

SIEMENS



Sinteso™

Detector system

Equipment overview

MP1

Building Technologies

Fire Safety & Security Products

Liefermöglichkeiten und technische Änderungen vorbehalten.
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1 About this document

Purpose

This document is an overview about the Sinteso™ detector products.



This document is continuously revised and extended.

Scope

The document contains information about all available devices to the series Sinteso™.

Target groups

This document arranges itself to all persons.

Reference documents

You find the detailed information in the technical descriptions.

Conventions

(...)	Additional information
bold letters	Definitions of designations
see	Cross-reference

Document identification

Place	Signification
Title page	– System names – Product type – Document purpose
Last page bottom left	– Document number – Version date
Last page bottom right	– Manual – Register

Modification index

Version	Date	Brief description
008164_a_de_--	08.2004	First edition
008164_b_de_--	12.2004	Align document layout, new manual call point complete FDM223, minor changes
008164_c_de_--	01.2005	Added spare parts for telescope rod FDUM291/292

Download

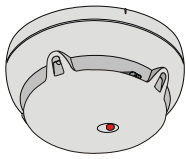
The current issue of technical documentation can be found in the Siemens Intranet.

2 Automatic fire detectors

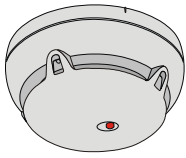
2.1 C-LINE Fire detectors with detection algorithms

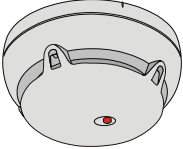
FDOOT221	Neural fire detector	Part no.	A5Q00001566
	Application	Scope of supply	Detector
	For the early detection of flaming fires caused by the combustion of liquid and solid matters, as well as smoldering fires. For the early and reliable fire detection in environments with deceptive phenomena. Addressable.	Packing unit	30 pieces
	Function	Accessories	see chapter 3
	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 hear sensors increase the fire detector's immunity to deceptive phenomena. Selectable detection behavior thanks to different DA parameter sets.		
	Technical data		
	Communication protocol	FDnet	
	Operating voltage (modulated)	12... 33 VDC	
	Operating current (quiescent)	200... 280 µA	
	ext. response indicator without sounder base	2	
	ext. response indicator with sounder base	1	
	Connection factor (FDnetMK)	1	
	Operating temperature	-25... +70 °C	
	Storage temperature	-30... +75 °C	
	Humidity	≤ 95 % rel.	
	Color	pure white (RAL9010)	
	Weight	0.102 kg	
	Protection category EN60529/IEC529	Base IP43, Base attachment IP44	
	System compatibility	AlgoRex/FDnet, SIGMASYS/FDnet	
	Standards	CEA4021 / EN54-7	
	Dimensions	Ø100 x 46	
	Approvals	VdS / G204006	

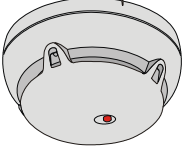
FDO221	Wide spectrum smoke detector	Part no.	A5Q00001565
	Application	Scope of supply	Detector
	For the early detection of smoke-generating flaming and smoldering fires. Addressable.	Packing unit	30 Pieces
	Function	Accessories	see chapter 3
	Works according to the scattered light principle with one sensor, optical forward scattering. Opto-electronic sampling chamber holds off disturbing extraneous light but optimally detects both dark and light smoke particles. Selectable detection behavior thanks to different DA parameter sets.		
	Technical data		
	Communication protocol	FDnet	
	Operating voltage (modulated)	12... 33 VDC	
	Operating current (quiescent)	180... 230 µA	
	ext. response indicator without sounder base	2	
	ext. response indicator with sounder base	1	
	Connection factor (FDnetMK)	1	
	Operating temperature	-10... +60 °C	
	Storage temperature	-30... +75 °C	
	Humidity	≤ 95 % rel.	
	Color	pure white (RAL9010)	
	Weight	0.100 kg	
	Protection category EN60529/IEC529 with	Base IP43, Base attachment IP44	
	System compatibility	AlgoRex/FDnet, SIGMASYS/FDnet	
	Standards	EN54-7	
	Dimensions	Ø100 x 46	
	Approvals	VdS / G204018	

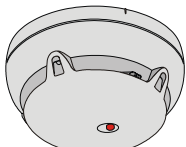
FDT221	Heat detector	Part no.	A5Q00001567																																
		Scope of supply	Detector																																
		Packing unit	30 Pieces																																
		Accessories	see chapter 3																																
<p>Application Monitoring of rooms in which a quick temperature rise is expected in case of fire, or when optical detection is difficult. Addressable.</p> <p>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 thanks to different DA parameter sets.</p>																																			
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2.2 S-LINE Fire detectors with ASAtechnology™

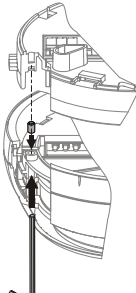
FDOOT241-8	Neural fire detector	Part no.	A5Q00004663																																		
		Scope of supply	Detector																																		
		Packing unit	30 Pieces																																		
		Accessories	see chapter 3																																		
<p>Application For the early detection 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. Addressable application possible, for the step-by-step modernization from MS8 to Sinteso™ FDnet.</p> <p>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 neural fire detector, wide spectrum smoke detector or heat detector. Selectable detection behavior thanks to application-specific ASA parameter sets.</p>																																					
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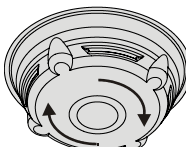
FDOOT241-9	Neural fire detector	Part no.	A5Q00004813																																						
		Scope of supply	Detector																																						
		Packing unit	30 Pieces																																						
		Accessories	see chapter 3																																						
<p>Application For 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. Addressable or collective.</p> <p>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 hear sensors increase the fire detector's immunity to deceptive phenomena. Software can be set to neural fire detector, wide spectrum smoke detector or heat detector.</p>																																									
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Dimensions	Ø100 x 46																																								
Approvals	VdS / G204007																																								

FDO241	Wide spectrum smoke detector	Part no.	A5Q00004811																																
		Scope of supply	Detector																																
		Packing unit	30 Pieces																																
		Accessories	see chapter 3																																
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Approvals	VdS / G204017																																		

FDT241	Heat detector	Part no.	A5Q00004812																													
	<p>Application Monitoring of rooms in which a quick temperature rise is expected in case of fire, or when optical detection is difficult. Addressable.</p> <p>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 thanks to application-specific ASA parameter sets.</p>	<p>Scope of supply Packing unit Accessories</p>	<p>Detector 30 Pieces see chapter 3</p>																													
	<p>Technical data</p> <table border="1"> <tr> <td>Communication protocol</td> <td>FDnet</td> </tr> <tr> <td>Operating voltage (modulated)</td> <td>12... 33 VDC</td> </tr> <tr> <td>Operating current (quiescent)</td> <td>130... 200 µA</td> </tr> <tr> <td>ext. response indicator</td> <td>2</td> </tr> <tr> <td>Connection factor (FDnetMK)</td> <td>1</td> </tr> <tr> <td>Operating temperature depending on the parameterization</td> <td>-25... +50 °C / -25... +70 °C</td> </tr> <tr> <td>Storage temperature</td> <td>-30... +75 °C</td> </tr> <tr> <td>Humidity</td> <td>≤ 95 % rel.</td> </tr> <tr> <td>Color</td> <td>pure white (RAL9010)</td> </tr> <tr> <td>Weight</td> <td>0.085 kg</td> </tr> <tr> <td>Protection category EN60529/IEC529 with</td> <td>Base IP43, Base attachment IP44, Base attachment wet IP55</td> </tr> <tr> <td>System compatibility</td> <td>AlgoRex/FDnet, SIGMASYS/FDnet</td> </tr> <tr> <td>Standards</td> <td>EN54-5</td> </tr> <tr> <td>Dimensions</td> <td>Ø100 x 46</td> </tr> <tr> <td>Approvals</td> <td>VdS / G204019</td> </tr> </table>			Communication protocol	FDnet	Operating voltage (modulated)	12... 33 VDC	Operating current (quiescent)	130... 200 µA	ext. response indicator	2	Connection factor (FDnetMK)	1	Operating temperature depending on the parameterization	-25... +50 °C / -25... +70 °C	Storage temperature	-30... +75 °C	Humidity	≤ 95 % rel.	Color	pure white (RAL9010)	Weight	0.085 kg	Protection category EN60529/IEC529 with	Base IP43, Base attachment IP44, Base attachment wet IP55	System compatibility	AlgoRex/FDnet, SIGMASYS/FDnet	Standards	EN54-5	Dimensions	Ø100 x 46	Approvals
Communication protocol	FDnet																															
Operating voltage (modulated)	12... 33 VDC																															
Operating current (quiescent)	130... 200 µA																															
ext. response indicator	2																															
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Color	pure white (RAL9010)																															
Weight	0.085 kg																															
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System compatibility	AlgoRex/FDnet, SIGMASYS/FDnet																															
Standards	EN54-5																															
Dimensions	Ø100 x 46																															
Approvals	VdS / G204019																															

