

REVISIONS		
REV	OR/CHANGE	DATE
A	RELEASE	8/2/11
B	ADDED 2ND PG/PROBE DRIVER INFO	6/7/12
C	ADDED MX2034, 4 PIN TO DWG	11/4/19
D	REMOVE MX2032; UPDATE SPECIAL CONDITIONS, ec	4/25/22

NOTES:

1. THE MAXIMUM OUTPUT VOLTAGE FROM THE SAFE AREA APPARATUS MUST NOT EXCEED THE RATINGS OF THE TRANSMITTER:  $V_{max}=30VDC$ ,  $I_{max}=50mA$
2. CIRCUIT IN HAZARDOUS AREA MUST BE CAPABLE OF WITHSTANDING A VOLTAGE TEST OF 500 VRMS TO EARTH OR TO THE FRAME OF THE APPARATUS. USE 8093 INSULATOR ON CONNECTOR BETWEEN PROBE AND EXTENSION CABLE.
3. THE INSTALLATION MUST COMPLY WITH THE APPROPRIATE NATIONAL INSTALLATION REQUIREMENTS.
4. THE TRANSMITTER MUST BE INSTALLED IN A SUITABLE ENCLOSURE ACCEPTABLE TO THE LOCAL INSPECTION AUTHORITY HAVING JURISDICTION.

⑤ THE TRANSMITTER PROBE ENTITY PARAMETERS ARE:

- $V_o = 5.36V$
- $I_o = 50mA$
- $C_a = 997\mu F$
- $L_a = 31.3mH$
- $P_o = 0.268W$

THE SERIES 10000 PROBE TOGETHER WITH ITS 10000 EXTENSION CABLE AND 8093 CONNECTOR INSULATOR MAY BE REPLACED BY ANY CSA CERTIFIED INTRINSICALLY SAFE OR NON-INCENDIVE/INCREASED SAFETY PROBE THAT SATISFIES THE FOLLOWING CONDITIONS:

- $V_{max} \geq V_{oc}$
- $I_{max} \geq I_{sc}$
- $C_i + C_{cable} \leq C_a$
- $L_i + L_{cable} \leq L_a$
- $P_i \geq P_o$

THE TRANSMITTER PROVIDES A NON-INCENDIVE/INCREASED SAFETY CIRCUIT TO THE PROBE.

TRANSMITTER ENTITY PARAMETERS ARE AS FOLLOWS:

- $V_{max} = 30V$
- $I_{max} = 50mA$
- $C_i = 18nF$
- $L_i = 0\mu H$
- $P_i = 0.375W$

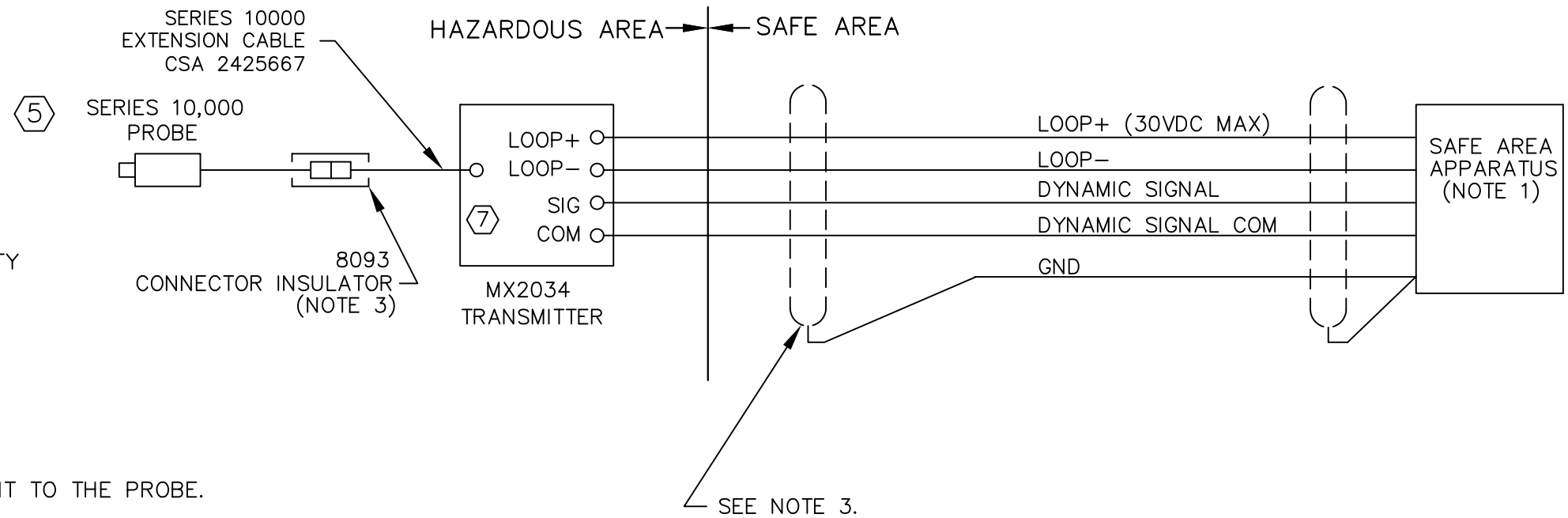
CLASS I, DIVISION 2, GROUPS A, B, C, AND D, T4,  $T_{amb}: -40^\circ C$  to  $85^\circ C$ . THIS EQUIPMENT IS SUITABLE FOR USE IN CLASS I, DIVISION 2, GROUPS A, B, C AND D OR NON HAZARDOUS LOCATIONS ONLY.

