

TurBiScat

In-line Process Turbidity Monitor



Applications

- Filtration monitoring in beverages such as beer, fruit juices, spirits
- 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
- Pharmaceutical

Advantages

- Sealless design, maintenance-free
- Extended sensor check function with fouling control
- Colour-compensated, 90°/25° dual-angle measurement
- Optional colour measurement at 430 nm
- Quick adjustment 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

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Innovations with tangible benefits



Convincing Design

Combination of Hastelloy® and sapphire in a compact, sealless design with LED technology:

- Simple installation.
- Allows operation in practically all process applications.
- No need for regular maintenance.



Highest Precision, Large Measuring Span

Highest quality components and precise workmanship result in a high measuring span. An optional integrated colour measurement is available:

- One sensor type for numerous applications.
- Precise measurement of lowest up to very high turbidity values.
- Colour measurement in the same sensor for an attractive price.



Monitored Safety

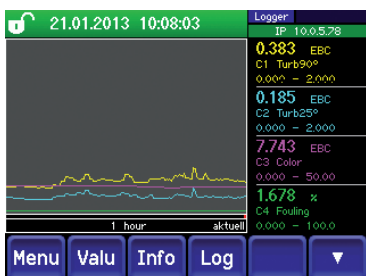
Formazin is used in the factory to calibrate the TurBiScat after assembly. For QC purpose and possible recalibration, a secondary solid reference standard is available. The sensor has a built-in optical fouling control:

- Precise verification and recalibration without the use of Formazin.
- Information about the condition after CIP cleaning.

Intelligent Control System

The SICON control unit with state-of-the-art touch screen technology and colour display:

- Allows simple operation using intuitive menu.
- Values, graphs, alarm and status messages can be presented.
- An internal data logger allows recalling and displaying measured data from the last 32 days.



Technical data

Sensor:

Measuring principle: 90°/25° Scattered light
Wavelength turbidity: LED 650 nm
Wavelength colour (optional): LED 430 nm
Measuring span turbidity: 0 .. 1'000 EBC
0 .. 4'000 NTU
0 .. 69,000 ASBC
Measuring ranges: 8, freely programmable
Resolution: 0.001 EBC/0.07 ASBC
Measuring span colour: 0 .. 50 EBC/0 .. 25.4 SRM
Installation: In-line housing Varivent® or compatible
Material sensor head: Hastelloy® C-22®
Material housing: Stainless Steel 304/1.4301
Windows: Sapphire
Sample temperature: -10 .. +100 °C/+14 .. +212 °F
+180 °C/+356 °F

Cleaning:

with cooling option
CIP/SIP compatible up to +120 °C/+248 °F @ 2 h
1 MPa (10 bar)/145 psi in standard Varivent® housing
Up to 4 MPa (40 bar)/580 psi on request

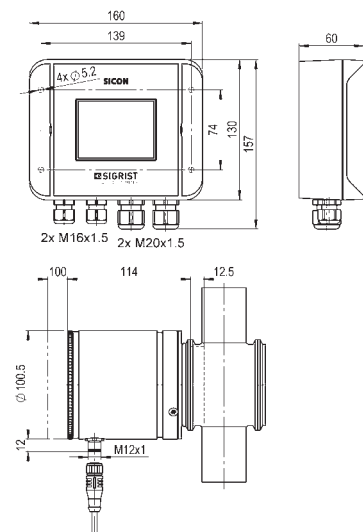
Pressure:

Ambient temperature:

Ambient humidity: 0 .. 100 % RH
Protection degree: IP66

Control unit SICON:

Power supply: 9 .. 30 VDC
Power consumption max.: 8 W (with instrument)
Display: 1/4 VGA, 3.5"
Operation: Touchscreen
Ambient temperature: -10 .. +50 °C/+14 .. +122 °F
Ambient humidity: 0 .. 100 % RH
Protection degree: IP66
Outputs: 4 x 0/4 .. 20 mA, galv. separated
7 x digital
Inputs: 5 x digital, freely configurable
Digital interfaces: Ethernet, microSD-card, Modbus TCP
Optional modules (max. 2): Profibus DP, Modbus RTU, HART
4 x 0/4 .. 20 mA outputs, galv. separated
4 x 0/4 .. 20 mA inputs



Your representative:



SIGRIST
PROCESS-PHOTOMETER

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