Relative Turbidity Meter ITM-3

CLEANadapt

Application / Specified Usage

- Media with a turbidity > 2000 NTU / 500 EBC (equal to about 5.5 % of display ITM-3)

Application Examples

- Phase separation of products (for example whey – cream – milk)
- CIP-return line (monitoring of pre-rinse water to product leftovers)
- Yeast harvest in breweries
- Quality control
- Leackage control of filter and gaskets

Hygienic Design / Process Connection

- By using Negele weld-in sleeves / adapters of the CLEANadapt system or the build-in system EHG-.../ 1/2" a flow optimized, hygienic and easy sterilizable installation will be achieved.
- Version with 3-A certificate deliverable (Tri-Clamp)
- CIP- / SIP-cleaning up to 140 °C / maximum 30 minutes
- Product contacting materials compliant to FDA
- Sensor made of stainless steel
- Optics made of high resistant sapphire glass
- Additional process connections: Tri-Clamp, dairy flange (DIN 11851), DRD, Varivent, APV et al.

Features / Advantages

- Frontflush sensor
- Independent to reflexions at small diameters or electro-polished surfaces
- 100 % compatible to antecessor ITM-2, mechanical and electrical
- No color dependency (wave length 860 nm)
- Smallest pipe diameter: DN 25
- Four measurement ranges, two externally switchable
- High reproducibility: ≤ 1 % of full scale
- Switching output (switchpoint and hysteresis free adjustable)
- Analog output 4...20 mA (standard)

Options / Accessories

- Electrical connection with M12 plug-in connector
- Preassembled cable for M12 plug-in connector
- Remote version (electronics and sensor separated)

Measuring Principle of the Relative Turbidity Meter

An infrared diode irradiates infrared light into the media. Particles in the media reflecting the irradiated light which is detected by the receiver diode (backscatter principle). The electronics calculates the relative turbidity of the media according to the received signal.
The relative turbidity is based on the Negele calibration standard and is displayed in "%TU".

Authorizations

FDA

3-A 46-03

ITM-3 with EMZ-132

ITM-3/FF sensor with EMZ-132

Measurement Principle