

**FDBZ290**

Sinteso™  
Cerberus™ PRO

## **Air sampling smoke detection kit**



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- **Reliable monitoring for smoke of supply air, exhaust air and recirculation ducts of air conditioning and ventilation systems**
  - **Suitable for air speeds from 1 m/s to 20 m/s**
  - **Smoke detection with specialized Sinteso and Cerberus™ PRO smoke detectors**
  - **Easy installation with just one air flow tube**
  - **Accessories for all forms of ventilation ducts**

**Function**

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- The air sampling smoke detection kit is a passive monitoring system without a fan of its own. It uses the pressure differences within the ventilation system to continuously take air samples from the ventilation duct via the air flow tube and supply them to the air sampling smoke detection kit.
- The air sampling smoke detection kit works only if the ventilation system is in operation and the air in circulation.
- The air to be monitored must usually be clean, i.e. free of dust and aerosols.
- If the smoke detector detects a certain concentration of smoke, the corresponding danger level is reported to the fire control panel which, in turn, triggers an alarm.

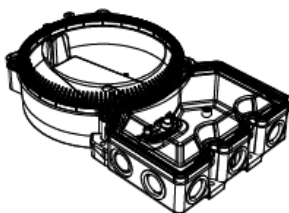
**Design**

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**The air sampling smoke detection kit consists of the following components:**

- Air duct sampling chamber (gray plastic housing with a transparent cover)
  - End plug for the air flow tube
  - Screws for installing the detector base
  - Screws for installing the air duct sampling chamber
  - Smoke cap
  - Plastic cable gland
  - Plastic counter nut

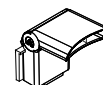
Air duct sampling chamber



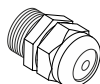
End plug



Smoke cap



Plastic cable gland M20 x 1.5



Plastic counter nut M20 x 1.5



The point detector and detector base listed must be ordered separately

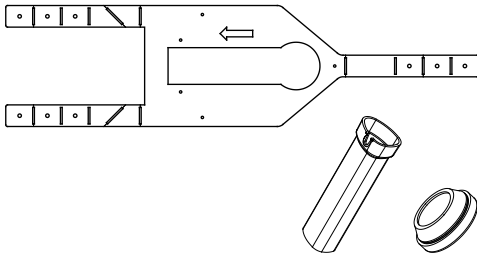
<b>Sinteso</b>	
Base	Detector
FDB222	FDOOT241-A9
FDB202	

<b>Cerberus PRO</b>	
Base	Detector
DB721	OOH740
DB110	
DB721D	

## Options

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Mounting bracket  
FDBZ290-AD



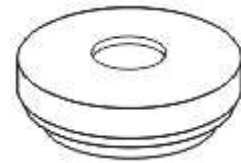
For uneven, round and insulated ducts incl. sealing sleeve, rubber seal and screws for installing the mounting bracket

Air flow tubes  
FDBZ290-AA,-AB,-AC



600 mm, 1500 mm, 2800 mm Length (FDBZ290-AB,-AC incl. long end plug)

Sealing kit  
FDBZ292-AD



Required when using the longer air flow tubes FDBZ290-AB, FDBZ290-AC

## Selecting a location

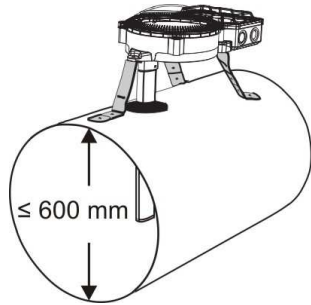
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- The air sampling smoke detection kit is installed in the same location within a ventilation system in which air flow measuring instruments would normally be installed, i.e. where no air vortices, changes of direction, branchings, constrictions or enlargements of the ventilation duct occur.
- To ensure a reliable smoke monitoring of the air, the air sampling smoke detection kit is installed after the last air inlet point.

**Installation variants**

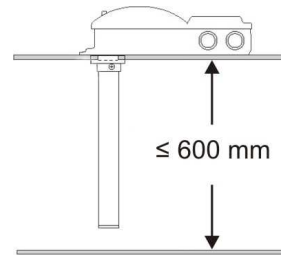
- The air sampling smoke detection kit is installed on the outside of the ventilation duct.
- Suitable for taking ventilation ducts with a diameter of 100...2700 mm.
- The air duct sampling chamber is usually installed on a rectangular ventilation duct using sheet-metal screws.
- With round and/or insulated ventilation ducts, the air sampling smoke detection kit is installed directly on the mounting bracket FDBZ290-AD.