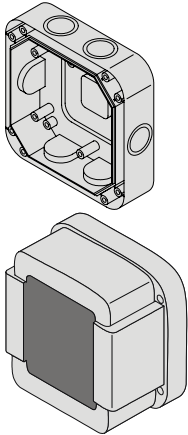
2.2.1 Accessories for fire detectors

FDBZ293	Detector locking device	Part no.	A5Q00005035					
	<p>Application For protection against theft.</p>	<p>Scope of supply Packing unit</p>	<p>100 Threaded pins, 2 x Hexagonal wrench 1 Set</p>					
	<p>Technical data</p> <table border="1"> <tr> <td>Threaded pin</td> <td>M3 x 6</td> </tr> <tr> <td>Hexagonal wrench</td> <td>1.5 mm</td> </tr> <tr> <td>Weight</td> <td>0.038 kg</td> </tr> </table>			Threaded pin	M3 x 6	Hexagonal wrench	1.5 mm	Weight
Threaded pin	M3 x 6							
Hexagonal wrench	1.5 mm							
Weight	0.038 kg							

FDZ291	Detector dust cap	Part no.	A5Q00004814					
	<p>Application To cover the detector, for the protection against dust during construction work.</p>	<p>Scope of supply Packing unit</p>	<p>Detector dust cap 50 Pieces</p>					
	<p>Technical data</p> <table border="1"> <tr> <td>Material</td> <td>Polystyrol</td> </tr> <tr> <td>Color</td> <td>red</td> </tr> <tr> <td>Weight</td> <td>0.005 kg</td> </tr> </table>			Material	Polystyrol	Color	red	Weight
Material	Polystyrol							
Color	red							
Weight	0.005 kg							

2.3 S-LINE Linear smoke detector with ASAtechnology™

FDLB291	Base for linear smoke detector	Part no.	A5Q00003941
		Scope of supply	Base
		Packing unit	1 Pieces
FDL241-9	Linear smoke detector	Part no.	A5Q00002298
		Scope of supply	Detector
		Packing unit	1 Pieces



Application

Large storerooms and production workshops. Areas with complex roof structures or historically valuable ceilings. Covered courtyards. Atrium-type buildings. Reception halls.
Addressable or collective signal processing.

Function

The detector consists of a light emitter and a light receiver. The light emitter emits a bundled infrared ray, which is scattered back by the prism-shaped reflector to the light emitter. The receiver converts the received infrared signal in an electric signal, which is evaluated by the microprocessor-controlled electronics.

Smoke penetrating the measuring section attenuates the infrared signal. When the signal reaches pre-defined measuring values, the detector transmits the corresponding danger level to the control unit. Distance measurement for the recognition of foreign matters. The built-in response indicator signals the alarm status locally.

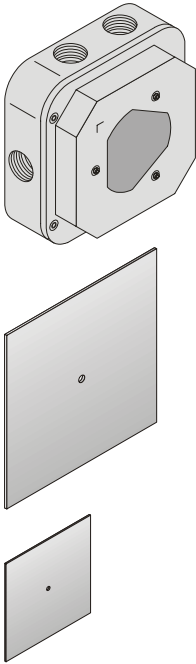
Max. detection distance 5 – 100m.

Technical data

Communication protocol	FDnet or collective
Operating voltage FDnet / collective	12... 33 VDC / 18... 28 VDC
Operating current FDnet und collective	1.5 mA
ext. response indicator	1
Connection factor (FDnetMK)	6
Connection factor (KMK)	10
Operating temperature	-25... +60 °C
Storage temperature	-30... +75 °C
Humidity	≤100% rel.
Color	pure white (RAL9010)
Weight Base / Detector	0.440 kg / 0.305 kg
Protection category EN60529/IEC529	IP65
System compatibility FDnet	AlgoRex, SIGMASYS
System compatibility collective	CS11, CZ10
Standards	EN54-12
Dimensions	135 x 135 x 115
Approvals	VdS / G204063

2.3.1 Accessories for linear smoke detector

DLR1191	Long distance reflector (Prism)	Part no.	4787710001
DLR1192	Middle distance reflector (400cm²)	Part no.	4788490001
DLR1193	Short distance reflector (100cm²)	Part no.	4787840001
		Scope of supply	Reflector
		Packing unit	1 Pieces



Application

Reflectors to the linear smoke detector.

Function

Light rays arriving are reflected parallel. Any extraneous light is also reflected in its own direction and consequently does not reach the receiver.

The retro reflecting prism in the DLR1191 has the shape of a pyramid that's lateral faces are formed by isosceles orthogonal triangles. Light beams entering through the base are completely reflected twice on the lateral faces and reflected back through the base. In principle, the reflector foil has the same effect (function) as the prism.

Technical data

Long distance reflector (Prism)	
Supply for detector heater	24 VDC
Weight	0.510 kg
Dimensions	135 x 135 x 65

Middle distance reflector (400 cm ²)	
Weight	0.075 kg
Dimensions	200 x 200 x 2.5

Short distance reflector (100 cm ²)	
Weight	0.025 kg
Dimensions	100 x 100 x 2.5

DLF1191-AA	Short distance filter 7-10m	Part no.	4933030001
DLF1191-AB	Short distance filter 5-8m	Part no.	4933160001
DLF1191-AC	Extraneous light filter	Part no.	5221480001
		Scope of supply	Filter
		Packing unit	1 Pieces



Application

The short distance filter is required for short distance of 5-10 m or 7-10 m.

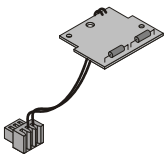
The extraneous light filter is required at powerful external light causes interference

Only one filter possible.

Technical data

Weight	0.005 kg
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DLH1191A	Detector heating element	Part no.	4787970001
		Scope of supply	Detector heating element
		Packing unit	1 Pieces




Application

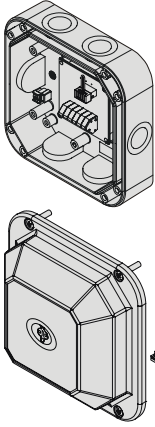
In the event of danger of condensation of the linear smoke detector and the long distance reflector the detector-heating element is recommended.

