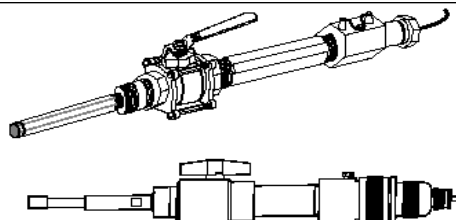


## 4909 and 4908 Conductivity Cells

## Model Selection Guide

- Allows insertion or removal of cell without interruption to process
- Available in 316 stainless steel or CPVC
- Allows safe removal at pressures up to 50 psi



Top: 4909 SS Insertion/Removal Cell Assembly  
Bottom: 4909 CPVC Plastic Insertion/Removal Cell Assembly

### Instructions

- Consult Steps to Selecting Appropriate Conductivity Instrumentation and Cells before making selections below.
- Select the desired key number. The arrow to the right marks the selection available.
- Make one selection from each Table using the column below the proper arrow.  
A dot denotes unrestricted availability.

Key Number      I      II      III      IV      V      VI      VII  
 -  -  -  -  -  -  -

KEY NUMBER	Description	Selection	Availability
04909 Complete Conductivity Cell Assembly	(Note 2) (Note 3)	04909	↓
04908 Replacement Cell Only	(Note 1) (Note 3)	04908	↓

TABLE I - Cell Constant

Cell Constant	0.01	001	•	•
	0.1	X01	•	•
	1	XX1	•	•
	10	X10	•	•
	50	X50	k	k

TABLE II - Electrode Material

Electrode Material Note 6	Nickel	33	•	•
	Platinum	44	•	•

TABLE III - Automatic Temperature Compensation

Available for APT2000/4000CC, 9782C, or 7082 Only	333	f	f
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**TABLE IV - Leadwire Length**

		Selection	09	08
Leadwire Length	7 ft. (2,13 meters) Leadwire	X7	•	•
	20 ft. (6,10 meters) Leadwire	20	•	•
	Junction Head (Aluminum)	X1	•	•

**TABLE V - Valve/Cell Materials**

Valve/Cell Material	Material			
4909 Stainless Steel (SS) Valve Assembly	Includes SS Valve assembly and Standard insertion cell	02	c	
4908 PES Replacement Cell for 4909 SS Valve Assembly	Standard insertion cell only	02		c
4909 CPVC Valve Assembly	Includes CPVC assembly and standard CPVC Support tube and cell	03	d	
4908 PES Replacement Cell for CPVC Valve Assembly	Cell only	03		d

**TABLE VI - Special Mounting Options**

Special Mounting Options - select one option per unit				
None		000	•	•
SS support tube for 4909 SS Valve assemblies only. Use Table V Option = 02		930	e, m	
4908 replacement cells for 4909 SS Valve Assembly containing SS Support tube. Use Table V Option = 02		930		e, m
Special insertion lengths for new/ replacement cells for 4909 SS Valve Assemblies. Only available for Table V Option = 02	Uses special insertion cell to increase standard insertion cell depth by 4.4" (111,76 mm)	910	h, m	h, m
	Uses special insertion cell to increase standard insertion cell depth by 8.8"(223,52mm) (Note 4)	920	m	m
	Uses special insertion cell to increase standard insertion cell depth by 13.2"(335,28mm) (Note 4)	925	m	m
	Uses special insertion cell to decrease standard insertion cell depth by 4.4" (111,76 mm)	940	h, m	h, m
Extended Length CPVC Support tube. Only available for Table V Option = 03	Supplies special CPVC support tube to increase cell insertion depth by 6.0 inches (152,40mm) in a new CPVC Valve Assembly. Note: Allow additional 6.0 in. (152,40mm) for cell removal	950	j, m	

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↓ ↓**TABLE VII - OPTIONS**

		Selection	09	08
Tagging	None	0_	•	•
	Linen	L_	•	•
	Stainless Steel	S_	•	•
Certificate of Calibration	None	_ 0	•	•
	Calibration & Conformance	_ 3	•	•

**Notes:**

1. Replacement cells only, caution look at Restrictions for insertion depth dimensions based on valve assembly type.
2. When converting from 4806 to 4909, order 4908 directly.
3. Replacement 4908 cells for existing 4908's and 4909's manufactured before 8/85 must specify Table V = 02.
4. This option is application sensitive. You must contact Analytical Instruments Marketing for approval.
5. The current selection system requires that Option 1 or 2 be chosen if a certificate is to be sent along with any of the available 4909/4908 cells.
6. Platinum is used in acid and base applications; Nickel is used in all others

**RESTRICTIONS**

Restriction Letter	Available Only With		Not Available With	
	Table	Selection	Table	Selection
<b>c</b>	V	Standard insertion cell for SS valve assemblies consists of a conductivity cell of variable length based on the cell constant and a 13.2" (335,28 mm) PES tube molded to the cell. The conductivity cell insertion depth is listed below:  001, X01, XX1 = 7.5 in. (190,50 mm) X10 = 7.7 in. (195,58 mm) X25, X50 = 8.8 in. (223,52 mm)		
<b>d</b>	V	Standard conductivity cell insertion depth dimensions according to cell constants for CPVC assemblies is listed below:  001, X01, XX1 = 5.5 in. (139,70 mm) X10 = 5.7 in. (144,78 mm) X25, X50 = 6.8 in. (172,72 mm)		
<b>e</b>	V	02		X25, X50
<b>f</b>	III	For APT2000/4000CC, 9782C, or 7082 Only		
<b>h</b>	V	02		
<b>j</b>	V	03		
<b>k</b>	I	For 9782C and 7082 Only		
<b>m</b>	III	333 "Consult Ft. Washington for other temperature compensator selections"		

## 4909 and 4908 Conductivity Cells

## Accessories and Replacement Parts

Accessory Parts	Part Number
Junction Box	31316260
Ball Valve Removal device	
316 SS (doesn't include 4908 Cell)	31741450
CPVC (doesn't include 4908 Cell)	31074357
CPVC Support tube. Used in 31074357 to extend cell insertion depth by 6".	31074344
Allow additional 6" for cell removal.	
SS Support Tube for use with: Table IV = X7 or 20 , Table V = 02, Table VI = 930	51450837-001
SS Support Tube for use with: Table IV = X1, Table V = 02, Table VI = 930	51450838-001
<b>Cell Extension Leadwire</b>	
For ATC value of 333:	
Standard Range 9782 or 7082, also APT2000	
To 1000 ft:	
3-conductor, 18 gage cable (Belden 9493) and	834059
Coax cable (Belden 9259)	835024
Wide Range 9782 and 7082	
To 1000 ft:	
4-conductor, 18 gage, cable only	31834052
For all cells with an ATC other than 333:	
3-conductor, 18 gage cable (Belden 9493) only	834059
Direction Manual for 4909 & 4908	
CPVC	70-82-25-19
Stainless Steel	70-82-25-68

### Replacement Parts

Viton Packing Gland for 1-1/4" NPT SS Assembly	31071494
Viton Packing Gland for 1-1/4" NPT Plastic Assembly	31074345