



# Calibration Solutions

## *pH - Conductivity - Redox*



### *Calibration and quality*

The determination of pH, conductivity and redox potential are routine operations in most laboratories and processes. Reliability and accuracy of the measurements are critical for the quality control.

*The XS Solution* range suits your needs and guarantees an impeccable calibration.



*Traceability and Reliability*



*Assurance and Accreditation*



## pH buffer solutions

- 250 ml and 500 ml ergonomic bottle with built-in dosing compartment and value table depending on temperature for an accurate calibration
- Economical, using just the proper amount per calibration
- Coloured for an easier identification

- Immune to micro-organisms
- Actual value and expiration date printed on the bottle
- Life time 24 months
- Actual Value and expiration date reported on the certificate
- Certificates available at our website

### XS Professional with DAkkS/DKD certificate

TAMPONI pH				
Part No.	Package	pH value (25°C)	Accuracy	Colour
51300003	250 ml	4,01	± 0,02	Red
51300013	250 ml	7,00	± 0,02	Green
51300023	250 ml	9,21	± 0,02	Blue
51300033	250 ml	10,01	± 0,02	Yellow
51300103	500 ml	4,01	± 0,02	Red
51300113	500 ml	7,00	± 0,02	Green
51300123	500 ml	9,21	± 0,02	Blue
51300133	500 ml	10,01	± 0,02	Yellow

### XS Basic with NIST traceability

pH buffer				
Part No.	Package	pH value (25°C)	Accuracy	Colour
51100033	250 ml	4,01	± 0,02	Red
51100043	250 ml	7,00	± 0,02	Green
51100053	250 ml	9,00	± 0,02	Blue
51100073	250 ml	9,21	± 0,02	Blue
51100063	250 ml	10,01	± 0,02	Colourless
51100133	500 ml	4,01	± 0,02	Red
51100143	500 ml	7,00	± 0,02	Green
51100153	500 ml	9,00	± 0,02	Blue
51100173	500 ml	9,21	± 0,02	Blue
51100163	500 ml	10,01	± 0,02	Colourless
51100233	5 l	4,01	± 0,02	Red
51100243	5 l	7,00	± 0,02	Green
51100253	5 l	9,00	± 0,02	Blue
51100273	5 l	9,21	± 0,02	Blue
51100263	5 l	10,01	± 0,02	Colourless



Lot number, Actual Value and expiration date reported on the bottle



Value table depending on temperature and QR Code with link to our website

REDOX STANDARD for ORP verification			
Part No.	Package	mV value (25°C)	Accuracy
51100303	250 ml	Redox/ORP 200mV/25°C	± 5mV
51100313	250 ml	Redox/ORP 475mV/25°C	± 5mV
51100323	500 ml	Redox/ORP 475mV/25°C	± 5mV
51100333	5 l	Redox/ORP 650mV/25°C	± 5mV

# Conductivity



Conductivity standard 5 µS/cm with DANAK/DFM certificate



Conductivity standard 5 µS/cm with NIST traceability



With DANAK/DFM certificate



With NIST traceability

## Conductivity standard

- 500 ml ergonomic bottle with built-in dosing compartment and value table depending on temperature for an accurate calibration
- 1,3 and 5,0 µS/cm in 280 ml glass bottle
- Economical, using just the proper amount per calibration

- Life time 24 months
- **1,3 and 5,0 µS/cm life time 12 months**
- Actual Value and expiration date reported on the certificate
- Certificates available at our website

### XS Professional with DANAK/DFM certificate

Conductivity standard			
Part No.	Package	Value µS/cm (20°C / 25°C)	Accuracy
51300303	280 ml	<b>1,3</b>	± 0.1 µS/cm
51300313	280 ml	<b>5,0</b>	± 0.1 µS/cm
51300323	500 ml	76 / <b>84</b>	± 1%
51300333	500 ml	133 / <b>147</b>	± 1%
51300343	500 ml	1278 / <b>1413</b>	± 1%
51300353	500 ml	11670 / <b>12880</b>	± 1%

### XS Basic with NIST traceability

Conductivity standard			
Part No.	Package	Value µS/cm (20°C / 25°C)	Accuracy
51100503	280 ml	<b>1,3</b>	± 0.1 µS/cm
51100513	280 ml	<b>5,0</b>	± 0.1 µS/cm
51100613	500 ml	76 / <b>84</b>	± 1%
51100623	500 ml	133 / <b>147</b>	± 1%
51100633	500 ml	1278 / <b>1413</b>	± 1%
51100643	500 ml	11670 / <b>12880</b>	± 1%



Fill calibration compartment



Calibrate electrode



Empty calibration compartment



**Assurance and Accreditation**

The measurements of pH and conductivity are much more accurate the more reliable the standards used for the calibration are. The XS Professional solutions are a guarantee of metrological traceability of your measurement chain, and are ideal for regulated areas. Traceability is ensured by the certification of accredited calibration laboratories according with UNI CEI EN ISO / IEC 17025. The pH buffer solutions are DKD-DAkKS certified by calibration at ZMK Zentrum für Messen und Kalibrieren. The conductivity standards are DANAK certified by calibration at DFM Danish Institute of Fundamental Metrology.

**DAkKS and DANAK are accepted by other accreditation bodies within the scope of the European Cooperation for Accreditation (EA) and the International Laboratory Accreditation Cooperation (ILAC).**



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**Traceability and Reliability**

XS standards are traceable to the IUPAC pH scale, by an unbroken chain of comparisons directly to Standard Reference Materials manufactured by NIST and PTB. Each solution is provided with the Certificate of Analysis of Giorgio Bormac internal Laboratory which guarantees quality, traceability and accuracy. XS Basic solutions are your perfect partner for verification of sensors and your measurement systems.

