

standard plastic pH electrodes

Standard plastic pH electrodes

Plastic bodied electrodes are robust making them ideal for field, plant and educational use. Mostly they are gel filled which lowers maintenance. For routine applications they are the equal of the more traditional glass bodied electrodes. The CE711 is the most popular electrode that Thermo Electron makes. Unlike other low cost electrodes it has a detachable skirt making cleaning and maintenance much easier.



**CE711**  
Plastic bodied, gel filled, combination pH electrode  
**Best for:** General purpose plant, field and student pH measurement  
CE711 – BNC  
CE7L/S7 – Screw cap  
CE78 – Coax  
CE76 – DIN  
Other plug types and cable lengths on request



**CER711**  
Plastic bodied, liquid filled, combination pH electrode  
**Best for:** General purpose plant, field and student pH measurement  
CER711 – BNC  
CERL/S7 – Screw cap  
Other plug types and cable lengths on request



**TCCE/A/142**  
Tempra 3-in-1 combination pH and temperature electrode  
**Best for:** General purpose plant, field and student pH measurement  
TCCE/A/142 – Plug configuration and thermistor for Russell meters  
Different configurations available for Denver, Accumet, Jenway, WPA and many other pH meters

Standard glass pH electrodes

Glass bodied electrodes offer the user a greater choice both in terms of application suitability and dimension options. Mainly liquid filled the user has the opportunity to replenish or change the reference electrolyte should it become contaminated or low. The semi-permeable fill hole cover means that this can be left in place during measurement decreasing the chance of electrolyte changes due to evaporation or contamination.



**RL6157**  
Plastic bodied, ISFET combination pH electrode with integral temperature compensation  
**Best for:** pH measurement in viscous or dirty samples where glass is prohibited  
N.B. For use only with Thermo Electron ISFET pH meter models RL610 and RL620



**CTE711**  
Plastic bodied, thin stem, long reach combination pH electrode  
**Best for:** Field, plant or student pH measurement in flasks and small samples  
CTE711 – BNC  
Other plug types and cable lengths on request

connector options and specifications

	Model	Model	Model	Model	Model
<b>BNC DIN 19262 S7 Other</b>	CE711	CER711	TCCE/A/142	N/A	CTE711
	CE76	CER76	N/A	N/A	CTE76
	CE7L/S7	CERL/S7	N/A	N/A	N/A
	See pg25	See pg25	Call tech support	7-PIN DIN ONLY	See pg25
<b>pH range</b>	0-14	0-14	0-14	0-14	0-14
<b>Temperature range (°C)</b>	0-80	0-80	0-80	0-80	0-80
<b>Outer junction</b>	Wick	Thread	Thread	Wick	Wick
<b>Active dimensions (l x dia, mm)</b>	120 x 12	120 x 12	120 x 12	120 x 12	150 x 6

All standard plastic electrodes have a silver/silver chloride reference system

standard calomel/tris pH electrodes

Combination pH electrodes with a calomel reference system are useful when the presence of silver is to be avoided. Typical applications include those in biochemistry, the food industry and pure water measurement. Tris buffers are widely used in biochemistry but can complex with silver ions blocking the reference junction. Likewise, proteins in foods complex with silver. Calomel reference systems contain only potassium chloride as reference electrolyte. Thermo Electron tris electrodes also have a special coating on the pH glass to resist fouling of the glass by fats and proteins.

K-series, high performance pH electrodes are also available for these applications. They contain neither mercury nor silver ions in solution. See pages 3-5.



**TR/CW711/TB**  
Glass combination pH electrode for tris/bio use  
**Best for:** Laboratory pH measurement in tris, protein and food samples  
TR/CW711/TB – BNC  
TR/CWL/S7/TB – Screw cap  
Other plug types and cable lengths available on request



**TR/CTW711/TB**  
Thin stem, glass combination pH electrode for tris/bio use  
**Best for:** Laboratory pH measurement in tris, protein and food samples in flasks  
TR/CTW711/TB – BNC  
TR/CTWL/S7/TB – Screw cap  
Other plug types and cable lengths available on request



**TR/CMAW711/TB**  
Semi-micro, glass combination pH electrode for tris/bio use  
**Best for:** Laboratory pH measurement in small tris, protein and food samples  
TR/CMAW711/TB – BNC  
TR/CMAWL/S7/TB – Screw cap  
Other plug types and cable lengths available on request



**TR/CE711/TB**  
Plastic combination pH electrode for tris/bio use  
**Best for:** Plant and student pH measurement in tris, protein and food samples  
TR/CE711/TB – BNC  
TR/CE7L/S7/TB – Screw cap  
Other plug types and cable lengths available on request



**CT711/LCW**  
Glass, combination pH electrode for low conductivity waters.  
**Best for:** Laboratory pH measurement in pure waters  
CT711/LCW – BNC  
CTL/S7/LCW – Screw cap  
Other plug types and cable lengths available on request



**CE711/LCW**  
Plastic, combination pH electrode for low conductivity waters  
**Best for:** Field and plant pH measurement in pure waters  
CE711/LCW – BNC  
CE7L/S7/LCW – Screw cap  
Other plug types and cable lengths available on request

connector options and specifications

	Model	Model	Model	Model	Model	Model
<b>BNC DIN 19262 S7 Other</b>	TR/CW711/TB	TR/CTW711/TB	TR/CMAW711/TB	TR/CE711/TB	CT711/LCW	CE711/LCW
	TR/CW76/TB	TR/CTW76/TB	TR/CMAW76/TB	TR/CE76/TB	CT76/LCW	CE76/LCW
	TR/CWL/S7/TB	TR/CTWL/S7/TB	TR/CMAWL/S7/TB	TR/CE7L/S7/TB	CTL/S7/LCW	CE7L/S7/LCW
	See pg25	See pg25	See pg25	See pg25	See pg25	See pg25
<b>pH range</b>	0-14	0-14	0-14	0-14	0-12	0-12
<b>Temperature range (°C)</b>	0-60	0-60	0-60	0-60	0-60	0-60
<b>Outer junction</b>	Ceramic	Ceramic	Ceramic	Wick	Annular Ceramic	Wick
<b>Active dimensions (l x dia, mm)</b>	120 x 12	150 x 7	90 x 4.5	120 x 12	120 x 14	120 x 12

All calomel/tris electrodes have a calomel reference system. Glass electrodes use reference electrolyte S00C/50/5. Plastic electrodes use reference electrolyte S00D/50/5