPPLIED (AS MEASURED AT J8)	CONFIGURATION	
	NO RELAYS	RELAYS INSTALLED
24 VOLTS	200 mA	250 mA
12 VOLTS	350 mA	500 mA
7 VOLTS	600 mA	750 mA



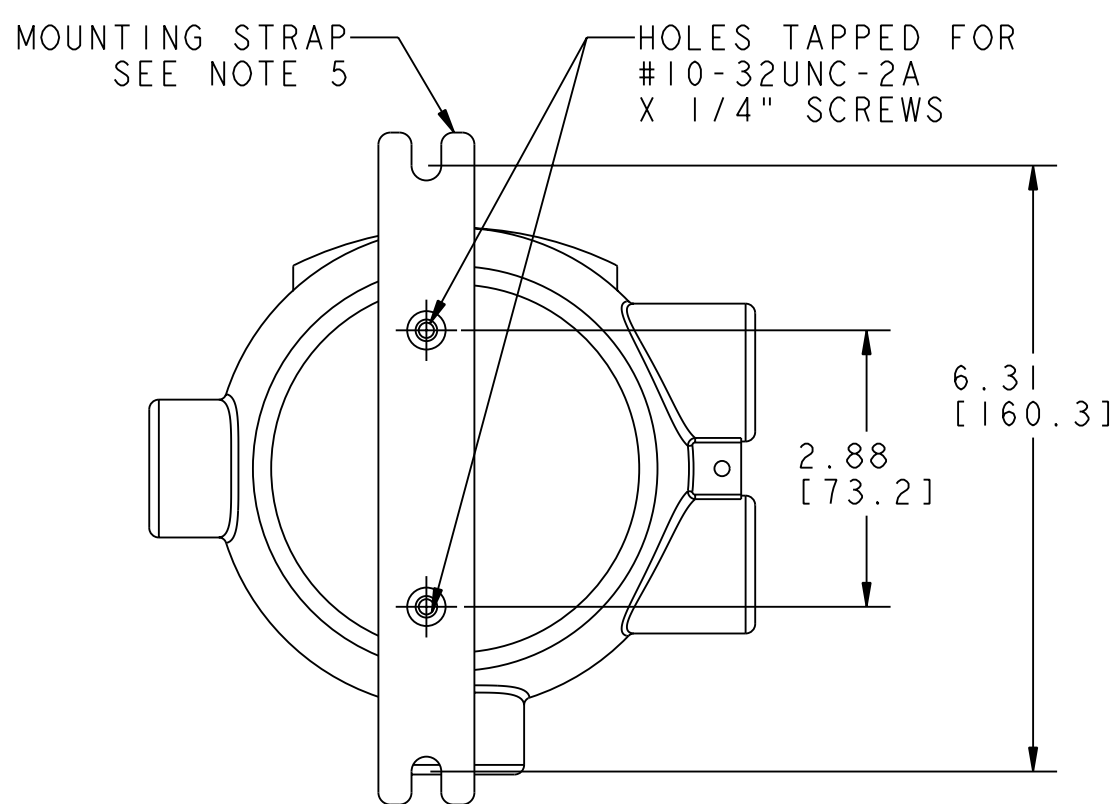
**MODULE "B"**  
EXPLOSION-PROOF HOUSING  
