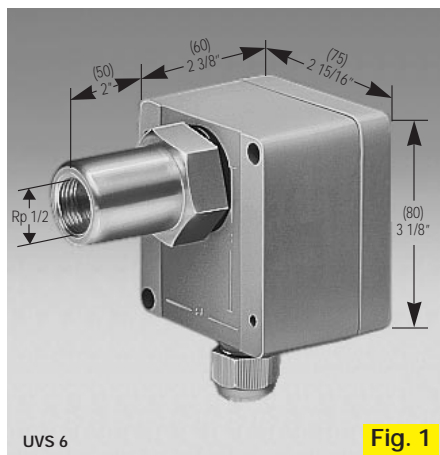


UV-detectors  
UVS 6, UVS 8





## UV-detectors UVS 6, UVS 8

- /// High sensitive
- /// Insensitive to sunlight, daylight, infrared radiation and incandescent lamps
- /// Protected against interruptions or short circuits in the flame signal line
- /// Large ambient temperature range
- /// Sturdy construction
- /// The UV detector may see ignition spark
- /// FM approved
- /// Kromschroder is a company certified to ISO 9001

## Application

For use on forced an induced draught burners, at hot air furnaces, gas fired boilers, industrial furnaces and installations for the flaring of excess gas conjunction with IFS automatic burner controls and/or IFW flame relays.

**Construction UVS 6** (Fig. 1) in an aluminium housing with incorporated heat protection with terminals (Pg 11 – cable gland with traction relief).

Terminals: AWG 16 (1.5 mm<sup>2</sup>)  
Protected against humidity.

**Construction UVS 8** (Fig. 3) in an aluminium housing with firmly connected cable, 3 leads, length: 6 ft (1,80 m).

Protected against humidity.



## Technical Data

UV sensor: P578

Spectral range: 190 – 270 nm

max. sensitivity: 210 ± 10 nm

min. D.C. signal: 1µA

Typ of enclosure: NEMA 3 (UVS 6)  
NEMA 1 (UVS 8)

Ambient temperature:

-40 °F to +176 °F  
(-40 °C to + 80 °C)

Life of the UV tube:

approx: 10000 operating hours

Weight: UVS 6 approx. 0,88 lbs (0,4 kg)

UVS 8 approx. 0,44 lbs (0,2 kg)

Lead colors (Fig. 4):

### UVS 8

- |               |       |
|---------------|-------|
| 1 signal      | blue  |
| 2 phase (L1)  | black |
| 3 neutral (N) | white |

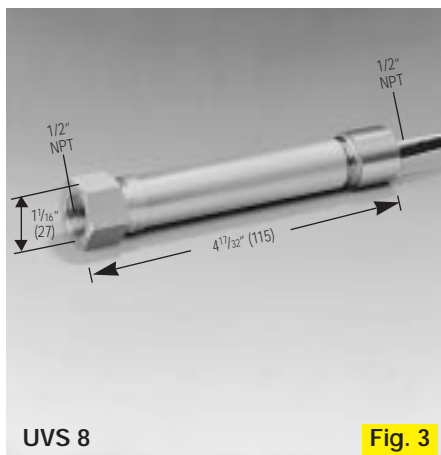
Max lead length between UV detector and automatic burner control: 150 ft (50 m), if plastic pipes are used; 50 ft (15 m), if metal pipes are used.

Max distance between UV detector and flame: 16" (400 mm)

## Accessory

Replacement sensor for UVS 6: (Fig. 2)  
Order No.: 0 406 5304

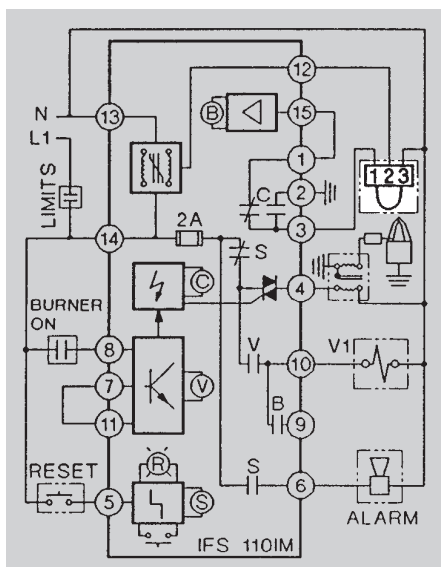
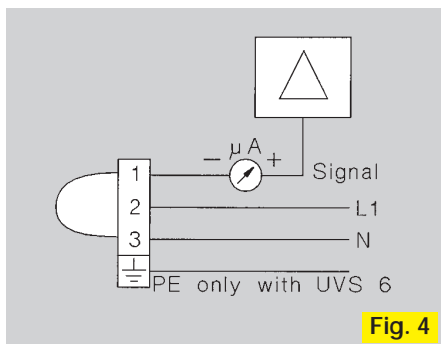
UV sensor for UVS 8 is not replaceable.



