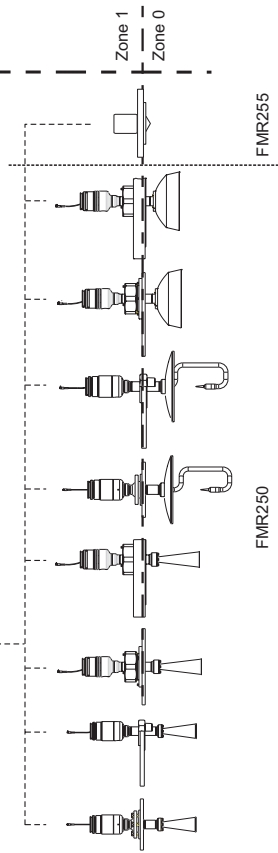
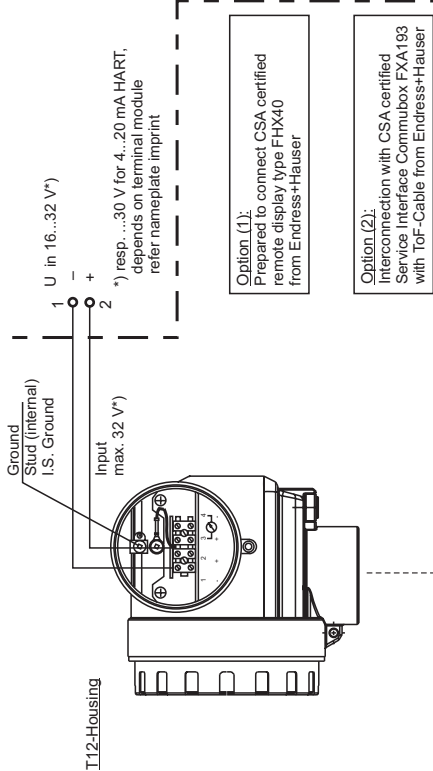


**HAZARDOUS LOCATION**

Class I, Div. 1, Groups A, B, C, D  
Ex d [Ia] IIC TX  
see table for temperature codes  
Class II, Div. 1, Groups E, F, G  
Class III

**NON HAZARDOUS LOCATION**



**Notes:**

EXPLOSION PROOF CLASS I, DIV. 1, GROUPS A, B, C, D or Ex d [Ia] IIC CLASS II, DIV. 1, GROUPS E, F, G CLASS III HAZARDOUS LOCATION INSTALLATION

1. Install per Canadian Electrical Code (CEC) resp. National Electrical Code NFPA 70 (NEC).
2. Supply wires shall be installed in conduit in accordance with the CEC resp. NEC.
3. Control room equipment may not use or generate over 250 Vrms.
4. Terminal compartment: Warning: Keep cover tight when circuit is alive unless the area is known to be non-hazardous.
5. For electronic: Maximum ambient temperature = 70 °C.
6. Use supply wires suitable for 5 K above surrounding ambient.
7. Ground stud shall be connected to a grounding electrode by 12 AWG wire or larger insulated conductors.
8. Resistance between ground stud and grounding electrode shall be less than 1 Ohm.
9. Use a dust tight seal at the conduit entry in Class II and III location.
10. Use of scavange junction. It is the users responsibility to use the adequate method by using the scavange device, like: Installation has to be IP-grade 67 resp. IP-grade 65 (IEC / EN 60529), depends on location.
11. Scavange pressure > inside pressure at the container; max 10 bar resp. 150 psi. At non-scavange status, a barrier spigot resp. valve must be closed. If the valve / spigot is open, and no scavange fluid is present the risk of flammable gas or combustible dust releases and flame entrance from outside exists.
12. FMR255: Avoid electrostatic charge at the antenna (e.g. do not rub with dry cloth; do not install within the filling curtain).
13. Apparatus with faucet: In case of disconnection of Micropilot M from the faucet (e.g. for maintenance) we recommend to secure resp. to close the faucet e.g. with an additional blind flange.
14. The responsibility for applicability of the arrangement behoves exclusive the operator.
15. Factory sealed / seal not required (Apparatus was tested by CSA with 5, 10 and 15 feet conduit).
16. Use specific cables, supplied with the Service Interface Commbox FXA193 or Remote Display FXH40.
17. Refer to the applicable Control Drawing.
18. 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 nc IIC and DIP, for CLASS II and III, DIV. 1, GROUPS E, F, G HAZARDOUS LOCATION INSTALLATION

