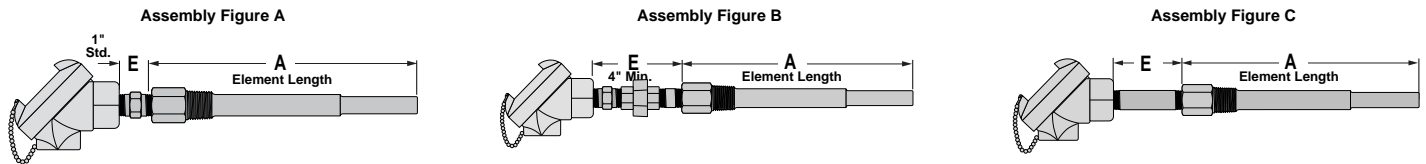


The element length table below can be used to determine the "X" length dimension required when ordering replacement elements for existing drilled wells. The table lists lengths for standard wells, and a table of formulas for determining the "X" length for other non-standard wells is included below.

**COMPLETE SENSOR ASSEMBLY STYLES**



**REPLACEMENT ELEMENT STYLES**

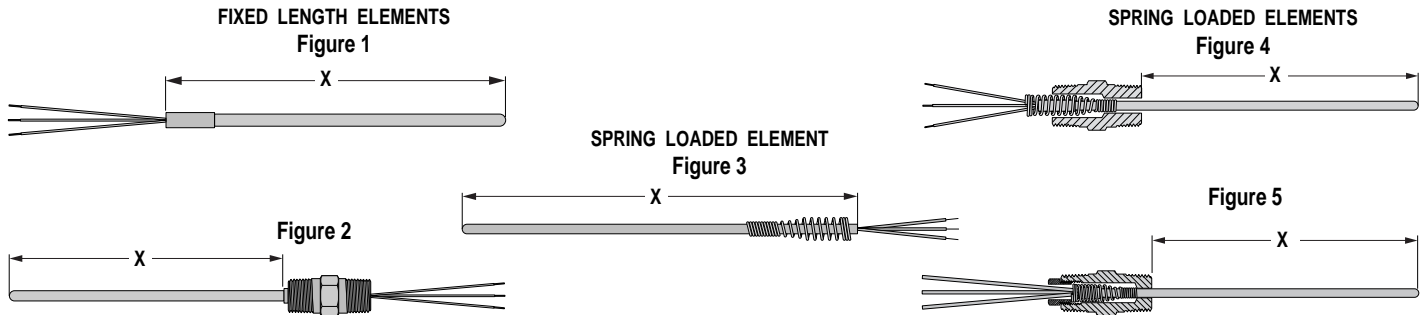


Table 1

ELEMENT LENGTHS FOR STANDARD WELLS					
DRILLED WELL "A" LENGTH	SENSOR & WELL ASSEMBLY FIG. LETTER	REPLACEMENT ELEMENT STYLE and LENGTH (Note 1)			
		Fig. 1	Fig. 2	Fig. 3	Fig. 4 and Fig. 5
		FIXED SHEATH W/O FITTING OR SPRING "X" LENGTH	FIXED SHEATH AND HEX FITTING "X" LENGTH	SHEATH W/SPRING LOADING SPRING "X" LENGTH	SHEATH W/SPRING LOADED HEX FITTING "X" LENGTH
4 Inches	A	5 (1/2)"	3 (1/2)"	5 (1/2)"	4"
	B	4 (1/2)" + "E"	2 (1/2)" + "E"	4 (1/2)" + "E"	3" + "E"
	C	4 (1/2)" + "E"	-----	4 (1/2)" + "E"	-----
6 Inches	A	7 (1/2)"	5 (1/2)"	7 (1/2)"	6"
	B	6 (1/2)" + "E"	4 (1/2)" + "E"	6 (1/2)" + "E"	5" + "E"
	C	6 (1/2)" + "E"	-----	6 (1/2)" + "E"	-----
9 Inches	A	10 (1/2)"	8 (1/2)"	10 (1/2)"	9"
	B	9 (1/2)" + "E"	7 (1/2)" + "E"	9 (1/2)" + "E"	8" + "E"
	C	9 (1/2)" + "E"	-----	9 (1/2)" + "E"	-----
12 Inches	A	13 (1/2)" + "E"	11 (1/2)"	13 (1/2)" + "E"	12"
	B	12 (1/2)" + "E"	10 (1/2)" + "E"	12 (1/2)" + "E"	11" + "E"
	C	12 (1/2)" + "E"	-----	12 (1/2)" + "E"	-----
15 Inches	A	16 (1/2)"	14 (1/2)"	16 (1/2)"	15"
	B	15 (1/2)" + "E"	13 (1/2)" + "E"	15 (1/2)" + "E"	14" + "E"
	C	15 (1/2)" + "E"	-----	15 (1/2)" + "E"	-----
18 Inches	A	19 (1/2)"	17 (1/2)"	19 (1/2)"	18"
	B	18 (1/2)" + "E"	16 (1/2)" + "E"	18 (1/2)" + "E"	17" + "E"
	C	18 (1/2)" + "E"	-----	18 (1/2)" + "E"	-----
24 Inches	A	25 (1/2)"	23 (1/2)"	25 (1/2)"	24"
	B	24 (1/2)" + "E"	22 (1/2)" + "E"	24 (1/2)" + "E"	23" + "E"
	C	24 (1/2)" + "E"	-----	24 (1/2)" + "E"	-----

**Directions for Table 1 Use:**

1. Determine complete sensor assembly style and "E" length if any (Fig. A,B, or C)
2. Determine the replacement element style desired (Fig. 1 thru 5)
3. Determine the "X" length from the table by reading across from the appropriate well length column to the intersection of the assembly figure letter and the element figure number

**EXAMPLE:**

Step

1. Assembly Figure B with a 4" Extension (E)
2. Element Style Fig. 4
3. 6" Drilled Well
4. X Length = 5" + 4" (E)
5. X Length = 9"

Table 2

"X" LENGTH FORMULAS for REPLACEMENT RTD ELEMENTS USED IN PRESSURE TIGHT WELLS (Note 1)		
ELEMENT CONSTRUCTION STYLE	REFERENCE FIGURE	DIMENSION FORMULAS
Fixed sheath length - no fitting	1	X = Well "A" + Ext. "E" + 1/2"
Fixed sheath with hex fitting	2	X = Well "A" + Ext. "E" - 1 1/2"
Spring loaded sheath	3	X = Well "A" + Ext. "E" + 1/2"
Spring loaded hex fitting	4 and 5	X = Well "A" + Ext. "E" - 1"

**NOTE 1:**

*Deduct 1/2" from calculated "X" lengths for Figures 2, 3, and 4 spring loaded replacement elements when used with head mounted transmitters in Series 300 heads.*