**Fig. 3**



**Fig. 4**



## UV-Supervision (Fig. 5)

The UV detector responds to the ultraviolet light of a flame. Therefore, it does not react to daylight, light from incandescent lamps and infrared radiation from hot workpieces or incandescent furnace walls.

The UV detector should see the flame from the top through an internally bright steel tube (Fig. 6), positioned at an angle. Its position must be such that only the flame to be supervised may produce a flame signal. If there is a flame signal from other burners, the flame amplifier cannot distinguish which burner to supervise.

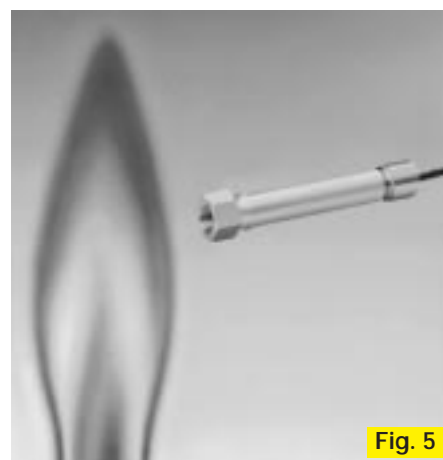
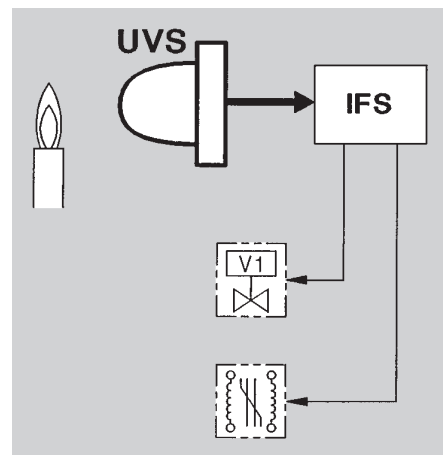
The UV detector may see the ignition spark.

The working life of the UV sensor amounts to approx. 10 000 operating hours. For safety reasons it must be exchanged after this time.

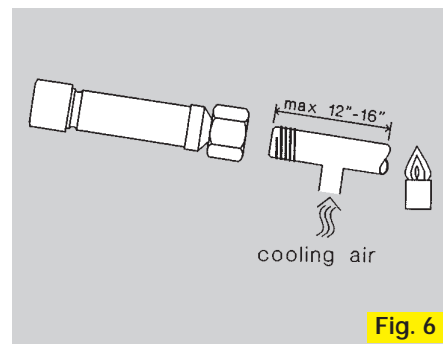
The UV detector operates on A.C. voltage. With incident UV light the alternating current flows through the UV sensor, which is converted into a direct current signal by a rectifier. The flame signal amplifier reacts only to direct current.

The UVS 6 is complete with quartz lens, which isolates the detector from the hot furnace atmosphere against humidity, dirt and heat. For UVS 8 a quartz lense is not necessary. Additionally, overheating, dirt and the build-up of condensation can be avoided with cooling (Fig. 5).

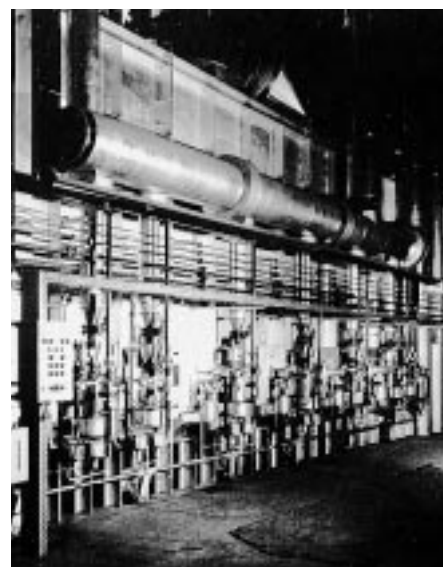
The UV detector generally operates on 220 V.



**Fig. 5**



**Fig. 6**



We reserve the right to make technical changes designed to improve our products without prior notice.

