

## Water pressure proof UV sensor UVC-SE



Sensor UVC-SE

The water pressure-proof UVC-SE sensors serve as robust, long-term stable measuring heads for the precise measurement of UV-C irradiances of UV-C irradiances of low-pressure mercury lamps and amalgam lamps in water disinfection and wastewater systems. The sensor can be exposed to pressure of up to 10 bar.

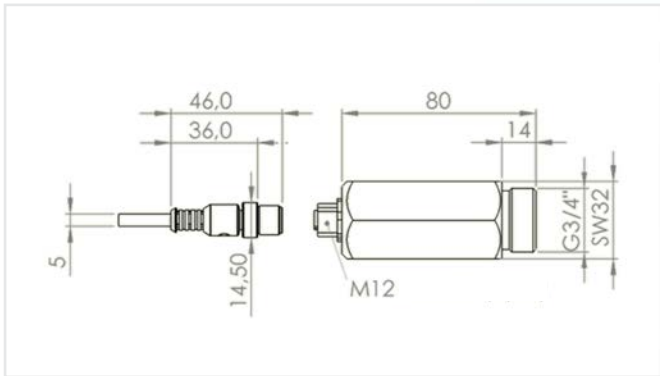
A long-term, stable high-sensitivity photo diode with a large active area of 1 cm<sup>2</sup> is used. This provides low noise and improved sensitivity, below 260 nm, compared to SIC sensors. Superior corrosion resistance and long-term stability is also achieved through the use of appropriate materials. No aging is determined over a period of one year. The sensors are calibrated with traceability to the PTB, the German national test authority.

The integrated electronics produce a signal voltage that is transmitted to the PLC or panel meter RM-32, so that inferences are minimized. Operating voltage and output signal can be selected to match the measurement task or PLC interfaces. For small control tasks, the sensor can be connected to RM-32, which shows the current irradiance on a 3.5-digit digital display and switches two relay contacts with adjustable warning and alarm signals.

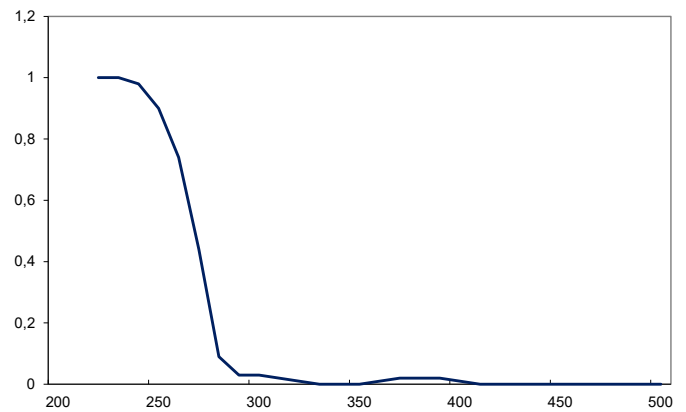
### TECHNICAL DATA

<b>Measuring range</b>	0 - 1000 W/m <sup>2</sup> other ranges on request
<b>Spectral range:</b>	180 - 280 nm
<b>Selectivity</b>	above 280 nm better than 4% for low-pressure HG lamps
<b>Remaining sensitivity</b>	around 650 nm
<b>Dimensions</b>	see drawing
<b>Housing material</b>	Stainless steel
<b>Weight</b>	~420 g
<b>Water pressure</b>	up to 10 bar
<b>Connector</b>	G 3/4"
<b>Operating voltage</b>	+24 V, +12 V or ±5 V
<b>Operating current</b>	<15 mA
<b>Output</b>	0 - 10 V, 4 - 20 mA or 0 - 1 V
<b>Operating temperature</b>	0 to 40 °C
<b>Storage temperature</b>	-10 to 40 °C
<b>Humidity</b>	< 80%, non-condensing
<b>Cable</b>	2 m - 10 m
<b>Sensor connector</b>	M12 (5-pole)

## TECHNICAL DATA

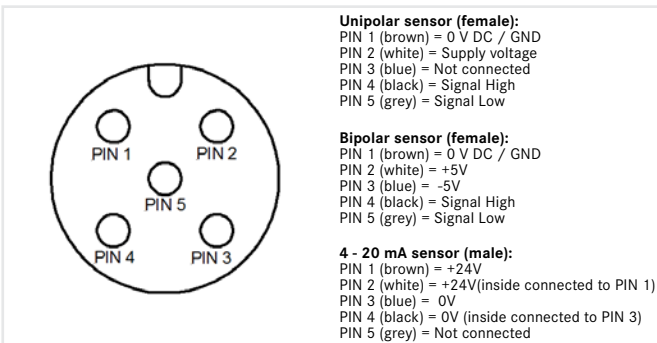


Dimensions UVC-SE



Spectral sensitivity (typical)

## CONNECTOR ASSIGNMENT



## UV PANEL METER RM-32



Optional UV panel meter: RM-32

## PART NUMBERS

UVC-SE ±5V <sub>DC</sub> 0 - 1 V	810351
UVC-SE +24V <sub>DC</sub> 0 - 10 V	810352
UVC-SE +24V <sub>DC</sub> 4 - 20 mA	810356
UVC-SE +12V <sub>DC</sub>	810353
<b>Cables for sensors with voltage output</b>	
sensor cable, 2 m	920310
sensor cable, 5 m	920310-5
sensor cable, 10 m	920310-10
<b>Cables for sensors with current output</b>	
sensor cable, 2 m	920310-I
sensor cable, 5 m	920310-I5
sensor cable, 10 m	920310-I10
RM-32	670029

For irradiance measurements of medium-pressure lamps we recommend our UVxSE sensors.

## SCOPE OF DELIVERY

UVC-SE sensor, protecting cap, manufacturers certificate of calibration

The UVC-S sensor is also suitable for Excimer lamps due to the high sensitivity below 260 nm. For MgF2 version or VIS blind versions please contact us.

