

Intrinsically safe Ex ia for Cl. I, Div. 1, Groups A, B, C, D, Cl. II, Div. 1, Groups E, F, G, Cl. III; Ex ia IIC T6

Hazardous Locations Installations

Division 1 Installation:

- Control room equipment may not use or generate over 250 V.
- Install per the Canadian Electrical Code or National Electrical Code (ANSI/NFPA70) and ISA RP 12.06.01.

- For entry installations: Use CSA certified intrinsic safety barrier or other associated equipment that satisfy the following conditions: $V_{oc} \leq V_{max}$, $I_{sc} \leq I_{max}$, $C_a \geq C_i + C_{cable}$
 $L_a \geq L_i + L_{cable}$.

Transmitter entity parameters are as follows:

- U_i / V_{max} = 30 VDC
 - I_i / I_{max} = 300 mA
 - P_i / P_{max} = 1 W
 - C_i ≤ 10 nF
 - L_i = 0
- for T-code see table

4. For System Installation:

Use: CSA certified safety barriers as follows:

- (a) 28 V / 300 Ω + ground or
- (b) 28 V / 300 Ω + 28 V / diode or
- (c) 28 V / 300 Ω + 10 V / 50 Ω

- Warning: Substitution of components may impair intrinsic safety.
 Avertissement : La substitution de composants peut compromettre la sécurité intrinsèque.
- 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.
- Use supply wires suitable for 5 °C above surrounding.
 Utiliser des fils d'alimentation qui conviennent à une température de 5 °C au-dessus de la température ambiante.

Suitable for Cl. I, Div. 2, Groups A, B, C, D, Cl. II, Div. 1, Groups E, F, G, Cl. III (only for NPT conduit entries)
 Hazardous Location Installation (not for FMB52, FMB53 and not for separated housing)

- Install per Canadian Electrical Code or National Electrical Code (ANSI/NFPA70) and ISA RP 12.06.01.

Intrinsic safety barrier not required
 max. supply voltage 45 VDC
 max. ambient temperature: 70 °C

- Warning: Explosion Hazard - Do not disconnect equipment unless power has been switched off or the area is known to be non hazardous.

Avertissement : Risque d'explosion - avant de déconnecter l'équipement, couper le courant ou s'assurer que l'emplacement est désigné non dangereux.

Warning: Open circuit before removing cover.

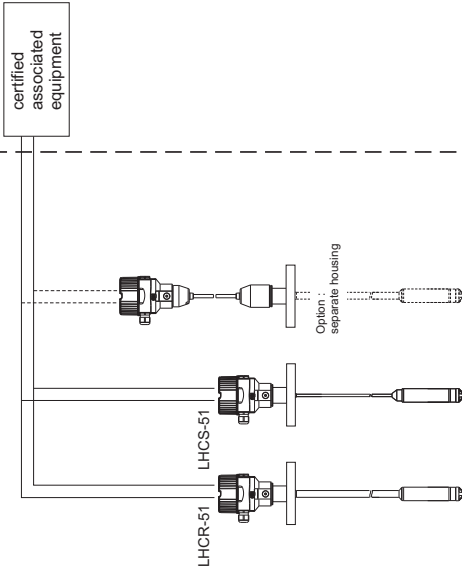
Avertissement : Ouvrir le circuit avant d'enlever le couvercle.

Warning: Substitution of Components may impair suitability for Cl. I, Div. 2.
 Avertissement : La substitution de composants peut rendre ce matériel inacceptable pour les emplacements de Cl. I, Div. 2.

Non hazardous location

Class I, Div. 1, 2, Groups A, B, C, D
 Zone 0
 AEx ia IIC T6
 Class II, Div. 1, 2, Groups E, F, G
 Class III

Any approved barrier / associated equipment



Entity parameter:

- V_{max} = 30 VDC
- I_{max} = 300 mA
- P_{max} = 1 W
- C_i ≤ 10 nF
- L_i = 0

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

Table: Permissible ambient temperature and temperature code:

Temperature code	Permissible ambient temperature, electronic compartment
T6	-40...40 °C
T4	-40...70 °C

option for T_a min: -50 °C

Control Drawing no. 116-0388

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 This document contains safety-relevant information. It must not be altered without the authorization of the norm expert (NE Ex)!

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Control Drawing - CSA
 LHCR-51, LHCS-51 4...20mA HART

PEPPERL+FUCHS
 P+F Global

116-0388

LHCR-51, LHCS-51 4 ... 20 mA HART
 CSA control drawing



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