

**4-DIGIT LOOP POWERED INDICATOR**  
(intrinsically safe)

MODEL **FXE/FXE-B**

**BEFORE USE ....**

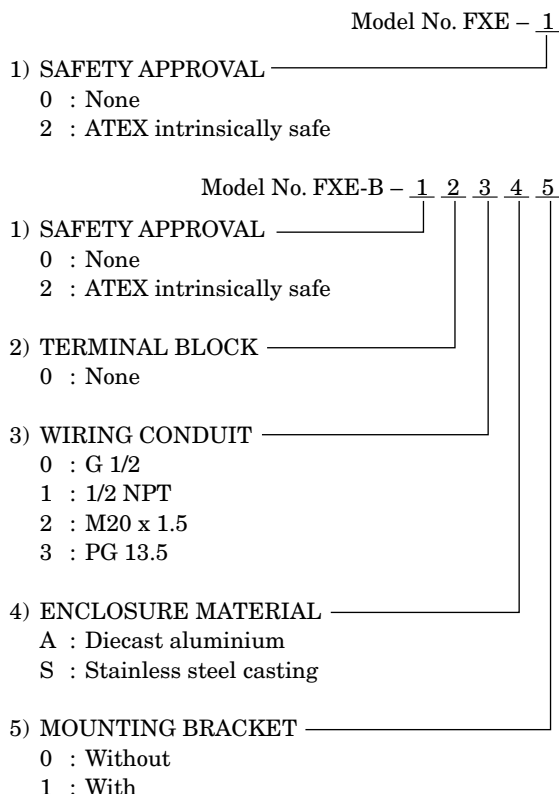
**SAFETY PRECAUTIONS**

This manual describes important points of caution for safe use of this product in potentially explosive atmosphere. Please read this manual carefully before installing and operating the product.

**SPECIAL CONDITIONS FOR SAFE USE**

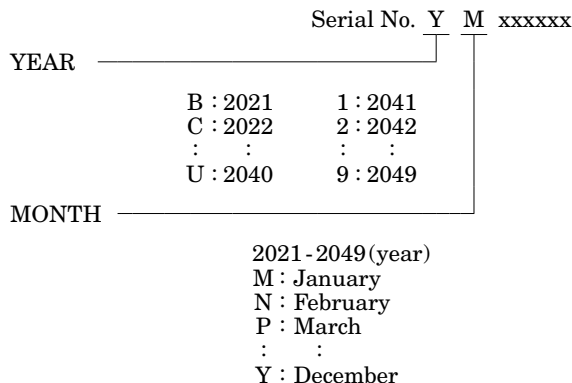
1. Because the enclosure of the Loop Powered Indicator model FXE-B is made of aluminium alloy, when used in an explosive gas atmosphere requiring the use of apparatus of equipment category 1 G, the Loop Powered Indicator must be installed so, that even in the event of rare incidents, an ignition source due to impact or friction between the enclosure and iron/steel is excluded.
2. On application of the Loop Powered Indicator model FXE in an explosive gas atmosphere requiring the use of apparatus of equipment category 1 G, precaution shall be taken to avoid danger of ignition due to electrostatic charges on the enclosure.

**MODEL NUMBER IDENTIFICATION**



**MANUFACTURED DATE CODE IDENTIFICATION**

The manufactured year and month can be identified by the serial number described on the specification label.



**WARNING**

**Explosions could result in death or serious injury:**

- Before you remove the unit or mount it, or before you connect or disconnect the wiring, turn off the power supply and the input signal for safety. Do not disconnect unless the area is known to be non-explosive.
- Whenever you need to measure voltage across the terminals or apply a simulated input signal to the terminals, make sure that there is no danger of explosion in the atmosphere.
- Verify the certification of the product described on the specification label on the product.
- Verify that the operating atmosphere of the indicator is consistent with the appropriate hazardous locations certifications.
- Verify that the environmental temperature is within the temperature class required for the area.

**Failure to follow these installation guidelines could result in death or serious injury:**

- Make sure only qualified personnel perform the installation.

