TurBiScat PM 40

In–Line Turbidimeter

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

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

– Measurement according to MEBAK / EBC / ASBC

– Quick adjustment with secondary standard

– Sensor monitoring regarding humidity and temperature

– Integrated display with colour touch screen display

– optional detached display unit

– Variable display of measuring data graphs, process performance direct on point of measurement

– Smooth system integration

Industries

– Beverage

– Food

Innovations with tangible benefits

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
– Proven measurement system
– MEBAK/EBC/ASBC–conform

Convincing Design

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

– Simple installation in VARINLINE® housings
– Allows operation in practically all process applications
– No need for regular maintenance
– Operates without additional control unit
– Precise verification and recalibration without the use of Formazin
– Permanent humidity and temperature monitoring
– Low TCO

Value display direct at the place of measurement

Das TurBiScat PM 40 can be easily detected in the plant.
Integrated display with state–of–the–art coloured display technology:

– Provides clear data display with easy touch screen navigation direct at the place of measurement
– Display of up to 4 measured data simultaneously or graphic representation of the measurement readings for up to 7 days (1 day, 1 hour)
– Clear status information with link to support in case of warnings or alarm
– state–of–the–art configuration and value display on the Smartphone

System integration and integrated security

The TurBiScat provides several data interfaces from analogue outputs to process buses for continuous process monitoring
Permanent accessibility to data and status information

– Integrated threshold monitoring
– Enforced data security
– Secured WLAN–connection
– Secured access to smartphone over web browser

Main technical details

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
Resolution:	0.001 EBC
Measuring span colour:	0 ... 50 EBC
Sample temperature:	−10 ... +100 °C
Protection degree:	IP66

Full details and technical data:

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TurBiScat PM 40

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
Measuring ranges:	8, freely programmable
Resolution:	0.001 EBC
Measuring span colour:	0 ... 50 EBC
Installation:	In-line housing Varivent® or compatible
Material sensor head:	Hastelloy C-22 (2.4602)
Material housing:	Stainless Steel 304 / 1.4301
Windows:	Sapphire
Sample temperature:	−10 ... +100 °C
Cleaning:	CIP / SIP compatible up to +120 °C / +248 °F @ 2 h
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

TurBiScat PM 40 – S1XX and SiDis AD 40

Supply voltage:	24 VDC ± 10 % (Interface PoE according to standard)
Power consumption:	Max. 4 W –> depending on communication interface
Display:	Display: ¼ VGA with Touchscreen
Resolution:	320 x 240 pixel with 2.4" diagonal
WLAN-Modul:	WLAN according to IEEE 802.11 b/g/n
Standard Interface (ED_IO):	6 configurable inputs and outputs • Max. 2 digital inputs: 5 ... 28 VDC • Max. 4 digital outputs: High-Side Switch max. 20 mA • Max. 4 current outputs: 0/4 ... 20 mA, max. 700 Ω Modbus RTU

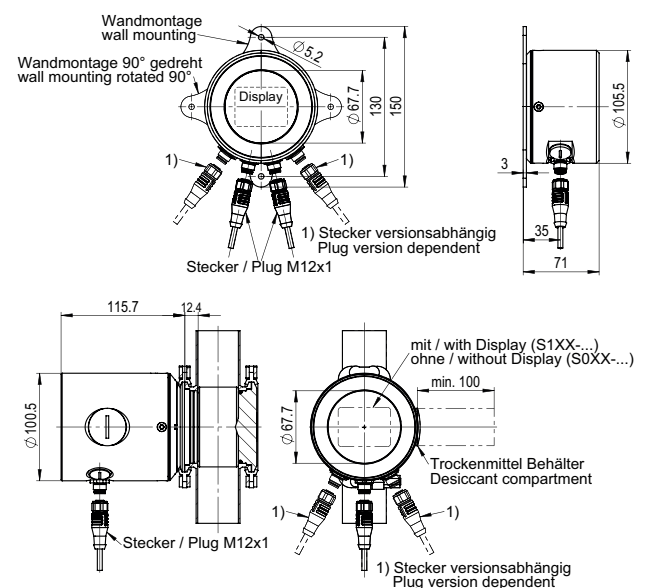|	
EG_PoE:	Ethernet LAN connection with Power over Ethernet • Ethernet accoridng to 10/100BaseT POE according to 802.3af, class 0
EG_Profibus:	Profibus DP-V1 Slave
EG_Profinet:	In preparation

SiDis AD 40

Protection degree:	IP 66
Weight:	Ca. 0.4 kg
Dimension:	Ø 105.5 x 71 mm
Material housing:	PC/ABS UL94 V0
Touchscreen:	Soda-Lime tempering glas

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