

UVB Sensor E 1.c

Instruction for use 7.1416.20.xxx



Application

Measuring transmitter for short-wave radiation which can cause irreversible damages of the human skin.. The relative spectral sensitivity of the sensor is especially suited to the erythem-curve acc. to DIN 5050. This sensor determines exactly the skin-damaging components of the spectral range.

Construction

The dome consists of uv-transmissive plastic, and the case is made of weather-proofed, anodized aluminium. The instrument is protected against rain and jets of water. In addition, the use of Silicagel prevents the dome from steaming up on the inside.

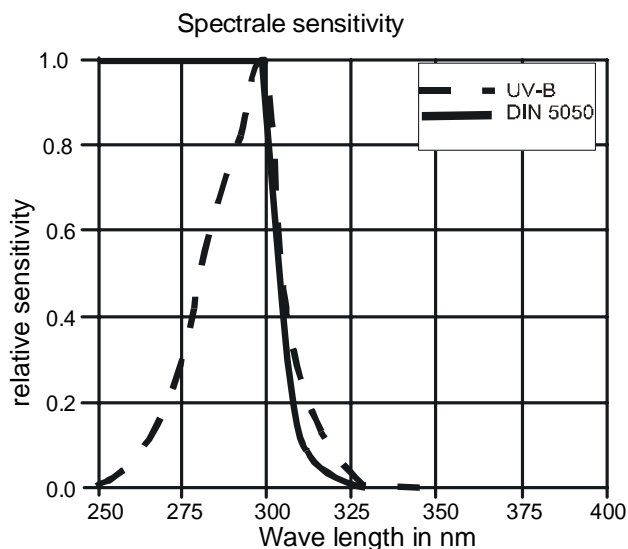
Models

Order-No.	Electr. Output	Operating voltage
7.1416.20.040	0 ... 20 mA	+10...+24 V DC
.041	4 ... 20 mA	+10...+24 V DC
.051	0 ... 5 V	+10...+24 V DC
.061	0 ... 10 V	+14...+24 V DC

The measuring value is supplied as analogue standard signal in accordance with the measuring range.

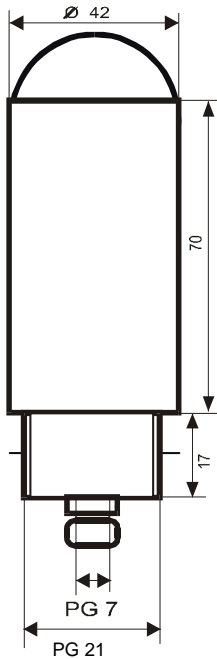
Technical Data

Meas. range UV-B	0ca. 0,5 W/m ²
Spectral range	0,265 ... 0,315 μm
max. spectr. sens..	0,297 μm
Power supply	+10 ... +24 V DC
for output 10 V	*+14 ... +24 V DC
Temperature range	-20 ... +60 °C
Switch on time	< 1 sec
Switch off time	< 12 sec
Diffuser	PTFE
Doom	PMMA
Cos - correction	error f2 < 3 %
Linearity	< 1 %
Absolute error	< 10 %
Cable	5 m long
Dimension	Ø 36 x 90 mm
Weight	0,30 kg

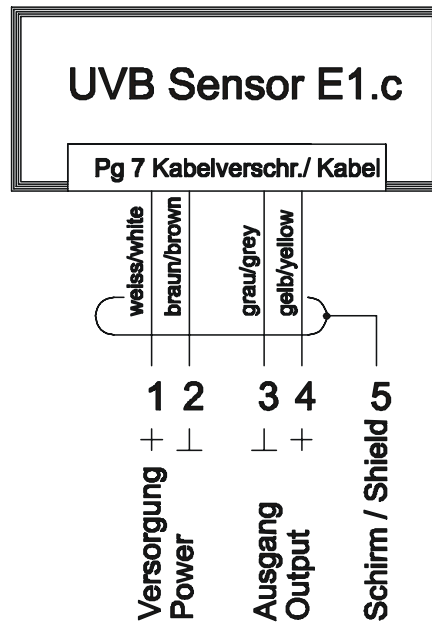


Delivery of UVB-sensor E1.c includes a calibration certificate.

Dimension



Connecting diagram



Mounting

The UVB-sensor E1.c is screwed onto a plane horizontal ground plate with a pg21-thread, and is made as level as possible. Please take care that the sunshine reaches the sensor all-day without shadow. The mounting near buildings or trees can affect the measuring values in a negative manner.

The electrical connection is to be carried out according to the connecting diagram. Please use a 4-core, watertight cable as extension lead. A cable length of up to 50 m is possible for instruments with voltage output. It is advisable to use a shielded cable.

Please pay attention to the operating voltage.

Maintenance

The instrument should be easily accessible for cleaning, as dirt and soiling affect the measuring results considerably. Depending on local conditions, the instrument should be cleaned at least twice a year with a soft and damp cloth. Please use residue- and solvent-free liquid cleansing agents without scrubbing alloy. The dome must not be damaged!

Warranty

The warranty does not comprise damages caused by improper use, or broken glass. The right to claim under guarantee expires in case the instrument has been opened.

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