



Division 2 and Zone 2 installation

Nonincendive Class I, Div.2, Group A, B, C, D Hazardous Location Installation (not for separate housing)

1. 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 (4-20 mA HART)
32 VDC (PROFIBUS PA, FOUNDATION Fieldbus).
For T-code see table.
2. Warning: Explosion Hazard - Do not disconnect equipment unless power has been switched off or the area is known to be non hazardous.
3. 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:
4-20 mA HART
 $V_{max} = 45$ 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 4
PROFIBUS PA, FOUNDATION Fieldbus
 $V_{max} = 32$ VDC; $C_i \leq 5$ nF; $L_i \leq 10$ μ H; $I_{max} =$ see note 4
The transmitter is suitable to be installed according the FNICO concept.
4. For these current controlled circuit, the parameter I_{max} is not required and need not to be aligned with parameter I_{sc} and it of the associated nonincendive field wiring apparatus or associated apparatus.
5. Avoid electrostatic charging of plastic surfaces, plastic process connections or coatings.
Warning: Substitution of Components may impair suitability for Class I, Div.2.

Table: Permissible ambient temperature and temperature code:

Temperature code	Permissible ambient temperature, electronic compartment
T6	-40°C...+65°C
T4	-40°C...+70°C
option for T _{a,min} : -50°C	

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...+85°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.

