# TESCA



### **Features**

- Professional analyzer for TH 165
- Continuous photometric determination of the glucose concentration

Sci-tech Flow Injection Analysis Apparatus Model 32379 supplements 32378. It uses the photometer in 32378 as a detector to detect the reaction product glucose.

The multi-channel pump permanently conveys three liquid flows into the FIA. The dissolved reaction products from TH 165 and an indicator reagent are first mixed in one chamber. The mixture then flows through a helical reaction loop. The conduction of the flow in the reaction loop enables an even distribution of all substances. Another indicator reagent is added in a second mixing chamber. After flowing through another reaction loop, the mixture enters the flow cell. There the light intensity is continuously measured with the photometer to determine the glucose concentration. To trigger the discoloration for the photometric measurement, a defined amount of the enzyme 'glucose oxidase' is injected through an injection valve. The indicator reagents and the enzyme 'glucose oxidase' are not included in the scope of delivery.

32379 enables more measurements during the experiment than a manual analysis. In addition, the reproducibility is improved and it is no longer necessary to mix each individual sample.

# **Specifications**

- Continuous, photometric determination of the glucose concentration in the product from 32378
- PTFE flow cell for determining the concentration with the photometer from 32378
- Multi-channel peristaltic pump for conveying the

Note: Specifications are subject to change.

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product from 32378 and the indicator reagents

- Injection valve, injection syringe and injection loop for adding the enzyme 'glucose oxidase' required for verification
- 2 mixing chambers for mixing the product and indicator reagents
- 2 PTFE reaction loops
- 3 DURAN glass beakers for indicator reagents and enzyme 'glucose oxidase'
- 1 tank for waste

# **Technical Specifications**

- Flow cell travel length: 1cm
- Multi-channel peristaltic pump
- 4 channels
- max. flow rate per channel: 11mL/min at 100min-1 and hose Di=1,42mm
- Injection valve
  - 6 connections
  - 2 switch positions
- Loops
  - Reaction loops: 1x 2000mm, 1x 4000mm
  - Injection loop: 1x 100mm
- Tanks
  - Indicator reagents: 2x 250mL
  - Enzyme 'glucose oxidase': 1x 25mL
  - Waste: 1x 1000mL
  - Injection syringe: 1x 10mL

# **Experiments**

- Using the flow injection analysis (FIA)
- Determining the concentration
- Determining the yield for TH 165

# Requirements

Mains Power 220 – 240V @ 50Hz, 1Ph

