

Cable Extension of SHT140

The Diamond Point SHT140 is a vibrating level switch for the detection of all kinds of granular or powdered solids. It is designed especially to detect very hot materials with process temperatures up to 250°C. The following description shows how to make the pipe extension of the Diamond Point SHT140.

A set of Diamond Point SHT140 without pipe extension consists of the following parts:

- probe SHT140
- mounting socket SHT140DIN or NPT with temperature insulating tube
- enclosure with SHT electronics
- O-ring sealing Ø46x2,5
- cable gland M20x1,5
- 2,20m Teflon isolated and shielded cable
- approx. 80mm solder tin with high melting point of 296°C
- three Teflon heat shrinkable sleeves

The extension pipe with 1" threads on both ends, material 1.4301 or 1.4571, must be supplied in the appropriate length by the distributor.



Mounting steps:

- 1.) Pull the Teflon isolated cable with the red wires and the screen through the eccentric hole of the temperature insulating tube; a stiff wire, e.g. welding wire, as shown in the picture aside, will help you to get the cable through.
- 2.) Pull the extension cable through the extension pipe.
- 3.) Solder the wires of the probe to the wires of the extension cable: red to red and black to shield; use the high temperature solder tin, temperature of the soldering iron must be approx. 450°C. The solder joints must get isolated by the three Teflon heat shrinkable sleeves supplied with each instrument, shrink with temperature approx. 340°C. Take care that the solder joints do not reopen while shrinking.
- 4.) Screw the probe onto the extension pipe. The screwing must be sealed with Teflon tape.
- 5.) Screw the mounting socket onto the extension pipe, apply a suitable sealing, (e.g. Teflon), and take care of the alignment of the sharp side of the vibrating blade and the mark at the mounting socket
- 6.) Make a function test by connecting the cable onto the electronics, (for electrical connection see SHT instruction manual).

