



Surface Scatter® 7 sc Turbidimeter

Applications

- Drinking Water
- Wastewater
- Industrial Wastewater



Outstanding results in high temperatures: Surface Scatter 7 sc

Use the Hach® Surface Scatter 7 sc Turbidimeter to monitor high range turbidity with greater accuracy and reliability than ever before. The optics never touch the sample in the Hach Surface Scatter 7 Turbidimeter so it's virtually maintenance free.

Less fouling for easy maintenance

The Hach Surface Scatter 7 sc Turbidimeter (SS7) is uniquely designed so that the light source and photocell never come in contact with the sample. In fluids with high loads of suspended solids this makes sample cell cleaning and replacement unnecessary.

Built to Last

All wetted parts of the Hach SS7 turbidimeter are made with corrosion-resistant materials for extended life. The photo-detector and light source assemblies are protected from the effects of corrosive vapors and heated samples. The SS7 turbidimeter is warranted against defects in materials or workmanship for two years from the date of shipment.

Wide Measurement Range

The SS7 turbidimeter can reliably measure turbidity from 0 to 9999 NTU in samples that vary from clear water to corrosive and high temperature paper mill and oil field samples.

Technical Data*

Range	0.1 - 9999 NTU	Relative Humidity	5 - 95% non-condensing
Accuracy	±5% of reading or ±0.1 NTU (whichever is greater) from 0 - 2000 NTU	Power Requirements (Voltage)	100/230 VAC
Resolution	<1000 NTU: 0.01 NTU 1000 - 9999.9 NTU: 0.1 NTU	Installation Category	Category II
Repeatability	1.0% or ±0.04 NTU, whichever is greater	Enclosure Rating	NEMA 12
Response Time	Initial response in 45 seconds	Mounting	Wall mount
Sample Flow Rate	Sample flow required 1.0 - 2.0 L/min	Dimensions (H x W x D)	685 mm x 670 mm x 285 mm
Sample Temperature	0 - 50 °C	Weight	15.8 kg (34.8 lb)
Ambient Temperature	0 - 50 °C		

