

Aspirating Smoke Detection

ASD 532



The ASD 532 (Aspirating Smoke Detector) is the new generation of a highly sensitive, active smoke detection system. It is based on the successful ASD 535 and is particularly well suited for monitoring smaller areas and sampling distances where a reduced sampling pipe network is sufficient.

The ASD 532 consists of a fan, a highly sensitive smoke sensor, an airflow measurement system, and evaluation electronics. The fan draws in air through sampling holes from the room or facility being monitored and then through a sampling pipe to the evaluating processor unit. Here the air samples are continually monitored for smoke particles by the smoke sensor. Airflow monitoring ensures that the sampling pipe is constantly checked for pipe breakage and any obstruction of the sampling holes. The display and control panel of the evaluating processor unit indicates alarm, fault and status reports. Any increase in the smoke concentration levels are detected very early. Three pre-alarms, two main alarms can be programmed and forwarded to a fire alarm control panel via volt free relays contacts.

The ASD 532 is used whenever conventional point-type smoke detectors cannot be used. This may be due for example to ambient conditions (too hot, too cold, too dirty) or because operating conditions are such that access is highly restricted (prisons, false ceilings, clean rooms, laboratories, highrack storage facilities, etc.). Or because lightning-fast detection is required, e.g. in data centres.

Features

Latest generation of aspirating smoke detectors for simple applications

1 sampling pipe/1 detector

EN 54-20 classes A, B, and C

5 alarm levels (3 pre-alarms and 2 alarms when using RIM36 Module)

Response sensitivity settable from 0.002–10%/m

Insensitive to dirt particles thanks to particle suppression

Auto-learning function

Low noise level, compliant with ISO 11690-1

Perfected smoke detection thanks to HD sensor (high-dynamic technology)

Low power consumption

ASD Config PC tool

ASD PipeFlow calculation tool

Individually Replaceable Components (Sensors, PCB's etc)

Applications

Elevator shaft monitoring

Museums, galleries, theatres, and cinemas

Collections of cultural artefacts, historical buildings

IT and data centres

Telecommunication centres

Laboratory and research centres

Transformer rooms

Clean rooms

Telecommunication facilities

High and Low Voltage distribution cabinets

Display cases

EDP facilities

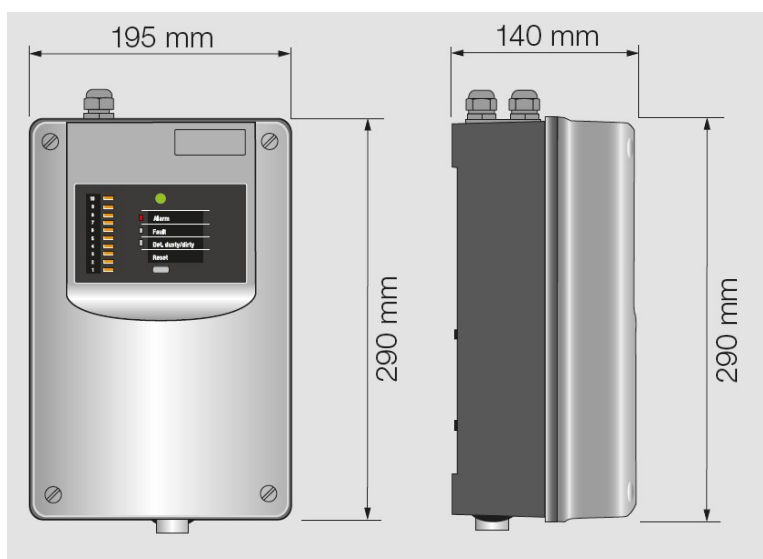
CNC control systems

Prison cells

Protection of cultural assets

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A high-power LED combined with a Large Volume Smoke Chamber (LVSC) results in unparalleled adjustable sensitivity (dynamic range of 0.002%/m to 10%/m) with low aerodynamic resistance and the utmost resistance to dust contamination. These features ensure long system service life and durability.

Commissioning and maintenance of the ASD 532 is done via the ASD Config PC Tool, and is calculated using the ASD PipeFlow software. This makes it possible to configure more cost-efficient asymmetrical pipe layouts. The optional SD memory card allows extensive long-term smoke level recordings (e.g. smoke and airflow values) to be stored directly on the SD memory card and analysed on your PC.

Networking

Up to 250 ASD 532 detectors can be networked using the on board Ethernet / TCP/IP.

Using the ASD Config Software the user is able to Poll, Configure and Visualise all of the connected ASD 532 detectors.

Accessories and options

The ASD 532 is compatible with all the usual sampling tubes with D=25mm and other accessories. All of these can also be calculated using ASD PipeFlow.

The device concept is compatible with the use of the following options:

- Relay interface module RIM36
- Networking with SIM35 (RS 485) for existing ASD 535 Networks

Specification

Supply Voltage:	14 - 30 Vdc
Supply Current:	115mA Quiescent (typical) (@ 24 Vdc)
Alarms 1:	0.02 - 10%/m (0.00087-0.457 dB/m)
Pre-alarms 1, 2 & 3:	0.002 - 9%/m (10% increments)
Interfaces:	
Alarm, Fault, Prog	3 Relays / Open Collector
Service interface	Ethernet
No. of Expansion:	2 Slots (SIM35, 2 x RIM36)
Relay Rating:	30 Vdc / 1Amp
Standards:	EN 54-20, classes A, B and C
Approvals:	VdS G 215 101
Temperature:-	-20°C to +60°C
IP Rating:	IP 54 (achieved without limitations)
Enclosure:	
Dimensions:	290mm x 195mm x 140mm (h x w x d)
Colour:	RAL 280 70 05 and RAL 300 20 05
Material:	ABS blend, UL 94-V0
Weight:	Approx 1,950g
Event Memory:	Max 1000 events (Onboard)
Analogue Logging:	Max 1 year events (with SD Card)
Cable Entries:	3 x M20, 1 x M25
Fan Type:	Radial
Suction Noise:	25 dBA Typical (Fan Level 1)
System Limits:	Class A: 8 Sampling Holes
EN54-20	Class B: 12 Sampling Holes
	Class C: 16 Sampling Holes
	70m Last Sampling Points
	120m Total Pipe Length per Unit

Ordering Information

Description	Part Number
Aspirating Smoke Detector ASD532	11-2000003-01-01P
Replacement Smoke Sensor SSD532-3	11-2000004-03-01P
Relay Interface Module RIM36	11-2200005-01-02P
SD Memory Card (Industrial Version)	11-4000007-01-01P
Serial Interface module SIM35	11-2200000-01-02P
Sampling Pipe	Refer D1316