1. Install per CEC using threaded metal conduit or wiring methods described in Rule 18-156 or Rule 18-202 or Rule 18-302 resp. install per NEC using threaded conduits or wiring methods acc. Article 500 through Article 510.
2. Intrinsic safety barrier not required. Max. supply voltage 32 V\*. For T-code see table.
3. Warning: Explosion Hazard - Do not disconnect equipment unless power has been switched off or the area is known to be Non-Hazardous.
4. Avertissement: Risque d'explosion - Avant de déconnecter l'équipement, couper le courant ou s'assurer que l'emplacement est désigné non dangereux.
5. Warning: Explosion Hazard - Substitution of components may impair suitability for Class I, Div. 2.
6. Avertissement: Risque d'explosion - La substitution de composants peut rendre ce matériel inacceptable pour les emplacements de Classe I, Div. 2.

**CLASS II and III, DIV. 1**

Installation shall be in accordance with CEC resp. NEC.  
WARNING: Keep cover tight unless power has been switched off or the area is known to be non-hazardous.

Temperature class with/without display VU331	Permissible max. medium temperature at the probe (process connection) Tmed	Permissible max. ambient temperature of the electronic compartment (Ta) (T12 housing)			
		FMR250		FMR255	
		Horn or parabolic antenna		FOUNDATION Fieldbus	
T6	+ 80 °C + 90 °C	Option 20 (Antenna) 4, 5 or 6	Option 20 (Antenna) D, E, G, H or 9*)	HART or PROFIBUS PA	FOUNDATION Fieldbus
		HART or PROFIBUS PA	FOUNDATION Fieldbus		
T5	+ 95 °C + 70 °C	Option 20 (Antenna) 4, 5 or 6	Option 20 (Antenna) D, E, G, H or 9*)	HART or PROFIBUS PA	FOUNDATION Fieldbus
		HART or PROFIBUS PA	FOUNDATION Fieldbus		
T4	+ 130 °C + 70 °C	Option 20 (Antenna) 4, 5 or 6	Option 20 (Antenna) D, E, G, H or 9*)	HART or PROFIBUS PA	FOUNDATION Fieldbus
		HART or PROFIBUS PA	FOUNDATION Fieldbus		
T3C (functional) <sup>1)</sup>	+ 150 °C + 70 °C	Option 20 (Antenna) 4, 5 or 6	Option 20 (Antenna) D, E, G, H or 9*)	HART or PROFIBUS PA	FOUNDATION Fieldbus
		HART or PROFIBUS PA	FOUNDATION Fieldbus		
T3	+ 195 °C + 70 °C	Option 20 (Antenna) 4, 5 or 6	Option 20 (Antenna) D, E, G, H or 9*)	HART or PROFIBUS PA	FOUNDATION Fieldbus
		HART or PROFIBUS PA	FOUNDATION Fieldbus		
T2, T1 (functional) <sup>1)</sup>	+ 200 °C + 70 °C	Option 20 (Antenna) 4, 5 or 6	Option 20 (Antenna) D, E, G, H or 9*)	HART or PROFIBUS PA	FOUNDATION Fieldbus
		HART or PROFIBUS PA	FOUNDATION Fieldbus		

Note: the applicable temperature of probe must be within their specified limits  
<sup>1)</sup> functional means max. permissible process temperature  
<sup>2)</sup> special version of horn or parabolic reflector dimensions

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

Permissible ambient temperature: Electronic: T12 enclosure -40...+70 °C resp. -40...+158 °F

Type	Type of antennas	Operation temperature
FMR250 -	Horn	-40 °C/-40 °F to +200 °C/392 °F
FMR255 -	Parabolic	-40 °C/-40 °F to +200 °C/392 °F
	Compact	-40 °C/-40 °F to +150 °C/302 °F

Note: take care to specific temperature ranges of antenna versions

