TurBiScat
In-line Process Turbidity Monitor

Applications
• Filtration monitoring in beverages such as beer, fruit juices, spirits and process water
• Supervision of centrifuges, separators, whirlpools in the beverage industry
• Turbidity measurement in oils, sugar solutions, food
• Purity control in chemical and pharmaceutical processes

Industries
• Beverage
• Food
• Chemical Industry
• Pharmaceutical Industry

Advantages
• Maintenance-free design without seals
• Removable electronic section with quick lock
• Extended sensor check function with fouling control
• 2-Angle measurement with colour compensation
• Optional colour measurement
• Easy calibration with secondary standard
• Control unit with colour touch screen display
• Variable display of measuring data, graphs, process performance
• Smooth system integration using various communication interfaces
Innovations with tangible benefits

Sealless Design
The combination of Hastelloy and sapphire allows operating the unit in practically all process applications – from filtration control in breweries up to turbidity control in chemical processes. It eliminates the need for regular maintenance.

Easy Handling
The electronic section can be quickly removed from the sensor head with a simple grip using a quick lock, no tools are required. Therefore, the sensor head remains in the pipe line. Possible inspection or service actions can be carried out without interruption of the process.

Monitored Safety
An extended sensor check function permanently monitors all system parameters in the background. An optical anti-fouling control provides important information about a successful CIP procedure and informs about necessary cleaning and calibration check. Calibration is easily done using a secondary reference standard.

Intelligent Control System
The new control unit SICON uses state-of-the-art touch screen technology with colour display. It allows simple operation using logical menu guidance. Results displayed can be either plain values, graphs or historical data, including the indication of system and alarm status. The control unit SICON offers all possibilities of full system integration using various interface options. A SD card is standard and can be used for data logging with almost unlimited storage capacity for QS requirements.

Technical Data

| Sensor: | Measuring principle: 90°/25° Scattered light |
| Wavelength turbidity: LED 890 nm |
| Wavelength colour (optional): LED 430 nm |
| Measuring range turbidity: 0 ... 1000 EBC |
| Measuring range colour: 0 ... 50 EBC |
| Installation: In-line housing |
| Material sensor head: Hastelloy C-22 |
| Material housing: Stainless steel 1.4301 |
| Windows: Sapphire |
| Sample temperature: -10 ... +100°C, 180°C with cooling option |
| Cleaning: CIP/SIP compatible up to 120°C |
| Pressure: 1 MPa (10 bar) / 100°C |
| Ambient temperature: -10 ... +60°C |
| Ambient humidity: 50% RH |
| Protection degree: IP 66 |

Control unit SICON:
- Power supply: 9 ... 30 VDC
- Power consumption max.: 8 W
- Display: 1/4 VGA, 3.5"
- Operation: Touch screen
- Ambient temperature: -10 ... +60°C
- Ambient humidity: 0 ... 100% RH
- Protection degree: IP 66
- Outputs: 4x 0/4 ... 20 mA, galvanic separated, 7x digital outputs, 5x digital inputs, freely configurable
- Digital Interface: Ethernet, SD-card
- Optional: Profibus DP, Modbus, Profinet

Your representative:

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