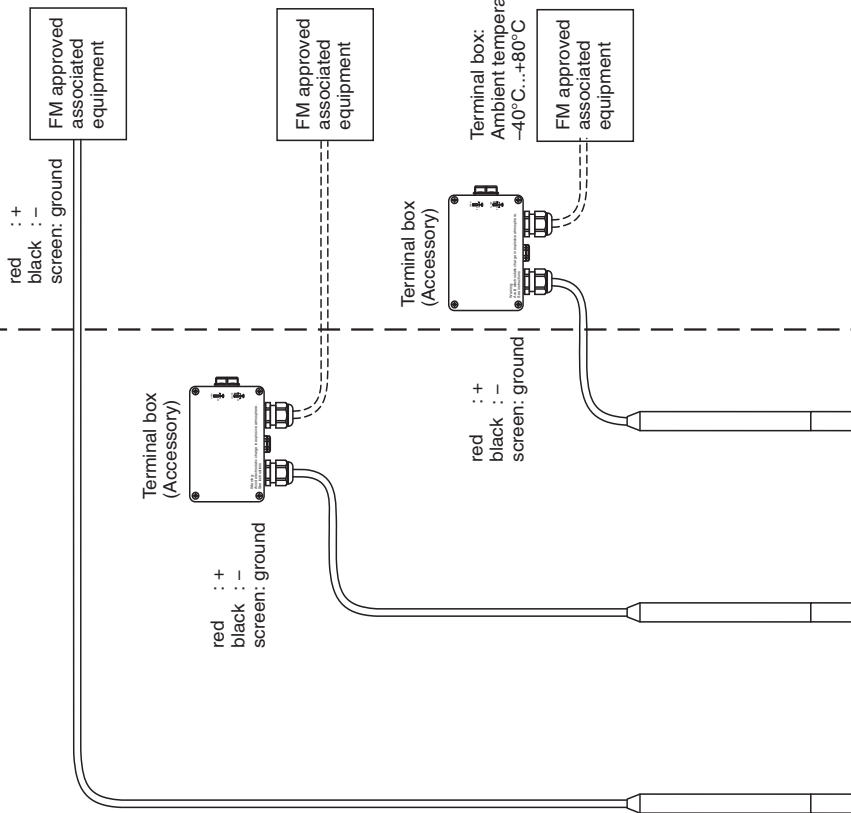


**Non hazardous location**

**Hazardous location**

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



Intrinsically safe (entity), Class I, Div. 1, Groups A, B, C, D or Zone 0, IIC, Hazardous Location Installations

1. FM approved apparatus must be installed in accordance with manufacturer instructions.
2. Control room equipment must not use or generate over 250 V.
3. The installation must be in accordance with the National Electric Code ANSI / NFPA 70 and ANSI / ISA-PP 12.06.01.
4. Sensor entity parameters:  $V_{max} = 30$  V DC,  $I_{max} = 133$  mA,  $P_{max} = 1$  W  $C_i$  and  $L_i$  per following table:

Length of sensor cable	$C_i$ (10.3 nF + 180 pF/m)	$L_i$ (1 $\mu$ H/m)
5 m	11.3 nF	5 $\mu$ H
10 m	12.2 nF	10 $\mu$ H
20 m	14.0 nF	20 $\mu$ H
30 m	15.8 nF	30 $\mu$ H
50 m	19.4 nF	50 $\mu$ H
100 m	28.4 nF	100 $\mu$ H
200 m	46.4 nF	200 $\mu$ H
300 m	64.4 nF	300 $\mu$ H

5. FM approved associated equipment must meet following conditions:  
 $V_{oc}$  or  $V_t \leq V_{max}$ ;  $I_{sc}$  or  $I_o \leq I_{max}$ ;  $P_o \leq P_{max}$ ;  
 $C_a \geq C_i + C_{cable}$ ;  $L_a \geq L_i + L_{cable}$ .  
Install associated equipment in accordance with the manufacturer instructions.  
Use supply wires suitable for 5°C above surrounding ambient.
6. Avoid friction and impact sparks. Anchor sensor if necessary, secure against swinging.
7. WARNING: Avoid electrostatic charging of plastic surfaces. Do not rub. Do not use in media or environments which may generate electrostatic charges on plastic surfaces.
8. WARNING: Substitution of components may impair intrinsic safety.
9. Do not remove or move terminal blocks, fastening elements or insulation plates of the terminal box. Do not build in additional components.
10. Connect cable screen to earth ground of the installation.

**Sensor**

Temperature class	Ambient temperature range
T4	$-10^\circ\text{C} \leq T_a \leq +70^\circ\text{C}$
T5	$-10^\circ\text{C} \leq T_a \leq +55^\circ\text{C}$
T6	$-10^\circ\text{C} \leq T_a \leq +40^\circ\text{C}$

**Terminal box**

Temperature class	Ambient temperature range
T6	$-40^\circ\text{C} \leq T_a \leq +80^\circ\text{C}$

**Terminal box (Accessory):**

