



## FDOOT241-9, FDO241, FDT241

Sinteso™  
S-LINE

### Automatic fire detectors



*ASAtechnology™*

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- The optimum smoke detector for each application
  - Turbo isolator for uninterrupted alarming (FDO241 and FDT241)
  - Signal processing with *ASAtechnology*
  - Event-controlled detection behavior
  - Early and reliable detection of emerging fires
  - High immunity to deceptive phenomena
  - Dual optical sensors for enhanced detection and failsafe operation
  - Suitable for air speeds of 1...20 m/s for FDO and FDOOT
  - Suited for future requirements thanks to programmability
  - Communication via FDnet
  - Ecologic material concept

## Characteristics

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- **Environmental**

- ecologically processing, recyclable materials
- electronic und synthetic material simple separable
- ecologically beneficial detector testing without test gas

- **Characteristics**

- resistant to environment and interference factors such as dust, fibers, insects, humidity, extreme temperatures, electro-magnetic interference, corrosive vapors, vibration, synthetic aerosols and atypical fire phenomena
- insensitive to impact, tamper protection
- signal processing with **ASA**technology ('Advanced Signal Analysis')
- time- and process-dependent detection behavior
- high immunity to power electronics disturbances
- protected electronics, high-quality components
- sophisticated sensor and electronics surveillance
- redundant, high-quality sensor system
- built-in alarm indicator (AI), visible at 360°
- integrated short-circuit isolator
- the same detector base type can be used for each detector type

### FDOOT241-9, Multi-sensor smoke detector, neural ASA

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- **Function**

- works according to the scattered light principle with two sensors, optical forward and backward scattering
- Opto-electronic sampling chamber holds off disturbing extraneous light but optimally detects both dark and light smoke particles
- two additional heat sensors increase the fire detector's immunity to deceptive phenomena
- software can be set to multi-sensor smoke detector, smoke detector or heat detector
- selectable detection behavior by application-specific ASA parameter sets
- Multi-protocol: collective (Cerberus, Siemens) / SynoLINE300

- **Application**

- for the early detection of flaming fires caused by the combustion of liquid and solid matters, as well as smoldering fires
- for the early and reliable fire detection in environments with deceptive phenomena
- Can be used as an addressable or collective device.

### FDO241 Smoke detector, FDnet wide spectrum ASA

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- **Function**

- works according to the scattered light principle with one sensor, optical forward scattering
- Opto-electronic sampling chamber holds off disturbing extraneous light but optimally detects smoke particles
- selectable detection behavior by application-specific ASA parameter sets

- **Application**

- for the early detection of smoke-generating flaming and smoldering fires
- addressable

## FDT241 Heat detector, ASA

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### ● Function

- equipped with two redundant heat sensors, so that in case of failure of one sensor, the detector still complies with the highest response class
- measures the ambient temperature and the temperature in the detector housing, so that an temperature increase can be detected immediately
- selectable detection behavior by application-specific ASA parameter sets

### ● Application

- Monitoring of rooms in which a quick temperature rise is expected in case of fire, or when optical detection is difficult.
- addressable

## FDX291 Dummy detector

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### ● Application

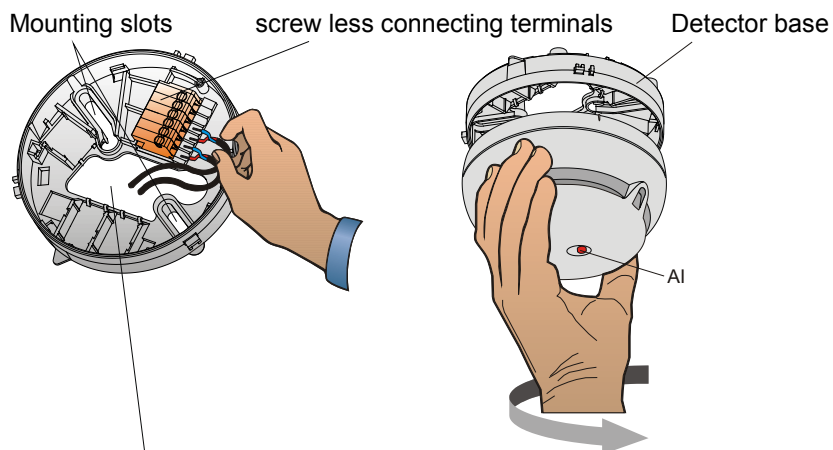
- To cover bases without detectors over a long period

## Installation

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### ● Easy, time-saving and high-quality mounting

- base with stand-offs for surface and recess supply wiring
- base without stand-offs for gap free ceiling mounting, only for recess supply wiring
- universal base for surface and recess supply wiring
- Extra-large mounting slots facilitate a re-use of existing drill holes resulting from other systems.
- large opening in the detector base for easy cable insertion
- screw less terminals (spring clip principle)
- detector line can be connected without any tools; the wire can be simply plugged in manually
- detector can be easily turned into the base by hand, or with the detector exchanger



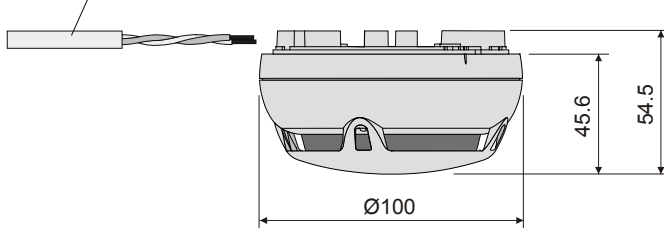
Opening for cable entry

- alarm indicator (AI) centered in the detector; no alignment required
- for more information, please see the datasheet 007775

