## **Product Brochure**

T-Product 2002 September







- // High sensitivity
- // Insensitive to sunlight, daylight, infrared radiation and incandescent lamps
- // Protected against interruptions or short circuits in the flame signal line
- // Wide ambient operating temperature range
- Rugged aluminum construction
- // Low maintenance
- // Integral threaded collar with 1/2" NPT female threads
- // UVS 6 available with replaceable UV cell
- Models also available with CE certification

## **Application**

The UVS flame detectors are for use on forced and induced draught burners, ovens, gas fired boilers, industrial furnaces and installations for the flaring of excess gas. The UVS 6 and UVS 8 are designed for use in conjunction with Kromschroder PFS, IFS or BCU automatic burner controls. Ultraviolet flame detectors sense the ultraviolet radiation from a combustion flame and are used to supervise gas fired burners.



# Specifications Operating limits

Ambient

temperature: -40 °F to +176 °F (-40 °C to +80 °C). Life of the UV tube: Approximately 10,000 operating hours

Note: Kromschroder recommends replacing the UV cell af-

ter 10,000 hours of operation or one year.

#### **Mechanical Data**

Type of enclosure: UVS 6: NEMA 3 (IP 55),

UVS 8: NEMA 1 (IP 10/20).

#### **Electrical Data**

Supply voltage: Input to Kromschroder burner control unit is 115 Vac.

Output to UV detector is 230 Vac.

Spectral range: 190-270 nm.Max. sensitivity:  $210 \pm 10 \text{ nm.}$ 

Min. D.C. signal:  $1 \mu A$ .

### **Materials of construction**

UVS 6: Assembled in an aluminum housing with integrated heat pro-

tection and AWG 16 (1.5 mm<sup>2</sup>) connection terminals. The UV

detector is protected against humidity.

UVS 8: Assembled in an aluminum housing with non-detachable

6-foot leads. The UV detector is protected against humidity.

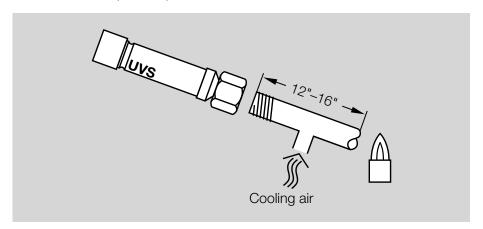
Terminals: AWG 16 (1.5 mm<sup>2</sup>).





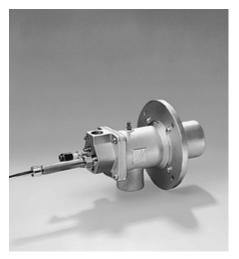
#### **Features**

- The UV detector responds to the ultraviolet light of a flame. It does not react to daylight, incandescent lamps, infrared radiation, hot work-pieces or incandescent furnace walls.
- The UVS 6 is complete with a quartz lens, which isolates the detector from the hot furnace atmosphere against humidity, dirt and heat.
- A quartz lens is not necessary for the UVS 8 detector. Overheating, dirt and condensation can be avoided with cooling as shown in the diagram below.
- Max lead length between UV detector and automatic burner control is 150 feet (50 m), if plastic conduit is used.
   If metallic conduit is used, this length should not exceed 50 feet (15 m).
- The maximum recommended sighting distance between the UV detector and the flame is 16" (400 mm)



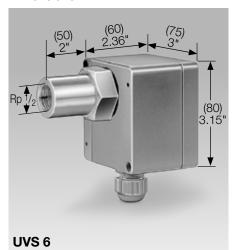
# **Application Examples**

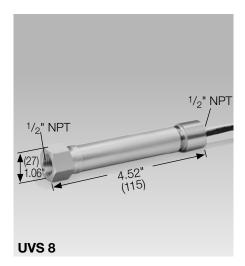




# **Dimensions and weights**

Dimensions:





Lead length of UVS 8: Three non-detachable cables, each 6 feet (1.8 m).

Weight: UVS 6 approx. 0.88 lbs. (0.4 kg), UVS 8 approx. 0.44 lbs. (0.2 kg).

#### **Order Information**

Model Designation	Description
UVS 6	Enclosed, with integrated heat protection, IP 55 with connection terminals
UVS 8T	Enclosed, with NPT connection, with non-detachable cable

## **Accessories**

Replacement sensor for UVS 6: Order No.: 74960445 (UV sensor for UVS 8 is not replaceable). UV detector adapter with Kromschroder burners.

#### Warning:

Situations dangerous to personnel and property can result from the misapplication and incorrect operation of combustion equipment.

Kromschroder advises compliance with the National Fire Protection Association standards that apply for related equipment and Insurance Underwriters recommendation, and care of operation.

We reserve the right to make technical changes designed to improve our products without prior notice. For current product information, visit our website at www.kromschroder.com.

