

# 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.*



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## Specifications\*

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

\*Subject to change without notice.

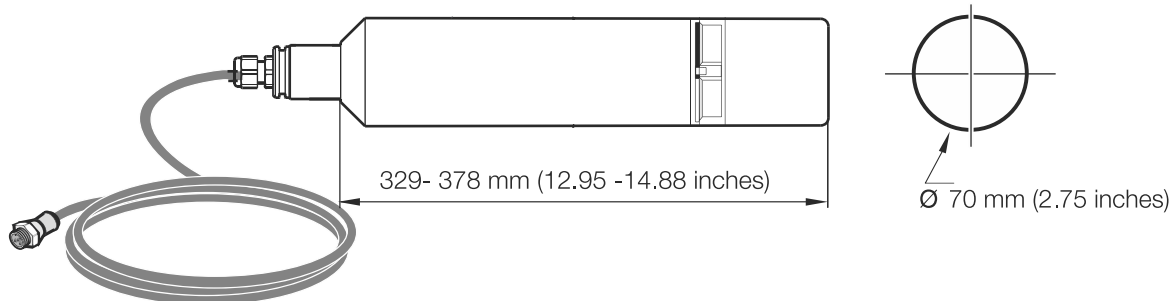
### NOTE

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

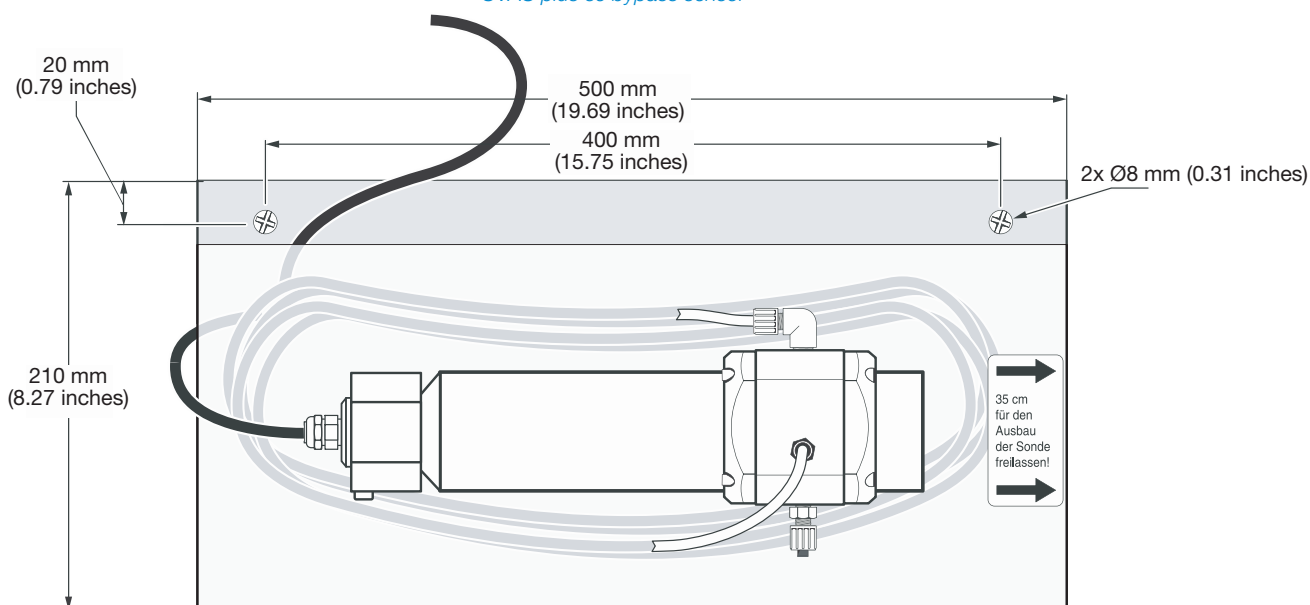
### Dimensions

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.

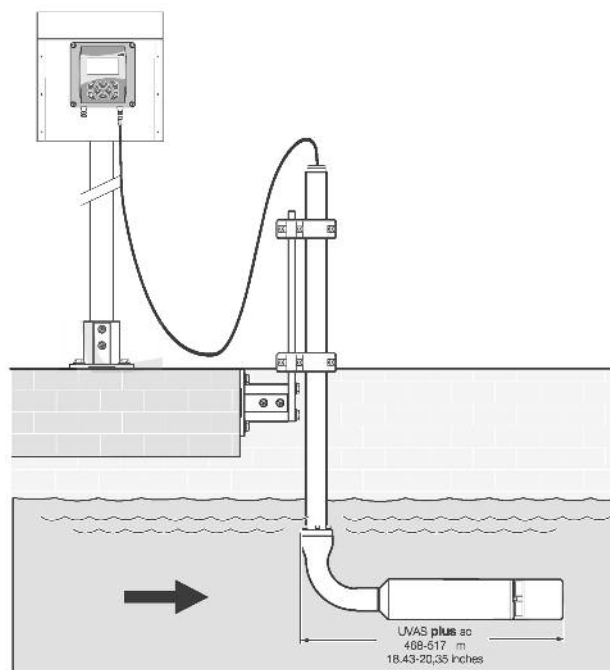
*UVAS plus sc tank sensor*



*UVAS plus sc bypass sensor*



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



## Ordering Information

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

<b>2976700</b>	1 mm UVAS plus sc sensor
<b>2976400</b>	2 mm UVAS plus sc sensor
<b>2976600</b>	5 mm UVAS plus sc sensor
<b>2976500</b>	50 mm UVAS plus sc sensor

## UVAS plus sc Sensor Only

<b>LXV418.99.10002</b>	1 mm UVAS plus sc sensor only
<b>LXV418.99.20002</b>	2 mm UVAS plus sc sensor only
<b>LXV418.99.50002</b>	5 mm UVAS plus sc sensor only
<b>LXV418.99.90002</b>	50 mm UVAS plus sc sensor only

## Bypass Panel

<b>LZX868</b>	Bypass Panel for 50 mm sensor
<b>LZX867</b>	Bypass Panel for 5 mm sensor
<b>LZX869</b>	Bypass Panel for 2 mm sensor
<b>LZX450</b>	Sedimenter for UVAS sc sensor

## Mounting Hardware

<b>LZY714.99.53520</b>	Mounting Hardware with 90 degree adapter
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