



FDBZ292

Air sampling smoke detection kit

FD20, collective/SynoLINE600, AnalogPLUS/SynoLOOP, interactive

Sinteso™
Synova™
AlgoRex



- **Reliable monitoring of fresh air, used air and air re-circulation ducts for smoke in air conditioning and ventilation systems**
- **Suitable for air speeds of 1... 20 m/s**
- **Smoke detection with the Sinteso™, AlgoRex and Synova 600 series smoke detectors**
- **Adaptable detection algorithms**
- **Simple installation with only one air flow tube**
- **Accessories for all shapes of duct**

Function

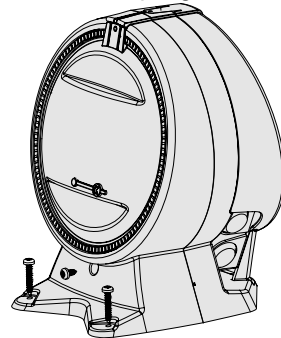
- The air sampling smoke detection kit is a passive monitoring system without its own fan. It makes use of the existing pressure difference in the ventilation system in order to supply a continuous flow of air through a bypass from the ventilation duct to the air sampling smoke detection kit.
- The air sampling smoke detection kit only works if the ventilation system is in operation and the air is circulating. The monitored air must be clean, i.e. free from dust and aerosols.
- When a smoke concentration set in the smoke detector is reached, the corresponding danger level is signaled to the fire alarm control unit which initiates the corresponding alarm.

Design

The air sampling smoke detection kit consists of:

- the air duct sampling chamber (grey plastic housing with transparent cover)
- the end plug for the air flow tube
- the sealing for the air flow tube
- all necessary screws

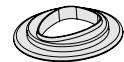
Air duct sampling chamber



End plug



Sealing



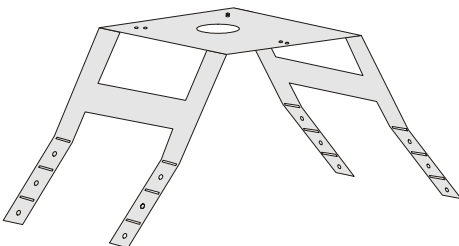
The smoke detectors and bases as listed below to be ordered separately.

Sinteso™	
Base	Detector
FDB201, FDB201-AA	FDO241
FDB221, FDB221-AA	FDOOT241-8
	FDOOT241-9

AlgoRex / Synova™	
Base	Detector
DB1101A	DO1103A, DO1104A
DB1131A / SO620A	DO1133A
DB1151A	DO1153A

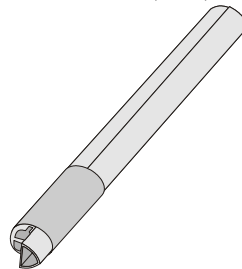
Options

Mounting bracket
FDBZ292-AF



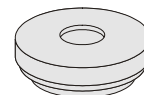
for uneven, round, rectangular and insulated ducts

Air flow tube
FDBZ292-AA,-AB,-AC



0.6 m, 1.5 m, 2.8 m
(FDBZ292-AB,-AC with additional end gasket)

Sealing kit
FDBZ292-AD



necessary at application with the mounting bracket and the longer air flow tubes

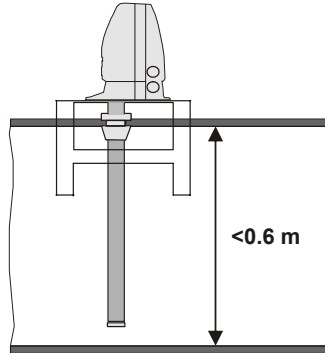
Choice of location

- The air sampling smoke detection kit is mounted in the ventilation system where air flow measuring devices are usually installed, i.e. where there is no air vortex, change of direction, duct branching, duct narrowing or duct extensions. The distance to the branching, bracket or bend must have 5 x the duct diameter.
- In order to guarantee smoke detection, mount the air duct sampling after the last air inlet.

