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

pH calibration parameters Lot No.2304201 and 2304207 (BioLector XT Microbioreactor, filter module ID-521)

Temperature	20°C	21°C	22°C	23°C	24°C	25°C	26°C
ϕ min	70.62	70.51	70.40	70.29	70.17	70.06	69.95
ϕ max	24.07	23.97	23.86	23.75	23.64	23.54	23.43
dpH	0.70	0.70	0.70	0.70	0.70	0.70	0.70
pH_0	5.84	5.83	5.82	5.82	5.81	5.80	5.79

Temperature	27°C	28°C	29°C	30°C	31°C	32°C	33°C
ϕ min	69.84	69.73	69.61	69.50	69.39	69.28	69.17
ϕ max	23.32	23.21	23.11	23.00	22.89	22.79	22.68
dpH	0.71	0.71	0.71	0.71	0.71	0.71	0.71
pH_0	5.78	5.77	5.76	5.75	5.74	5.73	5.72

Temperature	34°C	35°C	36°C	37°C	38°C	39°C	40°C
ϕ min	69.05	68.94	68.83	68.72	68.61	68.50	68.38
ϕ max	22.57	22.46	22.36	22.25	22.14	22.04	21.93
dpH	0.71	0.71	0.71	0.71	0.71	0.71	0.71
pH_0	5.71	5.70	5.69	5.69	5.68	5.67	5.66

pH sensor properties

Dynamic range	pH 3.50 - 7.75
Resolution	Up to 0.01 pH (software)
Accuracy	± 0.25 pH at pH 4.20 - 4.70 ; ± 0.1 pH at pH 4.70 - 6.50 ; ± 0.25 pH at pH 6.50 - 7.00 (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 LG1-2239-01 (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 -360.53 (pH Ser. 3513, gain 8)
Date of calibration	2023-03-20

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.2304201 and 2304207 (BioLector XT Microbioreactor, filter module ID-528)

Temperature	20°C	21°C	22°C	23°C	24°C	25°C	26°C
A	-1719	-1684	-1649	-1613	-1578	-1542	-1507
B	13210	12931	12653	12375	12096	11818	11540
C	-11628	-11376	-11125	-10873	-10621	-10370	-10118

Temperature	27°C	28°C	29°C	30°C	31°C	32°C	33°C
A	-1471	-1436	-1401	-1365	-1330	-1294	-1259
B	11262	10983	10705	10427	10148	9870	9592
C	-9867	-9615	-9363	-9112	-8860	-8609	-8357

Temperature	34°C	35°C	36°C	37°C	38°C	39°C	40°C
A	-1223	-1188	-1153	-1117	-1082	-1046	-1011
B	9314	9035	8757	8479	8201	7922	7644
C	-8106	-7854	-7602	-7351	-7099	-6848	-6596

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-230250060+61 (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 -360.66 (DO Ser. 4452, gain 4)
Date of calibration	2023-03-20

Sterilization procedure

Sterilization	Beta irradiation (20 kGy)
Steris Process Run ID	2324-3482
Date of sterilization	2023-03-09

Contact us

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