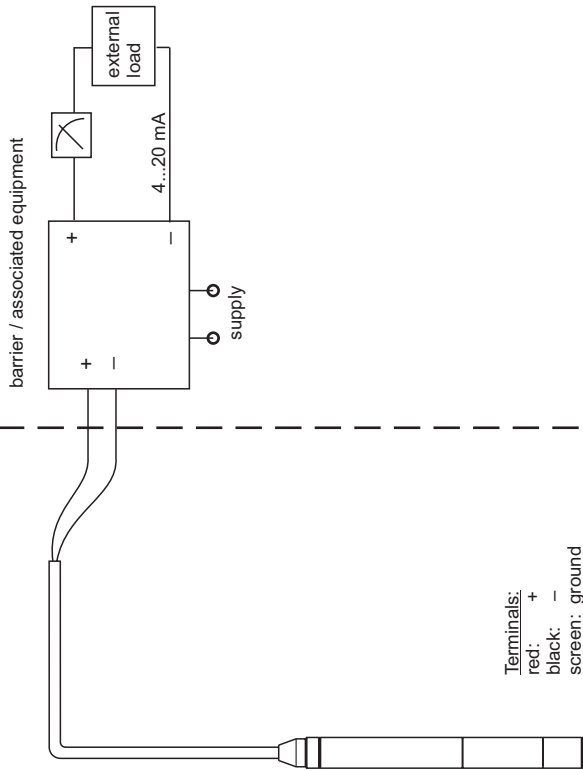


Hazardous location

Class I, Div. 1, Groups A, B, C, D
 Class I, Zone 0, Ex ia IIC T6

Non hazardous location



Terminals:
 red: +
 black: -
 screen: ground

Table: Entity parameters

Sensor:
 $U_i / V_{max} = 30 \text{ V DC}$
 $i_i / I_{max} = 133 \text{ mA}$
 $P_i / P_{max} = 1 \text{ W}$
 $C_{i,sensor} \leq 10 \text{ nF}$
 $L_{i,sensor} = 0$

Cable:
 $C_{i,cable} = 180 \text{ pF/m}$
 $L_{i,cable} = 1 \mu\text{H/m}$

Areas of application

The compact instruments are suitable for use in areas subject to explosion caused by gases, vapours or mists.

Ambient temperature range:
 $-10 \text{ }^\circ\text{C} \dots +70 \text{ }^\circ\text{C}$

Intrinsically safe (entity), Class I, Div. 1, Groups A, B, C, D
 Hazardous Location Installations

1. Control room equipment may not use or generate over 250 V.
2. Install per the Canadian Electrical Code.
3. Use CSA certified intrinsic safety barrier or other associated equipment that satisfy the following conditions: $V_{oc} \leq V_{max}$, $I_{sc} \leq I_{max}$, $C_a \geq C_i + C_c$, $L_a \geq L_i + L_c$. Barrier must be incapable of delivering more than 1 Watt to a matched load. Transmitter entity parameters are as follows: $U_i / V_{max} = 30 \text{ V DC}$
 $i_i / I_{max} = 133 \text{ mA}$
 $C_i = C_{i,sensor} + C_{i,cable}$
 $L_i = L_{i,sensor} + L_{i,cable}$
 $P_{max} = 1 \text{ W}$

C_i and L_i shall be calculated depending of cable length (see table).

Length of sensor cable	C_i (10 nF + 180 pF/m)	L_i (1 $\mu\text{H/m}$)
5 m	10.9 nF	5 μH
10 m	11.8 nF	10 μH
20 m	13.6 nF	20 μH
30 m	15.4 nF	30 μH
50 m	19.0 nF	50 μH
100 m	28.0 nF	100 μH
200 m	46.0 nF	200 μH
300 m	64.0 nF	300 μH

4. For system installation:

Use: CSA certified safety barriers as follows:

- (a) $28 \text{ V} / 300 \Omega + \text{ground}$ or
- (b) $28 \text{ V} / 300 \Omega + 28 \text{ V} / \text{diode}$ or
- (c) $28 \text{ V} / 300 \Omega + 10 \text{ V} / 50 \Omega$

5. Warning: Substitution of components may impair intrinsic safety.

Avertissement: La substitution de composants peut compromettre la sécurité intrinsèque.

6. Intrinsic safety barrier manufacturer's installation drawing must be followed, when installing this equipment: The configuration of the intrinsic safety barrier(s) must be CSA approved.

