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

pH calibration parameters Lot No.2208221 (BioLector XT Microbioreactor, filter module ID-521)

Temperature	20°C	21°C	22°C	23°C	24°C	25°C	26°C
ϕ min	71.57	71.48	71.39	71.30	71.22	71.13	71.04
ϕ max	24.04	23.97	23.90	23.83	23.76	23.70	23.63
dpH	0.71	0.71	0.71	0.71	0.71	0.71	0.71
pH_0	5.99	5.98	5.97	5.96	5.95	5.94	5.93

Temperature	27°C	28°C	29°C	30°C	31°C	32°C	33°C
ϕ min	70.95	70.87	70.78	70.69	70.60	70.51	70.43
ϕ max	23.56	23.49	23.42	23.35	23.29	23.22	23.15
dpH	0.71	0.71	0.71	0.71	0.71	0.71	0.71
pH_0	5.92	5.91	5.90	5.89	5.88	5.87	5.86

Temperature	34°C	35°C	36°C	37°C	38°C	39°C	40°C
ϕ min	70.34	70.25	70.16	70.08	69.99	69.90	69.81
ϕ max	23.08	23.01	22.94	22.88	22.81	22.74	22.67
dpH	0.71	0.71	0.71	0.71	0.71	0.71	0.72
pH_0	5.85	5.84	5.83	5.82	5.81	5.80	5.79

pH sensor properties

Dynamic range	pH 3.55 - 7.95
Resolution	Up to 0.01 pH (software)
Accuracy	± 0.25 pH at pH 4.25 - 4.75 ; ± 0.1 pH at pH 4.75 - 6.70 ; ± 0.25 pH at pH 6.70 - 7.20 (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 = 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	2022-08-01

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.2208221 (BioLector XT Microbioreactor, filter module ID-528)

Temperature	20°C	21°C	22°C	23°C	24°C	25°C	26°C
A	-1740	-1714	-1688	-1662	-1636	-1610	-1584
B	13407	13203	12999	12795	12591	12387	12183
C	-11842	-11658	-11474	-11290	-11107	-10923	-10739

Temperature	27°C	28°C	29°C	30°C	31°C	32°C	33°C
A	-1558	-1532	-1506	-1479	-1453	-1427	-1401
B	11979	11775	11571	11367	11163	10959	10755
C	-10555	-10372	-10188	-10004	-9820	-9636	-9453

Temperature	34°C	35°C	36°C	37°C	38°C	39°C	40°C
A	-1375	-1349	-1323	-1297	-1271	-1245	-1219
B	10551	10347	10143	9939	9735	9531	9327
C	-9269	-9085	-8901	-8717	-8534	-8350	-8166

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- 221155395+396 (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	2022-08-01

Sterilization procedure

Sterilization	Beta irradiation (20 kGy)
BGS-certificate No	1064096
Date of sterilization	2022-07-28

Contact us

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