# spirax /sarco

# **High Integrity, Self-monitoring Low Level Alarm Probe**

Description

The Spirax Sarco LP30 level probe is used with a Spirax Sarco LC3050 level controller to provide a high integrity, self-monitoring low level alarm signal, usually in a steam boiler. It consists of a probe body with a removable cable socket, and a separate screw-on probe tip which is retained by a lock-nut and pin.

The probe has a level sensing tip (probe tip), and a comparator tip. The earth return path is via the body connection.

Under normal operating conditions the probe tip is partially immersed, and the resistance to earth is low. When the water level drops below the probe tip the resistance to earth becomes high, causing the controller to give a low level alarm signal.

The comparator tip compensates for any leakage to earth caused by scale, dirt, or internal moisture, ensuring a low water alarm signal even under adverse conditions.

### **Principal features:**

- High integrity, self-monitoring low level alarm probe.
  Suitable for pressures up to 32 bar g at 239°C.
- No maintenance required.
- Positively retained probe tip.

## Approvals:

The LP30 is also available with a ½" NPT screwed connection, approved to UL61010. Please note that this version will not be (¢ marked and is not suitable for Europe.

The probe is not suitable for outside installation without additional environmental protection.

# **Available tip lengths** mm (inches) 500 (19.7), 1 000 (39.4) and 1 500 (59).

## Pressure/temperature limits

Nominal pressure rating	PN40	
Maximum boiler pressure	32 bar g	(464 psi g)
Maximum temperature	239°C	(462°F)
Maximum ambient temperature	70°C	(158°F)
Designed for a maximum cold hydraulic pressure test of:	60 bar g	(870 psi g)

## **Technical data**

Maximum probe cable length	50 metres	(164 ft)
Cable socket protection rating	IP65	

## **Materials**

No.	Description	Material	
1	Probe body	Austenitic stainless steel	BS EN 10088-3 (1.4306)
2	Cover assembly	Austenitic stainless steel	Type 316L
3	Name-plate	Polycarbonate	
4	Cable socket and probe connector	Polyamide, glass fille	ed
5	Connector gasket	Silicone elastomer	
6	Comparator tip	Austenitic stainless steel	Type 316L
7	Primary insulator and secondary insulator	PTFE	BS 6564 Grade UA Type 1
8	Retaining pin	Austenitic stainless steel	Type 302/304
9	Probe tip	Austenitic stainless steel	Type 316L
10	Lock-nut	Austenitic stainless steel	BS 6105 A4 80

