

INSTRUCTION SHEET

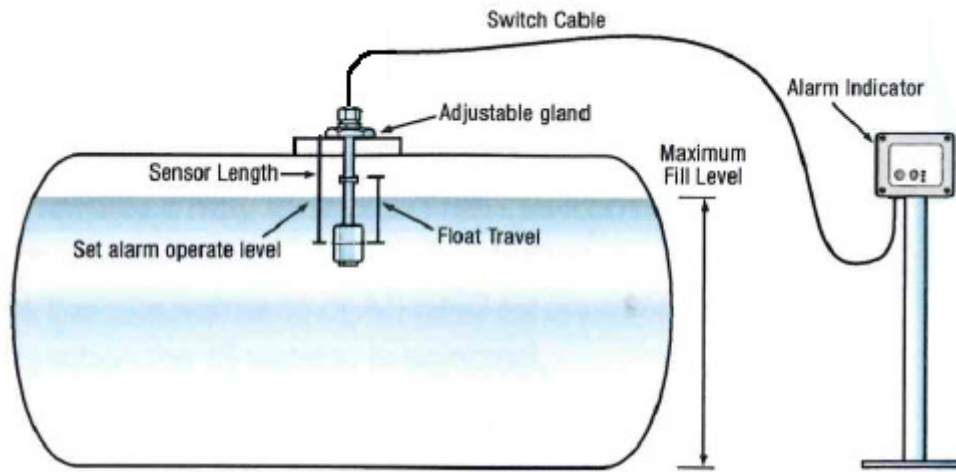


The EX Tank Compartment Alert is battery powered and enables the monitoring of the fluid in the remote tank.

It may be set to provide a high level / Bund alert audible and visible alarm. It is used in association with a magnetic level switch fitted to the tank. The intended use of the alarm is for industrial applications in hazardous atmospheres of up to Zone 1: gas, vapours and mists.

Intrinsically Safe Rating - Ex ia IIB T4
Copy of the certification is available from sales@centretank.com

Installation (Typical)



Note : Due to the potential electrostatic risk of the plastic membrane and the light metal enclosure the apparatus must NOT be located in a Zone 0

Multiple Level Switches

The EX Tank Compartment Alert can monitor the following switches

FLOAT	TERMINAL	INDICATOR
Switch 1 (Probe Connection)	J1 + / c	High / Bund
Switch 2 (Probe Connection)	J2 + / c	Low / Bund

Testing

After unpacking, the unit should be tested before installation. Connect the probe and test the operation of the float to correspond to the correct operation of the alarm. On some probes the float can be reversed to set the desired alarm or some probes have 3 cables so choosing the correct pair is important. If in doubt check operation with a multi test meter before connecting to the alarm.

Fitting to the tank

A 1.5" M BSP fitting is required if using CTS 5m standard probes.

Adjust the probe drop into the tank by pulling the cable through the electric gland on top of the cap and then tightening to set the level. Use the blue label included to hide which function of the alarm is not being used.

Operation for both probe inputs

- a) Continuous Level Switch (on)
Continuous siren and flashing indicator for 120 secs, unit then gives short burst of siren every 20 secs, until 60 mins timeout or level probe switches off or until CANCEL pressed, Unit then switches OFF.

- b) Test Alarm Key
Performs a full function test as if the probe has been activated and released.


Maintenance

No maintenance is required except for periodic testing of the alarm and battery condition (before fill or monthly). If the battery good indicator does not illuminate when testing then the unit should be removed and new batteries fitted as shown below.

Ensure that the batteries are fitted with the correct polarity and firmly mounted within their holder using a cable tie.

Battery Replacement should be done in a **NON-HAZARDOUS AREA** only. Cable tie must be also replaced.

Specifications

Enclosure:	Cast Alloy, IP65
Mounting:	Fixed to sensor (remote mount optional)
Orientation:	Vertical $\pm 30^\circ$
Environment:	External (hazardous area)
Alarms:	Warble Siren 95 dBA and flashing LED
Alarm Duration:	120 sec
Keys:	Cancel Alarm, Test Alarm, Test Battery
Battery:	AAA Only replace with DURACELL MN2400 (Life 1 year estimated, 2 timeout operations per day)
Electrical Inputs:	Normally open switches x 3
Safety Parameters:	Refer to hazardous area certification IECEX ITA 07.0014X
Process Connection:	1/2 inch BSP to 2 inch BSP (Other process connections as factory options)
Adjustment:	Tank level threshold set via sensor position
Accuracy:	Repeatability 1%
Operating Temperature:	-20°C to 60°C
Power Requirements:	6 VDC (refer battery)
Dimensions:	L x H x D, 115 x 90 x 55 mm
Weight:	2 kg with process connections
Compliance:	IEC Ex ia IIB T4 & AS1940 for overfill indication, 

Intrinsically safe parameters

J1,J2,J3,J4,J5;RF1 (COMBINED)	
U0 =	6.6 V
I0 =	124 mA
P0 =	170 mW
C0 =	400 μ F
L0 =	0 mH
Ci =	25 μ F
Li =	4.4 μ H

Note: the above load parameters apply where :

- a) The external circuit contains no combined lumped inductance **Li** and capacitance **Ci** greater than 1% of the above values.
- or
- b) The inductance and capacitance are distributed as in a cable.
- or
- c) The external circuit contains only lumped inductance or only lumped capacitance in combination with a cable. In all other situations, e.g. the external circuit contains combined lumped inductance and capacitance up to 50% of each of the inductance and capacitance values is allowed.

Product customised to Centre Tank Services Ltd requirements. Please respect the safety parameters when using a 3rd party float switch.

DIMENSIONS

