Please enter these **calibration parameters** and the **Lot No.** into the BioLection software!

pH calibration parameters Lot No.2209201 (BioLector XT Microbioreactor, filter module ID-521)

Temperature	20°C	21°C	22°C	23°C	24°C	25°C	26°C
ϕ min	71.84	71.76	71.68	71.59	71.51	71.43	71.34
ϕ max	22.79	22.73	22.66	22.59	22.53	22.46	22.39
dpH	0.70	0.70	0.70	0.70	0.70	0.70	0.70
pH_0	6.03	6.02	6.01	6.00	5.98	5.97	5.96

Temperature	27°C	28°C	29°C	30°C	31°C	32°C	33°C
ϕ min	71.26	71.18	71.09	71.01	70.93	70.84	70.76
ϕ max	22.33	22.26	22.19	22.13	22.06	21.99	21.93
dpH	0.70	0.70	0.70	0.71	0.71	0.71	0.71
pH_0	5.95	5.94	5.93	5.91	5.90	5.89	5.88

Temperature	34°C	35°C	36°C	37°C	38°C	39°C	40°C
ϕ min	70.68	70.59	70.51	70.43	70.34	70.26	70.18
ϕ max	21.86	21.79	21.73	21.66	21.59	21.52	21.46
dpH	0.71	0.71	0.71	0.71	0.71	0.71	0.71
pH_0	5.87	5.86	5.84	5.83	5.82	5.81	5.80

pH sensor properties

Dynamic range	pH 3.50 - 8.15
Resolution	Up to 0.01 pH (software)
Accuracy	± 0.25 pH at pH 4.25 - 4.75 ; ± 0.1 pH at pH 4.75 - 6.85 ; ± 0.25 pH at pH 6.85 - 7.35 (batch calibration)
Response time (t90)	At 25 °C < 30 s
Drift at pH = 7	< 0.005 pH per day (sampling interval of 6 min)
Temperature range	5 °C to 50 °C
Compatibility	Aqueous solutions, ethanol, methanol (max. 5 % v/v)
Sensor stability	Sensor material can be degraded by some microorganisms
Cross-sensitivity	Reduced to ionic strength (salinity); high concentration of fluorescent molecules in the visible range can interfere (GFP, (e)YFP); complex media can cause a pH-shift (peptone, yeast extract)
Basic material	pH sensor LG1-2141-01 (at least stable for 7 days with CertiPUR-buffer)
	pH sensors are light-sensitive;please protect them from direct light!

pH calibration

Buffer	CertiPUR Reference Material Buffer solutions Set (pH 2.00 ± 0.02 / pH 3.00 ± 0.02 / pH 9.00 ± 0.03 / pH 10.00 ± 0.03, 20 °C); 150 mM Citrat-Na-Phosphate buffer (16 solutions)
Settings	BioLector protocol = pH_DO_calibration_BOH2 ,T = 20-40 °C, 800 rpm, 1000 µL/well, shaking diameter 3 mm, MTP-type = Flower Plate (MTP-48-BOH2)
Calibration device	Hardware ID: 03166164 (BLXT Pilot 1)
Calibration phase offset	pH -360.63 (pH Ser. 3513, gain 8)
Date of calibration	2022-09-01

Contact us

If you have any questions, contact Beckman Coulter Customer Support Center:

· Worldwide, find out in our website at: www.beckman.de/support/technical

· In the USA and Canada, call us at 1-800-369-0333

· Outside the USA and Canada, contact your local Beckman Coulter representative

Please enter these **calibration parameters** and the **Lot No.** into the BioLection software!

DO calibration parameters Lot No.2209201 (BioLector XT Microbioreactor, filter module ID-528)

Temperature	20°C	21°C	22°C	23°C	24°C	25°C	26°C
A	-1973	-1932	-1891	-1849	-1808	-1767	-1726
B	15253	14929	14605	14281	13957	13633	13309
C	-13529	-13235	-12941	-12647	-12353	-12060	-11766

Temperature	27°C	28°C	29°C	30°C	31°C	32°C	33°C
A	-1685	-1644	-1603	-1562	-1520	-1479	-1438
B	12985	12661	12337	12013	11689	11365	11041
C	-11472	-11178	-10885	-10591	-10297	-10003	-9710

Temperature	34°C	35°C	36°C	37°C	38°C	39°C	40°C
A	-1397	-1356	-1315	-1274	-1233	-1191	-1150
B	10717	10393	10069	9745	9421	9098	8774
C	-9416	-9122	-8828	-8535	-8241	-7947	-7653

DO sensor properties

Dynamic range	0 - 100 % oxygen
Resolution	Up to 0.1 % O2 (software)
Accuracy	± 5% dissolved oxygen (batch calibration)
Drift at 0% oxygen	< 0.5% O2 per day (sampling interval of 6 min)
Response time (t90)	< 30 s
Temperature range	5 – 50°C
Sensor stability	sensor material can be degraded by some microorganisms
Cross-sensitivity to	Organic solvents, such as acetone, toluene, chloroform or methylene chloride, Chlorine gas; high concentration of fluorescent molecules in the visible range can interfere (mCherry, tdTomato, dsRed, nile red); complex media can cause a DO-shift
Basic material	Oxygen sensor RF-221155396 (at least stable for 7 days with CertiPUR-buffer)
	DO sensors are light-sensitive;please protect them from direct light!

DO calibration

Calibration	Three-point calibration at an oxygen-free environment (1.0 M sulfite system), an air-saturated environment (21% oxygen) and a pure (100%) oxygen environment (latter two with QC buffer)
Settings	BioLector protocol = pH_DO_calibration_BOH2 ,T = 20-40 °C, 800 rpm, 1000 µL/well, shaking diameter 3 mm, MTP-type = Flower Plate (MTP-48-BOH2)
Calibration device	Hardware ID: 03166164 (BLXT Pilot 1)
Calibration phase offset	DO -360.94 (DO Ser. 4452, gain 4)
Date of calibration	2022-09-01

Sterilization procedure

Sterilization	Beta irradiation (20 kGy)
BGS-certificate No	1065724
Date of sterilization	2022-08-01

Contact us

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