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

pH calibration parameters Lot No.2210301+2210307 (BioLector XT Microbioreactor, filter module ID-524)

Temperature	20°C	21°C	22°C	23°C	24°C	25°C	26°C
ϕ min	63.73	63.96	64.20	64.43	64.66	64.89	65.12
ϕ max	9.39	9.42	9.45	9.47	9.50	9.53	9.56
dpH	-0.38	-0.38	-0.38	-0.38	-0.38	-0.38	-0.38
pH_0	5.48	5.48	5.47	5.46	5.45	5.45	5.44

Temperature	27°C	28°C	29°C	30°C	31°C	32°C	33°C
ϕ min	65.35	65.58	65.81	66.05	66.28	66.51	66.74
ϕ max	9.58	9.61	9.64	9.67	9.70	9.72	9.75
dpH	-0.38	-0.38	-0.38	-0.38	-0.38	-0.38	-0.38
pH_0	5.43	5.43	5.42	5.41	5.40	5.40	5.39

Temperature	34°C	35°C	36°C	37°C	38°C	39°C	40°C
ϕ min	66.97	67.20	67.43	67.67	67.90	68.13	68.36
ϕ max	9.78	9.81	9.83	9.86	9.89	9.92	9.94
dpH	-0.38	-0.38	-0.38	-0.38	-0.38	-0.38	-0.38
pH_0	5.38	5.37	5.37	5.36	5.35	5.34	5.34

pH sensor properties

Dynamic range	pH 4.05 - 6.60
Resolution	Up to 0.01 pH (software)
Accuracy	± 0.25 pH at pH 4.35 - 4.50 ; ± 0.1 pH at pH 4.50 - 6.15 ; ± 0.25 pH at pH 6.15 - 6.30 (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 pH51-211650286+287 (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 7.00 ± 0.02 / pH 8.00 ± 0.03, 20 °C); 150 mM Citrat-Na-Phosphate buffer (16 solutions)
Settings	BioLector protocol = pH_DO_calibration_BOH3 ,T = 20-40 °C, 800 rpm, 1000 µL/well, shaking diameter 3 mm, MTP-type = Flower Plate (MTP-48-BOH3)
Calibration device	Hardware ID: 03166164 (BLXT Pilot 1)
Calibration phase offset	pH -360.94 (pH Ser. 3587, gain 6)
Date of calibration	2022-09-06

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.2210301+2210307 (BioLector XT Microbioreactor, filter module ID-528)

Temperature	20°C	21°C	22°C	23°C	24°C	25°C	26°C
A	-1783	-1748	-1713	-1678	-1642	-1607	-1572
B	13739	13462	13185	12907	12630	12353	12076
C	-12133	-11882	-11631	-11380	-11129	-10878	-10627

Temperature	27°C	28°C	29°C	30°C	31°C	32°C	33°C
A	-1537	-1501	-1466	-1431	-1396	-1360	-1325
B	11798	11521	11244	10967	10689	10412	10135
C	-10376	-10125	-9874	-9623	-9372	-9121	-8870

Temperature	34°C	35°C	36°C	37°C	38°C	39°C	40°C
A	-1290	-1255	-1219	-1184	-1149	-1114	-1078
B	9858	9580	9303	9026	8749	8471	8194
C	-8619	-8368	-8117	-7866	-7615	-7364	-7113

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 = pH_DO_calibration_BOH3 ,T = 20-40 °C, 800 rpm, 1000 µL/well, shaking diameter 3 mm, MTP-type = Flower Plate (MTP-48-BOH3)
Calibration device	Hardware ID: 03166164 (BLXT Pilot 1)
Calibration phase offset	DO -360.76 (DO Ser. 4452, gain 4)
Date of calibration	2022-09-06

Sterilization procedure

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

Contact us

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