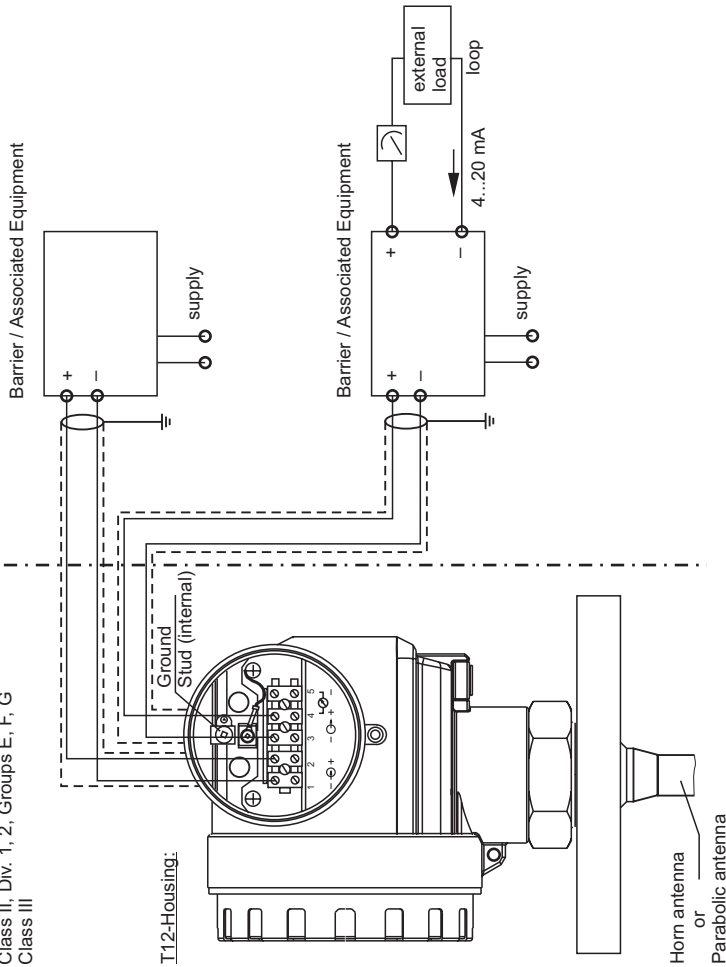


HAZARDOUS LOCATION

Class I, Div. 1, 2, Groups A, B, C, D
 Class I, Zone 0, Ex ia IIC T₄
 Class II, Div. 1, 2, Groups E, F, G
 Class III



NON HAZARDOUS LOCATION

Barrier / Associated Equipment

Barrier / Associated Equipment

Area of application

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

Permissible ambient temperature:

Electronics: Intrinsically safe, T12-enclosure: -40...+ 80 °C
 Antennas: Horn or Parabolic: -40...+200 °C

Permissible process / ambient temperature and temperature code:

Temperature code of Microplit S FMR540	Permissible medium temperature (flange)	Permissible ambient temperature of electronics compartment as a function of medium temperature (horn or parabolic antennas)
T6	+ 80 °C + 60 °C	+55 °C +60 °C
T5	+ 95 °C + 75 °C	+70 °C +75 °C
T4	+130 °C + 80 °C	+75 °C +80 °C
T3	+195 °C +140 °C	+70 °C +75 °C
T2, T1 functional	+200 °C	+70 °C

Notes:

Intrinsically safe Class I, Div. 1, Groups A, B, C, D or Ex ia IIC Hazardous Location Installation

- Control room equipment may not use or generate over 250 V_{rms}.
- Installation should be in accordance with the Canadian Electrical Code (CEC), the National Electrical Code NFPA 70 (NEC) and ANSI/ISA RP12.06.01.
- Warning: Substitution of components may impair intrinsic safety.
- Avertissement : La substitution de composants peut compromettre la sécurité intrinsèque.
- Ex ia is defined as intrinsically safe / sécurité intrinsèque.
- For entity installation use CSA certified safety barrier or other associated equipment that satisfy the following conditions:

with $U_o/V_{oc} \leq U/V_{max}$, $I_o/I_{sc} \leq I/I_{max}$, $C_o/C_s \geq C_s + C_{cable}$, $L_o/L_s \geq L_s + L_{cable}$

Barrier must be incapable of delivering more than 1 Watt to a matched load.

Transmitter entity parameters are as follows:

Intrinsically safe supply circuit:

U/V _{max} [V]	I/I _{max} [mA]	P _i /P _{max} [W]	C _i [nF]	L _i [µH]
30	300	1.0	≤ 18.5	13

Intrinsically safe signal circuit:

U/V _{max} [V]	I/I _{max} [mA]	P _i /P _{max} [W]	C _i [nF]	L _i [µH]
30	300	1.0	≤ 20.7	0

- For temperature code of the Microplit S FMR540 see table.
- Install barrier / associated equipment in accordance with the manufacturer's instructions.
- Use supply wires suitable for 5 °C above surrounding ambient.
- Utiliser des fils d'alimentation qui conviennent à une température de 5 °C au-dessus de la température ambiante.
- In case of use of the parabolic antenna avoid electrostatic charge at the antenna (e.g. do not rub with dry cloth; do not install within the filling curtain).
- Dual Seal Device acc. ISA 12.27.01 – Gas tight conduit seal not required.

Class I, Div. 2, Groups A, B, C, D or Ex nA IIC and DIP for Class II, Div. 1, Groups E, F, G and Class III Hazardous Location Installation

- Installation should be in accordance with the CEC resp. NEC using threaded metal conduits.
- Intrinsic safe barrier not required. Class 2 power supply shall be used.
- Max. supply voltage 30V DC. For temperature code of the Microplit S FMR540 see table.
- 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: Explosion Hazard - Substitution of components may impair suitability for Class I, Div. 2.
- Avertissement : Risque d'explosion – La substitution de composants peut rendre ce matériel inacceptable pour les emplacements de Classe I, Division 2.

For Class II and III, Div. 1

Hazardous Location Installation

- A dust tight seal must be used at the conduit entry when the transmitter is used in a Class II or Class III location.
- Warning: Keep cover tight unless power has been switched off or the area is known to be non-hazardous.

Functional ratings

These ratings do not supersede Hazardous Locations Values

Supply circuit: $V_{nom} = 16...30V$, $I_{nom} = 21 mA$ ($I_{nom} \leq 50 mA$ during power on)

Signal circuit: $V_{nom} = 16...30V$, $I_{nom} = 4...20 mA$

