



B.IV4

Strip-type biosensor

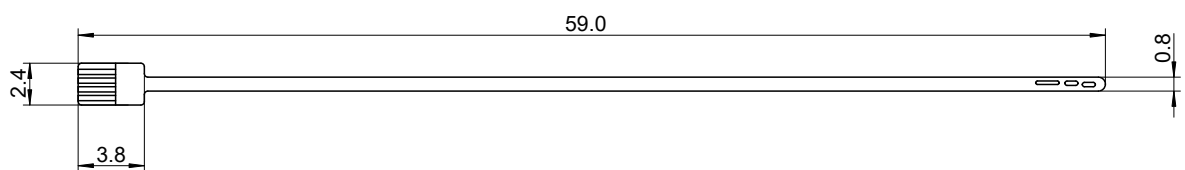
For various bioanalytical applications

A product of Jobst Technologies

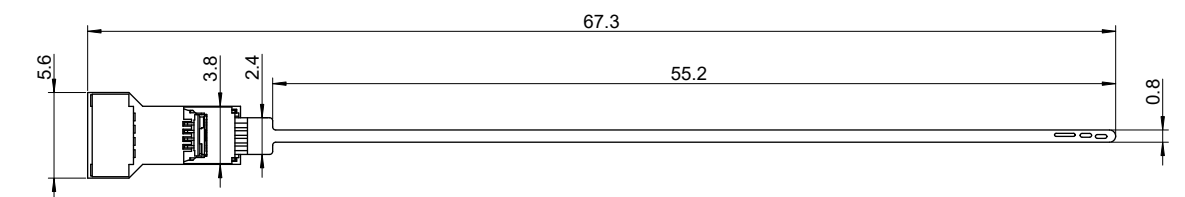
Benefits & Characteristics

- Enzyme-based amperometric measurement
- Excellent long-term stability
- Reference, counter and blank electrodes on-chip
- Suitable for dip-in applications
- For industrial applications
- Outstanding reliability
- Fast response time
- Gamma and beta sterilization compatible
- Small size

Illustration



B.IV4 Sensor



B. IV4 Sensor with IDC





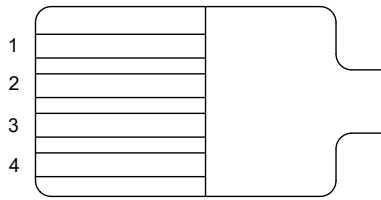
Technical Data

Dimensions	See illustration above. Dimensions in mm	
Measurement principle:	Enzymatic amperometric (oxydase enzymes and H ₂ O ₂ oxydation)	
Working electrode:	Platinum covered with enzyme membrane	
Blank electrode:	For background compensation	
Reference electrode:	Silver / silver chloride	
Counter electrode:	Platinum	
Measurable analytes: on request:	Glucose Lactate, Glutamine, Glutamate	
Operating measurement range at 37 °C:	Glucose:	0.1 mM to 50 mM
	Lactate:	0.05 mM to 25 mM
	Glutamine:	contact IST AG
	Glutamate:	contact IST AG
	Notes:	- measured in acetate buffer at 37°C - contact IST AG for buffer composition - other measurement ranges on request
Sensitivity at 37 °C:	Glucose:	typical 0.4 nA/mM
	Notes:	- measured in acetate buffer at 37°C - contact IST AG for buffer composition - other measurement ranges on request - info on other analytes on request
Compatible sterilization method:	Irradiation (beta, gamma) - recommended dose: < 25 kGy - sensitivity increases according to applied dose - lifetime decreases according to applied dose Product is delivered not sterile Do not use organic solvents For more information contact IST AG	
Time (t ₉₀ %) to first measurement:	~ 30 min after storage at 37 °C	
Time response (t ₉₀ %) at 37 °C:	< 90 s in acetate buffer at 37 °C	
Temperature influence:	~ 3.8 %/°C on signal	
Storage conditions:	+4 °C to +28 °C, desiccated	
Shelf life at recommended storage conditions:	> 6 months (from delivery)	
	> 2 years from fabrication	
Operational life time:	Glucose:	> 120 days at 20 mM > 50 days at 50 mM
	Lactate	> 7 days at 8 mM
	Notes:	- measured in acetate buffer at 37 °C - life time may vary in other buffer systems
Operating Temperature:	15-42 °C	
pH Range:	6-8	
Drift at 37 °C:	< 5%/day	
Suitable media:	bicarbonate, acetate, imidazole buffers - to be used in buffered media only - buffer must contain chloride, [Cl ⁻] ca. 110 mM - not suitable for direct use in tap water or DI-water - for information on buffer systems please contact IST AG	
Electrical connection:	FPC: compatible with 0.5-mm pitch FFC/FPC ZIF connectors IDC: JST SUR Header 4 Pos 0.8 mm Female	

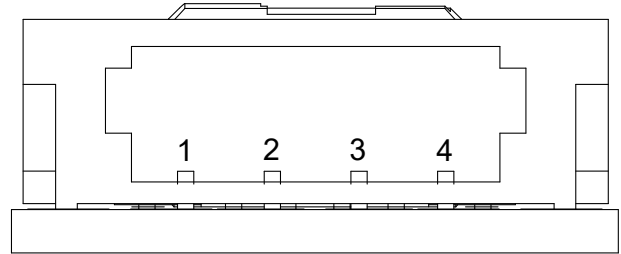
General note: Performance data in this document was determined in acetate buffer at 37 °C, pH 7 and normal atmospheric conditions. All parameters may vary in other media.



Pin assignment



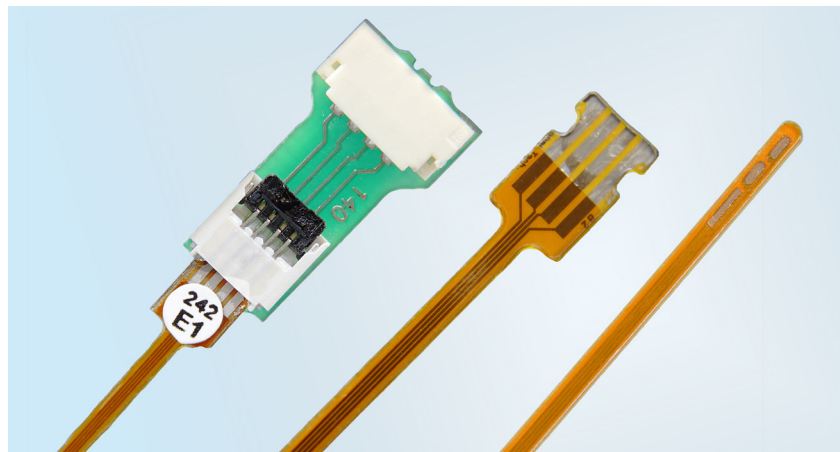
B.IV4 Sensor



B. IV4 Sensor with IDC

1	2	3	4
Reference	Counter	Blank	Glucose

Product Image



Left: B.IV4 Sensor with IDC
Center: B.IV4 Sensor
Right: Sensing area

Order information

	Glucose	Glucose with IDC	Lactate with IDC
Reference	B.IV4.G.1X.FPC	B.IV4.G.1X.IDC	B.IV4.L.1X.IDC
Former reference	B.IV4.G.FC	B.IV4.G.IDC	B.IV4.L.IDC
Order Code	105127	105192	105191
Former order code	390.00148	390.00231	390.00230
Other analytes	on request		on request

Disclaimer

Evaluation product for professionals to be used solely for research and development purposes! Not for medical and diagnostic use. Not to be used on humans. For more information contact IST AG.



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