# **UVAS PLUS sc SENSOR**

### **Applications**

- Drinking Water
- Wastewater
- Industrial



# Continuously protect plant treatment processes from high influent organic loads.

# Continuous, Automatic Early Warning Systems

Use the Hach UVAS plus sc UV Absorbance/ %Transmittance Sensor to continuously protect plant treatment processes from high influent organic loads.

# **Control Activated Sludge Processes**

Activated sludge processes require precise balancing of organic load, aeration, and nutrients. Continuous trending of the organics using the UVAS plus sc sensor can help operators know how to balance other factors resulting in cost and time savings.

# **Self-cleaning Wiper System**

The detector windows are automatically cleaned by a built-in wiper that eliminates surface films or particles that can diminish accuracy.

# Monitor Efficiency of UV Disinfection Process

Hach's UVAS plus sc is designed to provide continuous UV light transmittance (UVT) measurement of pre-disinfected source water. Operational costs related to sampling for UVT may be reduced with continuous on-line measurement.

## **Self-diagnostics and Easy Maintenance**

Diagnostic routines built into the UVAS plus sc sensor reduce the need for extensive calibration and maintenance. Only semi-yearly inspection and replacement of the wiper and seals is needed.

# **Principal of Operation**

The Hach UVAS plus sc UV Absorbance / %Transmittance Sensor determines the Spectral Absorption Coefficient (SAC) at a wavelength of 254 nm. Measurements can be expressed in absorption units (1/m), mE, AU, %T, %T/cm, mg/L, or ppm.

This sensor requires a Hach sc200 or sc1000 Digital Controller.



2 UVAS plus sc Sensor

# **Specifications\***

	UVAS plus sc Tank Sensors	UVAS plus sc Bypass Sensors
Measurement Technique	UV absorption measurement (2-beam technique), reagent-free	
Measurement Method	SAC 254 in accordance with DIN 38404 C3	
Measurement Path Length	1, 2, 5 and 50 mm	2, 5, and 50 mm
Measurement Range	Choice of:  0.01 to 60 m <sup>-1</sup> at 50 mm  0.1 to 600 m <sup>-1</sup> at 5 mm  0 to 1500 m <sup>-1</sup> at 2 mm  2 to 3000 m <sup>-1</sup> at 1 mm	Choice of: 0.01 to 60 m <sup>-1</sup> at 50 mm 0.1 to 600 m <sup>-1</sup> at 5 mm 0 to 1500 m <sup>-1</sup> at 2 mm
Compensation	550 nm	
Measurement Interval	≥ 1 minute	
Sample Temperature	2 to 40°C (35.6 to 104°F)	
Sample pH	4.5 to 9 pH	
Probe Pressure Limit at Inlet	0.5 bar (7.25 psi) maximum	
Sample Flow Rate	n/a	0.5 L/hour minimum
Sample Connection	n/a	4 mm ID/6 mm OD hose
Sensor Cable Length	10 m (32.8 ft.)	
Control Function	PID, time control, 2-point controller (with sc controller)	
Inspection Interval	6 months	
User Maintenance	1 h / month, typical	
Dimensions	70 x 333 mm (2.75 x 13.11 in.) approximate	
Weight	3.6 kg (7.9 lb.) approximate	

\*Subject to change without notice.

# NOTE

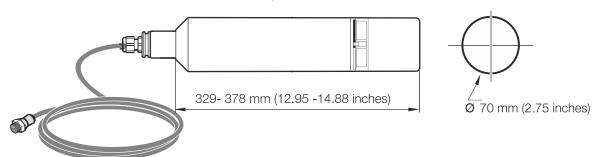
The UVAS plus sc probes cannot be used in sea water.

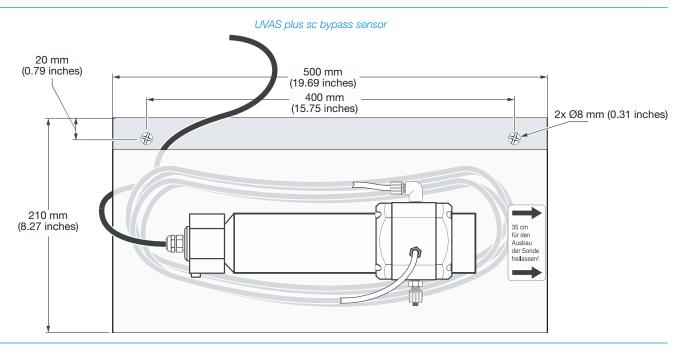
UVAS plus sc Sensor

# **Dimensions**

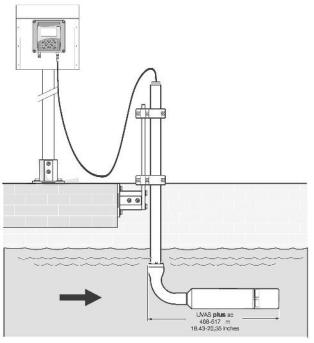
Hach UVAS plus sc UV Absorbance / %Transmittance Sensors can be installed using a fixed-point installation kit as shown in the bottom illustration. The bypass panel below can be used for non-immersion applications. With the cable supplied, the sensor can be used in a sample stream within 10 meters (32.8 feet) of the controller.

UVAS plus sc tank sensor





Installation for mounting the Hach UVAS plus sc UV Absorbance / %Transmittance Sensor for immersion in open tanks.



UVAS plus sc Sensor

# **Ordering Information**

The following sensors include the Hach sc200 Multi-parameter Controller (see LIT2665 for complete details).

 2976700
 1 mm UVAS plus sc sensor

 2976400
 2 mm UVAS plus sc sensor

 2976600
 5 mm UVAS plus sc sensor

 2976500
 50 mm UVAS plus sc sensor

#### **UVAS plus sc Sensor Only**

 LXV418.99.10002
 1 mm UVAS plus sc sensor only

 LXV418.99.20002
 2 mm UVAS plus sc sensor only

 LXV418.99.50002
 5 mm UVAS plus sc sensor only

 LXV418.99.90002
 50 mm UVAS plus sc sensor only

### **Bypass Panel**

LZX868Bypass Panel for 50 mm sensorLZX867Bypass Panel for 5 mm sensorLZX869Bypass Panel for 2 mm sensorLZX450Sedimenter for UVAS sc sensor

## **Mounting Hardware**

LZY714.99.53520 Mounting Hardware with 90 degree adapter



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