MATERIAL: 316 STAINLESS STEEL



**MODULE "A"**  
EXPLOSION - PROOF HOUSING  
MATERIAL: CAST ALUMINUM



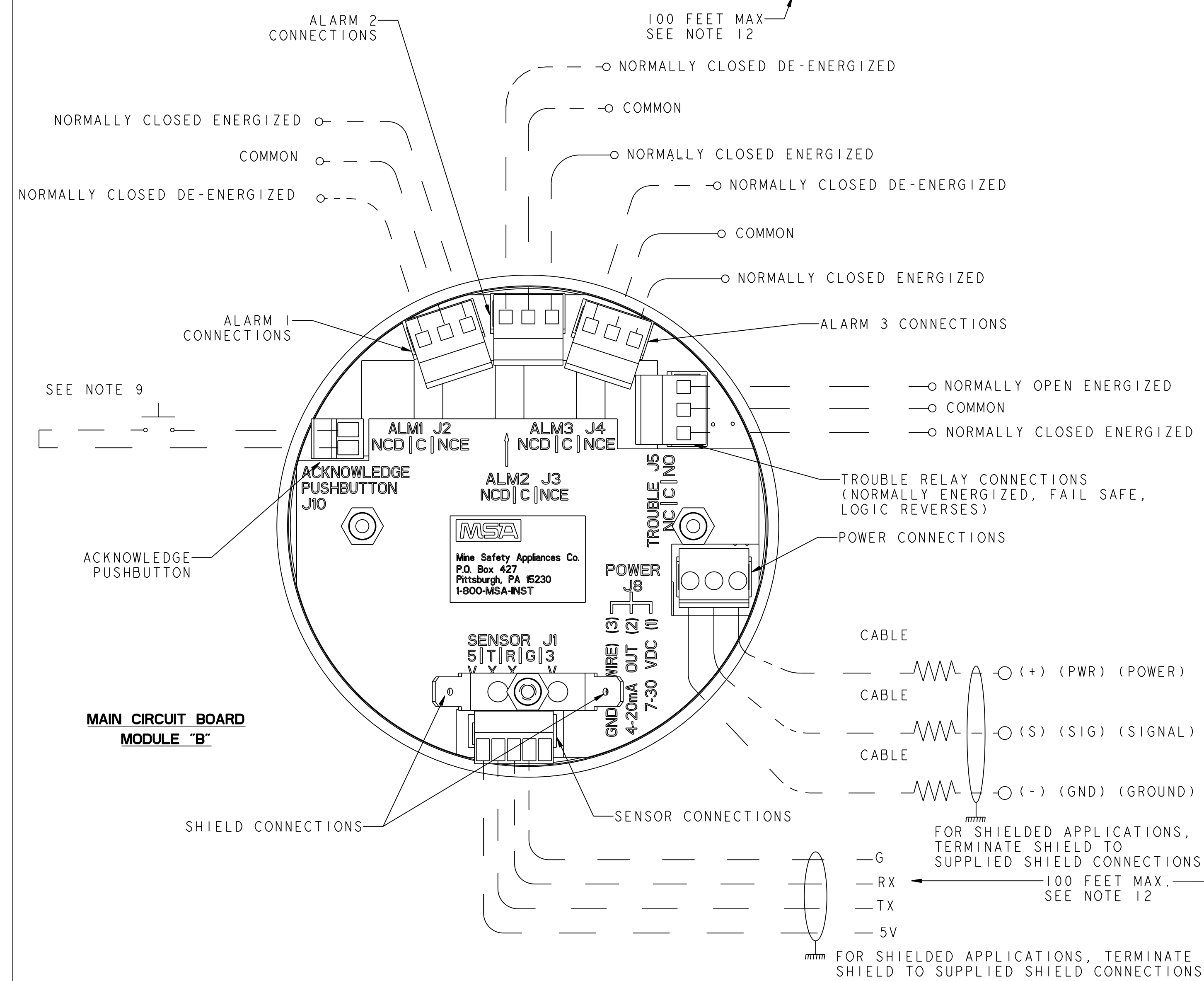
**MODULE "A"**  
MOUNTING STRAP METHOD (OPTIONAL)



