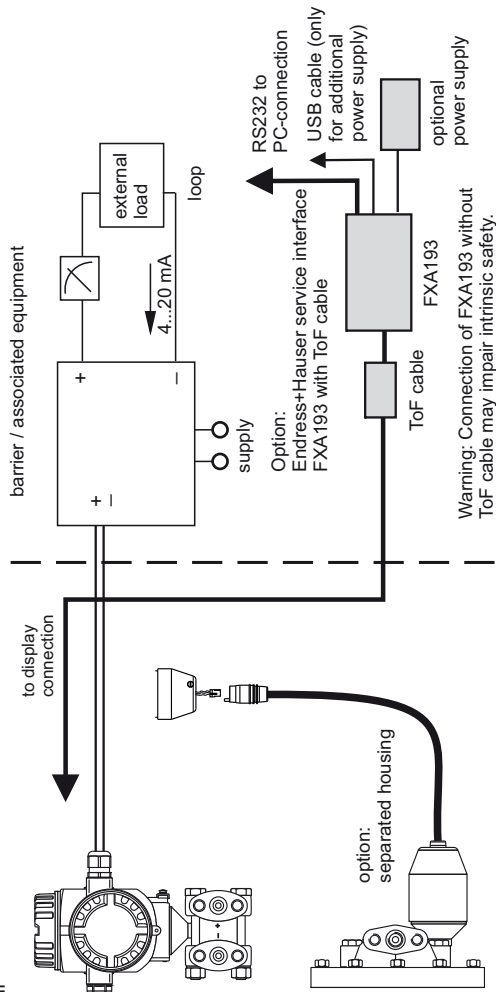


Hazardous location

Class I, Div.1, Groups ABCD
Zone 0
Class II, Div.1, Groups EFG
Class III



Entity parameter:

UI/V_{max} = 30 VDC
I_{I/Max} = 300 mA
P_{I/Pmax} = 1 W
C_I ≤ 11.8 nF
L_I ≤ 225 µH or L_I = 0

Warning: Connection of FXA193 without ToF cable may impair intrinsic safety.

Note: FXA193 with ToF cable provides intrinsically safe circuits for connection to the display connector of Deltabar S transmitters, when they are installed in Class I, Div.1, Group A,B,C,D hazardous locations.

Table: Permissible ambient temperature and temperature code:

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

option for T_{a,min}: -50°C

The devices are CSA Certified as Single Seal devices per ANSI/ISA 12.27.01 as tabulated below; therefore installation of external secondary seals is not required.

Single Seal	Model	Limited to:	
		MWP*	Process Temperature**
	PMD75, FMD77 and FMD78	420 bar (6091 psi)	-40°C...+100°C

* Limitations of the Maximum Working Pressure (MWP) are marked on the nameplate and must be considered!

** Limitations of the process temperature range depending on the used version are specified in the applicable technical information of the manufacturer and must be considered! FMD77, FMD78 allows higher process temperatures depending on the used diaphragm seal. This is allowable provided the above specified process temperatures are guaranteed at the sensor close to the enclosure (location of primary seal) for these types.

Intrinsically safe Ex ia for Cl.I, Div.1, GP, ABCD, Cl.II, Div.1, GP, EFG, 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 entity 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:

UI/V_{max} = 30 VDC; I_{I/Max} = 300 mA; P_{I/Pmax} = 1 W; C_I ≤ 11.8 nF;

L_I ≤ 225 µH ('electronic' option code = A, B, C) or

L_I = 0 µH ('electronic' option code = D, E, F);

see table for T-codes.

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.

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.

7. 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.

8. Remark: Versions with optional terminalblock with integrated overvoltage protection have an isolation voltage greater than 420 VDC between terminal connections and potentially grounded metal parts.

9. Avoid electrostatic charge of plastic surfaces, plastic process connections or coatings.

Suitable for Cl.I, Div.2, GP, ABCD, Cl.II, Div.1, GP, EFG, Cl. III

Hazardous Location Installation (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.

- 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.

XA00594P-I/00/EN/16.17
CCS/FM10
CSA/I 15.08.16



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CSA Control Drawing
960006697-I

Deltabar S PMD75, FMD77, FMD78
HART

Endress+Hauser



People for Process Automation