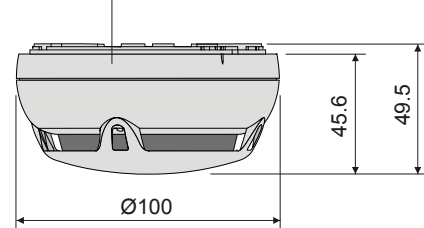
## Dimensions

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with base FDB2x1, FDB2x1-AA for surface cable to Ø6 mm possible



with base FDB222 for gap free ceiling mounting, only for recess cable entry




## Efficiency on site


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- 'one man' testing, commissioning, diagnostics and maintenance
- detector replacement without new parameter setting
- detector replacement without ladder up to 8 m height

## Technical data

	FDOOT241-9	FDO241	FDT241
Operating voltage (modulated)	DC 12...33 V	DC 12...33 V	DC 12...33 V
Operating current (quiescent)	200...280 µA	180...230 µA	130...200 µA
Ext. alarm indicator without sounder base	2	2	2
Ext. alarm indicator with sounder base	1	1	–
AI connectable and programmable			
Operating temperature	-25...+70 °C	-25...+70 °C	-25...+50 °C / -25...+70 °C depending on the parameterization
Storage temperature	-30...+75 °C	-30...+75 °C	-30...+75 °C
Humidity (short-term moisture condensation permitted)	≤95 % rel.	≤95 % rel.	≤95 % rel.
Communication protocol	FDnet or collective	FDnet	FDnet
Color	white, ~RAL 9010	white, ~RAL 9010	white, ~RAL 9010
Protection category EN 60529 / IEC 60529			
– Base FDB221-AA, FDB222, base attachment FDB291	IP43	IP43	IP43
– Base FDB221 and sealing element FDBZ295	IP44	IP44	IP44
– Base attachment wet FDB295	IP44	IP44	IP44
Standards	CEA4021, EN 54-5, EN 54-7, EN 54-17	EN 54-7, EN 54-17	EN 54-5, EN 54-17
Approvals			
– VdS	G204007	G204017	G204019
– LPCB	126bh/01	126bf/02	126bj/02
Permissible air speed	1...20 m/s	1...20 m/s	–
System compatibility collective	CZ10, CS11, BC10, FC10, XC10, FC330A, FC700A, SIGMASYS, BMS, SM80/88/D100	–	–
System compatibility FDnet		FS20, AlgoRex, SIGMASYS	
QS standards		Siemens Standard SN 36350	

07  0786	<b>FDOOT241-9</b>	Siemens Switzerland Ltd, Gubelstrasse 22 CH-6301 Zug, Switzerland Technical data: see doc. <b>007004</b>
FDOOT241-9 - Point type smoke detector incl. short-circuit isolator for use in fire detection and fire alarm systems installed in buildings		
305/2011/EU (CPR): EN 54-5 / EN 54-7 / EN 54-17 ; 2004/108/EC (EMC): EN 50130-4 / EN 61000-6-3 ; 2011/65/EU (RoHS): EN 50581 ;		
Declared performance and conformity can be seen in the Declaration of Performance and 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>		
DoP No.: 0786-CPR-20007; DoC No.: CED-FDOOT241-9		

07  0786	<b>FDO241</b>	Siemens Switzerland Ltd, Gubelstrasse 22 CH-6301 Zug, Switzerland Technical data: see doc. <b>007004</b>
FDO241 - Point type smoke detector incl. short-circuit isolator for use in fire detection and fire alarm systems installed in buildings		
305/2011/EU (CPR): EN 54-7 / EN 54-17 ; 2004/108/EC (EMC): EN 50130-4 / EN 61000-6-3 ; 2011/65/EU (RoHS): EN 50581 ;		
Declared performance and conformity can be seen in the Declaration of Performance and 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>		
DoP No.: 0786-CPR-20002; DoC No.: CED-FDO241		

07  0786	<b>FDT241</b>	Siemens Switzerland Ltd, Gubelstrasse 22 CH-6301 Zug, Switzerland Technical data: see doc. <b>007004</b>
FDT241 - Point type heat detector incl. short-circuit isolator for use in fire detection and fire alarm systems installed in buildings		
3305/2011/EU (CPR): EN 54-5 / EN 54-17 ; 2004/108/EC (EMC): EN 50130-4 / EN 61000-6-3 ; 2011/65/EU (RoHS): EN 50581 ;		
Declared performance and conformity can be seen in the Declaration of Performance and 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>		
DoP No.: 0786-CPR-20004; DoC No.: CED-FDT241		

## Details for ordering

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Type	Part no	Designation	Weight
FDOOT241-9	A5Q00004813	Multi-sensor smoke detector	0.106 kg
FDOOT241-9M	A5Q00015955	Migration kit	0.140 kg
FDO241	A5Q00004811	Smoke detector	0.102 kg
FDT241	A5Q00004812	Heat detector	0.087 kg
FDX291	S54319-F2-A1	Dummy detector	0.120 kg

Detector and detector base accessories see data sheet 007775

Colored detectors, bases and base attachment see data sheet 009409

Details see equipment overview 008164

Details about system compatibility see List of compatibility 008331