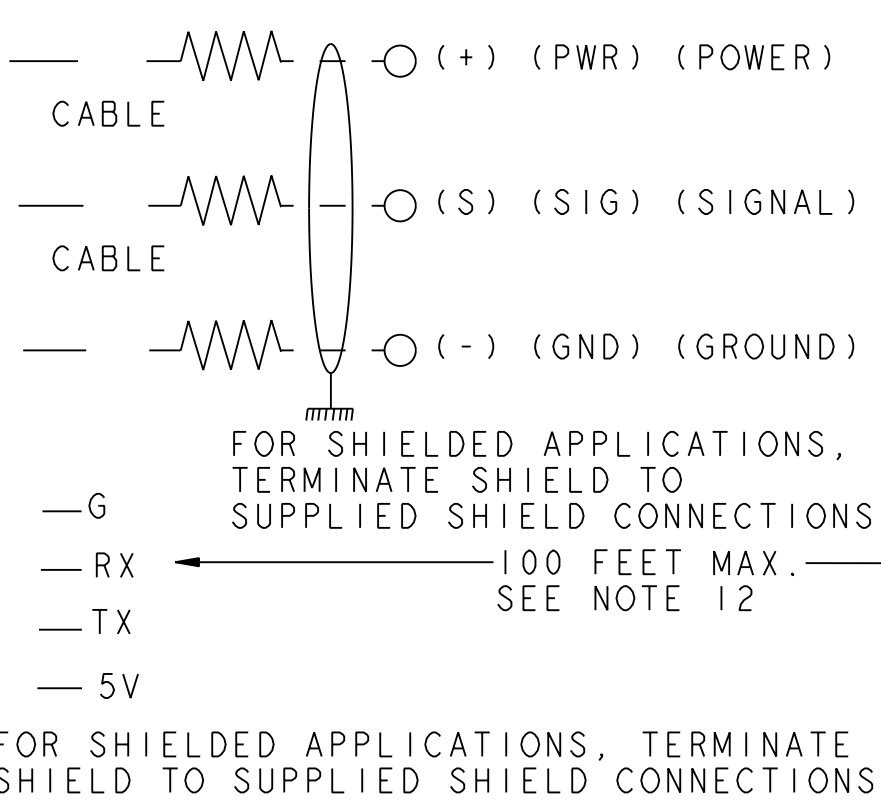
**MODULE "B"**  
MOUNTING STRAP METHOD (OPTIONAL)

CUSTOMER \_\_\_\_\_  
P.O.# \_\_\_\_\_  
MSA # \_\_\_\_\_  
LOCATION \_\_\_\_\_  
TAG # \_\_\_\_\_  
TOTAL NO. OF UNITS \_\_\_\_\_

- NOTES:
- DIMENSIONS SHOWN IN INCHES (MILLIMETERS).
  - MOUNT SENSOR WITH ORIENTATION AS SHOWN.
  - INDICATES FIELD CONNECTIONS BY OTHERS.
  - CALIBRATION TUBING IS SUPPLIED IN CALIBRATION KIT.
  - P/N 697281 IS OPTIONAL MOUNTING STRAP.
  - CHECK THIS TAG FOR HAZARDOUS RATING.
  - MODULE "A" WEIGHT IS 5 LBS (2.3 KG), MODULE "B" WEIGHT IS 7.3 LBS (3.3 KG).
  - P/N 655700 IS AN OPTIONAL MOUNTING KIT.
  - CUSTOMER INSTALLED NORMALLY OPEN PUSH BUTTON SWITCH, MAX. 16 AWG CABLE.
  - CHECK SENSOR LABEL FOR GAS TYPE, RANGE, AND ATO ORDERING NUMBER.
  - RELAY AND POWER CABLES NOT TO EXCEED 12 AWG.
  - REMOTE CABLES MAX. 50 FT. OF 16 AWG CABLE OR 100 FT. OF 12 AWG CABLE. 12 AWG CABLE MUST HAVE ADAPTER TO 16 AWG TO CONNECT TO J1 ON MAIN CIRCUIT BOARD.



**MAIN CIRCUIT BOARD**  
**MODULE "B"**



**REMOTE CONNECTOR**  
**MODULE "A"**

AUTHORIZED COUNTRY	<b>MSA</b>	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 PH-0718	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		DATE 10-23-02	FRACTIONAL ± 1/64	
CHECKED BY S. TURNER		DATE 11-13-02	2 PL DEC. ± 0.01	
PROJ. ENGR. M. SHOMALI		DATE 11-13-02	3 PL DEC. ± 0.005	
QUALITY ASSURANCE J. DANNHARDT		DATE 11-13-02	ANGULAR ± 1 deg.	
MANUFACTURING R. SMIDL		DATE 11-13-02	SEE MSA STANDARD SHOP PRACTICES FOR DRILLED HOLE TOLERANCES	
CADD REF: 10000015284		DOCUMENT NO. <b>D SK 10000015284</b>	SCALE: 0.500	SHEET 1 OF 1

## INSTALLATION OUTLINE, REMOTE, ULTIMA XE WITH Xlr SENSOR