Type STS 01

modular @ analyse

Turbidity Sensor

Basic features

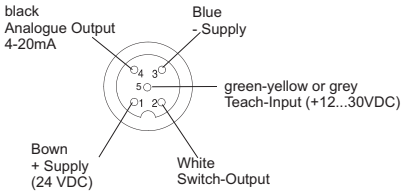
- Phase-Separation
- Qick product-change
- Reduced costs for waste water
- Filter-monitoring
- Colour-independent concentration measure-ment
- Compact Design with integrated electronic and display for parameterisation
- Robust saphir-windows, CIP/SIP-suitable
- Hygienc Design, polymerfree-sealing system
- LED-light, stable and durable signal guaranteed
- Integrated digital- and analog-output
- Simple parameterization
- Process-monitoring and documentation

Technical features

- Measuring range 0-100%
- Wave length 880 nm
- Light source LED
- Optical pathlength 5, 10, and 20 mm
- Made of high grade steel 1.4435 (316L)
- Finish quality electropolished <0,37 µm Ra
- Window: Saphir
- Supply voltage 12...30VDC
- Output current 4…20mA
- Output PNP Normally Closed / Normally open, parametrisable / 200 mA max.
- Input-contact: zero position
- Cabel-Connection M12-plug, 5-pole
- Process-connection 1/2” elastomerfree sealing system
- Ambient-temperature -20...70°C
- Process-temperature 0…90 ºC, 140 ºC max. for 2 hours (SIP-cycle)
- Process-pressure 10 bar (150 psig) max. at 60 ºC

Optical Pathlength (OPL)

Pin Configuration



Favoured fields of application are:

STS is a sensor for monitoring the optical density of liquids, to control process-results continuously or to indicate changes securely. Especially suitable for phase-separation, filter-monitoring and concentration measurement.

ATTENTION!
At lower deviation of dew points water condensation is possible, that can destroy the sensor. At stress with change of temperatures, e. G. a cold water jet on the hot sensor, it can come to absorption of fluids in to the sensor. (Requirements cf. DIN EN 60068-2-14)
At applications with dew point, temperature shock or thermal shock stresses we recommend to put in the enclosed silikagel-bag into the connecting head.

The tightness classification after IP68 does not mean that these parts are suitable! for applications with lower deviation ot dew point or temperature shock. (DIN 60068-2-14)

Stand 03/2010

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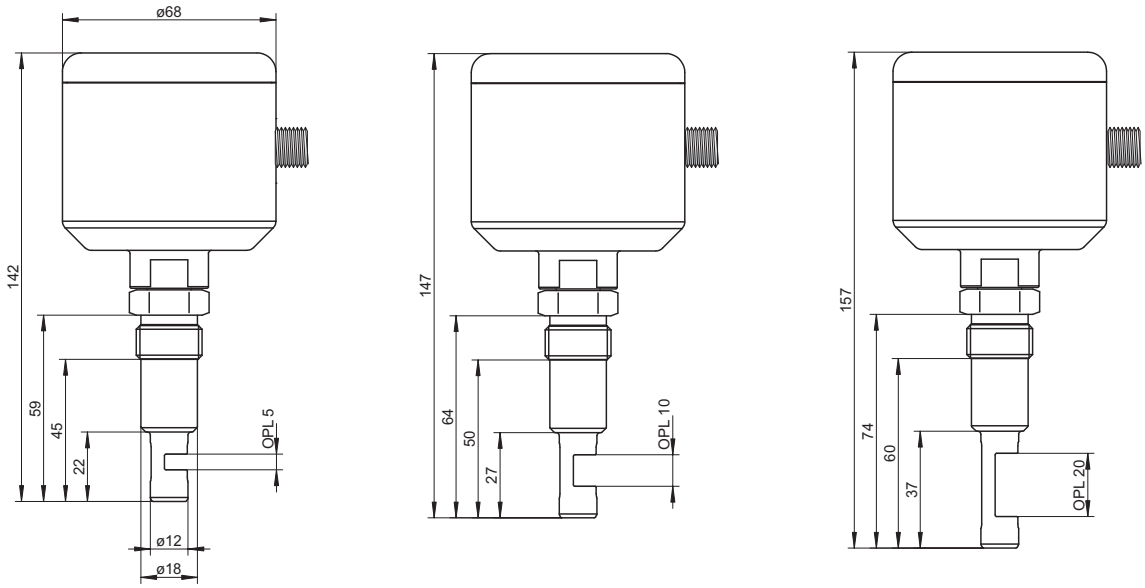
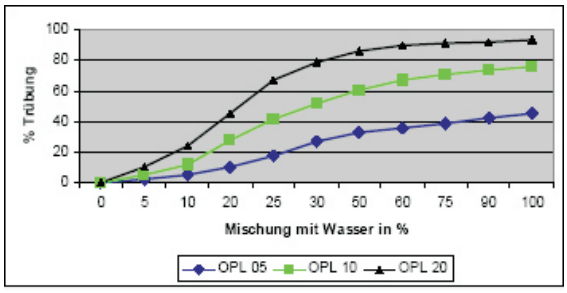
Technical Facts

Supply Voltage:	12...30 VDC
Currend demand:	ca. 80 mA (30V, Analog-Output= 22,5 mA)
Power Input:	2,4 W max.
Analog-Output:	4-20 mA
Current limit:	3,5 mA min. 22,5 mA max., ajustable
Torque:	10-20Nm

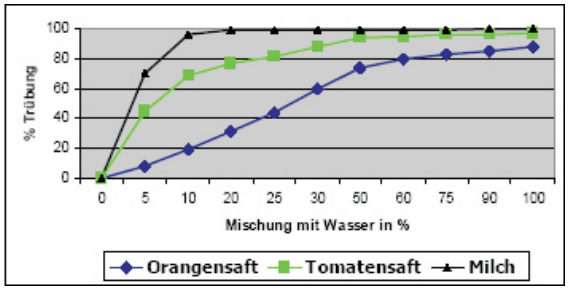
Load: <=(Ub-4V)/20mA (max. 400Ohm at 12V, 1000 Ohm at 24V, 1300 Ohm at 30V)
Teach-Input: Digital-Input, +12...30VDC, circa. 1,6mA input current
Switch-Output: semiconductor-switching, PNP-switching
Switched Power: 200mA max., thermally protected against overload
Protection class: IP 68



Typical Turbidities



Wheat beer with different OPLs



Different products with OPL 010

Order Code

STS 01-□-□-□-□

Optical Pathlength	
Optical Pathlength 5 mm	005
Optical Pathlength 10 mm	010
Optical Pathlength 20 mm	020
Configuration Measuring-Range	
Measuring range 0...100,0%	1
Special Constructions on request	K
Interface / Parameterization	
4...20 mA	A
Special Constructions on request	K
Display / Control Unit	
with integrated display	1
without Display	0
Special Constructions on request	X

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