

FDBZ290

Air sampling smoke detection kit

Sinteso™
Cerberus™ PRO



- | **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**
- | **Complies with EN 54-27 with specialized Sinteso and Cerberus PRO smoke detectors**
- | **Easy mounting with just one air flow tube**
- | **Accessories for all forms of ventilation ducts**

Function

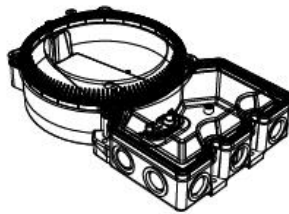
- The air sampling smoke detection kit is a passive monitoring system without a fan of its own. It uses the pressure differences within the ventilation system to continuously take air samples from the ventilation duct via the air flow tube and supply them to the air sampling smoke detection kit.
- The 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

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

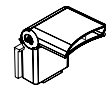
Air duct sampling chamber



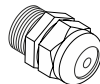
End plug



Smoke cap



Plastic cable gland M20 x 1.5



Plastic counter nut M20 x 1.5



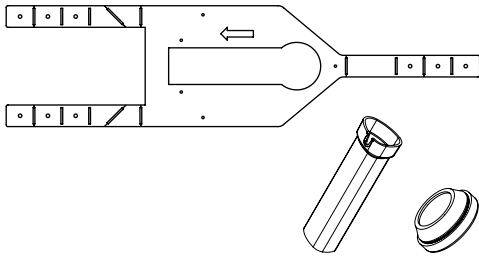
The point detector and detector base listed must be ordered separately.

Sinteso	
Base	Detector
FDB222	FDOOT241-A9
FDB202	

Cerberus PRO	
Base	Detector
DB721	OOH740
DB110	
DB721D	

Options

Mounting bracket
FDBZ290-AD



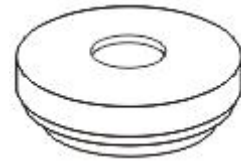
For uneven, round and insulated ducts incl. sealing sleeve, rubber seal and screws for installing the mounting bracket

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

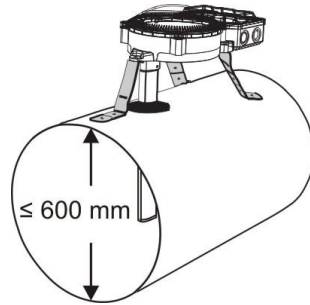
Selecting a location

- 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.

Mounting variants

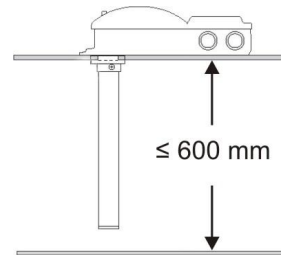
- The air sampling smoke detection kit is installed on the outside of the ventilation duct.
- Suitable for taking ventilation ducts with a diameter of 100...2700 mm.
- The air duct sampling chamber is usually installed on a rectangular ventilation duct using sheet-metal screws.
- With round and/or insulated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

Round, insulated duct ≤ 600 mm



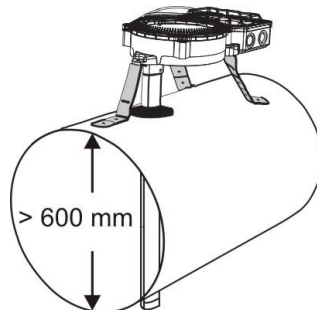
- FDBZ290 air sampling smoke detection kit
- FDBZ290-AD mounting bracket
- FDBZ290-AA air flow tube ≤ 600 mm
- M20 x 1.5 metal cable gland
- M20 x 1.5 metal counter nut

Rectangular duct ≤ 600 mm



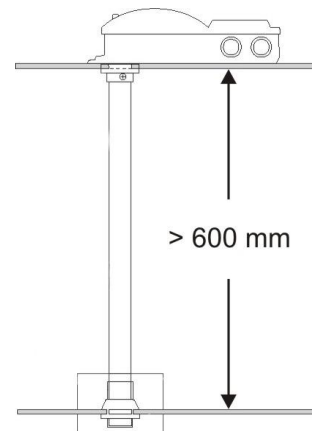
- FDBZ290 air sampling smoke detection kit
- FDBZ290-AA air flow tube ≤ 600 mm
- M20 x 1.5 metal cable gland
- M20 x 1.5 metal counter nut

Round, insulated duct > 600 mm



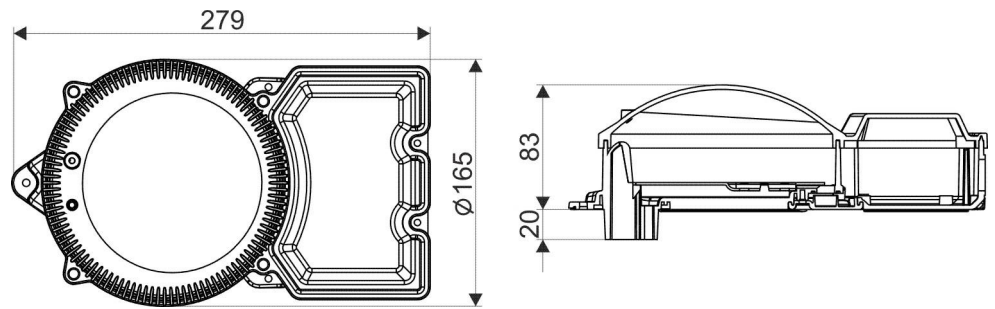
- FDBZ290 air sampling smoke detection kit
- FDBZ290-AD mounting bracket
- FDBZ292-AD sealing kit
- FDBZ290-Ax air flow tube 1500/2800 mm
- M20 x 1.5 metal cable gland
- M20 x 1.5 metal counter nut

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 (IEC60529)	IP54
- Color	~RAL 7001 silver grey
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
Operating temperature	-20...+50 °C
Air humidity	≤95 % rel.
Approvals	
VdS	G216035
Standards	EN 54-27 when used with specialized Sinteso or Cerberus PRO smoke detectors

14 CE	FDBZ290	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.		
2014/30/EU (EMC): EN 50130-4 / EN 61000-6-3 ; 2011/65/EU (RoHS): EN 50581		
The declared conformity can be seen in the EU Declaration of Conformity (DoC), which is obtainable via the Customer Support Center: Tel. +49 89 9221-8000 or http://siemens.com/bt/download		
DoC No.: CED-FDBZ290		

Details for ordering

Type	Order no.	Designation	Weight
FDBZ290	S54319-S32-A1	Air sampling smoke detection kit	664 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	402 g
FDBZ292-AD	A5Q00021367	Sealing kit	41 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	124 g
DB721	S54319-F11-A1	Detector base with loop contact DB721	52 g
DB110	S54319-F5-A1	Detector base (collective)	52 g
DB721D	S54319-F15-A1	Detector base	54 g
PSR720-2	S54319-F17-A1	Parameter set resistor	1 g
-	A5Q00004478	M20 x 1.5 metal cable gland	36 g
-	A5Q00004479	M20 x 1.5 metal counter nut	6 g

You will find more information on the Sinteso fire detector FDOOT241-A9 in data sheet 008141.

You will find more information about the Cerberus PRO fire detector OOH740 in data sheet A6V10284161.