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

pH calibration parameters Lot No.2210221 and 2210227 (BioLector XT Microbioreactor, filter module ID-521)

Temperature	20°C	21°C	22°C	23°C	24°C	25°C	26°C
ϕ min	69.99	69.90	69.80	69.70	69.60	69.50	69.40
ϕ max	21.89	21.81	21.73	21.65	21.58	21.50	21.42
dpH	0.72	0.72	0.72	0.72	0.72	0.72	0.72
pH_0	5.87	5.86	5.85	5.83	5.82	5.81	5.80

Temperature	27°C	28°C	29°C	30°C	31°C	32°C	33°C
ϕ min	69.30	69.20	69.11	69.01	68.91	68.81	68.71
ϕ max	21.34	21.26	21.19	21.11	21.03	20.95	20.87
dpH	0.72	0.72	0.72	0.71	0.71	0.71	0.71
pH_0	5.79	5.77	5.76	5.75	5.74	5.73	5.71

Temperature	34°C	35°C	36°C	37°C	38°C	39°C	40°C
ϕ min	68.61	68.51	68.41	68.32	68.22	68.12	68.02
ϕ max	20.79	20.72	20.64	20.56	20.48	20.40	20.33
dpH	0.71	0.71	0.71	0.71	0.71	0.71	0.71
pH_0	5.70	5.69	5.68	5.66	5.65	5.64	5.63

pH sensor properties

Dynamic range	pH 3.50 - 7.60
Resolution	Up to 0.01 pH (software)
Accuracy	± 0.25 pH at pH 4.20 - 4.65 ; ± 0.1 pH at pH 4.65 - 6.45 ; ± 0.25 pH at pH 6.45 - 6.90 (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 LG1-2212-01 (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 = MF_pH_DO_calibration_BOH2 ,T = 20-40 °C, 800 rpm, 1000 µL/well, shaking diameter 3 mm, MTP-type = Microfluidic Flower Plate (MTP-MF32C-BOH2)
Calibration device	Hardware ID: 03166164 (BLXT Pilot 1)
Calibration phase offset	pH -360.63 (pH Ser. 3513, gain 8)
Date of calibration	2022-08-17

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.2210221 and 2210227 (BioLector XT Microbioreactor, filter module ID-528)

Temperature	20°C	21°C	22°C	23°C	24°C	25°C	26°C
A	-1964	-1924	-1884	-1843	-1803	-1763	-1723
B	15201	14883	14566	14248	13931	13613	13296
C	-13497	-13209	-12921	-12633	-12345	-12057	-11769

Temperature	27°C	28°C	29°C	30°C	31°C	32°C	33°C
A	-1682	-1642	-1602	-1561	-1521	-1481	-1441
B	12978	12661	12343	12026	11708	11391	11073
C	-11481	-11193	-10905	-10617	-10329	-10041	-9753

Temperature	34°C	35°C	36°C	37°C	38°C	39°C	40°C
A	-1400	-1360	-1320	-1279	-1239	-1199	-1158
B	10756	10438	10121	9803	9486	9168	8851
C	-9465	-9177	-8889	-8601	-8313	-8025	-7737

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-221155397+398 (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 = MF_pH_DO_calibration_BOH2 ,T = 20-40 °C, 800 rpm, 1000 µL/well, shaking diameter 3 mm, MTP-type = Microfluidic Flower Plate (MTP-MF32C-BOH2)
Calibration device	Hardware ID: 03166164 (BLXT Pilot 1)
Calibration phase offset	DO -360.94 (DO Ser. 4452, gain 4)
Date of calibration	2022-08-17

Sterilization procedure

Sterilization	Beta irradiation (20 kGy)
BGS-certificate No	1069681
Date of sterilization	2022-08-11

Contact us

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