HAZARDOUS AREA

APPROVED FOR CLASS I, II AND III, DIVISION 1,
GROUPS A, B, C, D, E, F AND G Hazardous Locations.

V_{\text{max}} = 29.9 \text{ V},
I_{\text{max}} = 0.450 \text{ A},
C_{\text{i}} = 0,
L_{\text{i}} = 0.

NON-HAZARDOUS AREA

The Entity Concept allows interconnection of intrinsically safe apparatus with associated apparatus when the following is true:

- \( V_{\text{max}} \geq V_{\text{oc}}, V_{\text{t}} \) or \( U_{\text{oc}}; \)
- \( I_{\text{max}} \leq I_{\text{sc}}, I_{\text{t}} \) or \( I_{\text{oc}} \) (Combined \( I_{\text{sc}}, I_{\text{t}} \) or \( I_{\text{oc}} \) of ALL BARRIERS \( \leq I_{\text{max}}; \))
- \( C_{\text{a}} \geq C_{\text{i}} + C_{\text{able}}; \)
- \( L_{\text{a}} \geq L_{\text{i}} + L_{\text{able}}. \)

NOTES:
1. MAX. CABLE LENGTH = 100 FT.
2. \( n = \) MAX. NUMBER OF LOAD CELLS THAT CAN BE CONNECTED IN PARALLEL WITHOUT EXCEEDING MAX. TOTAL CAPACITANCE AND MAX. TOTAL INDUCTANCE.
3. INSTALLATION SHOULD BE IN ACCORDANCE WITH ANSI/ISA RP12.06.01 "INSTALLATION OF INTRINSICALLY SAFE SYSTEM FOR HAZARDOUS (CLASSIFIED) LOCATIONS AND THE NATIONAL ELECTRICAL CODE ( ANSI/NFPA 70 )
4. APPARATUS CONNECTED TO THE SYSTEM SHALL NOT USE OR GENERATE VOLTAGE GREATER THAN 250 V.
5. INSTALL INTRINSICALLY SAFE BARRIERS IN ACCORDANCE WITH BARRIER INSTRUCTIONS.
6. SUBSTITUTION OF COMPONENTS MAY VOID FACTORY MUTUAL APPROVAL.
7. THE ASSOCIATED APPARATUS MUST BE FM APPROVED.
8. NO REVISION TO DRAWING WITHOUT FM APPROVAL.