



Disposable **Screen-Printed Ferrocyanide/Carbon Electrodes (ref. F10 and XFF10)** are ideal for the determination of hydrogen peroxide at a low detection potentials. These electrodes are recommended for the development of enzymatic biosensors based on oxidases, for working with microvolumes and for decentralized assays.

The presence of two working electrodes in XFF10 enables the detection of two analytes in the same solution simultaneously.

*Ceramic substrate:* L33 x W10 x H0.5 mm

*Electric contacts:* Silver

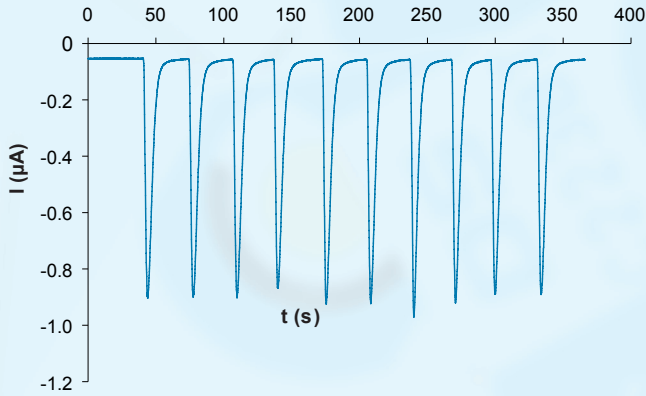
The electrochemical cell consists on:

*Working electrode:* Ferrocyanide/Carbon

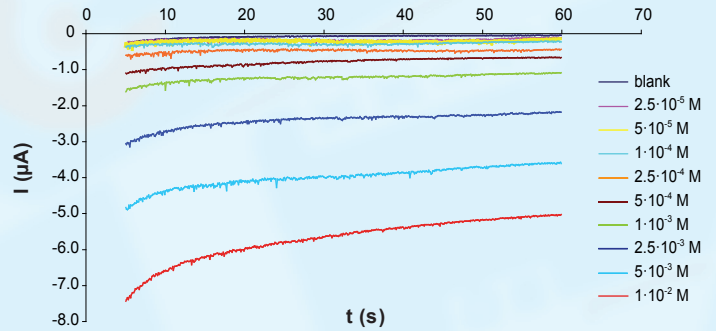
*Auxiliary electrode:* Carbon

*Reference electrode:* Silver

**Screen-printed Ferrocyanide/Carbon Electrodes** are commercialised in 75 units pack. They should be stored at room temperature, protected from light in a dry place.

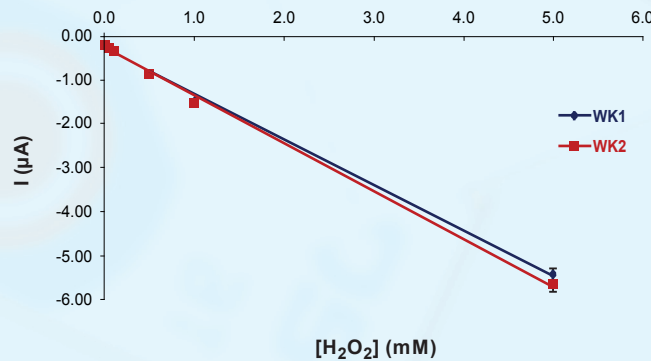


Amperometric detection of hydrogen peroxide in a flow injection analysis system with our easy to use Flow-cell (ref. FLWCL). The amperometric responses for  $1 \cdot 10^{-3}$  M  $H_2O_2$  at a ref. F10 electrode do not show any fouling effect.  $RSD\% = 3.5$ ,  $n = 10$ .  
 $E_{det} -0.15$  V; Flow rate 2 ml/min; Flow carrier 0.05 M phosphate buffer, pH 6.5 and 0.1 M KCl.



These Ferrocyanide/Carbon Electrodes (ref. F10) can also be used in batch, for chronoamperometric detection of hydrogen peroxide using a drop of 40  $\mu$ L of sample.

In this assay different electrodes are used for each measurement. Analysis of hydrogen peroxide between  $2.5 \cdot 10^{-5}$  M and  $1 \cdot 10^{-3}$  M is presented in the figure.  $E_{det} -0.15$  V (60 s); Electrolyte solution 0.05 M phosphate buffer, pH 6.5 and 0.1 M KCl.



Calibration curve for hydrogen peroxide (in a 0.05 M PBS 0.1M KCl buffer pH 6.4) from  $5 \cdot 10^{-5}$  M to  $5 \cdot 10^{-3}$  M using our Dual Screen-printed Ferrocyanide/Carbon electrodes (ref. XFF10).  $E_{det} -0.15$  V

Also, specific connectors that act as an interface between the Screen-Printed Electrode and any potentiostat and other accessories are available at [DropSens](http://DropSens.com).

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