

DASGIP BioLector

Calibration Data Sheet for *DO optodes*

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

Lot.-No.: 1015
Filter: STD

Date of execution: 2010/09/29
Responsible: Ritter

DO calibration parameters

Buffer	Sulfite system						
Temperature	20°C	21°C	22°C	23°C	24°C	25°C	26°C
ϕ cal0	65,76	65,81	65,86	65,91	65,97	66,02	66,07
ϕ cal100	38,55	38,32	38,10	37,87	37,65	37,42	37,20
Temperature	27°C	28°C	29°C	30°C	31°C	32°C	33°C
ϕ cal0	66,12	66,17	66,22	66,27	66,32	66,37	66,42
ϕ cal100	36,97	36,75	36,52	36,30	36,07	35,85	35,62
Temperature	34°C	35°C	36°C	37°C	38°C	39°C	40°C
ϕ cal0	66,47	66,52	66,57	66,62	66,67	66,72	66,77
ϕ cal100	35,40	35,17	34,95	34,72	34,50	34,27	34,05

Sensor properties

Dynamic range	0-100% air saturation (a.s.)
Resolution	Up to 0.1% O ₂ (software)
Accuracy	± 2% dissolved oxygen
Drift at 0% oxygen	< 0.03% O ₂ within 30 days (sampling interval of 1 min)
Response time (t ₉₀)	< 30 s
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-0938-01

Calibration

Calibration	0.5 M Sulfite system (Two-point calibration with oxygen-free environment (nitrogen, sodium sulfite) and air-saturated environment)
Settings	BioLector protocol = pH-DO-calibration, T = 20-40°C, 800 rpm, 1000 µL/well, shaking diameter 3 mm, MTP-type = Flowerplate (MTP-48-BO)
Calibration device	BioLector CX_025C03(024)

Sterilization procedure

Sterilization	Gamma irradiation (15 kGy)
BGS-certificate No	30113280
Date of sterilization	2010/09/22