



FLOW
LEVEL
PRESSURE
ANALYTICAL
TEMPERATURE
INSTRUMENTATION
PASTEURIZATION CONTROLS

"ITM-4A" 4-Beam Turbidity Meter

- *3-A Compliant; Third party verified*
- *2 units (NTU and EBC) 11 ranges each*
- *Low range down to 0-5 NTU and 0-1 EBC*
- *High range up to 0-5000 NTU and 0-1250 EBC*
- *4 Remote selectable ranges*
- *Single switch output*

Anderson is pleased to offer select versions of the Negele ITM-4 Turbidity Meter. These products offer benefits to our customers looking to control and standardize suspended solids in their products. They are widely recognized and used by both OEM's and processors in Negele's traditional markets, and can now help our customers as well.

The ITM-4 is a 4 beam turbidity meter that allows the monitoring and controlling of low levels of suspended solids in liquid media. The compact design makes installation and set-up easy but is not short on features. There are switching and analog (4-20mA) outputs standard. Also, 4 remote selectable ranges are available to handle different products on the same process line.

The ITM-4 is easy to spec, the only thing that you need to choose is the connection size. Set-up is also easy with navigation of the on screen

menus and selecting the units, analog output range, and switch point for your product.

Most importantly the design is robust and offers a lower cost of ownership than many other turbidity meters. The LED lamp technology provides a longer life than tungsten bulbs. The sapphire glass avoids scratches and fouling of the glass is compensated in the unit. Most importantly, the construction is the same rugged water tight stainless steel construction you have come to expect from Anderson. In fact the unit complies to the German IP69K standard which is more stringent than NEMA 4X.

For more information on this turbidity meter, or any of our Anderson Instrument Company products visit www.andinst.com or call our Customer Service Department at 1-800-833-0081

APPLICATIONS

- Filter monitoring
- Quality control and standardization
- Process control of brewing processes
- Waste water control



"ITM-4A" Specifications

Process connection: 2", 2.5", 3"; DN 40; 50; 65; 80; 100

Materials
 connection head SS 1.4305 "303 Stainless"
 89 mm dia.
 fitting SS 1.4404 "316L"
 optical block PEEK
 glass panes sapphire glass

Temperature ranges
 ambient -10-60 °C (14-140°F)
 process 0-100 °C (32-212°F)
 CIP-/ SIP-cleaning up to 130 °C (66°F) 30 psi max

Pressure 85 psi
Protection type IP69K
Measurement principle
 acc. to EN 7027 4-beam-altern. light
Wave length
 acc. to EN 7027 860 nm ± 60 nm
LCD-Indicator
 with illumination 2 x 8-digit

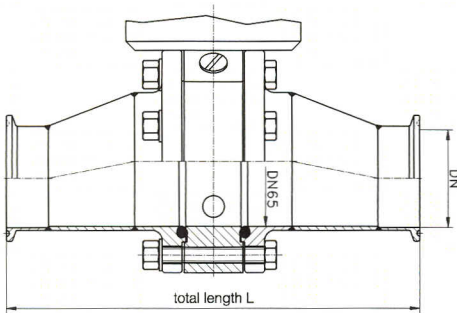
Accuracy see table below
Electr. connection
 cable entry 2 x PG (M16 x 1.5)
 cable connection 2 x M12 plug-in(SS 316)
 supply voltage 18...36 V DC
 160 mA maximum
Input
 range switching E1 and E2 (24 V DC)
 DC decoupled
Output
 analog 4-20 mA
 short circuit proof DC decoupled
 switching 24 V DC 80 mA max.respectively to GND of
 power supply
Measurement ranges
NTU 0-5; 10; 20; 50; 100;
 200; 500; 1000; 2000;4000; 5000
EBC 0-1; 2; 5; 10; 20; 50;100;
 200; 500; 1000;1250
Damping time 0; 1; 2; 4; 8; 16; 32; 64; 128 seconds

Total length of fitting(tol.: ±2 mm)

Process connection / nominal width	Tri-Clamp®(-TC) acc. to DIN32676
DN40	10.83"
2" / DN50	8.22"
2.5" / DN65	10.08"
3" / DN80	8.52"
DN100	12.63"

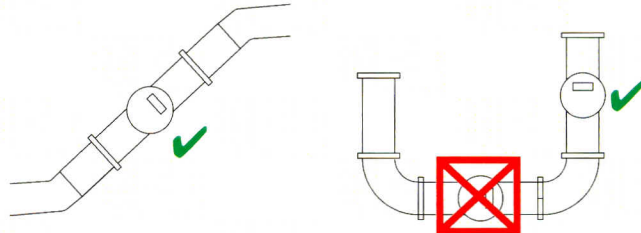
Accuracy at the calibration points (20; 200; 2000 NTU) ± 2%

Offset drift		< ± 0.3NTU (± 0.075EBC)	
Slope accuracy	Range 0-1000 NTU (0-250 EBC)	< 3 %	
	Range 1001-2000 NTU (250-500 EBC)	< 4 %	
	Range 2001-5000 NTU (500-1250 EBC)	< 6 %	
Reproducibility	Range 0-1000 NTU (0-250 EBC)	< 2 %	
	Range 1001-2000 NTU (250-500 EBC)	< 3 %	
	Range 2001-5000 NTU (500-1250 EBC)	< 4 %	
Resolution	Range 0-100 NTU (0-25 EBC)	0.1 NTU (0.025 EBC)	
	Range 100-1000 NTU (25-250 EBC)	1 NTU (0.25 EBC)	
	Range 1001-5000 NTU (250-1250 EBC)	10 NTU (2.5 EBC)	



Conditions for a measuring point according to 3-A Standard 46-03:

- The sensor ITM-4A is approved according to the 3-A Standard.
- Self draining has to be warranted by the build-in position.
- To continue the approval of the measuring point according to the 3-A Standard the sensor has to be checked by Anderson every two years!



HOW TO ORDER

