

# Turbidity controller TRUBOMAT GS3



- ON/OFF turbidity Controller
- No effect of day light
- Output relay
- Adjustable delay
- Dysfunction indicator

## PRINCIPLE

The TRUBOMAT GS3 is designed to be used with our immersion probe CP1 or our turbidity armatures GA1 ... GA5. It provides a contact signal as soon as the turbidity reaches the preset value.

A complete system compares continuously the measured value with the preset value; it is not pre-calibrated in factory but calibrated on site by end-user.

The technician on site configures the instrument using samples to calibrate the limit for switching the output between correct turbid sample and overpass turbidity value.

Most of all products can be monitored, even with high load, small or big particles.

## A complete turbidity control system includes:

- 1 turbidity controller **TRUBOMAT GS3**
- + 1 immersion probe **CP1** (built in emitter and receiver)

Or

- 1 turbidity controller **TRUBOMAT GS3**
- + 1 armature **GA ...1 /...2/ ... 5/ ...11** (DN 15 to DN 125) for in-line measurement / by-pass (emitter TT-GS and receiver TR-GS included)

## APPLICATIONS

- Control on phase separation milk/water
- Drinking water quality survey
- Diaphragm filtration efficiency
- Survey on separation, centrifugation... process
- Pollution control

## DESCRIPTION

The turbidity system works as a limit monitor. Turbidity measurement is based upon absorption, i.e. it responds to loss of light caused by turbidity in the liquid medium.

The emitter TT-GS send the IR beam (940 nm pulsed 8 kHz) through the fluid to the receiver TR-GS. The variations due to the turbidity are fully used by the TRUBOMAT to detect the over passing preset value.

To avoid false alarms due to air bubbles or accidental excess of turbidity, switching delays are adjustable from 0 to 10 seconds (increasing and decreasing turbidity).

The armature GA... are convenient even for fluids with a turbidity over 3000 FAU/ FNU / FTU. Emitter and receiver are partially blinded with a washer (0.5 mm hole) that can be deposit to allow high turbidity detection.

**BAMO** MESURES

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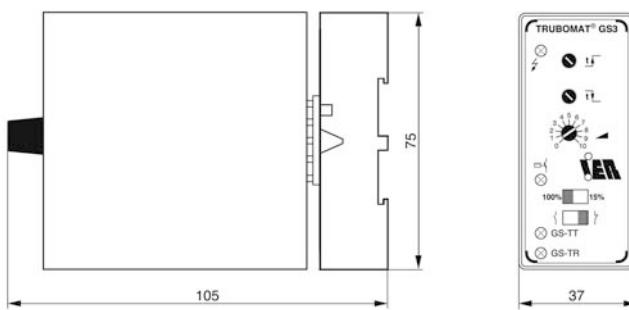
Turbidity controller  
**TRUBOMAT GS3**

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**TUR**  
**410-01/1**

## TECHNICAL FEATURES

Supply power:	230 V AC / 40 to 60 Hz ±15%
Optional:	24 V AC, 110 V AC ±15% 24 V DC ±15%
Power consumption:	3.5 VA
Ambient temperature:	-10 to +50° C
Range selection:	Switch on 15% or 100% full scale
Sensitivity:	Adjustment with potentiometer
Relay output:	Floating changeover contact – 250 V AC, 5 A, 500 VA
Transistor output:	NPN 2.5 to 30 V, max. 60 mA
Delay, decreasing signal:	Adjustable from 0 to 10 s
Delay, increasing signal:	Adjustable from 0 to 10 s
Indicators:	Power supply, green LED Relay indicator yellow LED Emitter error red LED Receiver error red LED
Dimensions:	Housing DIN 83 x 37 x 105 mm



## CODE NUMBERS AND DESIGNATIONS

Code	Reference	Designation
410 100	TRUBOMAT GS 3	IP 40 - rail DIN mounting
410 900	Emitter TT-GS	Emitter for GAB Armature
410 930	Receiver TR-GS	Receiver for GAB Armature

**Note:** details on armatures GAB or Immersion probe CP1, please see the corresponding documents.

## INFORMATION, EXAMPLES

<b>Filtration control:</b>	Values are between 30 and 70 FAU/FNU/FTU
- Microfiltration, ultra/nano filtration - diaphragm ...	
<b>Rinsing filter control:</b>	Values are between 50 and 1000 FAU/FNU/FTU
From clear to highly loaded fluid	
<b>River water control:</b>	Values between 10 and 150 FAU/FNU/FTU
<b>Filtered Beer:</b>	1 to 6 FTU
<b>Raw beer:</b>	20 to 400 FTU
<b>Wine:</b>	1 to 150 FTU