

# Titration Sensors



## EasyPlus™ Titration Sensors

pH / mV

Argentometry

Redox



**Quality and Reliability**  
at the Heart of Your Titration

**METTLER TOLEDO**

# Reliable Results For Your Titration

The titration glass sensors for routine acid / base application in aqueous media, or non-aqueous solutions are specially developed for use with the EasyPlus™ Titrators. In addition, a silver ring sensor for chloride precipitation, a platinum plate sensor for all redox titrations, and a double platinum pin sensor for voltammetric or amperometric titrations like Karl Fischer Titration are available. Quality and reliability are of the utmost importance to METTLER TOLEDO. Hence, each sensor is delivered with its own quality certificate and unique serial number for full traceability and compliance.

## EG11-BNC – pH aqueous Sensor



The EG11-BNC is the ideal sensor in acid/base titrations with the EasyPlus™ Titrator for accurate and reliable results. Determine the acidity in juice, milk and wine as well as the m- and p-value in water and much more.

### EG11-BNC

Order number	: 30043103
pH application range	: 0 – 14
Temperature range	: 0 – 60 °C
Diaphragm	: Ceramic
Shaft material	: Glass
Reference system	: Conductor
Reference electrolyte	: 3 M KCl sat. w/AgCl
Connection	: BNC fix cable
	: .....

## EG13-BNC – pH non-aqueous Sensor



The EG13-BNC is suited for acid/base titrations in non-aqueous media, such as the free fatty acid content of edible oils. Get accurate and reliable results with this specially suited sensor.

### EG13-BNC

Order number	: 30043104
pH range	: 0 – 12
Diaphragm	: PTFE
Shaft material	: Glass
Temperature range	: 0 – 60 °C
Reference system	: Conductor
Reference electrolyte	: LiCl, 1 mol/L in ethanol
Connection	: BNC fix cable
	: .....

## EM45-BNC – Chloride Sensor



The EM45-BNC is the ideal silver ring sensor for chloride titrations, particularly in food and water. This sensor is also suited for silver content titrations.

### EM45-BNC

Order number	30043107
Detection range	0 – ±2000 mV
Temperature range	0 – 60 °C
Sensor element	Silver ring
Diaphragm	Ceramic
Shaft materia	Glass
Reference system	Conductor
Reference electrolyte	1 mol/L KNO <sub>3</sub>
Connection	BNC fix cable

## EM40-BNC – Redox mV Sensor



The EM40-BNC is a platinum ring sensor suited for all types of redox titrations encountered in the food, electroplating or electronics industries. The sensor is suited for applications like preoxide value or reducing sugar content.

### EM40-BNC

Order number	30043106
Detection range	0 – ±2000 mV
Temperature range	0 – 60 °C
Sensor element	Platinum plate
Shaft material	Glass
Reference system	Conductor
Reference electrolyte	3 mol/L KCl sat.
Connection	BNC fix cable

## EM43-BNC – Redox Ipol and Karl Fischer Sensor



The EM43-BNC is a simple, durable and zero-maintenance sensor primarily for Karl Fischer and redox titrations of important food ingredients such as Vitamin C or SO<sub>2</sub> in wine.

### EM43-BNC

Order number	30043105
Detection range	0 – ±2000 mV
Temperature range:	0 – 100 °C
Sensor element	Double platinum pin
Diaphragm	n/a
Shaft material	Glass
Reference system	n/a
Reference electrolyte	n/a
Connection	BNC fix cable

## NT1000 – Temperature Sensor

The NT1000 temperature sensor is used for compensating your pH measurements and pH endpoint titrations with the EasyPlus™ Titrator.

### NT1000

Order number	51300164
Temperature range:	0 – 100 °C
Connection	Cinch

# Accessories

## Electrolyte and Cleaning Solutions

METTLER TOLEDO offers an extensive range of reference electrolytes and cleaning solutions, which are indispensable for proper maintenance and care, yielding trouble-free titrations and measurements, as well as extended sensor life.

Electrolytes for reference systems	Order no. 25 mL	Order no. 250 mL	Order no. 6 x 250 mL
KCl 3 mol/L solution, AgCl-saturated, for Ag/AgCl reference systems	51343184	51340045	51340046
1 mol/L KNO <sub>3</sub>	51343182	51340047	51340234

Wetting cap	Order no.
For sensors with shaft diameter of 12 mm	51340020

## Buffer Solutions with Quality Test Certificate

Any pH measurement and end point titration can only be as accurate as the buffer solutions used for calibrating the pH sensor. The buffer solutions supplied by METTLER TOLEDO are provided with a quality test certificates that guarantees the specifications and compliance with international standards. The temperature compensation tables for the buffers are built into the EasyPlus™ titrators for the utmost accuracy in calibrations when used with the NT1000 temperature sensor.

Buffer solutions	pH level at 25 °C	Order no. 250 mL	Order no. 6 x 250 mL	Order no. 30 sachets of 30 mL
Standard pH buffer solutions	2.00	51350002	51350016	
	4.01	51350004	51350018	51302069
	7.00	51350006	51350020	51302047
	9.21	51350008	51350022	51302070
	10.00	51350010	51350024	51302079
	11.00	51350012	51350026	
	Rainbow I (3x10 sachets of 20 mL 4.01/7.00/9.21)			51302068
	Rainbow II (3x10 sachets of 20 mL 4.01/7.00/10.00)			51302080

[www.mt.com/easyplustitration](http://www.mt.com/easyplustitration)

For more information

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**Quality certificate.** Development, production and testing according to ISO 9001.



**Environmental management system** according to ISO 14001.



**"European conformity".** The CE conformity mark provides you with the assurance that our products comply with the EU directives.