**Round, insulated duct ≤ 600 mm**



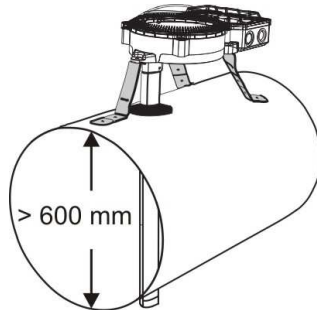
- FDBZ290 air sampling smoke detection kit
- FDBZ290-AD mounting bracket
- FDBZ290-AA air flow tube ≤ 600 mm
- M20 x 1.5 metal cable gland
- M20 x 1.5 metal counter nut

**Rectangular duct ≤ 600 mm**



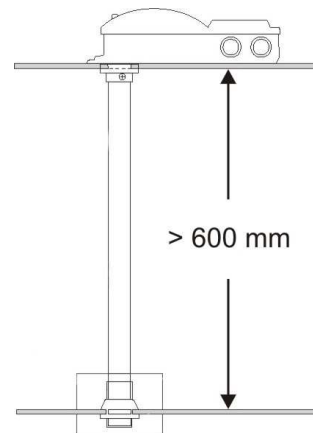
- FDBZ290 air sampling smoke detection kit
- FDBZ290-AA air flow tube ≤ 600 mm
- M20 x 1.5 metal cable gland
- M20 x 1.5 metal counter nut

**Round, insulated duct > 600 mm**



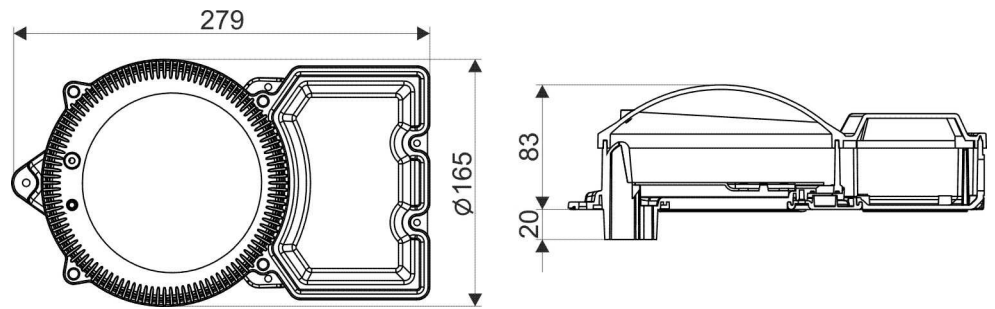
- FDBZ290 air sampling smoke detection kit
- FDBZ290-AD mounting bracket
- FDBZ292-AD sealing kit
- FDBZ290-Ax air flow tube 1500/2800 mm
- M20 x 1.5 metal cable gland
- M20 x 1.5 metal counter nut

**Rectangular duct > 600 mm**



- FDBZ290 air sampling smoke detection kit
- FDBZ292-AD sealing kit
- FDBZ290-Ax air flow tube 1500/2800 mm
- M20 x 1.5 metal cable gland
- M20 x 1.5 metal counter nut

## Dimensions



## Technical data

Housing of the air duct sampling chamber	
- Material	ABS
- Protection category according to EN 60529 / IEC 60529	IP54
- Color	Gray, ~RAL 7001
Smoke detector/detector base	See "Version" section
System compatibility	Sinteso -> FDnet, collective Cerberus PRO -> C-NET, collective
Air flow tube	Aluminum
Permissible air speeds	1...20 m/s
Air flow indicator	≥1 m/s
Ambient temperature	-20...+50 °C
Air humidity	≤95 % rel.
Approvals	
VdS	Pending

14 <b>CE</b>	<b>FDBZ290</b>	Siemens Switzerland Ltd; Gubelstrasse 22 CH-6301 Zug Technical data: see doc. A6V10409732
		FDBZ290 - Duct smoke detector for use in fire detection and fire alarm systems installed in buildings
2004/108/EC (EMC): EN 50130-4 / EN 61000-6-3 ; 2011/65/EU (RoHS): EN 50581		
Declared conformity can be seen in the EC Declaration of Conformity, which is obtainable via the Customer Support Center: Tel. +49 89 9221-8000 or <a href="http://siemens.com/bt/download">http://siemens.com/bt/download</a>		
DoC No.: CED-FDBZ290		

## Details for ordering

Type	Art. no.	Designation	Weight
FDBZ290	S54319-S32-A1	Air sampling smoke detection kit	650 g
FDBZ290-AA	S54319-B33-A1	Air flow tube, length 600 mm	340 g
FDBZ290-AB	S54319-B33-A2	Air flow tube, length 1500 mm	850 g
FDBZ290-AC	S54319-B33-A3	Air flow tube, length 2800 mm	1570 g
FDBZ290-AD	S54319-B34-A1	Mounting bracket	400 g
FDBZ292-AD	A5Q00021367	Sealing kit	45 g
FDOOT241-A9	S54310-F11-A1	Neural fire detector, ASA	106 g
FDB222	S54319-F1-A1	Addressable detector base, flat	25 g
FDB202	S54319-F3-F1	Collective detector base, flat	25 g
OOH740	S54320-F7-A3	Multi-sensor smoke detector, ASA	120 g
DB721	S54319-F11-A1	Detector base with loop contact DB721	55 g
DB110	S54319-F5-A1	Detector base (collective)	55 g
DB721D	S54319-F15-A1	Detector base	55 g
PSR720-2	S54319-F17-A1	Parameter set resistor	5 g
	A5Q00004478	M20 x 1.5 metal cable gland	39 g
	A5Q00004479	M20 x 1.5 metal counter nut	6 g

For Sinteso fire detectors see document 008141

For Cerberus PRO fire detectors see document A6V10284161