Technical data

Operating voltage	20... 30 VDC
Operating current	30... 50 mA
Resistance	600 Ω
Weight	0.010 kg

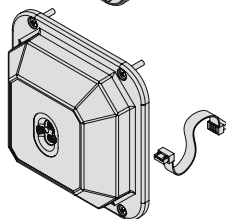
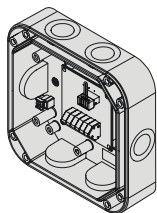
-	Metal screwed cable gland M20	Part no.	A5Q00004478
		Scope of supply	Cable gland
		Packing unit	1 Pieces
	Application		
	For surface cable entry.		
	Technical data		
	Material	Ms nickel-plated	
	Weight	0.039 kg	
	Dimensions	M20	

2.4 C-LINE Infrared flame detector with detection algorithms

FDFB291	Base for infrared flame detector	Part no.	A5Q00003310
		Scope of supply	Base
		Packing unit	1 Pieces
FDF221-9	Infrared flame detector (1 Sensor)	Part no.	A5Q00003902
		Scope of supply	Detector, cable
		Packing unit	1 Pieces
	Application		
	For simple applications, additional to smoke detectors. Detection of smokeless combustible liquid and gas fires, as well as smoke-forming open fire involving carbonaceous materials as contained in wood, plastics, gases, oil products etc. Only used without source of interference as sun, halogen light, and blackbody radiation. Addressable or collective.		
	Function		
	1 infrared sensor with detection algorithms.		
	Technical data		
	Communication protocol	FDnet or collective	
	Operating voltage addressable / collective (quiescent)	12... 33 VDC / 16... 28 VDC	
	Operating current FDnet / collective (quiescent)	0.7 mA / 0.5 mA	
	ext. response indicator	2	
	Connection terminals	0.2... 1.5 mm ²	
	Connection factor (FDnetMK)	3	
	Connection factor (KMK)	5	
	Operating temperature	-25... +70 °C	
	Storage temperature	-40... +75 °C	
	Humidity	≤ 100 % rel.	
	Color	pure white (RAL9010)	
	Weight Base / Detector	0.250 kg / 0.500 kg	
	Protection category EN60529/IEC529	IP44	
	System compatibility FDnet	AlgoRex, SIGMASYS	
	System compatibility collective	CS11, CZ10	
	Standards	EN54-10	
	Dimensions	135 x 135 x 77	
	Approvals	VdS / G204009	

2.5 S-LINE Infrared flame detector with *ASAtechnology*[™]

FDFB291	Base for infrared flame detector	Part no.	A5Q00003310
		Scope of supply	Base
		Packing unit	1 Pieces
FDF241-9	Infrared flame detector (3 Sensors)	Part no.	A5Q00003006
		Scope of supply	Detector, cable
		Packing unit	1 Pieces



Application

Detects smokeless liquid and gas fires as well as smoke-generating open fires resulting from the combustion of carbonaceous materials such as wood, synthetics, gases, oil products, etc.
Large industrial warehouses, Hangars for military and civil aircraft, Underground tunnels etc.
Addressable or collective.

Function

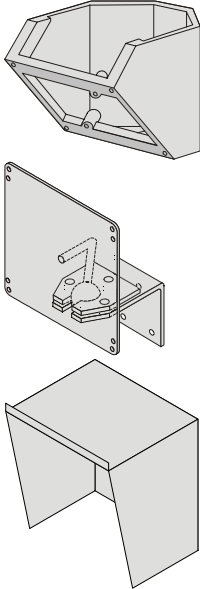
3 infrared sensors with *ASAtechnology*[™].

Technical data

Communication protocol	FDnet or collective
Operating voltage addressable / collective (quiescent)	12... 33 VDC / 14... 28 VDC
Operating current FDnet / collective (quiescent)	0.7 mA / 0.5 mA
ext. response indicator	2
Connection terminals	0.2... 1.5 mm ²
Connection factor (FDnetMK)	3
Connection factor (KMK)	5
Operating temperature	-35... +70 °C
Storage temperature	-40... +75 °C
Humidity	≤ 100 % rel.
Color	pure white (RAL9010)
Weight Base / Detector	0.250 kg / 0.500 kg
Protection category EN60529/IEC529	IP67
System compatibility FDnet	AlgoRex, SIGMASYS
System compatibility collective	CS11, CZ10
Standards	EN54-10
Dimensions	135 x 135 x 77
Approvals	VdS / G204010

2.5.1 Accessories for infrared flame detector


MV1	Mounting bracket	Part no.	3950450001
		Scope of supply	Mounting bracket
		Packing unit	1 Pieces
MWV1	Ball and socket joint	Part no.	3674840001
		Scope of supply	Joint
		Packing unit	1 Pieces
DFZ1190	Rain hood	Part no.	5302660001
		Scope of supply	Rain hood
		Packing unit	1 Pieces



Application
The mounting bracket for volumetric surveillance, fixed the detector in the right angle.
Ball and socket joint for the flame detector for the orientation to a defined object.
Rain hood for the flame detector for outdoor applications.

Technical data	
Mounting bracket	
Weight	0.285 kg
Dimensions	136 x 120 x 120
Ball and socket joint	
Weight	0.860 kg
Dimensions	120 x 164 x 118
Rain hood	
Weight	0.640 kg
Dimensions	150 x 165 x 130

-	Metal screwed cable gland M20	Part no.	A5Q00004478
		Scope of supply	Cable gland
		Packing unit	1 Pieces



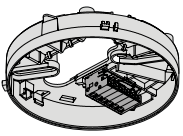
Application
For surface cable entry.

Technical data	
Material	Ms nickel-plated
Weight	0.039 kg
Dimensions	M20

3 Detector base

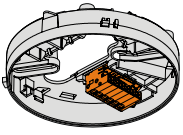
3.1 Detector base collective

FDB201	Detector base collective	Part no. Scope of supply Packing unit	A5Q00003814 Detector base 30 Pieces
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	Application For fire detectors with collective signal processing. For recess mounting. For surface mounting, cable diameter up to 6mm.
	Technical data Screwless connecting terminals 'grey' Color Weight Protection category EN60529/IEC529 Dimensions

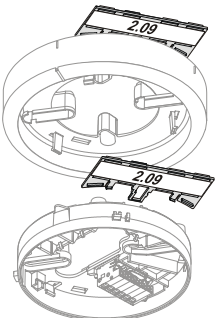
3.2 Detector base addressable

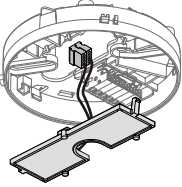
FDB221	Detector base addressable	Part no. Scope of supply Packing unit	A5Q00001664 Detector base 30 Pieces
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
	Application For fire detectors with addressable signal processing. For recess mounting. For surface mounting, cable diameter up to 6mm.
	Technical data Screwless connecting terminals 'orange' Color Weight Protection category EN60529/IEC529 Dimensions

3.2.1 Accessories for detector base

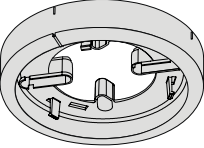
FDBZ291	Designation plate	Part no. Scope of supply Packing unit	A5Q00002621 Designation plate 10 Pieces
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	Application To identify the location address.
	Technical data Color Weight Dimensions

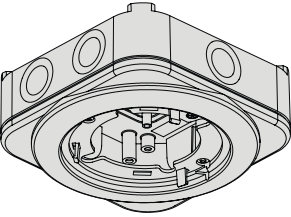
FDBH291	Detector heating incl. micro terminals	Part no.	A5Q00004439
		Scope of supply	Detector heating, 2 micro terminals
		Packing unit	1 Pieces
Application			
For the operation of the fire detectors in critical environments, danger of frost formation or moisture condensation, e.g. in cold storage houses, attics, loading ramps, cheese storage cellars, etc. Optimum function of the detector heating is only ensured with the auxiliary base.			
Technical data			
Operating voltage (normal operation)		20... 30 VDC	
Operating current		35... 55 mA	
Operating temperature		-30°... +40 °C	
Humidity		≤ 95 % rel.	
Weight		0.032kg	

