

pH calibration – Tutorial

	A detailed description about the setting of the calibration parameters is given in the Instructions for Use. The example below is a calibration with two buffers.
	Start the calibration with the key <CAL> .
el.in buffer <OK> 	Immerse the electrode into the first buffer and confirm with <OK> .
enter cal.temp. 	If no temperature sensor is connected, enter the temperature at which the electrode is being calibrated. The number to be changed is selected with the arrow keys <◀> or <▶>. Now the number can be changed with the arrow keys <▲> or <▼>. Press <OK> to store the temperature.
buffer 1 measuring temp...	If a temperature sensor is connected, the temperature of the first buffer is being measured automatically.
measuring U...	The first buffer is being measured.
buffer 2  change buffer <OK> 	Remove the electrode from the first buffer and rinse it with water. Immerse the electrode into the second buffer and press <OK>.
buffer 2 measuring temp...	The temperature of the second buffer is being measured with a connected temperature sensor.
measuring U...	The second buffer is being measured.
 calibration OK	The slope, pH(0) and the temperature are displayed after the calibration.
 	Finish the calibration with <OK> or <QUIT> .

pH measurement

<< pH/°C/mV >>	Change to the menu << pH/°C/mV >> with the arrow keys <◀> or <▶> .
	Press the key <OK> as often, until the pH value is displayed.
	Immerse the pH electrode into the sample.
	You can read off the current pH value of the sample from the display. It is stable when the message └ drifting... is no longer being displayed.

Configuration

[illegible]

Parameter in pH mode

Display	Default value	Entry range	Function
>measurement			Measuring parameters
temp.	25.0 °C	-999.9 ... 999.9 °C	Measuring temperature
>cal.settings			Calibration parameters
temperature	25.0 °C	0.0 ... 99.9 °C	Calibration temperature
report:	off	on, off	Printing calibration report automatically after calibration
cal.interval	0 h	0 ... 999 h, 0 = off	Calibration interval
no.of buffers:	2	1 ... 3	Number of buffers
buff.type:	Metrohm	Metrohm, NIST, DIN, Fisher, Fluka-BS, Mettler, Merck Titrisol, Merck CertiPUR, Beckman, Radiometer, Baker, Hamilton, Precisa, special	Buffer type
special			
pH buffer1	7.000	-19.999 ... 19.999	
pH buffer2	4.000	-19.999 ... 19.999	
pH buffer3	7.000	-19.999 ... 19.999	
>cal.limits			Monitoring calibration
lo.lim.slope	95.0 %	1.0 ... 999.9 %	Slope, lower limit
up lim.slope	103.0 %	1.0 ... 999.9 %	Slope, upper limit
lo.lim.pH(0)	6.40	0.00 ... 99.99	pH(0), lower limit
up lim.pH(0)	8.00	0.00 ... 99.99	pH(0), upper limit
>cal.data			Calibration data
slope	100.00 %	0.1 ... 999.9 %	Electrode slope
pH(0)	7.000	-99.999 ... 99.999	pH(0)
variance		read only	Variance
temperature		read only	Calibration temperature
temp.sensor		read only	Type of temperature sensor
cal.date		read only	Calibration date
cal.time		read only	Calibration time
cal.interval		read only	Calibration interval
buff.type		read only	Buffer type
no.of buffers		read only	Number of buffers

pH buffers	
<i>Set of buffers</i>	<i>Buffer / pH</i>
Metrohm	4.00 / 7.00 / 9.00
NIST	1 / 4 / 7 / 9 / 13
DIN	1 / 3 / 4 / 7 / 9 / 12
Fisher	2 / 4 / 7 / 10
Fluka Basel	4 / 7 / 9
Mettler-Toledo	2 / 4 / 7 / 9 / 11
Merck Titrisol	2 / 4 / 7 / 9 / 12
Merck CertiPUR	4.01 / 7.00 / 9.00 / 10.00
Beckmann	4 / 7 / 10
Radiometer	4.01 / 7 / 9.18
Baker	4.00 / 7.00 / 9.00 / 10.00
Hamilton DURACAL	4.01 / 7.00 / 9.21 / 10.01
Precisa	4.00 / 7.00 / 9.00