XA01634P-A/00/EN/01.17
CCS/FM10
CSA/A 13.03.17

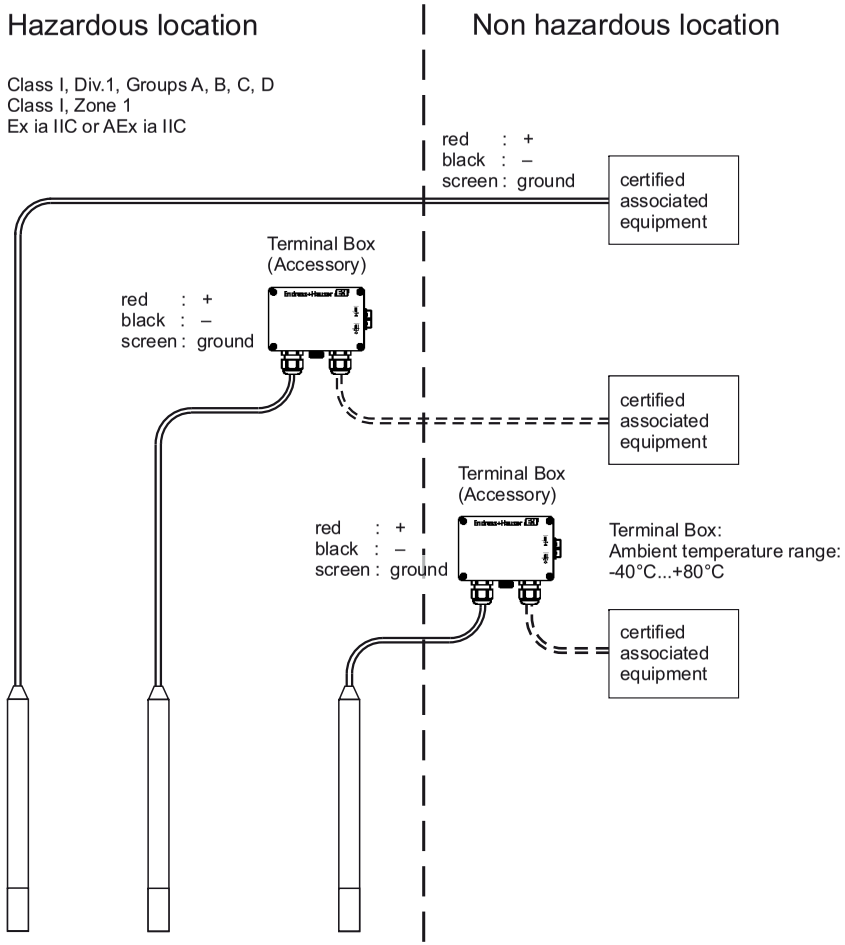
71362367

CSA Control Drawing
960008976 A

Waterpilot FMX21

Endress+Hauser

People for Process Automation



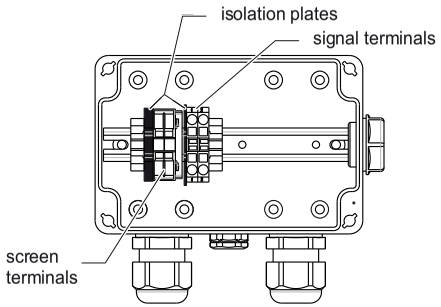
Sensor

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

Terminal Box (Accessory):



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

1. CSA certified apparatus must be installed in accordance with manufacturer instructions.
2. Control room equipment must not use or generate over 250 V.
3. Install per Canadian Electrical Code (Canada) or per National Electric Code ANSI / NFPA 70 and ANSI / ISA-RP 12.06.01 (USA).
4. Sensor entity parameters: Vmax = 30 VDC, Imax = 133 mA, Pmax = 1 W, Ci and Li per following table:

Length of Sensorcable	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. CSA certified associated equipment must meet following conditions:
   Voc or Vt ≤ Vmax; Isc or Io ≤ Imax; Po ≤ Pmax,
   $C_a \geq C_i + C_{cable}$; $L_a \geq L_i + L_{cable}$
   Install associated equipment in accordance with the manufacturer instructions.
6. Use supply wires suitable for 5°C above surrounding ambient.
7. Avoid friction and impact sparks. Anchor sensor if necessary, secure against swinging.
8. WARNING: Avoid electrostatic charging of plastic surfaces.
   Do not rub surfaces with a dry cloth. Do not use in media or environments which may generate electrostatic charges on plastic surfaces.
   Avertissement : Eviter le chargement électrostatique des surfaces synthétiques. Ne pas frotter les surfaces avec un chiffon sec. Ne pas utiliser pas dans les médias ou les environnements qui peuvent produire des charges électrostatiques sur les surfaces de plastique.
9. WARNING: Substitution of Components may impair intrinsic safety.
   Avertissement : La substitution de composants peut compromettre la sécurité intrinsèque.
10. 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.