



Thermo Scientific Orion Spear Tip pH Electrodes

For Piercing Fruits, Cheese and Meats

Spear tip pH electrodes can be used for piercing soft samples like cheese or fruit or cutting through tougher samples such as meat. All have refillable designs. They are available in single junction or double junction designs which can be used with TRIS samples, proteins or sulfides.

The ROSS spear tip electrode offers the proven accuracy and response that ROSS electrodes are known for and is a double junction electrode. It is suited for semi-solid samples.

The 9163SC is suited for routine measurements and is for use in semi-solid samples.

The KNiPHE electrode has a glass electrode that is encased in a stainless steel housing with a cutting blade at the tip. It is used for tough samples such as meat. It has a double junction design.

The 9162BNWP can be used for soft samples or routine clean water measurements. It has a single junction design.

For piercing semi-solid samples



ROSS® combination pH electrode with glass body, spear tip

- For cheese, meat, and fruit samples
- Measure samples as small as 100 µL
- Double junction for TRIS samples

For piercing soft samples



Combination pH electrode, glass body, spear tip

- For cheese, meat, and fruit samples
- Measure samples as small as 100 µL

For meat, cheese and sludge samples



KNiPHE® Double Junction combination pH electrode with stainless steel cutting blade

- For meat, cheese and sludge where glass alone may break
- Replacement electrode Cat. No. 9121APWP
- Replacement blade Cat. No. 712001
- Replacement sheath Cat. No. 712002

Rugged with an easy-to-clean bulb



Low resistance combination pH electrode with glass body, rugged bulb

- For routine or clean water measurements
- For soft samples

Cat. No.	8163BNWP 8163SC	9163SC	9120APWP	9162BNWP
pH Range	0-14	0-14	0-14	0-14
pH Precision	0.01	0.02	0.02	0.02
Temp. Range	0-100 °C	0-90 °C	0-60 °C	0-90 °C
Internal Reference	ROSS	Ag/AgCl	Ag/AgCl Double junction	Ag/AgCl
Junction	Ceramic	Ceramic	Ceramic	Ceramic
Fill Solution (Cat. No.)	3 M KCl (810007)	4 M KCl w/ Ag/AgCl (900011)	3 M KCl (910008-WA)	4 M KCl w/ Ag/AgCl (900011)
Dimension D (Dia) L (Length) T (Tip)	L - 110 mm T - 4.5 mm x 20 mm L	L - 95 mm D - 6.5 mm x 25 mm L	L - 215 mm D - 16 mm	L - 120 mm D - 12 mm
Connector Type	BNC Waterproof Screw Cap	Screw Cap	BNC Waterproof	BNC Waterproof

Cat. No.	Recommended Accessories
900011	Ag/AgCl fill solution
810007	ROSS fill solution
910008	3M KCl fill solution



Screw Cap



BNC Waterproof

Key Information

All cap diameters are 16 mm
All cable lengths are 1 meter