WARNING – EXPLOSION HAZARD – SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2.

AVERTISSEMENT – RISQUE D'EXPLOSION – LA SUBSTITUTION D E COMPOSANTSP EUTR ENDRE CE MATERIEL INACCEPTABLE POUR LES EMBLACEMENTS DE CLASSE I, DIVISION 2.

⚠ REFER TO MANUAL 100545 FOR MAINTENANCE AND OPERATING INSTRUCTIONS.

DIVISION 2 INSTALLATION  
NORTH AMERICAN STANDARDS



MATERIAL:	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. ALL CORNERS BROKEN TO .010 MIN RADIUS AND TOLERANCES ARE:	APPROVALS	DATE	 HOUSTON, TEXAS U.S.A.
FINISH:	FRACTIONS: DECIMALS:	DRAWN BY:	08-02-11	
THIS DOCUMENT AND ALL INFORMATION HEREON IS THE PROPERTY OF METRIX INSTRUMENT CO. APPROVAL MUST BE OBTAINED BEFORE IT IS REPRODUCED OR INFORMATION HEREON IS ISSUED TO A THIRD PARTY. THIS DOCUMENT MUST BE RETURNED UPON REQUEST.	$\pm 1/64$ .XX $\pm 0.01$ ANGLES: .XXX $\pm 0.05$ $\pm 1^\circ$ SURFACE FINISH 64	CHECKED BY:		
		APPROVED BY:		
		NEXT ASSY	USED ON	DIV. 2 INSTALLATION (INTERTEK) MX2033/MX2034
		APPLICATION	DO NOT SCALE DRAWING	PART NO.: 100512 REV. D
				SCALE: 1:1 DOCUMENT NO.: 100512-DWG SHEET: 1 of 2

NOTES:

1. THE MAXIMUM OUTPUT VOLTAGE FROM THE SAFE AREA APPARATUS MUST NOT EXCEED THE RATED VOLTAGE OF THE TRANSMITTER: 30VDC.
2. CIRCUIT IN HAZARDOUS AREA MUST BE CAPABLE OF WITHSTANDING A VOLTAGE TEST OF 500 VRMS TO EARTH OR TO THE FRAME OF THE APPARATUS. USE 8093 INSULATOR ON CONNECTOR BETWEEN PROBE AND EXTENSION CABLE.
3. THE INSTALLATION MUST COMPLY WITH THE APPROPRIATE NATIONAL INSTALLATION REQUIREMENTS.
4. THE PROBE DRIVER MUST BE INSTALLED IN A SUITABLE ENCLOSURE ACCEPTABLE TO THE LOCAL INSPECTION AUTHORITY HAVING JURISDICTION.

⑤ THE PROBE DRIVER PROBE ENTITY PARAMETERS ARE:

$V_{oc} = 5.36V$   
 $I_{sc} = 93mA$   
 $C_a = 62\mu F$   
 $L_a = 8.5mH$   
 $P_o = 0.5W$

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$V_{max} \geq V_{oc}$   
 $I_{max} \geq I_{sc}$   
 $C_i + C_{cable} \leq C_a$   
 $L_i + L_{cable} \leq L_a$   
 $P_i \geq P_o$

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