

Hazardous location

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

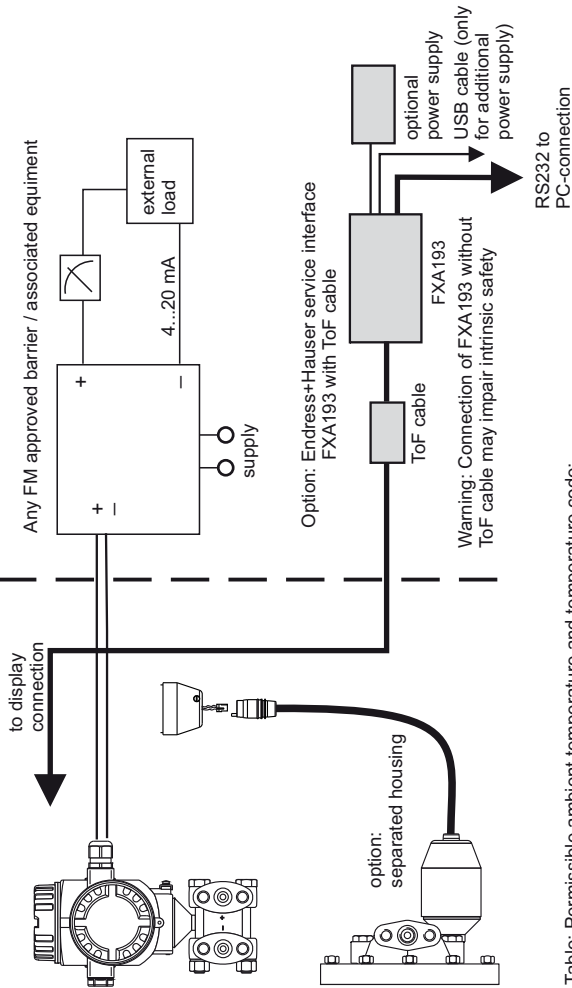


Table: Permissible ambient temperature and temperature code:

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

option for Ta, mini: -50°C

Functional ratings:

These ratings do not supersede Hazardous Location values

$U_{nom} \leq 45$ VDC
 $I_{nom} = 4 \dots 20$ mA (max. 25 mA)

The devices are FM 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 installation

Intrinsically safe (entity), Class I, II, III, Div. 1, Group ABCDEFG, Hazardous Location Installation, Class I, Zone 0, A, Ex ia IIC T6

- Control room equipment may not use or generate over 250 V.
- Use Factory Mutual Entity-approved intrinsic safety barrier with V_{oc} or $V_t \leq V_{max}$, I_{sc} or $I_t \leq I_{max}$, $C_a \geq C_i + C_{cable}$, $L_a \geq L_i + L_{cable}$. Barrier must be incapable of delivering more than 1 Watt to a matched load. Transmitter entity parameters are as follows: $V_{max} = 30$ VDC
 $I_{max} = 200$ mA
 $C_i \leq 11.8$ nF
 $L_i \leq 225$ μ H ('electronic' option code A, B, C) or $L_i = 0$ ('electronic' option code D, E, F)
 For T-code see table
- Installation should be in accordance with ANSI/ISA RP 12.06.01, "Installation of intrinsically safe systems for hazardous (classified) locations" and the National Electrical Code (ANSI/NFPA 70).
- Warning: Substitution of Components may impair intrinsic safety.
- Intrinsic safety barrier manufacturer's installation drawing must be followed, when installing this equipment: The configuration of the intrinsic safety barrier(s) must be FMRC approved.
- Use supply wires suitable for 5°C above surrounding ambient.
- Avoid electrostatic charging of plastic surfaces, plastic process connections or coatings.

Division 2 and Zone 2 installation

Nonincendive Class I, Div. 2, Group ABCD, Hazardous Location Installation (not for separate housing)

- Installation shall be in accordance with NEC using threaded conduits or other wiring methods in accordance with articles 500 to 510. Intrinsic safety barrier not required. Max. supply voltage 45 VDC. For T-code see table.
- Warning: Explosion Hazard - Do not disconnect equipment unless power has been switched off or the area is known to be non hazardous.
- Warning: Substitution of Components may impair suitability for Class I, Div. 2.
- Nonincendive field wiring installation
 The Nonincendive Field Wiring Circuit Concept allows interconnection of nonincendive field wiring apparatus with associated nonincendive field wiring apparatus or associated apparatus not specifically examined in combination as a system using any of the wiring methods permitted for unclassified locations, when $V_{max} \leq V_{oc}$ or V_t , $C_a \leq C_i + C_{cable}$, $L_a \leq L_i + L_{cable}$. Transmitter parameters are as follows: $V_{max} = 45$ VDC; $C_i \leq 11.8$ nF; $L_i \leq 225$ μ H ('electronic' option code A, B, C) or $L_i = 0$ ('electronic' option code D, E, F); $I_{max} =$ see note 11
- For these current controlled circuit, the parameter I_{max} is not required and need not to be aligned with parameter I_{sc} and I_t of the nonincendive field wiring or associated apparatus.

Class II, III installation

DIP for Class II and III, Div. 1, Group EFG, Hazardous Location Installation (not for separate housing)

- Installation of transmitter wiring according to NEC using threaded conduits or other wiring methods in accordance with articles 500 to 510.
- Use a dust tight seal at the conduit entry.

