

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 430nm
- 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.

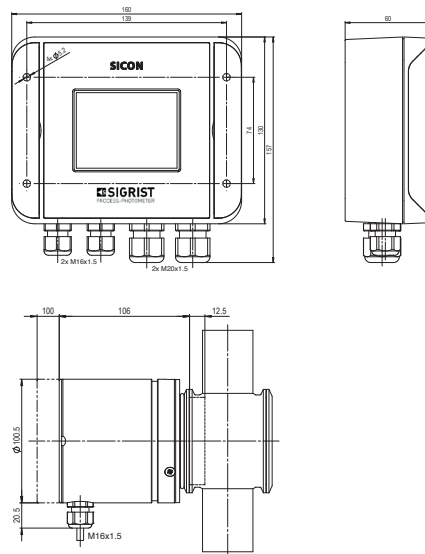
Technical Data

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 Hastelloy® C-22®
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 with cooling option CIP/SIP compatible up to 120 °C / 248 °F
Cleaning:	
Pressure:	1 MPa (10 bar) / 145 psi in standard Varivent® housing Up to 4 MPa (40 bar) / 580 psi on request
Ambient temperature:	-10 .. +50 °C / 14 .. 122 °F
Ambient humidity:	0 .. 100% RH
Protection degree:	IP66

Control unit SICON:

Power supply:	9 .. 30 VDC
Power consumption max.:	8 W
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:	4x 0/4 .. 20 mA, galvanic separated, 7x digital outputs, 5x digital inputs, freely configurable
Digitale Interface:	Ethernet, microSD-card, Modbus TCP
Optional:	Profibus DP, Modbus RTU



Your representative:

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