MONITORING EXCELLENCE.

SIGRIST
PROCESS-PHOTOMETER

TurbiGuard

In-line Process Monitor for Medium to High Turbidity Measurement

Applications

- Turbidity measurement and monitoring in beverages such as beer, fruit juices, etc.
- Supervision of centrifuges, separators, whirlpools
- Monitoring of filter performance and filter breakthrough
- Determination of solids concentration
- Yeast dosing

Industries

- Beverage
- Food and Dairy Industry
- Chemical Industry
- Pharmaceutical Industry

Advantages

- Sealless design
- Extremely low maintenance
- High measuring span
- Linearized factory calibration over the whole measuring range
- Easy configuration and system integration

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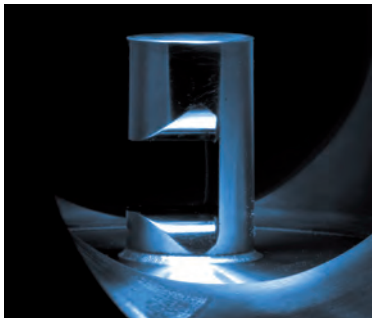
Innovations with tangible benefits



Sealless Design

The days of spending time doing routine maintenance for regular replacement of seals have gone. The sealless design with sapphire windows is well-proven and established. This allows the TurbiGuard to be to be used in practically all process applications – from turbidity measurement in the brewing process to monitoring tasks in the chemical industry.

Simple Concept

A single instrument which can be widely used for almost all applications, simply mounted in a standard housing without the need of tools, combined with the highest flexibility in configuration and communication – just the way state-of-the-art instruments should be designed.

Quality- and Cost optimized

The TurbiGuard is factory calibrated with a true, linearized Formazine calibration. Once installed it is only necessary to perform an occasional zero check. The use of well-proven optical components guarantees the quality and reduces costs of purchase and maintenance. This results in a favourable total cost of ownership.

Flexible Configuration

For simple applications and system integration the instrument configuration and communication can be easily done using the integrated Ethernet interface with a web browser in combination with the existing outputs. For a more comfortable installation and operation the optional control unit SICON with touch screen technology and colour display can be connected.

Technical Data

Sensor:

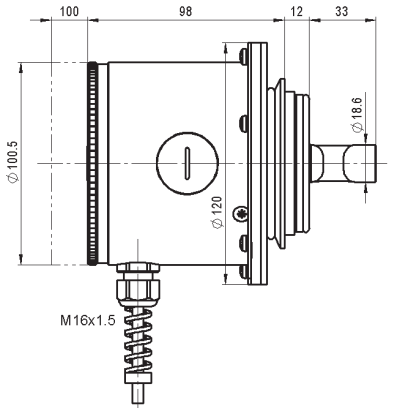
Measuring principle:	Absorption
Wavelength:	LED 880 nm
Measuring range:	0 .. 100 / 0 .. 1000 EBC 0 .. 400 / 0 .. 4000 NTU 0 .. 69,000 ASBC
Resolution:	0.5 EBC / 2 NTU / 34 ASBC
Path-length:	10 mm
Outputs:	2x Open-Collector-Transistor
Installation:	In-line housing Varivent® or compatible
Pipe diameter:	≥DN 40
Material sensor head:	Stainless steel, 316L
Material housing:	Stainless steel, 304
Windows:	Sapphire
Sample temperature:	-10 .. +100 °C / 14 .. 212 °F
Cleaning:	CIP/SIP compatible up to 120 °C / 248 °F @ 2h
Pressure:	1 MPa (10 bar) / 100 °C 145 psi / 212 °F
Ambient temperature:	-10 .. +50 °C / 14 .. 122 °F
Ambient humidity:	0 .. 100% RH
Protection degree:	IP66
Power supply:	9 .. 30 VDC
Power consumption max:	2 W (3 W with Profibus DP)

Operation:

Configuration:	Ethernet/Web-Browser
Communication (optional):	Profibus DP, Modbus RTU, HART

Control unit SICON (optional):

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
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



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