

# HAFFMANS VOS ROTA TURBIDITY METER

PRODUCT LEAFLET



## GENERAL PRODUCT INFORMATION

In the beer and beverage industries, the turbidity is a determining factor in the quality of beer and carbonated beverages and serves as an acceptance criteria for consumers. It is especially important to continuously control and measure the turbidity during production and after filling to predict the shelf life of the product (forcing test).

The Turbidity Meter measures the scattered light caused by particles and incorporates the latest standards from MEBAK (Mittleeuropäische Brautechnische Analysekommission):

- 90° measuring angle
- Red light  $650 \pm 30$  nm
- Formazin calibration standard

Particles smaller than  $1 \mu\text{m}$ , such as proteins, mainly cause scattered light and are measured under 90°. Particles larger than  $1 \mu\text{m}$ , such as diatomaceous earth and yeast, mainly cause forward-scattered light and are measured under 25°. Up to 10 calibration curves can be programmed and with product identification and memory, the Vos Rota allows for the traceability of measuring data.

A sample (cuvette or bottle) is placed in the measuring chamber, which is filled with water. The automatic measurement proceeds, positioning the sample and rotating it, making 100 measurements, and calculating the average value. The measurement results can be exported to a PC and/or directly printed.

Two executions are available:

- Type Vos Rota 90/25, for simultaneous measurement of 90° and 25° turbidity.
- Type Vos Rota 90, for measurement of 90° turbidity.

## BENEFITS

- Perfect process performance control
- Cost saving
  - one device for different product types
  - lower investment costs
  - automated measuring process – less labor intensive
  - low maintenance

## APPLICATIONS

- Laboratory

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## TECHNICAL DATA

### Vos Rota 90/25

Measuring angle 90° and 25°  
Wave length 650 ± 30 nm  
(others on request)

### Vos Rota 90

Measuring angle 90°  
Wave length 650 ± 30 nm  
(others on request)

### Measuring range

EBC units 0.00 - 100.00  
ASBC units 0.00 - 6,920.00  
Helm units 0.00 - 4,000.00  
FTU units 0.00 - 400.00

### Memory capacity

up to 999 measurements

### Number of calibration curves

10

### Bottle dimensions

Height max. 320 mm  
Diameter min. 50 mm/max. 90 mm

### Interfaces

RS-232, Centronics, Bar code reader

### Voltage

100-240 V AC/50-60 Hz

### Dimensions

455 x 330 x 430 (LxWxH mm)

### Weight

19 kg

## SCOPE OF SUPPLY

- Turbidity Meter\*
  - Type Vos Rota 90/25 or
  - Type Vos Rota 90
- Mains cable (Euro, US, UK or AUS plug)
- Software set (CD + Interface)
- Service set
- Cuvette with screw cap
- Instruction manual

\* When ordering, please state which instrument you require.

## OPTIONS

- Certificate of measurement
- Bar code reader
- Formazin 500 ml, 1,000 EBC
- AEPA, available in various calibration standards



HAFFMANS BV

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