

DASGIP BioLector

Calibration Data Sheet for *DO optodes*

Please enter these **calibration parameters** and the **Lot.-No.** in the BioLector software!

Lot.-No.: 1110
Filter: STD

Date of calibration: 2011/07/29

DO calibration parameters

Buffer	Sulfite system						
Temperature	20°C	21°C	22°C	23°C	24°C	25°C	26°C
ϕ cal0	75.33	75.28	75.23	75.18	75.08	75.08	75.03
ϕ cal100	44.43	44.22	44.01	43.80	43.59	43.39	43.18
Temperature	27°C	28°C	29°C	30°C	31°C	32°C	33°C
ϕ cal0	74.98	74.93	74.88	74.83	74.78	74.73	74.68
ϕ cal100	42.97	42.76	42.55	42.34	42.13	41.92	41.71
Temperature	34°C	35°C	36°C	37°C	38°C	39°C	40°C
ϕ cal0	74.63	74.58	74.53	74.48	74.43	74.38	74.33
ϕ cal100	41.50	41.29	41.09	40.88	40.67	40.46	40.25

Sensor properties

Dynamic range	0-100% air saturation (a.s.)
Resolution	Up to 0.1% O ₂ (software)
Accuracy	± 2% dissolved oxygen (batch calibration)
Drift at 0% oxygen	< 0.03% O ₂ within 30 days (sampling interval of 1 min)
Response time (t90)	< 30s
Temperature range	0-50°C
Cross-sensitivity to	Organic solvents, such as acetone, toluene, chloroform or methylene chloride Chlorine gas
Basic material	Oxygen sensor PSt3-HG-1113-01

Calibration

Calibration	0.5 M Sulfite system (Two-point calibration with oxygen-free environment (nitrogen, sodium sulfite) and air-saturated environment)
Settings	BioLector protocol = DO-calibration, T = 20-40°C, 700 rpm, 1000 µL/well, shaking diameter 3 mm, MTP-type = Flowerplate (MTP-48-BO)
Calibration device	BioLector CX_020305 (BL004)
Calibration phase offset	DO 332.4 (DO Ser.0164, gain 45)

Sterilization procedure

Sterilization	Gamma irradiation (15 kGy)
BGS-certificate No	31110228
Date of sterilization	2011/07/25