



**Intrinsically Safe Capacitance  
Level Sensor  
BASEEFA  
CERTIFICATION  
No. 812069X/1**

The intrinsically safe FPC5 series fixed point level controllers, with the appropriate zener barrier, provides a means of detecting high, low and intermediate levels of liquids and free flowing granular solids in hazardous areas.

The equipment comprises an encapsulated probe head unit, a zener barrier and a remote mounting plug-in, control module. It is designed for level control applications with liquids or granular solids which present a fire or explosion hazard. The probe head is located in the container vessel, within the hazardous area and connected, via a zener barrier to the control module which is

mounted outside the hazardous area.

The control module can be located up to 200 metres away from the probe head and interconnected by ordinary, unscreened, 3 core cable.

- \* **Encapsulated, Vibration Proof, Probe Units.**
- \* **Fixed Point Level Control of liquids and granular solids. High, low or intermediate.**
- \* **Intrinsically Safe for use in Zone 0 areas, Group IIC gases. Temperature T5.**
- \* **Remote mounting plug-in control module with an 11 pin base. For 110/230 volts 50/60Hz supplies as standard.**

## SPECIFICATION

	<b>FPC5IS</b>
<b>Supply</b>	110/230 volts AC 50/60Hz.
<b>Supply Tolerance</b>	-15% to +7½% about nominal voltage
<b>Sensitivity Range</b>	20-2000 picofarads (three ranges)
<b>Sensitivity</b>	1 picofarad change
<b>Ambient temperature</b>	-15°C to +50°C
<b>Output</b>	One set changeover contacts rated at 5 amps 240 volts ac non-inductive
<b>Fail-safe Modes</b>	High (FLT1RHT) or low (FLT1RLT) level
<b>Time Delays</b>	Adjustable time delays are fitted to the module. Standard time range is 3-30 seconds. Other delay periods are 0-3s, 1.5-15s or 6-60s.
<b>Delay modes</b>	Switch selected on top of the module for material either making of breaking contact with the probe as required.
<b>Connections</b>	11 pin plug-in relay base.
<b>Indication</b>	Output (relay) energised (On).
<b>Enclosure</b>	NDP1 MS2530- Alloy enclosure with Stainless steel mounting thread and probe rod. PVC bung assembly.
<b>Protection</b>	NDP1 MS2530 - IP66. FLT1R_T - IP40
<b>Weight</b>	NDP1 Level Probe MS2530 - 300mm - 1.5Kg 1Mtr - 2.5Kg 2Mtr - 4.0Kg FLT1R_T Module - 275Grammes

### HOW TO ORDER:-

1. Specify module required ie **FLT1RHT** (hi-level fail-safe) or **FLT1RLT** (lo-level fail-safe) + time delay required
2. Specify **Intrinsically Safe NDP1 Probe Head MS2530** with length of probe required (Standard **30mm**).
3. Specify **Zener Barrier** Type MTL 788 positive or equivalent.

### **INTRINSIC SAFETY CERTIFICATION.**

*Intrinsically safe for use in Zone 0 areas, Group IIc gasses, Temperature T5.*

### **CONNECTIONS**

**This system must be wired in accordance with Synatel Certified Drawing Number A3-5827 (available on request)**



Detection & Control  
in action