DBZ1190-AA	Micro terminal	Part no.	4677080001
DBZ1190-AB	Auxiliary terminal	Part no.	4942340001
 		Scope of supply	Terminal
		Packing unit	1 Pieces
Application			
As cross-connection point for T branches, external response indicators (AI), cable shielding, or for the connection of a power supply unit e.g. for the detector heating.			
Technical data			
DBZ1190-AA for conductors		0.28... 0.5 mm ² / 4-pole	
Weight		0.001 kg	
Dimensions		7 x 10 x 10	
DBZ1190-AB for conductors		1.0... 2.5 mm ² / 3-pole	
Weight		0.007 kg	
Dimensions		13.5 x 9.5 x 19.5	

3.3 Base attachment

FDB291	Base attachment	Part no.	A5Q00001603
		Scope of supply	Base attachment
		Packing unit	20 Pieces
Application			
For the supply of surface-mounted lines > Ø6mm. When the detector-heating unit is used.			
Technical data			
Color		pure white (RAL9010)	
Weight		0.040 kg	
Dimensions		Ø120 x 25	

3.4 Base attachment wet

FDB292	Base attachment wet	Part no.	A5Q00003940
		Scope of supply	Base attachment wet
		Packing unit	1 Pieces
Application			
For mounting in humid or wet environments.			
Technical data			
Color		pure white (RAL9010)	
Weight		0.328 kg	
Dimensions		135 x 135 x 49	

3.4.1 Accessories for base attachment wet

DBZ1194	Protective cage	Part no.	4677110001
		Scope of supply	Protective cage, screws
		Packing unit	1 Pieces

Application

For the protection of the detector against damage.
Can only be used together with the base attachment wet.

Technical data

Weight	0.133 kg
Dimensions	Ø160 x 126

3.5 Sounder base

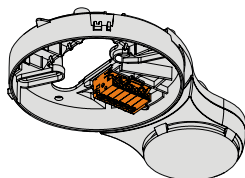
FDSB291**Sounder base****Part no.****A5Q00001647**

Scope of supply

Sounder base

Packing unit

5 Pieces

**Application**

For the neural fire detector and the wide spectrum smoke detector with addressable signal processing.
For recess mounting.

For surface mounting, cable diameter up to 6mm.

The signal base FDSB291 and the detector compose a unity, which already has a base and is mounted on ceilings, e.g. in hotel rooms, hospitals and nursing homes.



Function

In case of a fire alarm, the signal base triggers an acoustic signal in parallel to the flashing of the detector LED.

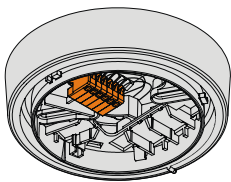
Technical data

Communication protocol detector / ton element	FDnet / EAI-Link (AI connection)
Operating voltage	12... 33 VDC
Operating current quiescent condition	150 µA
Operating current ton activated	1.2 mA
ext. response indicator	1
Connection factor (FDnetMK)	5
Number of sounds	11; 2 activation levels, 2 sound intensities
Sound intensity	80... 88 dBA
Operating temperature	-25... +70 °C
Storage temperature	-30... +75 °C
Humidity	≤ 100 % rel.
Screwless connection terminals 'orange'	Wire cross-sectional area from 0.2... 1.6 mm ²
Color	pure white (RAL9010)
Weight	0.068 kg
Protection category EN60529/IEC529	IP43
System compatibility	AlgoRex/FDnet, SIGMASYS/FDnet
Standards	EN54-3, BS5839-1
Dimensions	153 x 93 x 27
Approvals	VdS / G204062

3.5.1 Accessories for sounder base

DBZ1190-AA	Micro terminal	Part no.	4677080001
DBZ1190-AB	Auxiliary terminal	Part no.	4942340001
		Scope of supply	Terminal
		Packing unit	1 Pieces
Application			
For the connection of an external response indicator (AI).			
Technical data			
DBZ1190-AA for conductors		0.28... 0.5 mm ² / 4-pole	
Weight		0.001 kg	
Dimensions		7 x 10 x 10	
DBZ1190-AB for conductors		1.0... 2.5 mm ² / 3-pole	
Weight		0.007 kg	
Dimensions		13.5 x 9.5 x 19.5	

3.6 Base adapter MS8 / FDnet

FDB281	Base adapter	Part no.	A5Q00004929
		Scope of supply	Base adapter
		Packing unit	10 Pieces
Application			
Adapter for MS8 detector base (existing, addressable MS8 fire detection systems).			
Technical data			
Color		pure white (RAL9010)	
Weight		0.090 kg	
Dimensions		Ø117 x 37	

4 Response indicators

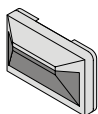
4.1 Door frame version

AI320
DJ1191

Response indicator, resistor 1k0
Response indicator, resistor 75 Ω

Part no. 5163030001
Part no. 4783280001

Scope of supply Response indicator
Packing unit 10 Pieces



Application

Response indicators are connected in parallel to automatic fire detectors in order to indicate quickly the source of an alarm signal from detectors, which are not easily accessible or visible.

Function

The LEDs in the response indicator are on, as soon as the appropriate detector is in alarm.

Technical data

Operating voltage	5... 8 VDC
Operating current, permanent	max. 35 mA
Screwless connection terminals	Wire cross-sectional area max. 1.5 mm ²
Environmental temperature	-25... +80 °C
Humidity	≤ 95 % rel.
Protection category EN60529/IEC529	IP40
Color	pure white (RAL 9010)
Weight	0.020 kg
Dimensions	62 x 37 x 17

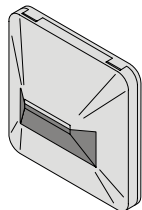
4.2 Wall version

AI322
DJ1192

Response indicator, resistor 1k0
Response indicator, resistor 75 Ω

Part no. 5163160001
Part no. 4783280001

Scope of supply Response indicator
Packing unit 10 Pieces



Application

Response indicators are connected in parallel to automatic fire detectors in order to indicate quickly the source of an alarm signal from detectors, which are not easily accessible or visible.
For concealed wiring.

Function

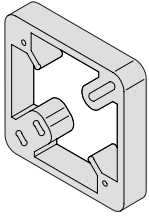
The LEDs in the response indicator are on, as soon as the appropriate detector is in alarm.

Technical data

Operating voltage	5... 8 VDC
Operating current, permanent	max. 35 mA
Screwless connection terminals	Wire cross-sectional area max. 1.5 mm ²
Environmental temperature	-25... +80 °C
Humidity	≤ 95 % rel.
Protection category EN60529/IEC529	IP40
Color	pure white (RAL 9010)
Weight	0.050 kg
Dimensions	85 x 85 x 25

4.2.1 Accessories for wall version

AI330	Adapter frame to AI322/DJ1192	Part no.	3169430001
		Scope of supply	Adapter frame
		Packing unit	1 Pieces



Application

For surface laid conduit or ducts, to increase the loop space or as an adapter for different makes of box.

Technical data

Color	pure white (RAL9010)
Weight	0.020 kg
Dimensions	85 x 85 x 16

4.3 Recess mounting version

DJ1193	Response indicator	Part no.	4876360001
		Scope of supply	Response indicator
		Packing unit	10 Pieces



Application

Indicator lamp to connect in parallel to automatic fire detectors in order to indicate quickly the source of an alarm signal from detectors, which are not easily accessible or visible
For recessed mounting in devices, false ceilings, raised floors.

