

# UNIGUARD UG-2

Smoke detector with service alarm for duct installation.  
Ionisation or optical function.



# 6.0.2.E



- One-tube air sampling system
- Service alarm
- Test hole on cover
- Simple installation
- Sensitive flow indication
- Filter for dusty environments
- Simple service and maintenance
- Installer-friendly connection of cables
- Foolproof moutage of sampling tube
- "Plug-in" montage of optional booster fan

## TECHNICAL DATA

Detector type:	Ionisation - UG-2-J Optical - UG-2-O
Operating Voltage:	Detector: 24VDC from control unit Booster fan: 24VAC separate supply
Operating current:	~ 0,04mA ~ 50mA - Booster fan
Service alarm current:	~ 13mA
Fire alarm current:	~ 55mA
Operating temperature:	-20°C to +50°C
Maximum humidity:	99% rH
Tested and approved according to EN-54:	by LPC (England)
Service alarm:	Indicated with green LED
Fire alarm:	Indicated with red LED
Adaptor housing:	ABS
Protection:	IP-54
Weight:	800g
Air sampling tube:	The length of the venturi pipe shall be chosen based upon how wide the ventilation duct is. The venturi pipes are available in 3 lengths; 0,6, 1,5 and 2,8 m. When the ventilation duct is wider than 0,6 m (dia), the venturi pipe should penetrate the whole duct. Please see enclosed sketch.

## FUNCTION

Uniguard has been developed to detect smoke in ventilation ducts and combines a smoke detector and an adaptor system where both tube and housing are specially designed for optimum airflow through the smoke detector.

The system fulfils all the requirements for safe fire detection with airflow speeds from 0,2 m/s to 20 m/s.

Uniguard is used in conjunction with a control unit; for example ABAV-S3 to control fire-safety dampers, to stop ventilation fans, and to activate accoustic and optical alarms etc. The detector has a bayonet fitting to simplify mounting and removal.

A contaminated detector will result in increased sensitivity and false alarms. To avoid nuisance alarms the detector has a service alarm (green LED). This indicates that the detector should be cleaned.

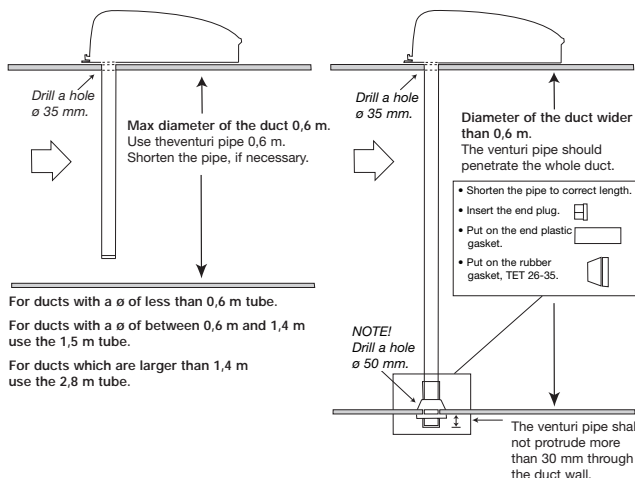
## BASIC PRINCIPLES FOR POSITIONING

For the airflow through the adaptor to be representative of the airflow in the ventilation duct, install the detector at a place where normally flow meters etc. should be mounted, please see our installation instructions.

Or use the national or local rules for moutage according to "Methods for measuring airflow in ventilation systems".

## ACCESSORIES

Booster fan:	M-UG 1
Filter:	F1-UG/10 pack
Mounting bracket:	UG-Beslag (For insulated/circular ducts)
Waterproof housing:	UG-SH for outdoors, in cold attics etc. IP 65.



# UNIGUARD UG-2

Smoke detector with service alarm for duct installation.  
Ionisation or optical function.

# 6.0.2.E

## INSTALLATION

The tube is made of aluminium and can easily be shortened to suit the diameter of the duct. Hole diameter is 35 mm. With insulated or circular ducts - use the mounting bracket, hole diameter is then 50 mm.

## MAINTAINANCE

When the detector becomes contaminated, sensitivity is increased, triggering the service alarm. This can be avoided for a considerable time by cleaning the detector once a year with a vacuum cleaner.

## CHECKING AIR FLOW

The detector is equipped with a flow indicator which oscillates in the air stream when the detector is correctly installed. This gives simple confirmation that there is no leakage, and that air from the ventilation duct is flowing through the detector.

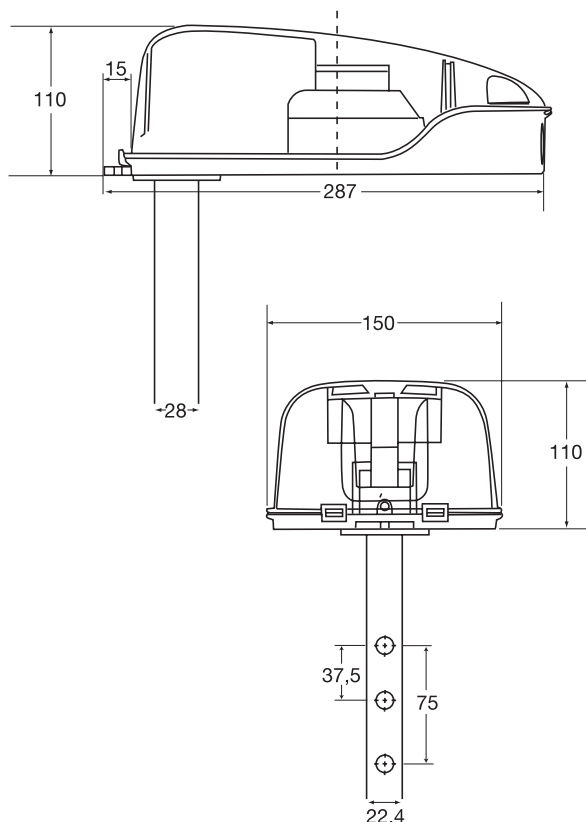
## FUNCTION TEST

When installation is complete, the detector should be tested. This can be carried out with smoke or suitable testspray for example RDP-300 (from Calectro), use the test hole on cover. Do not forget to refit the plastic plug after test.

**NOTE!** When installing outdoors or in cold attics etc., where there is a risk for condensation, this requires that the detector is insulated from the surrounding air by means of for example our waterproof housing UG-SH, and marked with an extra indicator lamp, LED-01 and a sign marked "Hidden Detector".

## DIMENSIONS

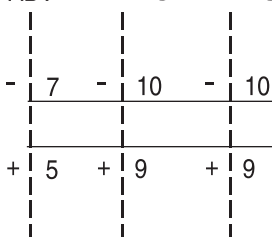
(mm)



## WIRING DIAGRAM

### CONTROL UNITS

ABV ABAV-S ABAV-S3



### SMOKE DETECTORS

