ALCOHOL, EXTRACT AND ORIGINAL GRAVITY MEASUREMENT

BEER MONITOR

Simultaneous Measurement of Alcohol, Extract and Original Gravity

The BEER MONITOR is a variant of COMBITEC for beer and beer mixed drinks. It measures alcohol and extract simultaneously during brewing; original gravity is automatically calculated and displayed by the sensor.



Alcohol
Measuring range 0 - 12,5 vol. %.

Extract
Measuring range 0 - 10 mass-%.

Original Gravity
Measuring range 0 - 25 °Plato.

Measuring Principle

The instrument combines RHOTEC density measurement and SONATEC sound velocity measurement. Density is determined using the oscillating U-tube principle; for acoustic measurement, a sound pulse is generated and detected. A mathematical polynomial describes the product-specific relationship.

Applications

- Beer
- Beer Mixed Drinks
- Brewing Process
- Alcohol
- Extract
- Original Gravity
- Quality Control

Temperature drift of the measurement signal is automatically compensated. European patent application: 1 439 438 B1.

Technical Data

Technical data for selection and integration.

PARAMETER	BEER MONITOR
Alcohol / Measuring Range and Accuracy	0 - 12,5 vol. % / ± 0,02 vol. %
Extract / Measuring Range and Accuracy	0 - 10 mass-% / ± 0,02 mass-%
Original Gravity / Measuring Range and Accuracy	0 - 25 °Plato / ± 0,03 °Plato
Response Time	≤ 1 s
Operating Pressure	max. 16 bar
Operating Temperature	-25 to +125 °C (Pt1000)
Material	1.4404 / 1.4435 / AISI 316L; Hastelloy; tantalum; others on request
Input	1 x analog (4 - 20 mA) & 6 x digital (24 VDC)
Output / Fieldbus	2 x analog (4 - 20 mA) & 3 x digital (24 VDC) optional: PROFIBUS DP & PROFINET
Enclosure Rating	IP65
Power Supply	24 VDC

Three Process Variables

Highly accurate determination of alcohol, extract and original gravity.

Display at the Measuring Point

Depending on the version, the measured value can be read directly at the sensor.

Hygienic Design

Various materials and flange connections.

Design & Integration

We support you with the project-specific selection and integration of the **BEER MONITOR** - from measuring range and installation position to process connection and interfaces.

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