Technical data

Operating voltage	6... 8 VDC
Operating current permanent	max. 35 mA
Screwless connection terminals	max. 1.5 mm ²
Environmental temperature	-25... +80 °C
Humidity	≤ 95 % rel.
Protection category EN60529/IEC529	
– with DJZ1193	IP65
– with DCA1191	IP56
Color	transparent
Weight	0.011 kg
Dimensions	Ø22 x 51

4.3.1 Accessories for recess mounting version

-	Insulating cap	Part no.	3048160001
		Scope of supply	Insulating cap
		Packing unit	1 Pieces

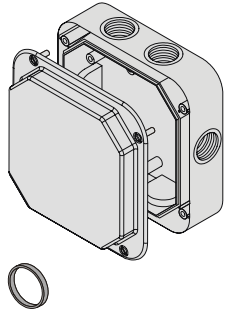

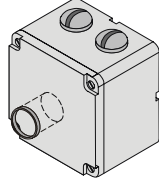
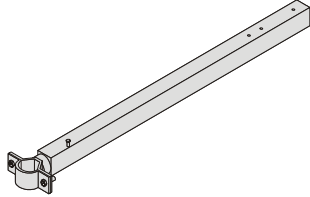


Application

For the insulation of the conductor.

Technical data

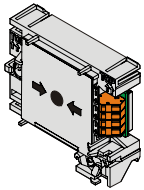
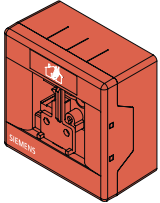
Weight	0.005kg
Dimensions	Ø21.4 x 45

DCA1191	Housing with cover	Part no.	4588560001
		Scope of supply Packing unit	Housing, cover 1 Pieces
-	Washer	Part no.	2473130001
		Scope of supply Packing unit	Washer 1 Pieces
	Application For surface mounting in wet areas. Up to 4 response indicators DJ1193 can be built into the housing.		
	Technical data		
	Housing with cover Protection category EN60529/IEC529 Weight Dimensions	IP56 0.265 kg 135 x 135 x 65	
	Washer		
	Weight Dimensions	0.001 kg Ø23 x 1	
-	Metal screwed cable gland M20 Details see chapter 2.5.1	Part no.	A5Q00004478
			
DJZ1193	Response indicator housing incl. washer	Part no.	5302950001
		Scope of supply Packing unit	Housing, washer 1 Pieces
	Application For surface mounting in dry areas. 1 response indicator DJ1193 in can be built into the housing.		
	Technical data		
	Protection category EN60529/IEC529 Color Weight Dimensions	IP65 pure white (RAL 9010) 0.115 kg 87 x 87 x 64	
MVH1	Mounting arm	Part no.	3496190001
		Scope of supply Packing unit	Mounting arm with pipe clamp, screws 1 Pieces
	Application For mounting of the response indicator housing DJZ1193 and detectors in hollow floors.		
	Technical data		
	Pipe clamp Weight Dimensions	1/2" 0.570 kg 20 x 20 x 290... 420	

5 Manual call points

5.1 Manual call points with direct operation

FDMH291-R	Housing red, with key	Part no.	A5Q00002217
FDMH291-Y	Housing yellow, with key	Part no.	A5Q00004979
FDMH291-B	Housing blue, with key	Part no.	A5Q00004980
FDMH291-G	Housing green, with key	Part no.	A5Q00004981
		Scope of supply	Housing
		Packing unit	10 Pieces
FDME221	Switching unit	Part no.	A5Q00002451
		Scope of supply	Switching unit
		Packing unit	10 Pieces



Application

For the immediate manual actuation of a fire alarm or an extinguishing process. For indoor and outdoor application. For surface- and recess-mounted feed lines in easily accessible places. Addressable.

Function

Direct alarm actuation by pushing in the glass plate. By replacing the glass plate the push button is set back and the device is ready for operation again.

Technical data

Communication protocol	FDnet
Operating voltage	12... 33 VDC
Operating current (quiescent)	200 µA
Connection factor (FDnetMK)	1
Connection terminals	0.28... 1.5 mm ²
Operating temperature	-25... +70 °C
Storage temperature	-30... +75 °C
Humidity	≤ 100 % rel.
Color	red (RAL3000), blue (RAL5005), yellow (RAL1023), green (RAL6024)
Weight housing / Switching unit	0.089 kg / 0.045 kg
Protection category EN60529/IEC529	IP44
System compatibility	AlgoRex/FDnet, SIGMASYS/FDnet
Standards	EN54-11, BS5839-2
Dimensions	87 x 87 x 46.6
Approvals	VdS / G203059

5.1.1 Accessories for manual call points with direct operation

FDMC291	Protective cover	Part no.	A5Q00001644
		Scope of supply	Protective cover
		Packing unit	5 Pieces

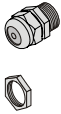


Application


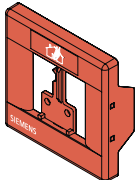
Protects the manual call point from unintentional glass break.

Technical data

Color	transparent
Weight	0.010 kg

-	Metal screwed cable gland M20	Part no.	A5Q00004478
		Scope of supply	Cable gland
		Packing unit	1 Pieces
-	Back nut	Part no.	A5Q00004479
		Scope of supply	Back nut
		Packing unit	1 Pieces
	Application For surface-mounted feed lines.		
Technical data			
Cable gland			
Material		Ms nickel-plated	
Weight		0.039 kg	
Dimensions		M20	
Back nut			
Weight		0.006 kg	
Dimensions		M20 x 1.5	

5.1.2 Spare parts for manual call points with direct operation

FDMG291	Glass	Part no.	A5Q00002122
		Scope of supply	Glass
		Packing unit	50 Pieces
	Application Use as spare part.		
Technical data			
Color		transparent	
Weight		0.006 kg	
FDMK291	Cover with key	Part no.	A5Q00001643
		Scope of supply	Cover with key
		Packing unit	1 Pieces
	Application Use as spare part.		
Technical data			
Color		red (RAL3000)	
Weight		0.030 kg	

5.2 Manual call points complete with indirect operation

FDM223

Manual call point complete, housing red with glass , key, switching unit and locking plug

Part no.

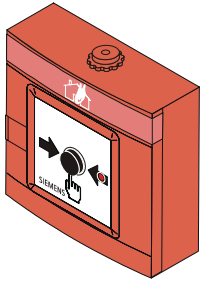
A5Q00008098

Scope of supply

Manual call point complete

Packing unit

1 Piece



Application

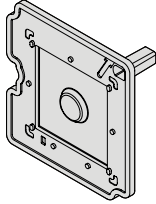



For the immediate manual actuation of a fire alarm or an extinguishing process.
For indoor and outdoor application, equally suited for wet, humid and dusty areas.
For surface- and recess-mounted feed lines in easily accessible places.
Addressable.

Function

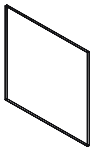

Indirect alarm actuation by smashing in the glass plate and pressing the push button.
To replace the glass plate, open the housing door with the key. The push button must be set back before closing the door again.

Technical data

Communication protocol	FDnet
Operating voltage	12... 33 VDC
Operating current (quiescent)	200 µA
ext. response indicator	2
Connection factor (FDnetMK)	1
Connection terminals	0.28... 1.5 mm ²
Operating temperature	-25... +70 °C
Storage temperature	-30... +75 °C
Humidity	≤ 100 % rel.
Color	red (RAL3000)
Weight Housing / Switching unit	0.256 kg / 0.067 kg
Protection category EN60529/IEC529	IP54
– with seal DMZ1197-AD	IP66
System compatibility	AlgoRex/FDnet, SIGMASYS/FDnet
Standards	EN54-11, BS5839-2
Dimensions	134.3 x 134.3 x 43.2
Approvals	VdS / G204002

DMZ1197-AD	Seal for wet areas	Part no.	5470680001
	Application Protects the manual call point in wet areas.	Scope of supply Packing unit	Seal 1 Pieces
Technical data		transparent 0.023 kg	
-	Metal screwed cable gland M20 Details see chapter 2.5.1	Part no.	A5Q00004478
			
-	Locking plug	Part no.	A5Q00006735
	Application For surface-mounted feed lines. For the application in wet rooms.	Scope of supply Packing unit	Locking plug 1 Pieces
Technical data		grey 0.007 kg M20	
-	Plate	Part no.	5304150001
	Application Only for Germany. Printed on both sides (Front side fire brigade / back side fire detector).	Scope of supply Packing unit	Plate 1 Pieces
Technical data		Vinyl, UV consistent red, Inscription white light-fast 0.007 kg	

