

spirax/sarco®



PA 20 Pre-Amplifier

- Compact, rigidly mounted unit
- Can be removed/replaced without disturbing probe
- No maintenance needed
- Stainless steel body
- Suitable for all probe lengths

Description

The PA 20 pre-amplifier is used with a Spirax Sarco capacitance probe to amplify the capacitance measured and convert it to a voltage output proportional to the liquid level. It is compatible with all Spirax Sarco voltage input controllers/transmitters.

The pre-amplifier consists of a tubular austenitic stainless steel body which screws onto the top of the probe, and has a DIN 43650 connector. The connector includes an 1/2" NPT adaptor for connection to flexible conduit and four 18AWG flying leads. The PA 20 has three sensitivity settings, selected to suit different probe lengths by wiring variations. These are fully described in the Installation and Maintenance Instructions supplied with the unit.

Field Wiring

Flying leads (supplied)	18 AWG, 105° 60 DV length: 12" (approx)
Conduit Connection	1/2" NPT for flexible conduit

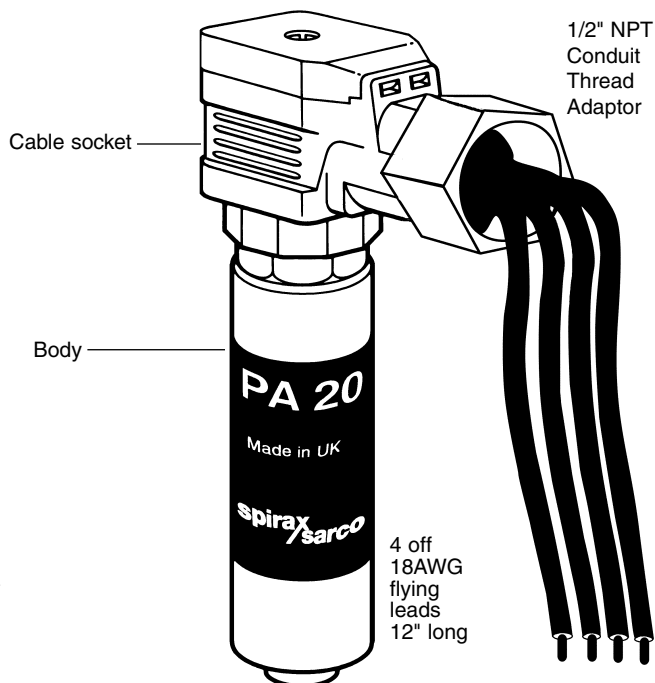
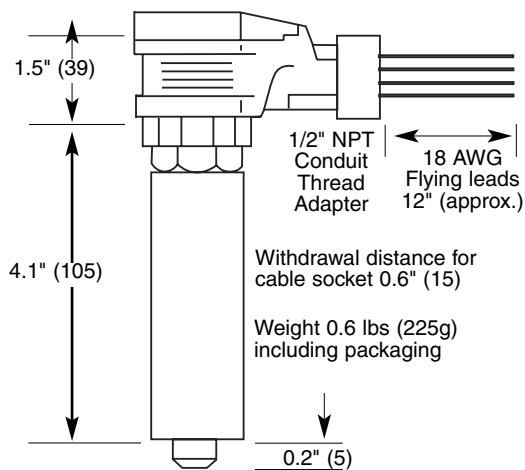
Limiting Conditions

Maximum ambient temperature	158°F (70°C)
Maximum cable length	300ft (100m)
Protection rating	IP 65 (NEMA 13)

Technical Data

Supply voltage	14-36V dc
Maximum power requirement	10mA
Output volts range	1-6V dc
Output impedance	100Ω

Dimensions (Approximate) in inches and millimetres



Materials

Body	Austenitic stainless steel ASTM A582 303
Cable connector	Polyamide (Glass filled)
Connector gasket	Silicone rubber
'O' ring	Nitrile rubber

Installation

The PA 20 is screwed into the top of the capacitance probe and hand tightened. An 'O' ring is supplied with both the LP20 probe and the pre-amplifier to provide a water tight seal. Ensure only one of these is fitted between the probe and amplifier. Full installation and wiring instructions are provided with each unit.

Approvals

UL United States Standard	UL 508 Industrial Control Equipment (E203559)
cUL CSA Canadian Standard	C22.2 Number 14-M91 Industrial Control Equipment (E203559)

Maintenance

No special maintenance is required. Boiler water level controls do, however, require periodic testing and inspection, which is described in separate literature.

How to Specify

Pre-amplifier for Spirax Sarco capacitance probe.

How to Order

Spirax Sarco PA 20 (UL) pre-amplifier.

Local regulation may restrict the use of this product below the conditions quoted. Limiting conditions refer to standard connections only. In the interests of development and improvement of the product, we reserve the right to change the specification.