



B.IV4.G.FC

Strip-type biosensor

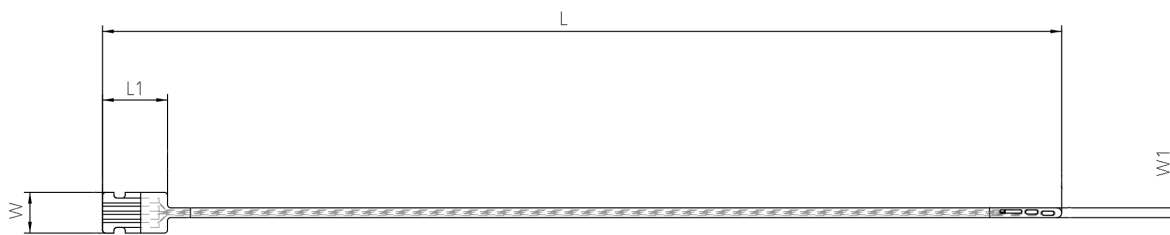
For various bioanalytical applications

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



1) For actual size, see dimensions

Technical Data

Dimensions (L/L1 x W/W1 x H in mm)	58.8/4 x 2.5/0.6 x 0.2	
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:	Glucose	
Operating measurement range at +37°C:	Glucose:	0.1 mM to 50 mM
Sensitivity at 37°C:	Glucose:	typical 0.4 nA/mA
	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



Sterilization:

Irradiation (beta, gamma)
 - recommended dose: < 25 kGy
 - sensitivity increases according to applied dose
 - lifetime decreases according to applied dose
 Initial bioburden > 1cfu per sensor
 Do not use organic solvents
 For more information contact IST AG

Time (t ₉₀ %) to first measurement after storage at 37 °C:	~ 30 min
Time response (t ₉₀ %) at 37°C:	< 90 s
Temperature influence:	~ 3.8 %/°C on signal
Storage conditions:	+4 °C to +35 °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 Notes: - measured in acetate buffer at 37 °C - life time may vary on 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:	FC: compatible with 0.5-mm pitch FFC/FCP 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 on other media.

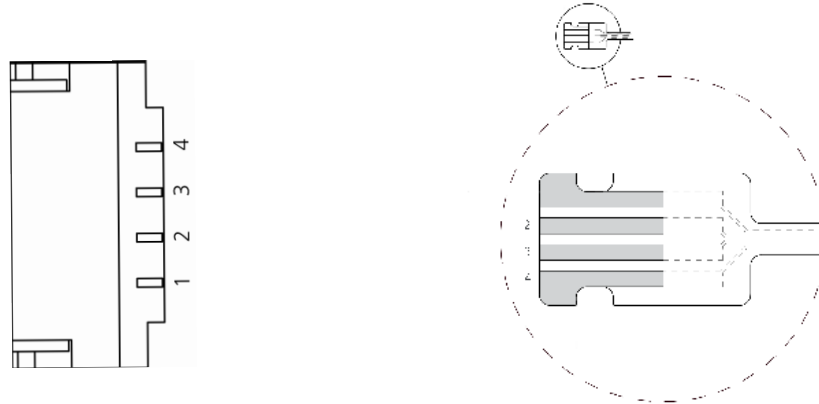
Product Photo



Two B.IV4 sensors: left showing pin, right showing sensor



Pin Assignment



1	2	3	4
Reference	Counter	Blank	Glucose

Order Information

Description:	Item number:	Former main reference:
B.IV4.G.FC	105127	390.00148

Disclaimer

Not for medical, diagnostics and use on humans. For evaluation use only. For more information contact IST AG.



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