5.3.2 Spare parts for manual call points with indirect operation

DMZ1196-AC	Glass	Part no.	4942050001
	Application Use as spare part.	Scope of supply Packing unit	Glass 50 Pieces
Technical data		transparent 0.016 kg	
DMZ1195	Key	Part no.	4851910001
	Application Use as spare part.	Scope of supply Packing unit	Key 1 Pieces
Technical data		rot (RAL3000) 0.003 kg	

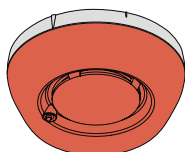
6 Alarm devices

6.1 Alarm sounder

FDS221-R
FDS221-W

Alarm sounder red
Alarm sounder white

Part no. A5Q00004117
Part no. A5Q00006711
Scope of supply Alarm sounder
Packing unit 1 Pieces



Application

Only with addressable detector base applicable.
For recess supply line.
For surface supply line until cable 6 mm in diameter, otherwise use the base attachment.
Along escape routes, Corridors, Staircases and is mounted on the wall or on the ceiling.

Function

Loud alarming in case of fire alarm, clearly recognizable as danger signal.

Technical data

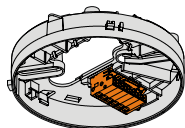
Communication protocol	FDnet
Operating voltage	12... 33 VDC
Operating current quiescent condition	250 μ A
Operating current Ton activated	3.5 mA
Connection factor (FDnetMK)	15
Connection terminals	According to the detector base
Number of sounds	11; 2 activation levels, 3 sound intensities
Sound intensity	80... 99 dBA
Operating temperature	-25... +70 °C
Storage temperature	-30... +75 °C
Humidity	\leq 100 % rel.
Color	rot (RAL3000), weiss (RAL 9010)
Weight housing / Switching unit	0.110 kg
Protection category EN60529/IEC529 with	Base IP43, Base attachment IP44, Base attachment wet IP55
System compatibility	AlgoRex/FDnet, SIGMASYS/FDnet
Standards	EN54-3, BS5839-1
Dimensions	\varnothing 100 x 43
Approvals	VdS / G204073

6.1.1 Accessories for alarm sounder

FDB221

Detector base addressable
Details see chapter 3.2

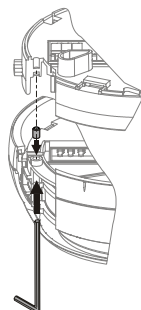
Part no. A5Q00001664



FDBZ293

Detector locking device
Details see chapter 2.2.1

Part no. A5Q00005035

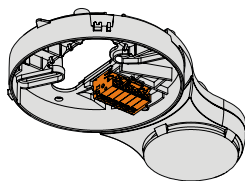


FDBZ291	Designation plate Details see chapter 3.2.1	Part no.	A5Q00002621
DBZ1190-AA	Micro terminal Details see chapter 3.2.1	Part no.	4677080001
DBZ1190-AB	Auxiliary terminal Details see chapter 3.2.1	Part no.	4942340001
FDB291	Base attachment Details see chapter 3.3	Part no.	A5Q00001603
FDB292	Base attachment wet Details see chapter 3.4	Part no.	A5Q00003940
DBZ1194	Protective cage Details see chapter 3.4.1	Part no.	4677110001

6.2 Sounder base

FDSB291**Sounder base****Part no.****A5Q00001647**

Details see chapter 3.5



7 Line separator, In-/Output modules

7.1 Line separator

FDCL221

Line separator

Part no.

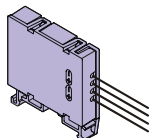
A5Q00004011

Scope of supply

Line separator

Packing unit

5 Pieces



Application

To avoid the breakdown of several stub lines in case of a short circuit, line separators may be inserted. The line separator is used where several stub lines are connected to the FDnet at one point. Retrofitting of existing, collective systems to the addressed Sinteso™ fire detection system.

Function

The separator is an electronic switch, which is integrated in the FDnet and separates the negative conductor in case of a short circuit, so that the short circuit-free side can continue to be operated. The separator has 2x2 connectors for the detector line.

Yellow LED for the status indication signals the short circuit separation.

Technical data

Communication protocol	FDnet
Operating voltage	12... 33 VDC
Operating current	250 µA
Connection factor (FDnetMK)	1
Operating temperature	-25... +70 °C
Storage temperature	-30... +80 °C
Humidity	≤ 95 % rel.
Color	transparent
Weight	0.040 kg
Protection category EN60529/IEC529	IP44
System compatibility	AlgoRex/FDnet, SIGMASYS/FDnet
Standards	prEN54-17
Dimensions	44 x 47.5 x 10
Approvals	VdS / G204030

7.1.1 Accessories for line separator

– U-rail TS35, L=122 mm

Part no.

5644780001

– U-rail TS35, L=133 mm

Part no.

5644360001

– U-rail TS35, L=288 mm

Part no.

5644230001

Scope of supply

U-rail

Packing unit

1 Pieces



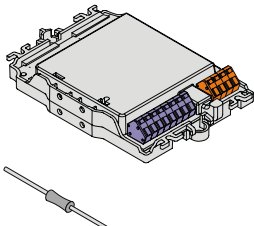
Application

For the mounting of the line separator.
For the series mounting of in-/output modules together with the mounting feeds.

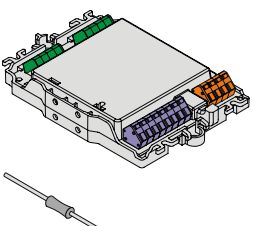
Technical data

Weight L=122 / L=133 / L=288	0.040 kg / 0.090 kg / 0.100 kg
------------------------------	--------------------------------


7.2 Input module

FDCI222	Input module	Part no.	A5Q00001984
 <p>4 x 3k01; 1 %; 0.25 W 4 x 1k15; 1 %; 0.25 W</p>	<p>Application For the connection of 4 independent, potential-free make or break contacts for the acknowledgement of technical states (e.g. door or ventilation control) or for alarm actuation (e.g. sprinkler alarm).</p> <p>Function 4 inputs for potential-free acknowledgement contacts. Status indication by LED.</p>	Scope of supply	Input module, 8 resistors
		Packing unit	2 Pieces
Technical data		Communication protocol	FDnet
		Operating voltage	12... 33 VDC
		Operating current	0.25... 0.35 mA
		Connection factor (FDnetMK)	2
		Connection terminals	0.2... 1.5 mm ² (2.5 mm ²)
		Operating temperature	-25... +60 °C
		Storage temperature	-30... +65 °C
		Humidity	≤ 100 % rel.
		Color housing / cover	pure white (RAL 9010) / transparent matt
		Weight	0.080 kg
		Protection category EN60529/IEC529	IP30
		- with housing FDCH291	IP54
		- with housing FDCH292	IP65
		System compatibility	AlgoRex/FDnet, SIGMASYS/FDnet
		Standards	CEA GEI I-084
		Dimensions	130 x 90 x 20
		Approvals	VdS / G204028

