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

pH calibration parameters Lot No.2201201 and 2201207 (BioLector XT Microbioreactor, filter module ID-521)

Temperature	20°C	21°C	22°C	23°C	24°C	25°C	26°C
ϕ min	72.13	72.04	71.96	71.87	71.79	71.71	71.62
ϕ max	22.74	22.70	22.65	22.61	22.57	22.52	22.48
dpH	0.70	0.70	0.70	0.69	0.69	0.69	0.69
pH_0	5.91	5.90	5.89	5.88	5.86	5.85	5.84

Temperature	27°C	28°C	29°C	30°C	31°C	32°C	33°C
ϕ min	71.54	71.45	71.37	71.28	71.20	71.11	71.03
ϕ max	22.44	22.39	22.35	22.31	22.26	22.22	22.18
dpH	0.69	0.69	0.69	0.69	0.69	0.69	0.69
pH_0	5.83	5.82	5.80	5.79	5.78	5.77	5.76

Temperature	34°C	35°C	36°C	37°C	38°C	39°C	40°C
ϕ min	70.94	70.86	70.77	70.69	70.60	70.52	70.43
ϕ max	22.13	22.09	22.05	22.00	21.96	21.92	21.87
dpH	0.69	0.69	0.69	0.69	0.69	0.69	0.69
pH_0	5.74	5.73	5.72	5.71	5.70	5.69	5.67

pH sensor properties

Dynamic range	pH 3.50 - 7.80
Resolution	Up to 0.01 pH (software)
Accuracy	± 0.25 pH at pH 4.20 - 4.65 ; ± 0.1 pH at pH 4.65 - 6.60 ; ± 0.25 pH at pH 6.60 - 7.10 (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 -360.68 (pH Ser. 3513, gain 8)
Date of calibration	2022-01-31

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.2201201 and 2201207 (BioLector XT Microbioreactor, filter module ID-528)

Temperature	20°C	21°C	22°C	23°C	24°C	25°C	26°C
A	-1638	-1607	-1576	-1545	-1514	-1483	-1452
B	12575	12332	12090	11847	11605	11362	11120
C	-11057	-10838	-10620	-10401	-10183	-9964	-9746

Temperature	27°C	28°C	29°C	30°C	31°C	32°C	33°C
A	-1421	-1391	-1360	-1329	-1298	-1267	-1236
B	10877	10635	10393	10150	9908	9665	9423
C	-9527	-9309	-9090	-8872	-8653	-8435	-8216

Temperature	34°C	35°C	36°C	37°C	38°C	39°C	40°C
A	-1205	-1174	-1143	-1112	-1081	-1050	-1019
B	9180	8938	8695	8453	8210	7968	7725
C	-7998	-7780	-7561	-7343	-7124	-6906	-6687

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-213550642 (at least stable for 7 days with CertiPUR-buffer)
	DO sensors are light-sensitive;please protect them from direct light!

DO calibration

Calibration	0.5 M Sulfite system (Two-point calibration with oxygen-free environment (sodium sulfite) and air-saturated environment)
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 -360.83 (DO Ser. 4452, gain 4)
Date of calibration	2022-01-31

Sterilization procedure

Sterilization	Beta irradiation (20 kGy)
BGS-certificate No	990461
Date of sterilization	2022-01-19

Contact us

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