

Instructions specific to hazardous area installations

Model numbers covered: S*****(X)**F***/* (if X included, indicates the -60°C version)**

("*" indicates options in construction, function and materials)

The following instructions apply to equipment covered by certificates numbered: **Sira 03ATEX1140X; IECEX SIR 07.0081X:**

1. The equipment may be used with flammable gases and vapours with apparatus groups IIA, IIB and IIC, with temperature classes T1, T2, T3, T4, T5 and T6. **Note:** The enclosure may be at the higher of the process or ambient temperature.
2. The equipment is suitable for installation across the boundary between an area that specifically requires Equipment Protection Level Ga (Zone 0) and an area that specifically requires Equipment Protection Level Gb (Zone 1). The float and fork flange only to be installed in Zone 0 (EPL Ga).
3. Installation of this equipment shall be carried out by suitably trained personnel, in accordance with the applicable code of practice.
4. Inspection and maintenance of this equipment shall be carried out by suitably trained personnel, in accordance with the applicable code of practice.
5. No maintenance or repair of the flameproof enclosure is permitted.
6. The enclosure must not be opened when the equipment is electrically energised. Where Line Monitoring Resistors are fitted allow four minutes after isolation before removing cover.
7. The certification of this equipment relies upon the following materials used in its construction:

Housing and Cover:	Stainless Steel 316 Type, or Aluminium Alloy LM25, or Aluminium Bronze AB1 (Nickel or Tin plated), or Gunmetal LG2 (Nickel or Tin plated)
Fork Flange (Partition Wall):	Stainless Steel Types 316, 321 or 347, or Gunmetal LG2 (Nickel or Tin Plated), or ECTFE coated Stainless Steel, or Alloy 400, or Alloy C275, or Alloy 625, or Alloy 825.

If the equipment is likely to come into contact with aggressive substances, it is the responsibility of the user to take suitable precautions that prevent it from being adversely affected, thus ensuring that the type of protection is not compromised.

Aggressive substances - e.g. acidic liquids or gases that may attack metals or solvents that may affect polymeric materials.

Suitable precautions - e.g. regular checks as part of routine inspections or establishing from the material's data sheet that it is resistant to specific chemicals.

8. It is the responsibility of the user to ensure:
 - a) That only suitably certified cable entry devices will be utilised when connecting this equipment. **Note:** The cable entry temperature may exceed 70°C.
 - b) That suitable temperature rated cable is used. **Note:** The cable entry temperature may exceed 70°C.

The table below is a guide to selection:

Process temperature	Cable Temperature Rating
85°C	> 65°C
100°C	> 70°C
135°C	> 80°C
250°C	> 115°C
300°C	> 130°C
400°C	> 160°C

- c) Safe working practices for the media and process concerned are followed during the installation and maintenance of the equipment.
- d) That the joint requirements between the switch housing and vessel are compatible with the process media.
- e) That the joint tightness is correct for the joint material used.
- f) The float is protected from impact or friction, or electrostatic charging from fast flowing non-conductive fluids, that could generate an ignition source.
- g) The voltage and current limits for this equipment are not exceeded.

9. Technical data:

- a) Coding: Sira 03ATEX1140X II 1/2 G Ex db IIC T6...T1 Ga/Gb
IECEX SIR 07.0081X Ex db IIC T6...T1 Ga/Gb
- b) Standards:
ATEX: EN IEC 60079-0:2018, EN 60019-1:2014, EN 60079-26:2015
IECEX : IEC 60079-0: 2011 (Edition 6.0), IEC 60019-1:2014 (Edition 7.0),
IEC 60079-26:2014 (Edition 3.0)
- c) Temperature:

Process Temperature (Tp)

T class	Switch Type (D, D6, P, P6)	Switch Type (H6, B6)
T6	-30°C to +80°C	-100°C to 80°C
T5	-30°C to +95°C	-100°C to 95°C
T4	-30°C to +130°C	-100°C to 130°C
T3	-30°C to +195°C	-100°C to 195°C
T2	-30°C to +290°C	-100°C to 250°C
T1	-30°C to +400°C	-100°C to 250°C

Ambient Air Temperature (Ta)

S*****F****/*** (-20°C ≤ Ta ≤ +60°C)

S*****XF****/*** (-60°C ≤ Ta ≤ +60°C)

- d) Pressure: Must not exceed the rating of the coupling/flange fitted.
- e) Year of manufacture: stamped on the product label

10. Specific Conditions of Use:

- a) The product can utilise different types of fastener, Therefore, replacement fasteners, when required, shall be obtained from the manufacturer.
- b) When the product is fitted with end of line resistors, the cable entry temperature will exceed 70°C; therefore, suitably selected cable shall be used.
- c) When the float is made from a non-metallic material, the user shall ensure that the material is suitable for the application.
- d) No maintenance or repair of the flameproof enclosure is permitted.

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