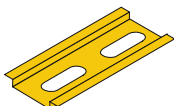
7.3 In-/Output module

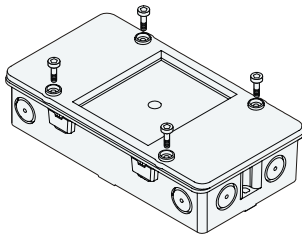
FDCIO222	In-/Output module	Part no.	A5Q00002369
 <p>4 x 3k01; 1 %; 0.25 W 4 x 1k15; 1 %; 0.25 W</p>	<p>Application For the connection of 4 independent, potential-free make or break contacts for the acknowledgement of technical states (e.g. door or ventilation control) or for alarm actuation (e.g. sprinkler alarm). For the decentralized control of fire doors, ventilation, air conditioning, etc.</p> <p>Function 4 inputs for potential-free acknowledgement contacts. 4 outputs with 4 potential-free relay contacts for fire control installations. Status indication by LED.</p>	Scope of supply	In-/Output module, 8 resistors
		Packing unit	2 Pieces
Technical data		Communication protocol	FDnet
		Operating voltage	12... 33 VDC
		Operating current	0.6... 0.75 mA
		Relay output (ohm)	250 VAC, 4 A, max. 1000 VA 30 VDC, 4 A, max. 120 W
		Connection factor (FDnetMK)	3
		Connection terminals	0.2... 1.5 mm ² (2.5 mm ²)
		Operating temperature	-25... +60 °C
		Storage temperature	-30... +65 °C
		Humidity	≤ 100 % rel.
		Color housing / cover	pure white (RAL 9010) / transparent matt
		Weight	0.116 kg
		Protection category EN60529/IEC529	IP30
		- with housing FDCH291	IP54
		- with housing FDCH292	IP65
		System compatibility	AlgoRex/FDnet, SIGMASYS/FDnet
		Standards	CEA GEI I-084
		Dimensions	130 x 90 x 20
		Approvals	VdS / G204029

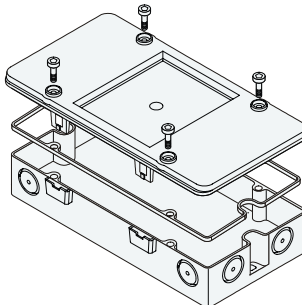
7.3.1 Accessories for in-/output modules


FDCM291	Mounting feeds to in-/output modules	Part no.	A5Q00003855
		Scope of supply	Mounting feeds
		Packing unit	25 Pieces
	Application		
	Installation in range of the in-/output modules with mounting feeds onto top U-rail TS35.		
	Technical data		
	Weight	0.002kg	

-	U-rail TS35, L=122 mm	Part no.	5644780001
-	U-rail TS35, L=133 mm	Part no.	5644360001
-	U-rail TS35, L=288 mm	Part no.	5644230001
	Details see chapter 7.1.1		



FDCH291	Housing to in-/output modules	Part no.	A5Q00002395
		Scope of supply	Housing, cover, 4 screws
		Packing unit	1 Pieces
	Application		
	For the mounting of the in-/output modules for dirty, dry applications.		
	Technical data		
	Protection category EN60529/IEC529	IP54	
	Color housing / cover	pure white (RAL 9010) / transparent matt	
	Weight	0.272 kg	
	Dimensions	202 x 109 x 49	

FDCH292	Housing to in-/output modules	Part no.	A5Q00003942
		Scope of supply	Housing, seal, cover, 4 screws
		Packing unit	1 Pieces
	Application		
	For the mounting of the in-/output modules for wet applications.		
	Technical data		
	Protection category EN60529/IEC529	IP65	
	Color housing / cover	pure white (RAL 9010) / transparent matt	
	Weight	0.337 kg	
	Dimensions	202 x 109 x 49	

-	Auxiliary terminal	Part no.	4074540001
		Scope of supply	Auxiliary terminal
		Packing unit	1 Pieces
	Application		
	For the earthing of screened cables. Up to 4 auxiliary terminals may be installed in the housing FDCH291/292.		
	Technical data		
	Weight	0.018 kg	

-	Metal screwed cable gland M20	Part no.	A5Q00004478
-	Back nut	Part no.	A5Q00004479

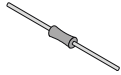
Details see chapter 5.1.1



7.3.2 Spare parts in-/output modules

-	Resistor 3k01, 1 %, 0.25 W	Part no.	2567860001
-	Resistor 1k15, 1 %, 0.25 W	Part no.	3383580001

Scope of supply Resistor
Packing unit 1 Pieces



Application

Use as spare part.

Resistor 3k01 for the input monitoring at open line.

Resistor 1k15 for the input monitoring at short circuit.

8 Detector exchanger, Test and measuring equipment

8.1 Detector exchanger

FDUD291

Detector exchanger

Part no.

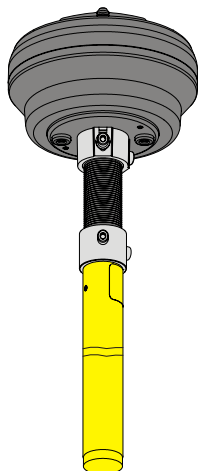
A5Q00003585

Scope of supply

Detector exchanger

Packing unit

1 Pieces



Application

For all point detectors.

Function

Rational insertion and removal of point detectors.

The point detector can be gripped in four turning positions for increased work efficiency. Compatible with the telescope rays and the conventional extension rods VR10/11/12/13.

Technical data

Weight

0.480 kg

Dimensions

Ø121 x 57 x 390

8.2 Detector exchanger and tester

FDUD292

Detector exchanger and tester

Part no.

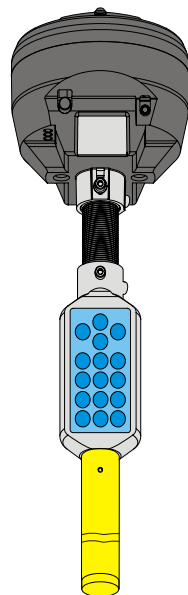
A5Q00003357

Scope of supply

Detector exchanger and tester

Packing unit

1 Pieces



Application

For all point detectors, manual call points, alarm sounder (wireless MC-Link). Input module, Output module, Linear smoke detector via adapter cable FDUD292-A.

Function

Rational insertion and removal of point detectors.

Commissioning, maintenance, status check and testing of detectors with extend diagnosis information on site. Polling parameters such as bus address and changes to detector settings. Efficient troubleshooting with detectors, installation and control unit.

Compatible with the telescope rays and the conventional extension rods VR10/11/12/13.

Technical data

Operating voltage

9 VDC

– Alkali battery
for temperatures under $-10\text{ }^{\circ}\text{C}$

Type IEC 6 LF 22 / capacity 500 mAh

– Lithium brownstone battery

ULTRALIFE U9VL or U9VL-J
capacity 950... 1200 mAh

Operating current

2 mA / 42 mA

– Stand by (light off / on)

95 mA

– Communication (3 LEDs + Summer)

Operating temperature

$-25\text{... }+40\text{ }^{\circ}\text{C}$

temporary

$-30\text{... }+50\text{ }^{\circ}\text{C}$

Storage temperature

$-30\text{... }+75\text{ }^{\circ}\text{C}$

– with battery

$-25\text{... }+60\text{ }^{\circ}\text{C}$

Humidity

$\leq 95\%$ rel. (no condensation)




Weight

0.900 kg

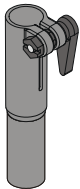
Dimensions


Ø121 x 85 x 390


8.2.1 Accessories for detector exchanger, detector exchanger and tester


FDUD292-A	Adapter cable to detector exchanger	Part no.	A5Q00004990
	Application MC-Link cable from detector exchanger and tester to the in-/output module and to the linear smoke detector.	Scope of supply Packing unit	Adapter cable 1 Pieces
	Technical data Audio stereo cable with direct and bend stereo jack 3.5 mm Cable length 1.5 m Weight 0.040kg		
	<hr/>		
- -	Alkali battery Type IEC 6 LF 22.9 V / 0.5 Ah Lithium brownstone battery 9 V / 1.2 Ah	Part no. Part no.	2766690001 4704940001
	Application For the supply of the detector exchanger and tester and line tester.	Scope of supply Packing unit	Battery 1 Pieces
	Technical data Weight 0.046 kg / 0.038 kg Dimensions 25 x 48 x 16		
	<hr/>		
FDUM291	Telescope rod	Part no.	A5Q00004996
	Application The three-part telescope with tri-oval tubes serve as extensions for the detector exchanger, detector exchanger and tester and other applications up to 5 m.	Scope of supply Packing unit	Telescope rod 1 Pieces
	Technical data Color yellow, black Weight 1.200 kg Dimensions Ø34.5 mm x 1.6 m (drown out length= 4.2 m)		
	<hr/>		