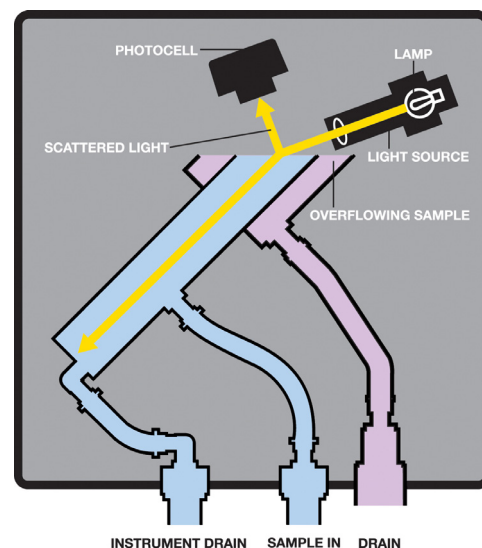
**Subject to change without notice.*

Principle of Operation

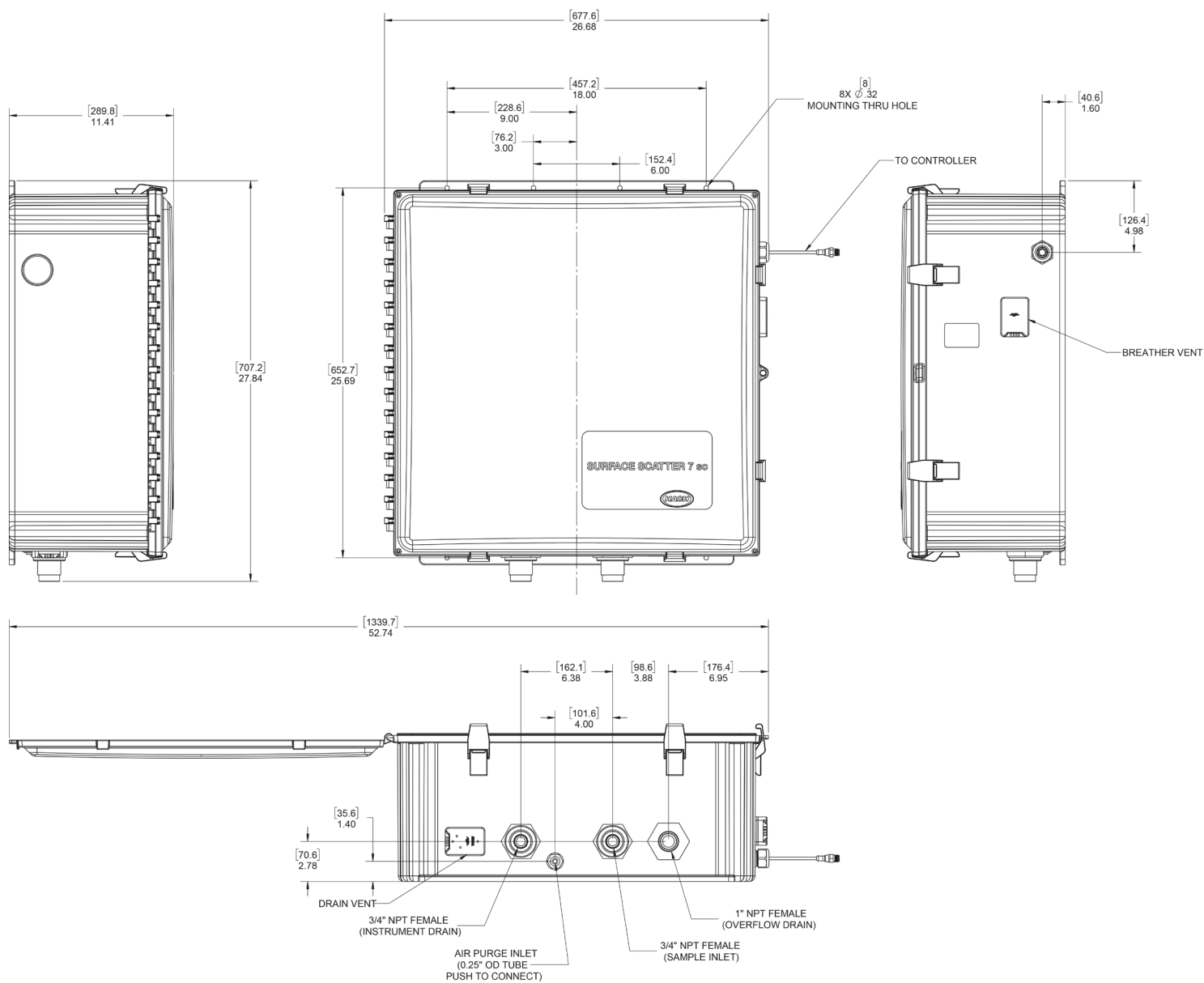
The sample is introduced into the center sample tube of an inclined turbidimeter body at a flow rate of 1 to 2 liters per minute (1/4 to 1/2 gallon per minute). As the fluid spills over the top of the turbidimeter body, a stable, flat surface of liquid forms and becomes the measuring surface.

A high-intensity light source is directed at the surface of the liquid at an acute angle. Light is scattered by particles in the sample and is detected by a photocell positioned directly over the point where the light enters the liquid. The light is scattered at or near the surface and very little is absorbed by the liquid. The amount of light scattered changes in direct proportion to turbidity.

Most of the light directed at the surface of the sample is reflected up into the instrument cabinet and absorbed, or refracted down into the turbidimeter body. A small amount of the light is scattered by the particles suspended in the fluid. The photocell assembly detects light scattered at 90° from the incident beam. The electronic signal generated by the photocell is directly related to the concentration of particles suspended in the sample.



Dimensions



Order Information

Sensor Only

LPV431.99.00002 Surface Scatter 7 sc Turbidimeter

Sample Conditioning Options

4668000 Bubble Trap, Head Regulator

4028400 Flow Meter; 100 to 1600 mL/minute Calibration Standards

Calibration Standards

7121649 Stablcal turbidity standard, 400 NTU, 500 mL

246149 Formazin Turbidity Standard, 4000 NTU, 500 mL

Cables

5796000 Digital Extension Cable, 7.7 m (25 ft.)

Optional Accessories

101278 Lamp Assembly, Surface Scatter 7

101279 Detector Assembly, Surface Scatter 7

68700 Bottle Cleaning Brush

4502100 Calibration Cup

2351300 Standardization Plate Kit

9220500 Sun shield



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