

Self Compensating Duct Probe

The Self Compensating Duct Probe (SCDP) has been designed to allow simple, trouble free, representative sampling of ducts. When used with a GDA aspirator, it completes a duct sampling system capable of operating in hazardous areas.

The SCDP draws a representative sample from the whole width of a duct, no matter what the flow. The design ensures equal sample volumes are drawn from each sampling point before combining them into the GDA aspirator.

The SCDP operates on the *reverse wing* principle. The contour of the SCDP creates an area of negative pressure on the opposite side to the airflow direction. Samples are drawn from the area behind the probe protecting the sample holes from becoming blocked by particulates in the duct.

Large particles, which may block the sampling points of traditional probes, will either be too heavy to be drawn into the negative pressure area or will impact on the face of the SCDP. In either case the SCDP sampling holes remain unaffected.

Benefits:

- Delivers a representative duct sample to GDA aspirator.
- Increases GDA aspirator availability.
- Operates up to 185 °C (365 °F).
- Designed to fit exact duct width.
- Can be fully insulated from duct wall.

Technical Specifications

Dimensions

- Each SCDP is manufactured to fit exactly into a customer's duct.
- Probes made up to a maximum length of 4 meters (13.1 ft)



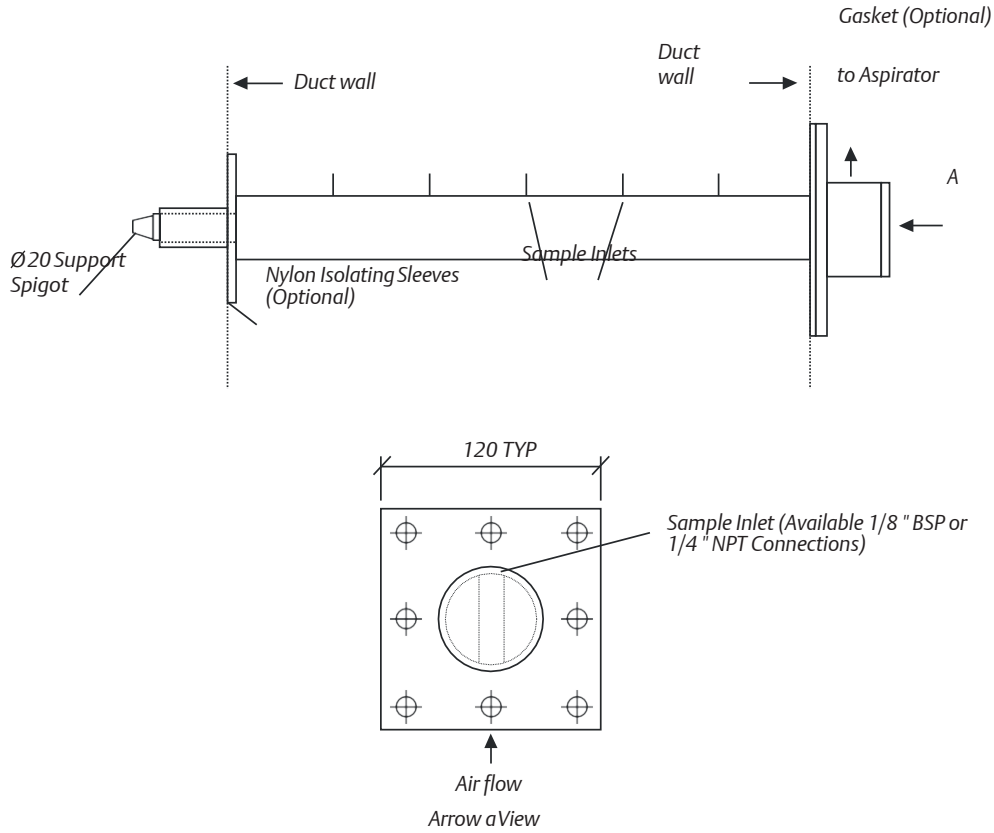
Operating temperature

- Standard (SCDP-S): -20 °C to +110 °C (-4 °F to +230 °F)
- High (SCDP-T): -20 °C to +185 °C (-4 °F to +365 °F)
- Heated (SCDP-H): -55 °C to +110 °C (-67 °F to +230 °F)





Construction

- All external surfaces are 316 stainless steel. Internal components are either polytetrafluoroethylene (PTFE), Tecaform™ AH, or naval brass, which are resistant to attack by corrosive gases like hydrogen sulfide. If required, neoprene sealing gaskets and Tecaform™ AH isolation sleeves can be provided to isolate the SCDP from the duct wall.

Diagram Showing SCDP Mounted in a Duct



www.Emerson.com/FlameGasDetection

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