



Turbidity Meter

4-beam pulsating light technique



measuring
•
monitoring
•
analysing



- Measuring range:
0.01 - 1000 FTU
- Measurement accuracy:
 $\pm 1\%$ f.s.
- p_{\max} : 6 bar,
 t_{\max} : 80 °C, short-time 120 °C
- Different connections
and nominal sizes
- Food-compatible materials,
hygienic according to
EHEDG and 3-A
- Analogue output: 4 - 20 mA
- High chemical resistance
- CIP-compliant



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Model:
LAT-N1



Description

The KOBOLD turbidity meter LAT-N1 senses very weak to average turbidity values according to Formazin standard (FTU); EBC's may also be used. The device operates according to DIN 38404/ISO 7027 with the 4-beam pulsating light technique, whereby soiling of optics as well as the effects of light from external sources and drift in electronic components are reliably compensated. The evaluating electronics and the fitting combine to make a compact robust instrument that can be easily installed.

The process connection has been designed according to the hygienic standard for pipe screwings (DIN 11864). Thus the most stringent hygiene requirements are satisfied. Welded hexagon nipples and dairy connections according to DIN 11851 are also available.

The device measuring range can be changed manually or with a digital signal. Thus the measurement accuracy across the entire turbidity range of 0.01 - 5 FTU to 0.01 - 1000 FTU is very high.

The 4-20 mA output signal allows different evaluating devices such as digital indicators, limit value controllers or a PLC to be connected.

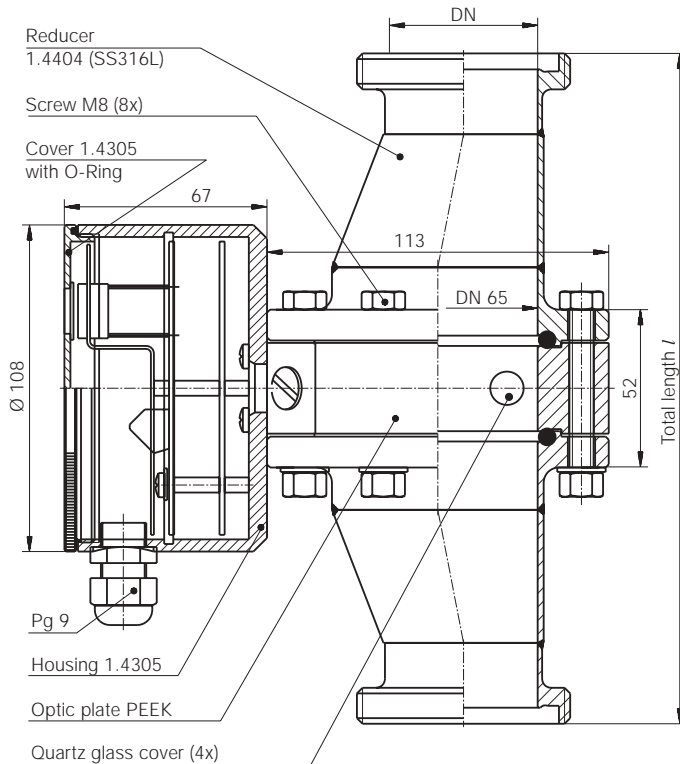
Application Examples:

- Process control
- Dosing applications
- Brewing
- Phase separation of slightly turbid media
- Water and waste water

Technical Details:

Method of measurement:	4-beam pulsating light according to DIN 38404 (90°)
Measuring ranges (4 - 20 mA):	0.01...5/10/50/100/500/1000 TE/F 0.01...5/10/50/100/250 EBC
Measurement accuracy:	± 1 % FS
Process temperature:	0 - 80 °C (short-time 120 °C)
Ambient temperature:	0 - 60 °C
Storage temperature:	-20 to +80 °C
Max. pressure:	6 bar
Material body:	stainless steel 1.4404 (V4A, SS316L)
Material optic block:	PEEK with silica glass
Process connections:	DN 40, 50, 65, 80, 100 dairy connection according to DIN 11851 pipe thread (aseptic) according to DIN 11864 welded hexagon nipple (EHEDG-, 3-A-compliant)
Wavelength:	875 nm
Control input (range switchover):	3 x 24 V _{DC} , BCD
Analogue output:	4 - 20 mA, overrange limit 22 mA
Load:	max. 500 Ω
Supply voltage:	24 V _{DC} , approx. 100 mA
Display:	7-segment LED, 4-digit (FTU or EBC) height of digits: 12.7 mm
Protection:	IP 67
Noise immunity:	EN 50082-2 according to IEC 801-4, interference level 3
Interference emission:	EN 50082-2
Weight:	approximately 3.8 kg

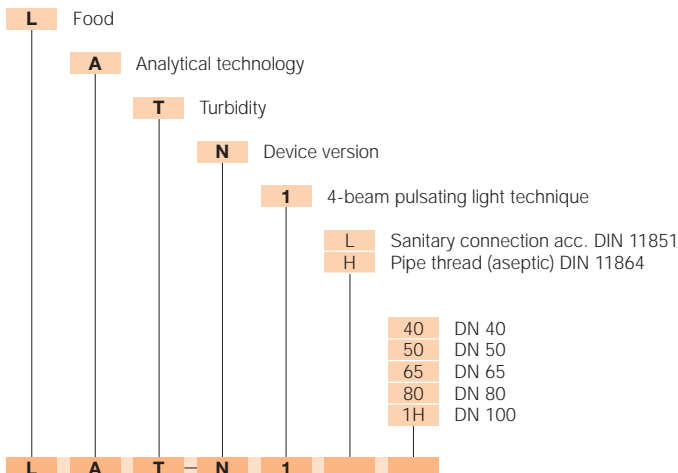
Dimensions



Overall length of fitting (tolerance: ± 2 mm)

Process connection nominal size	Sanitary connection L... acc. DIN 11851	Pipe thread (aseptic) H... acc. DIN 11864	Weld-on ends S... (EHEDG-agreed)
DN 40	298 mm	284 mm	232 mm
DN 50	236 mm	226 mm	166 mm
DN 65	250 mm	236 mm	140 mm
DN 80	250 mm	236 mm	160 mm
DN 100	378 mm	362 mm	270 mm

Type code



Please refer to our brochure "A2" ...



...for humidity measurement technology