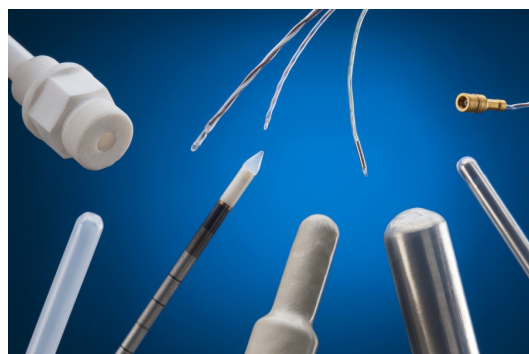


Fluoroplastic Coated Probe Covers

Coated probe covers offer complete chemical resistance in temperature, capacitance and magnetic applications.

Fluoroplastics are some of the most inert materials known to man, and they also have a very high temperature resistance for polymeric materials. This means that they are ideal materials for the protection of sensors in applications where highly corrosive or solvent conditions exist.

Fluoroplastics are relatively difficult materials to process, but by using a combination of moulding, shrinking, welding, or spraying techniques, we can provide a fluoroplastic probe cover of any length or diameter, without damaging delicate sensor elements inside.



We use a variety of technologies to encapsulate measurement elements - typically thermocouples, thermistors and bimetallics for temperature control, and capacitance and magnetic for level & proximity detection.

Probe Cover Features

- Completely unaffected by chemicals or solvents
- Temperature range from -200°C to +260°C
- Complete range of sizes from 0.50mm to 40mm diameter
- Any length possible
- Standard and custom designed construction
- Thermocouple, Platinum resistance or thermistor elements
- Capacitance and magnetic proximity probes

Fabricated coverings on metal probes

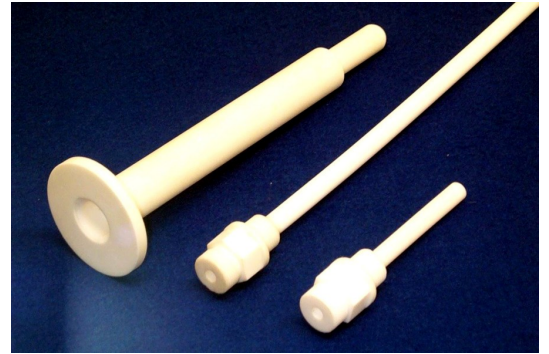
Probes made from steel or other metals are covered in a sheath of fluoroplastic with a minimum thickness of 1mm (except 6mm and 8mm probes). The sheath is shrunk over the stem to ensure a tight fit and the exclusion of air between the metal and the fluoroplastic. We are able to coat most sizes this way, from 3mm up to 100mm diameter.

All assemblies are subjected to a high voltage spark test to ensure integrity of the plastic construction.

Plugged PTFE Probe Covers

Plugged PTFE probe covers are PTFE tubing terminated with a welded plug. The probe covers are manufactured from moulded, machined or welded PTFE without any metal internal support.

Fittings supplied are threaded, which allow connection to female threaded mounting points. If a flanged connector is required, a PTFE flange can be supplied to suit, threaded to take the probe.



PTFE, FEP & PFA Encapsulated Sensor Probes



Where small diameter or flexible temperature probes are needed in hostile conditions, we have developed a range of temperature probes with the sensor element encapsulated in the tip.

Sensor elements as standard are 2 or 4 wire platinum resistance or type K thermocouple. Alternative sensors including thermistors and thermocouple types, are available to special order.

For simplicity of insertion and connection to equipment, a PTFE sliding gland fitting is available. Where a gland type fitting cannot be used, a fitting or sealing flange can be moulded in place anywhere along the length of the probe, where a gland type fitting cannot be used.

Spray Coated Probes

For complex shapes and faster temperature response, spray coatings offer an advantage.

Coatings produced in PFA, PVDF and E-CTFE are generally 35-40 micron thick and depend upon the thickness of the metal substrate. All are spark tested to 2 KV.

All these coatings are subject to oven curing at temperatures above 300°C, therefore, the probe and contents must be capable of withstanding this



For more information about our Coated Probe Covers, please visit adtech.co.uk

For other custom sizes or technical assistance, contact our customer service team:

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