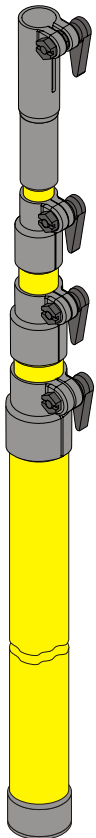
8.2.1.1 Spare parts telescope rod FDUM291

-	Adapter with lever, screw and nut incl. attachment and bushing screw	Part no.	A5Q00009786
		Scope of supply	Adapter
		Packing unit	1 Pieces
	Application Use as spare part.		
	Technical data		
	Color	black	
	Weight	0,080 kg	

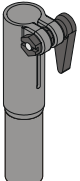
-	Lever with screw and nut	Part no.	A5Q00009787
		Scope of supply	Lever
		Packing unit	1 Pieces
	Application Use as spare part.		
	Technical data		
	Color	black	
	Weight	0,020 kg	


-	Small flap with screw and nut	Part no.	A5Q00009788
		Scope of supply	Flap
		Packing unit	1 Pieces
	Application Use as spare part.		
	Technical data		
	Color	black	
	Weight	0,014 kg	

-	Large flap with screw and nut	Part no.	A5Q00009789
		Scope of supply	Flap
		Packing unit	1 Pieces
	Application Use as spare part.		
	Technical data		
	Color	black	
	Weight	0,014 kg	

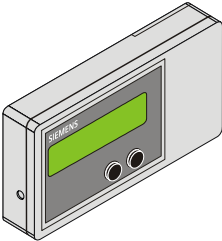
FDUM292	Telescope rod	Part no.	A5Q00004997						
		Scope of supply Packing unit	Telescope rod 1 Pieces						
 <p>Application The stable, four-part telescope with round tubes serve as extensions for the detector exchanger, detector exchanger and tester and other applications up to 8 m.</p>									
<p>Technical data</p> <table border="1"> <tr> <td data-bbox="470 380 981 414">Color</td> <td data-bbox="981 380 1484 414">yellow, black</td> </tr> <tr> <td data-bbox="470 414 981 436">Weight</td> <td data-bbox="981 414 1484 436">3,200 kg</td> </tr> <tr> <td data-bbox="470 436 981 459">Dimensions</td> <td data-bbox="981 436 1484 459">Ø44.5 mm x 2.1 m (drown out length = 7.3 m)</td> </tr> </table>				Color	yellow, black	Weight	3,200 kg	Dimensions	Ø44.5 mm x 2.1 m (drown out length = 7.3 m)
Color	yellow, black								
Weight	3,200 kg								
Dimensions	Ø44.5 mm x 2.1 m (drown out length = 7.3 m)								

8.2.1.2 Spare parts telescope rod FDUM292

-	Adapter with lever, screw and nut incl. attachment and bushing screw	Part no.	A5Q00009786				
		Scope of supply Packing unit	Adapter 1 Pieces				
 <p>Application Use as spare part.</p>							
<p>Technical data</p> <table border="1"> <tr> <td data-bbox="470 1433 981 1456">Color</td> <td data-bbox="981 1433 1484 1456">black</td> </tr> <tr> <td data-bbox="470 1456 981 1489">Weight</td> <td data-bbox="981 1456 1484 1489">0,080 kg</td> </tr> </table>				Color	black	Weight	0,080 kg
Color	black						
Weight	0,080 kg						

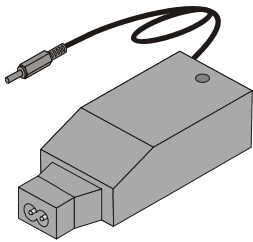
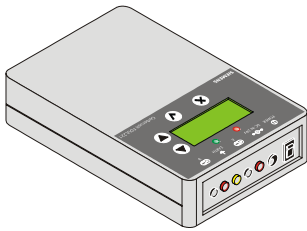
-	Lever with screw and nut	Part no.	A5Q00009787				
		Scope of supply Packing unit	Lever 1 Pieces				
 <p>Application Use as spare part.</p>							
<p>Technical data</p> <table border="1"> <tr> <td data-bbox="470 1736 981 1758">Color</td> <td data-bbox="981 1736 1484 1758">black</td> </tr> <tr> <td data-bbox="470 1758 981 1780">Weight</td> <td data-bbox="981 1758 1484 1780">0,020 kg</td> </tr> </table>				Color	black	Weight	0,020 kg
Color	black						
Weight	0,020 kg						

8.3 Adjustment set for linear smoke detector

FDLU291	Adjustment device to linear smoke detector	Part no.	A5Q00004905
		Scope of supply	Box with: Adjustment device, Test filter, Visor, Magnet, Spiral cable, MC-Link cable, Battery 9V, 0.5Ah
		Packing unit	1 Set
<p>Application The optics can be rationally adjusted to the reflector by single-handed alignment by means of the adjustment device.</p>			
Technical data			
Weight box		0.840 kg	
Dimensions adjustment device		120 x 65 x 22	

8.4 Line tester

FDUL221	Line tester	Part no.	A5Q00004397
		Scope of supply	Line tester, Connector set, Mains adapter, Mains cable
		Packing unit	1 Set



Application

The line tester is a universal device for the final testing of completely installed FDnet fire detection lines, when no control unit has been connected yet. For troubleshooting for electricians, installers or service technicians.

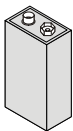
Technical data

Line tester	
Operating voltage	min. 6 VDC
– Battery or via	4 x 1.5 V or 2 x 9 V or 4 x 3.6 V
– mains adapter	240 VAC/24 VDC, 625 mA
Quiescent current
Current consumption during measuring	depending on number of devices
Detection line voltage	32 VDC
Detection line current	300 mA at 18 V operating voltage
Operating temperature	–25... +40 °C
Storage temperature	–30... +75 °C
– with battery	–25... +60 °C
Humidity	≤ 95 % rel. (no condensation)
Weight	0.450kg
Dimensions	190 x 135 x 45

Mains adapter AC/DC

Input voltage	100... 240 VAC / 50... 60 Hz / 400 mA
Output voltage	24 VDC / 625 mA
Weight	0.240 kg
Dimensions	115 x 52 x 33

–	Alkali battery Type IEC 6 LF 22.9 V / 0.5 Ah	Part no.	2766690001
–	Lithium brownstone battery 9 V / 1.2 Ah	Part no.	4704940001
	Details see chapter 8.2.1		



–	Lithium battery 3.6V / 1.9Ah	Part no.	5205350001
		Scope of supply	Battery
		Packing unit	1 Pieces



Application

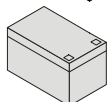
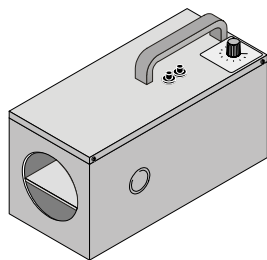
For the supply of the line tester.

Technical data

Weight	0.017 kg
Dimensions	Ø14 x 50

8.5 Test lamp for flame detector

LE3	Test lamp	Part no.	3669510001
		Scope of supply	Test lamp, charger
		Packing unit	1 Set (Box)
AX1204	Battery 12 V / 7.2 Ah to test lamp	Part no.	2522560001
		Scope of supply	Battery
		Packing unit	1 Pieces



Application

For checking the alarm function of all flame detector for distance up to 10 m.

Technical data

Test lamp	
Weight	5.260 kg
Dimensions	178 x 180 x 369
Battery	
Weight	2.480 kg
Dimensions	65 x 95 x 150

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