**APS1 Probe Simulator**

### Description
The APS1 probe simulator is used in place of a level or conductivity probe to verify the correct operation of Spirax Sarco controllers. It can also be used to diagnose wiring/probe faults. It is connected to the level probe or conductivity probe wiring, avoiding the need to fire the boiler or alter water levels, and is quick and easy to use.

The APS1 has switch settings covering all Spirax Sarco probe types and ranges. A potentiometer provides the variable input to a capacitance controller, and 4 mm test sockets are provided for connection of a multimeter, which is used to check the voltage when simulating capacitance probes.

Switches simulate wet or dry (high or low resistance) conductivity level probe conditions, and resistors are built in to represent various conductivity probe ranges.

The APS1 is powered by the controller under test, so needs no batteries or external power supply.

The unit is fitted with two inputs, connected in parallel. One is for connection of a PT2 or PT3 plug tail, and the other is a DIN 43650 connector as used on conductivity and capacitance probes.

Full operating instructions are supplied with each unit.

### Principal features:
- A valuable diagnostic aid for Spirax Sarco boiler control installations.
- Compatible with all TDS / level probes and controllers.
- No need to fire boiler or alter water levels.
- No battery or power supply needed.
- Easy to operate.

### Limiting conditions
- Maximum ambient temperature: 55°C
- Protection rating: IP40

### Technical data
- **Conductivity probe settings**
  - LP30: 6.8 kΩ / 15 kΩ
  - LP31: 6.8 kΩ / 15 kΩ
  - 22 Ω, 68 Ω, 220 Ω, 680 Ω
- **Level probe settings**
  - LP10-4 (High sensitivity): 68 kΩ / 150 kΩ
  - (Low sensitivity): 6.8 kΩ / 15 kΩ
- **Capacitance probe range**
  - 0-10 volts output

### Materials
- **Case**: Die-cast aluminium
- **Coating**: Nylon (grey)

### Dimensions
- **(approximate) in mm**
  - Length: 132 mm
  - Width: 85 mm
  - Height: 138 mm

### Weight
- 450 g

### How to order
**Example:** 1 off Spirax Sarco APS1 probe simulator.

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**Note:** This is to illustrate the connection of an LP20/LP30, which must be ordered separately as it is not supplied with the APS1 as standard.