SIEMENS

Sinteso™
Synova™
AlgoRex
Cerberus® PRO

FDBZ292

Air sampling smoke detection kit

FD20, collective/SynoLINE600, AnalogPLUS/SynoLOOP, interactive

$C\epsilon$

- ● **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**

Building Technologies

Fire Safety & Security Products

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
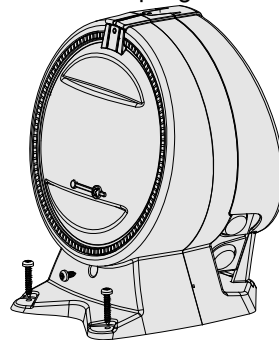
Air duct sampling chamber   End plug   Sealing

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

Sinteso		AlgoRex / Synova		Cerberus PRO	
Base	Detector	Base	Detector	Base	Detector
FDB201, FDB201-AA FDB221, FDB221-AA	FDO241 FDOOT241-8 FDOOT241-9	DB1101A DB1131A / SO620A DB1151A	DO1103A, DO1104A DO1133A DO1153A	DB1101A	DO1104A

Options

Mounting bracket
FDBZ292-AF

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

Sealing kit
FDBZ292-AD
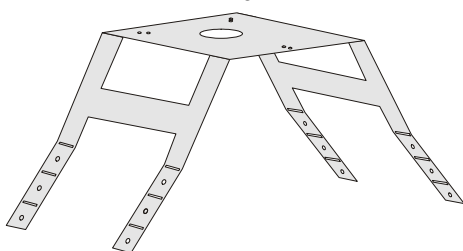
for uneven, round and insulated ducts
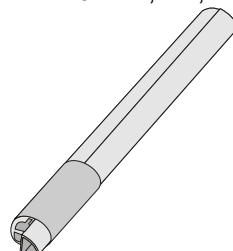
0.6 m, 1.5 m, 2.8 m
(FDBZ292-AB,-AC with additional end gasket)
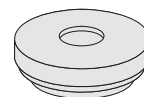
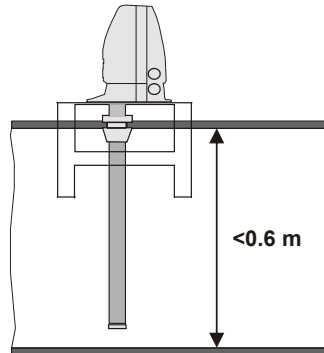necessary at application with the mounting bracket and the longer air flow tubes

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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.
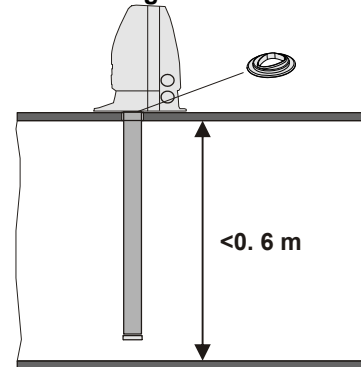
Installation method

– 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.
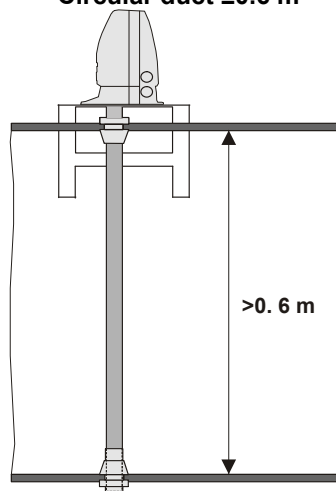
Circular duct ≤0.6 m   **Rectangular duct ≤0.6 m**

<0.6 m   <0. 6 m

– FDBZ292 Air sampling smoke detection kit   – FDBZ292 Air sampling smoke detection kit
– FDBZ292-AD Sealing kit (1x)   – FDBZ292-AA Air flow tube 0.6 m
– FDBZ292-AF Mounting bracket
– FDBZ292-AA Air flow tube 0.6 m

Circular duct ≥0.6 m   **Rectangular duct ≥0.6 m**

>0. 6 m   >0. 6 m

– FDBZ292 Air sampling smoke detection kit   – FDBZ292 Air sampling smoke detection kit
– FDBZ292-AD Sealing kit (2x)   – FDBZ292-AD Sealing kit (1x)
– FDBZ292-AF Mounting bracket   – FDBZ292-Ax Air flow tube 1.5/2.8 m
– FDBZ292-Ax Air flow tube 1.5/2.8 m
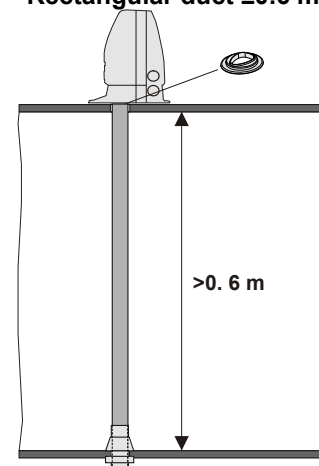
Dimensions
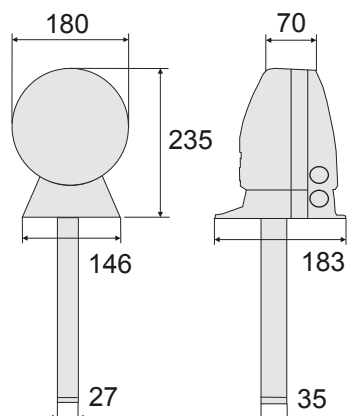
Technical data

Housing of the air duct sampling chamber	
– Material	ABS
– Protection category acc. to EN 60529 / IEC 529	IP54
– Color	grey, ~RA L7001
Smoke detector / detector base	see table
System compatibility	Sinteso -> FDnet
	AlgoRex -> interactive, AnalogPLUS, collective
	Synova -> SynoLINE600, SynoLOOP
	Cerberus PRO -> collective, in C-NET via FDCIO223
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.
Approval VdS	G207139 with smoke detector FDOOT241-8, FDOOT241-9 with parameter set no 9

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	BPZ: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