

INSTALLATION AND MAINTENANCE INSTRUCTIONS FOR ASHCROFT® TYPE 91 SERIES ADAPTER KIT



The Type 91 Series Adapter Sets were designed to provide a simple means of installing a bimetal dial thermometer into an existing industrial glass thermometer well.

The adapter set consists of:

1. A metal liner and spring assembly.
2. An adapter nut.
3. A small supply of heat conducting medium.

METHOD OF SELECTING THE SET

The Adapter Sets are available in four different sizes, to cover various depths of wells. The "Selection Chart" shows the Adapter Set number and the Bimetal Dial Thermometer stem length to use for any well depth from 3⁵/₈" up to 25¹/₈".

To select the proper Adapter Set and Bimetal Dial Thermometer stem length, measure first the well depth by inserting a pencil, or any small diameter rod or stiff wire until it reaches the bottom. (See Figure 1.) Be sure the rod does not hang up on any shoulder inside the well. Using your thumb as an index, withdraw the rod and measure the distance from the end of the rod to the index point. (See Figure 2.)

Then use the chart to select the Adapter Set and the Bimetal Dial Thermometer stem length to fit the well.

Note that one stem length of thermometer covers several different well depths by using the correct Adapter Set.

For example, a thermometer with a 9" long stem can be used for well depths between 7¹/₈" and 10¹/₈", by choosing the correct Adapter Set.

The liner is tapped with a 5/16" - 18 machine thread so it can be removed from the well if desired.

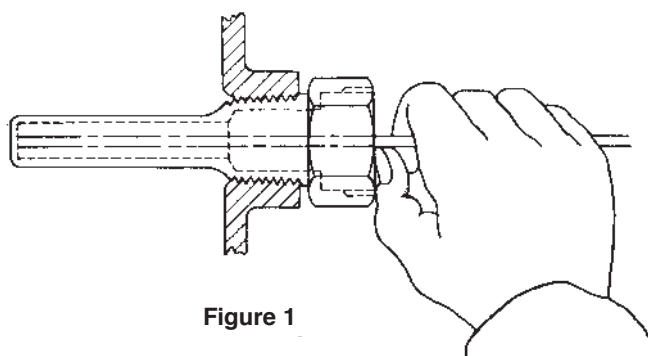


Figure 1

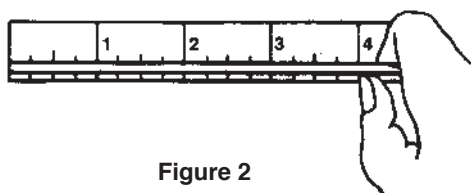


Figure 2

INSTALLATION

Assemble the adapter nut into the well and tighten securely. (See Figure 3.)

Before installing the Bimetal Dial Thermometer into the adapter and well, coat the lower 3" section of the thermometer with a layer of heat conducting medium. This will improve the temperature response of the thermometer.

The metal liner is then slipped over the end of the thermometer stem and a coating of heat conducting medium is applied to the outside wall of the liner.

The thermometer and the liner are then inserted into the well and tightened in position. Do not tighten more than is necessary to prevent the thermometer from turning.

Where service temperatures exceed 350°F the heat conducting medium may smoke when first subjected to a high temperature. This is caused by the vehicle, in the heat conducting medium, vaporizing and leaving the dry solids behind. This should not be cause for alarm. The dry solids will act equally well as a heat conducting medium for temperatures up to 1000°F.

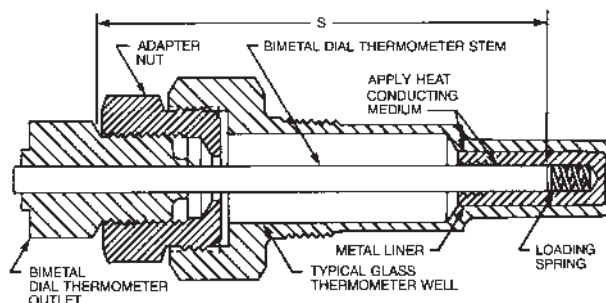


Figure 3

SELECTION CHART

WELL DEPTH IN INCHES	ADAPTER SET NO.	STEM LENGTH "S"	WELL DEPTH IN INCHES	ADAPTER SET NO.	STEM LENGTH "S"	WELL DEPTH IN INCHES	ADAPTER SET NO.	STEM LENGTH "S"
3			10			18	91B	18
				91D		19	91A	
4	91B	4	11	91C	12	20		
5	91A		12	91B		21		
6	91C		13	91A		22		
7	91B	6	14	91D	15	23	91D	
8	91A		15	91C		24	91C	24
9	91D		16	91B		25	91B	
	91C	9	17	91A	18		91A	
	91B		18	91D				
10	91A			91C				

Note: If the measured well depth falls on the dividing line between two stem lengths and/or two Adapter Sets choose the stem and/or Adapter Set above the line.