



ATEX Safety Instructions

For TF Series (Exd)
Vibrating Level Switch

Instructions specific to hazardous area installations



Hycontrol Limited, Larchwood House, Orchard Street,
Redditch, Worcestershire, B98 7DP, England.
Tel: + 44 (0)1527 406800 Fax: +44(0)1527 406810
Email: Hsales@hycontrol.com Web:
www.hycontrol.com

EC Declaration of Conformity

Hycontrol Ltd.

Larchwood House, Orchard Street, Redditch, Worcestershire, B98 7DP.

(Tel: +44(0)1527 406800, Fax: +44(0)1527 406810)

Email: sales@hycontrol.com Web: www.hycontrol.com

Declares under our sole responsibility that the product(s):

Equipment: **Vibrating Level Switch**

Type Numbers: **TF xxxxxxxx *****

(Minor variations in design to suit the application and/or mounting requirements are identified by alpha/numeric characters where indicated * above)

Conform to the relevant provisions of the European Directives:

89/336/EEC	Electromagnetic Compatibility	92/31/EEC	Amending 89/336/EC
94/09/EC	ATEX	98/37/EC	Machinery Directive

Inspection carried out by:

SIRA Certification Service
Rake Lane
Ecclestone
Cheshire, CH4 9JN

EC Type Examination Certificate to 94/09/EC

SIRA 04ATEX1125

Quality Assurance System monitored by:

LRQA (0038)
Hiramford
Coventry
Warwickshire, CV3 4FJ

Certificate No:

The following Harmonised Standards have been applied:

EN50014:1997 + A1 + A2	EN50281-1-1:1998
EN 50284:1999	EN50018:2000

Authorised Signatory for the manufacturer within the European Community:

Signed:



Date: May 2005

Brian C Allen - Managing Director

Instructions specific to hazardous area installations (Reference European ATEX Directive 94/9/EC, Annex II, 1.0.6.)

The following instructions apply to the TF Series covered by certificate number Sira **04ATEX1125**:

1. The equipment may be used with flammable gases and vapours with apparatus groups IIA, IIB & IIC and with temperature classes T1, T2, T3, T4, T5 & T6.
2. The equipment is certified for use in ambient temperatures of -40°C to +80°C and with a maximum process temperature of 150°C.
3. The equipment has not been assessed as a safety related device (as referred to by Directive 94/9/EC Annex II, clause 1.5).
4. Installation of this equipment shall be carried out by suitably trained personnel, in accordance with the applicable code of practice.
5. Inspection and maintenance of this equipment shall be carried out by suitably trained personnel, in accordance with the applicable code of practice.
6. The user should **not** repair this equipment.
7. The certification of this equipment relies upon the following materials used in its construction:

Body:	Aluminium Alloy ASTM B26 356-T6
Lid:	Aluminium Alloy ASTM B26 356-T6
Probe:	Stainless steel 316 Type or Hastelloy C276 UNS N10276 or equivalent
Probe Filling:	Perlite
Lid Seal:	Silicone

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

Note: The metallic alloy used for the enclosure material may be at the accessible surface of this equipment; in the event of rare accidents, ignition sources due to impact and friction sparks could occur. This shall be considered when the switch is being installed in locations that specifically require group II, category 1G equipment.

8. It is the responsibility of the user to ensure:
 - (i) That the joint requirements between the probe and the vessel tank are compatible with the process media.
 - (ii) That the joint tightness is correct for the joint material used.
9. The probe fork is subjected to small vibration stresses as part of its normal function. As this provides a partition wall, it is recommended that the fork should be inspected every 2 years for signs of defects.
10. It is the responsibility of the user to ensure that only suitably certified cable entry devices will be utilised when connecting this equipment.

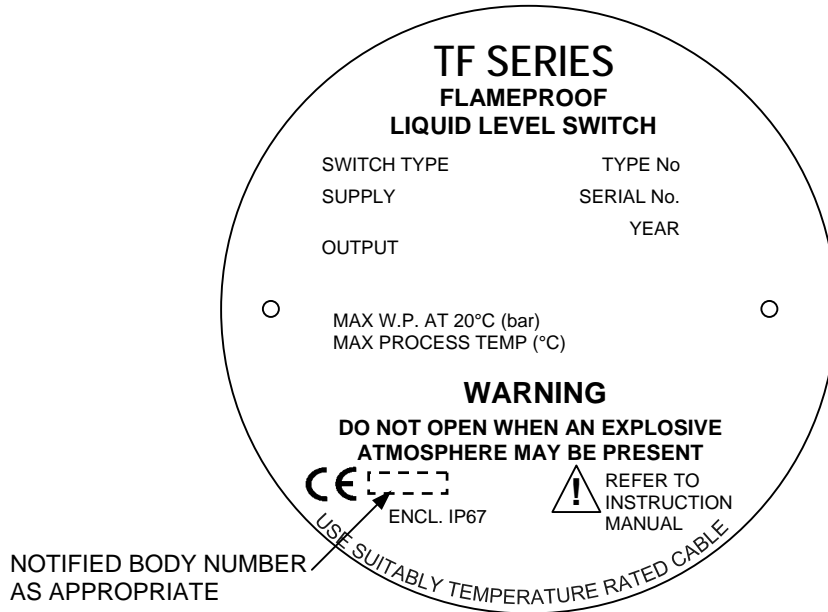
11. Technical data:

Coding: II 1/2 G D. EEx d IIC T6 (Ta = -40°C to + 75°C)
 T4 (Ta = -40°C to +125°C)
 T3 (Ta = -40°C to +150°C)
 Ta = the higher of the process or ambient temperature.

For electrical details and pressure ratings, refer to the main TF Series Manual.

12. Label and certification plate details.

Typical arrangement shown. Sensor specific details omitted.



HYCONTROL LTD, REDDITCH, UK	
	II 1/2G D SIRA04ATEX1125
	EEx d IIC T6 (Tamb -40°C to + 75°C) REFER TO
	EEx d IIC T4 (Tamb -40°C to + 125°C) MANUAL
	EEx d IIC T3 (Tamb -40°C to + 150°C)
	TYPE No.

13. Cable selection.

It is the responsibility of the user to ensure that suitably temperature rated cable is used. The table below is a guide to selection:

T Class	Cable Temperature Rating
T6	Above 85°C
T5	Above 100°C
T4	Above 135°C
T3	Above 160°C