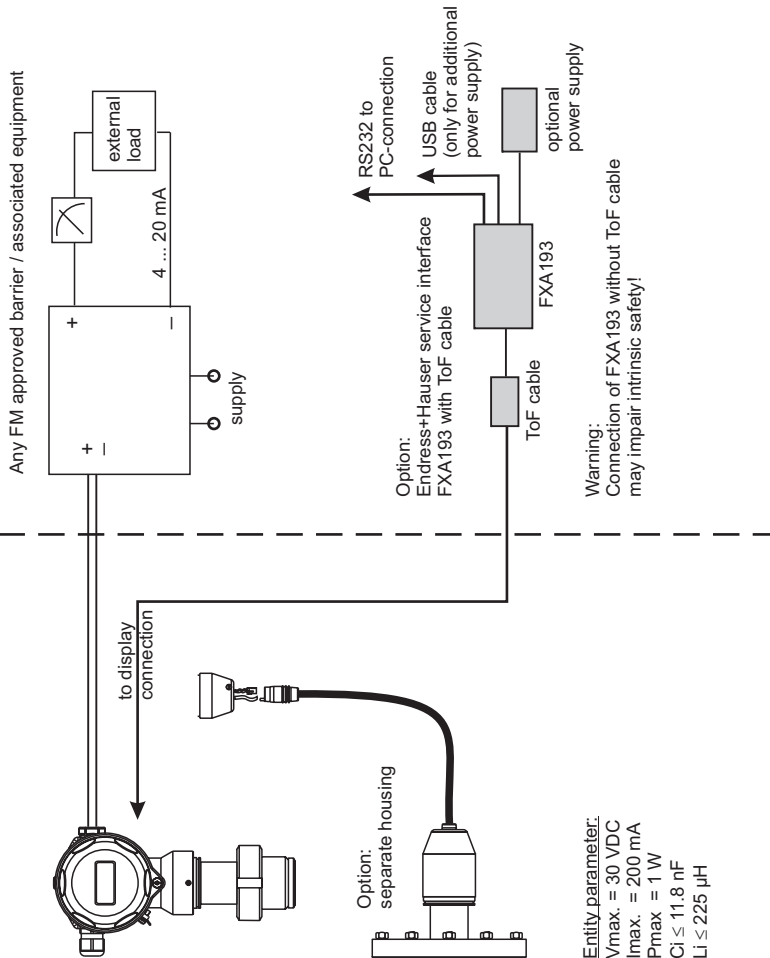


Hazardous location

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

Non hazardous location



Entity parameter:
Vmax = 30 VDC
Imax = 200 mA
Pmax = 1 W
Ci ≤ 11.8 nF
Li ≤ 225 µH

Areas of application

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

Table: Permissible ambient temperature and temperature code:

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

option for Ta min: –50 °C

Intrinsically safe installation

Intrinsically safe (entity). Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G
Hazardous Location Installation

1. Control room equipment may not use or generate over 250 V.
2. Use Factory Mutual Entity-approved intrinsic safety barrier with Voc or Vt ≤ Vmax, Isc or It ≤ Imax, Ca ≥ Ci + Ccable, La ≥ Li + Lcable.

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

Transmitter entity parameters are as follows: Vmax = 30 VDC

Imax = 200 mA

Ci ≤ 11.8 nF

Li ≤ 225 µH

For T-code see table

3. 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).

4. Warning: Substitution of Components may impair intrinsic safety.

5. 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.

6. Use supply wires suitable for 5 °C above surrounding ambient.

Division 2 and Zone 2 installation

Nonincendive Class I, Div. 2, Groups A, B, C, D

Hazardous Location Installation (not for separated housing)

7. 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.

8. Warning: Explosion Hazard - Do not disconnect equipment unless power has been switched off or the area is known to be non hazardous.

9. 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 Vmax ≥ Voc or Vt, Ca ≥ Ci + Ccable, La ≥ Li + Lcable.

Transmitter parameters are as follows: Vmax = 45 VDC; Ci ≤ 11.8 nF; Li ≤ 225 µH;

Imax = see note 10

10. For these current controlled circuit, the parameter Imax is not required and need not to be aligned with parameter Isc and It of the associated nonincendive field wiring apparatus or associated apparatus.

Warning: Substitution of Components may impair suitability for Cl. I, Div. 2.

Class II, III installation

DIP for Class II, III, Div. 1, Groups E, F, G

Hazardous Location Installation (not for separated housing)

11. Installation of transmitter wiring according to NEC using threaded conduits or other wiring methods in accordance with articles 500 to 510.

12. Use a dust tight seal at the conduit entry.

Functional ratings:

These ratings do not supersede Hazardous Location values.

Unom ≤ 45 VDC

Inom = 4...20 mA (max. 25 mA)

ZD214P-A/00/en/12.07
CCS/FM6.0
FM/A 17.04.07



71067792

FM Control Drawing 960007651 A

Deltapilot S
FMB70
4...20 mA HART

Endress+Hauser



People for Process Automation