Installation method

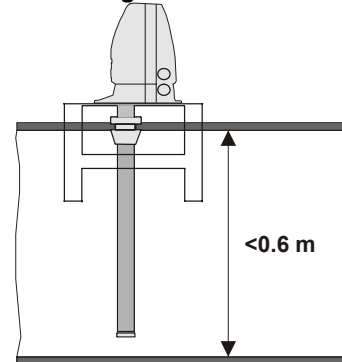
- The air duct sampling chamber is mounted on the outside of the air duct. Only the air flow tube is introduced through a hole drilled into the duct and shortened according to the diameter of the duct.
- Normally, the air duct sampling chamber is mounted on the air duct using metal screws. It can also be mounted without difficulty on uneven, round or insulated ducts using the mounting device.

Circular duct ≤ 0.6 m



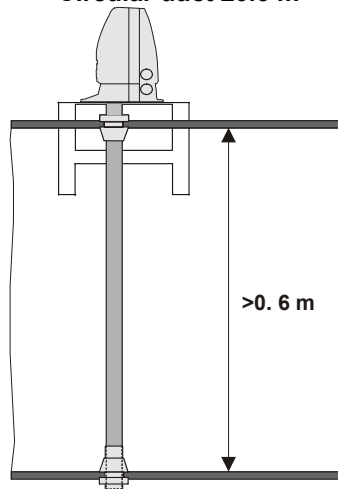
- FDBZ292 Air sampling smoke detection kit
- FDBZ292-AD Sealing kit
- FDBZ292-AF Mounting bracket
- FDBZ292-AA Air flow tube 0.6 m

Rectangular duct ≤ 0.6 m



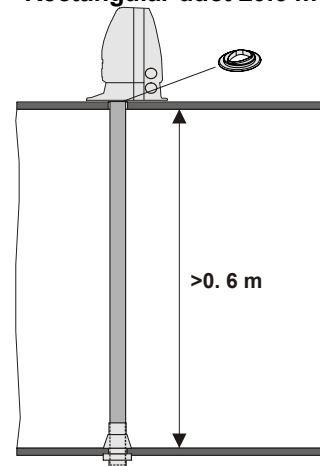
- FDBZ292 Air sampling smoke detection kit
- FDBZ292-AD Sealing kit
- FDBZ292-AA Air flow tube 0.6 m

Circular duct ≥ 0.6 m



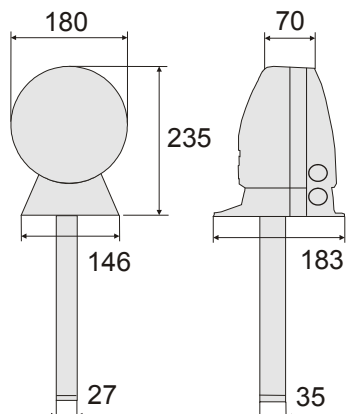
- FDBZ292 Air sampling smoke detection kit
- FDBZ292-AD Sealing kit (2x)
- FDBZ292-AF Mounting bracket
- FDBZ292-Ax Air flow tube 1.5/2.8 m

Rectangular duct ≥ 0.6 m



- FDBZ292 Air sampling smoke detection kit
- FDBZ292-AD Sealing kit
- FDBZ292-Ax Air flow tube 1.5/2.8 m

Dimensions



Technical data

Housing of the air duct sampling chamber	
- Material	ABS
- Protection category acc. to EN 60529 / IEC 529	IP54
- Color	grey, RAL7001
Smoke detector / detector base	see table
Air flow tube	Aluminum
Permissible air speeds	1... 20 m/s
Air flow indicator	≥1 m/s
Ambient temperature	-20... + 50 °C
Humidity	≤95 % rel.
Approvals	
- VdS with smoke detectors	
DO1104A, FDOOT241-8, FDOOT241-9	request

Details for ordering

Type	Part no	Designation	Weight
FDBZ292	A5Q00021362	Air sampling smoke detection kit	0.800 kg
FDBZ292-AA	A5Q00021363	Air flow tube, Length 0.6 m	0.353 kg
FDBZ292-AB	A5Q00021364	Air flow tube, Length 1.5 m	0.882 kg
FDBZ292-AC	A5Q00021366	Air flow tube, Length 2.8 m	1.647 kg
FDBZ292-AD	A5Q00021367	Sealing kit	0.030 kg
FDBZ292-AF	A5Q00021369	Mounting bracket	0.630 kg
DBZ1190-AB	4942340001	Connection terminal 1... 2.5 mm ²	0.002 kg

Sinteso™ fire detectors see documents 007005, 008141

Synova™, AlgoRex fire detectors see documents 001578, 001331