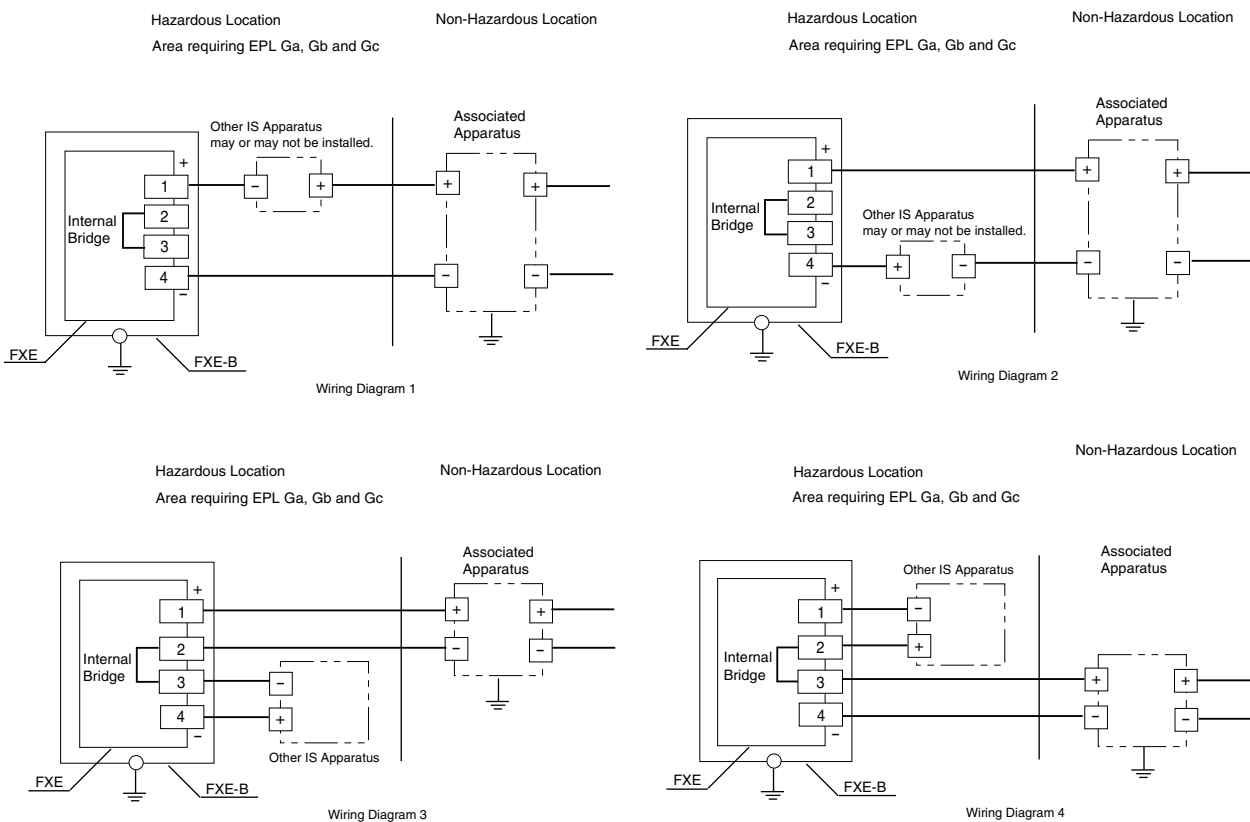
**SAFETY FEATURES & CAUTIONS**

**INTRINSICALLY SAFE APPROVAL**

- ATEX  
 EU-Type Examination Certificate: DEKRA 13ATEX0057 X  
 Ⓢ II 1G Ex ia IIC T4, T5 Ga  
 Zone 0
- Applicable Standards  
 EN 60079-0  
 EN 60079-11
- IS Data  
 Ui = 30V DC  
 Ii = 100mA DC  
 Pi = 750mW  
 Ci = 1 nF  
 Li = 0 mH

- The electric strength between the enclosure and the input terminals is 500V r.m.s. @1 minute.
- Prior to installation, check that the safety class of this unit satisfies the system requirements.
- The indicator shall be mounted in an enclosure with a protection level of at least IP20 in accordance with EN 60529. When the environmental conditions are such that a higher degree in ingress protection is required, this shall be taken into account.
- A safety barrier must be installed between the unit and its power supply. Refer to “Installation Diagram” attached at the end of this manual when selecting a safety barrier.
- The power supply and the safety barrier must be located in a non-hazardous area.
- Environmental temperature must be within the following ranges depending upon the required temperature class.  
 T4 :  $-40^{\circ}\text{C} \leq T_a \leq +80^{\circ}\text{C}$   
 T5 :  $-40^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$
- DO NOT RUB the surface of the plastic enclosure with a dry cloth. Electrostatic charge generated by the friction may cause an explosion.
- Non-metallic materials (window cement) are contained in the FXE-B enclosure and the user must consider the performance of these materials with respect to chemicals which may be present in the hazardous area.
- The wiring method must be in accordance with the electrical parameters described in this manual.
- Substitution of components may impair suitability for the hazardous location and may cause an explosion.

Installation Diagram



Electrical Data

Maximum Input Voltage $U_i$ :	30 V
Maximum Input Current $I_i$ :	100 mA
Maximum Input Power $P_i$ :	0.75 W
Maximum Input Capacitance $C_i$ :	1.0 nF
Maximum Input Inductance $L_i$ :	0 mH

NOTES

1. The associated apparatus and other IS apparatus must be certified by a notified body under ATEX directive 2014/34/EU.
2. Input voltage of associated apparatus must not be more than 250 Vrms/Vdc.