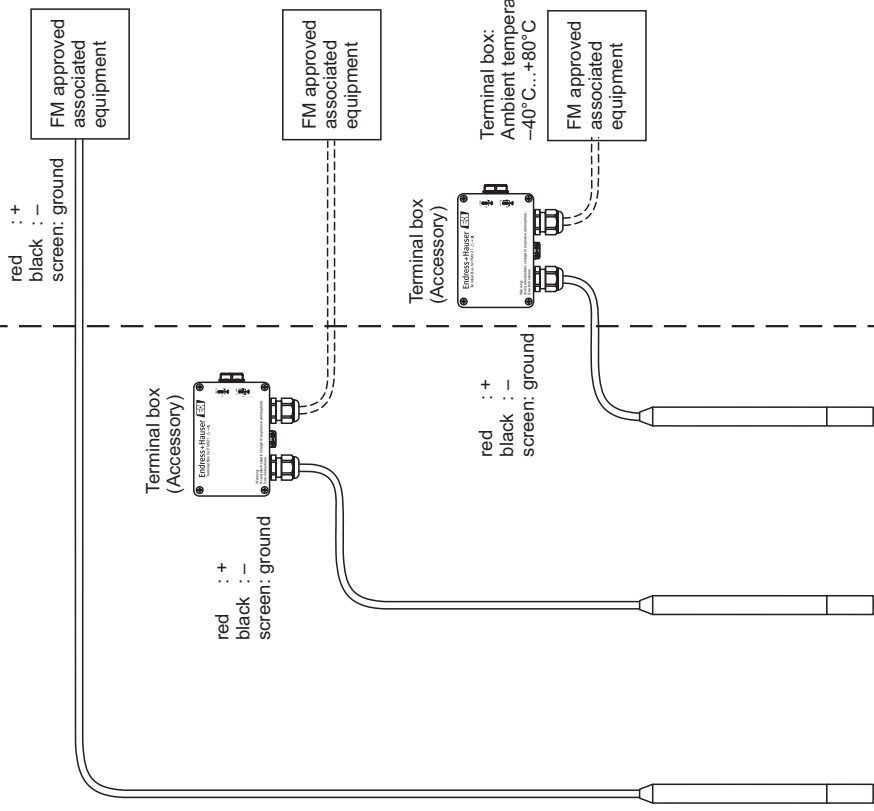


Non hazardous location

Hazardous location
Class I, Div. 1, Groups A, B, C, D
Class I, Zone 0
AEx ia IIC

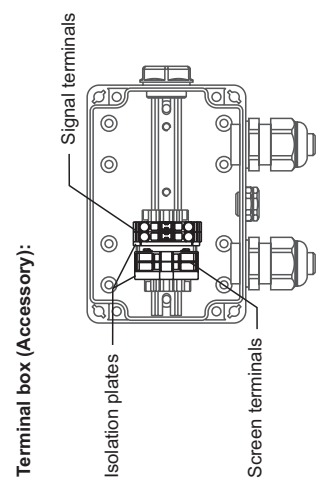


Intrinsically safe (entity), Class I, Div. 1, Groups A, B, C, D or Zone 0, IIC Hazardous Location Installations

1. FM approved apparatus must be installed in accordance with manufacturer instructions.
2. Control room equipment must not use or generate over 250 V.
3. The installation must be in accordance with the National Electric Code ANSI / NFPA 70 and ANSI / ISA-RP 12.06.01.
4. Sensor entity parameters: Vmax = 30 V DC, Imax = 133 mA, Pmax = 1 W Ci and Li per following table:

Length of sensor cable	Ci (10.3 nF + 180 pF/m)	Li (1 μH/m)
5 m	11.3 nF	5 μH
10 m	12.2 nF	10 μH
20 m	14.0 nF	20 μH
30 m	15.8 nF	30 μH
50 m	19.4 nF	50 μH
100 m	28.4 nF	100 μH
200 m	46.4 nF	200 μH
300 m	64.4 nF	300 μH

5. FM approved associated equipment must meet following conditions:
Voc or Vi ≤ Vmax; Isc or Io ≤ Imax; Po ≤ Pmax;
Ca ≥ Ci + Coable; La ≥ Li + Lcable.
6. Install associated equipment in accordance with the manufacturer instructions.
7. Use supply wires suitable for 5°C above surrounding ambient.
8. Avoid friction and impact sparks. Anchor sensor if necessary, secure against swinging.
9. WARNING: Avoid electrostatic charging of plastic surfaces. Do not rub. Do not use in media or environments which may generate electrostatic charges on plastic surfaces.
10. WARNING: Substitution of components may impair intrinsic safety. Do not remove or move terminal blocks, fastening elements or insulation plates of the terminal box. Do not build in additional components.
11. Connect cable screen to earth ground of the installation.



Terminal box (Accessory):

Sensor	Temperature class	Ambient temperature range
T4		-10°C ≤ Ta ≤ +70°C
T5		-10°C ≤ Ta ≤ +55°C
T6		-10°C ≤ Ta ≤ +40°C

Terminal box	Temperature class	Ambient temperature range
T6		-40°C ≤ Ta ≤ +80°C

ZD231P/00/en/06.09
CCS/FM6.0
FM/- 05.11.08

FM Installation Drawing
960008975 -



Waterpilot
FMX21