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

pH calibration parameters Lot No.2201321 and 2201327 (BioLector XT Microbioreactor, filter module ID-524)

Temperature	20°C	21°C	22°C	23°C	24°C	25°C	26°C
ϕ min	63.20	63.32	63.45	63.57	63.70	63.82	63.95
ϕ max	7.06	7.07	7.08	7.09	7.09	7.10	7.11
dpH	-0.39	-0.39	-0.39	-0.39	-0.38	-0.38	-0.38
pH_0	5.58	5.58	5.57	5.56	5.56	5.55	5.55

Temperature	27°C	28°C	29°C	30°C	31°C	32°C	33°C
ϕ min	64.07	64.20	64.32	64.45	64.57	64.70	64.82
ϕ max	7.12	7.13	7.13	7.14	7.15	7.16	7.17
dpH	-0.38	-0.38	-0.38	-0.38	-0.38	-0.38	-0.38
pH_0	5.54	5.54	5.53	5.52	5.52	5.51	5.51

Temperature	34°C	35°C	36°C	37°C	38°C	39°C	40°C
ϕ min	64.95	65.07	65.20	65.33	65.45	65.58	65.70
ϕ max	7.18	7.18	7.19	7.20	7.21	7.22	7.23
dpH	-0.38	-0.38	-0.38	-0.37	-0.37	-0.37	-0.37
pH_0	5.50	5.50	5.49	5.48	5.48	5.47	5.47

pH sensor properties

Dynamic range	pH 4.05 - 6.70
Resolution	Up to 0.01 pH (software)
Accuracy	± 0.25 pH at pH 4.35 - 4.50 ; ± 0.1 pH at pH 4.50 - 6.20 ; ± 0.25 pH at pH 6.20 - 6.40 (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 pH51-202850563+564 (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 = MF_pH_DO_calibration_BOH3 ,T = 20-40 °C, 800 rpm, 1000 µL/well, shaking diameter 3 mm, MTP-type = Microfluidic Round Well Plate (MTP-RMF32C-BOH3)
Calibration device	Hardware ID: 03166164 (BLXT Pilot 1)
Calibration phase offset	pH -361.00 (pH Ser. 3587, gain 6)
Date of calibration	2022-01-25

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.2201321 and 2201327 (BioLector XT Microbioreactor, filter module ID-528)

Temperature	20°C	21°C	22°C	23°C	24°C	25°C	26°C
A	-1453	-1431	-1408	-1386	-1364	-1341	-1319
B	11092	10919	10745	10572	10399	10225	10052
C	-9687	-9534	-9380	-9227	-9073	-8919	-8766

Temperature	27°C	28°C	29°C	30°C	31°C	32°C	33°C
A	-1296	-1274	-1251	-1229	-1206	-1184	-1161
B	9879	9706	9532	9359	9186	9012	8839
C	-8612	-8459	-8305	-8151	-7998	-7844	-7691

Temperature	34°C	35°C	36°C	37°C	38°C	39°C	40°C
A	-1139	-1116	-1094	-1072	-1049	-1027	-1004
B	8666	8492	8319	8146	7972	7799	7626
C	-7537	-7383	-7230	-7076	-6923	-6769	-6615

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-213550641 (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 = MF_pH_DO_calibration_BOH3 ,T = 20-40 °C, 800 rpm, 1000 µL/well, shaking diameter 3 mm, MTP-type = Microfluidic Round Well Plate (MTP-RMF32C-BOH3)
Calibration device	Hardware ID: 03166164 (BLXT Pilot 1)
Calibration phase offset	DO -360.83 (DO Ser. 4452, gain 4)
Date of calibration	2022-01-25

Sterilization procedure

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

Contact us

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