

CP30 Conductivity Probe

Description

The Spirax Sarco CP30 conductivity probe is used in conjunction with a controller to measure the conductivity (or TDS) of water, usually in a steam boiler for the purpose of monitoring and controlling blowdown.

The probe may be installed in a Spirax Sarco probe elbow, a screwed flange, or directly in a boiler connection. The CP30 is supplied in four nominal tip lengths, and is cut to the exact length required prior to installation.

A DIN 43650 cable socket with Pg 11 cable gland is supplied with the unit.

Principal features:

- Conductivity probe for use with blowdown controllers.
- Suitable for use in steam boilers up to 32 bar g, 239°C.
- All wetted parts in austenitic stainless steel / PTFE.
- Easily cut to length.

Approvals:

The CP30 is also available with a $\frac{1}{2}$ " NPT screwed connection, approved to UL61010. Please note that this version will not be (¢ marked and is not suitable for Europe.

Caution:

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

Available tip lengths mm (inches)

300 (11.8), 500 (19.7), 1000 (39.4) and 1500 (59).

Pressure / temperature limits

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

Technical data

Minimum distance from boiler tubes	20 mm	(3/4")
Minimum immersion depth (Vertically installed probes)	100 mm	(4")
Maximum cable length (probe to controller)	100 m	(330 ft)
Minimum conductivity	10 µS/cm or 10 ppm	

Materials

No.	Description	Material				
1	Cable socket	Polyamide, glass filled				
2	Flat gasket	Silicone rubber				
3	Probe connector	Polyamide, glass filled				
4	Cover assembly	Austenitic stainless steel				
5	Name-plate	Polycarbonate				
6	Body	Austenitic stainless steel	Type 316Ti W/S No. 1.4571			
7	Probe tip	Austenitic stainless steel	ASTM A276 316L			
8	Probe tip sleeving	PTFE				
9	Tip shroud	PTFE				
10	Spring (not shown)	Austenitic stainless steel	BS 2056 316 S42			

