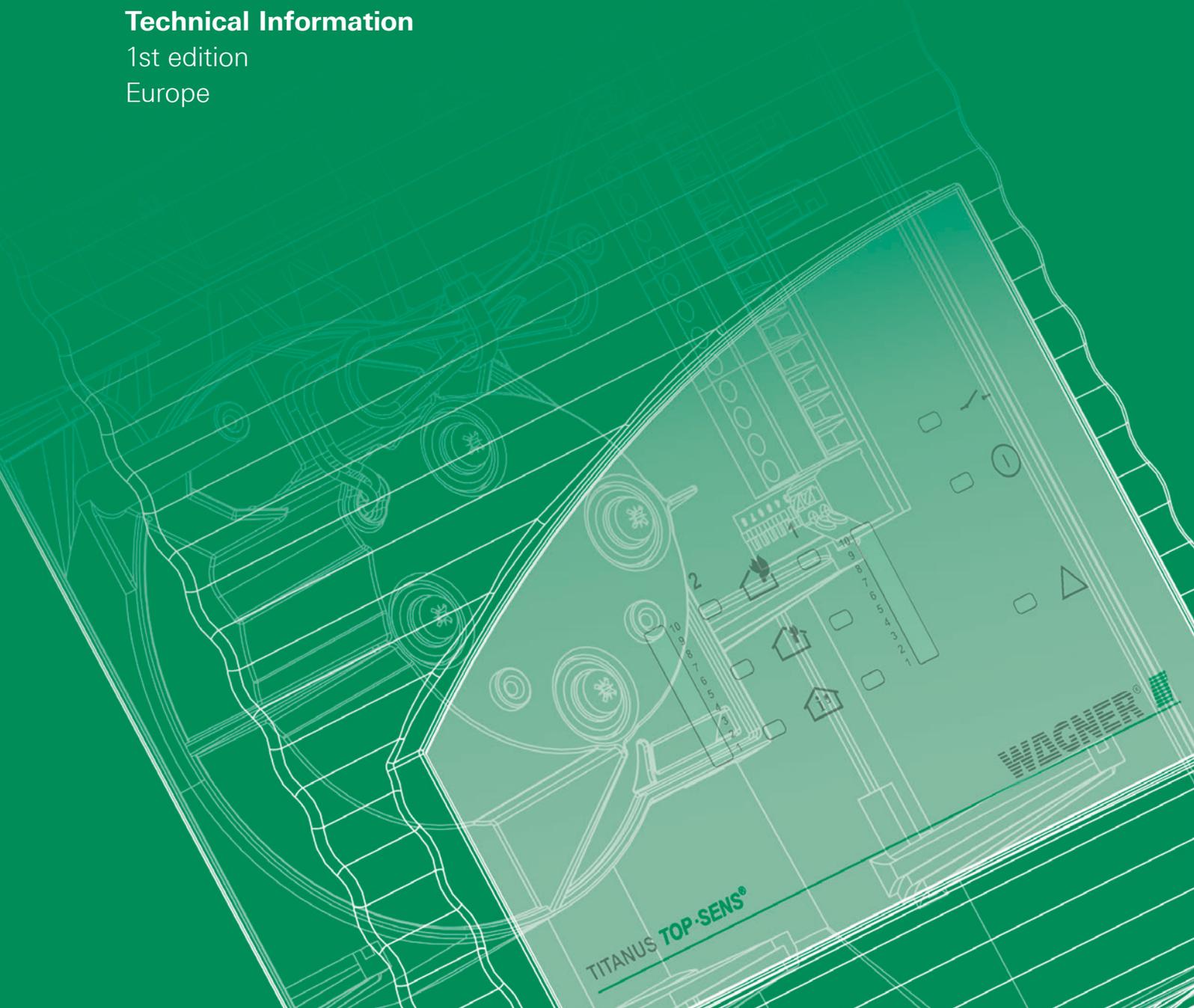


TITANUS® Aspirating Smoke Detectors

Technical Information

1st edition

Europe



Content

WAGNER – better solutions in fire protection	4
System overview	7
TITANUS® aspirating smoke detectors	11
Accessories	53
Pipe systems and components	87
Power supplies	129
Smoke and aerosol generation	141
Software	151
Article number index	156
Key word index	160



WAGNER offers you

- Trend-setting technology with numerous unique selling points and a wide range of accessories
- Customer and price-oriented adaptation of the systems thanks to modular design
- Easy project planning and commissioning through installer-oriented tools, reliable support from competent application engineers

WAGNER – better solutions in fire protection

WAGNER has been your independent and reliable partner in fire protection for over 40 years. As a trend-setting solution and system provider, the company has long since established itself internationally as a technology leader in fire protection through intensive development work and the experience gained from countless systems implemented worldwide. The modular structure of our product range combines the uncompromising demand for quality with the need for high variability and easy handling. In this way, we offer reliable fire protection even under the most difficult conditions, when seconds count in an emergency.



Earliest fire detection with TITANUS®

Earliest possible and highly sensitive fire detection for protecting people, assets and operational processes.



Fire extinguishing with FirExting®

The optimum extinguishing agent for every application: Nitrogen, argon or IG 541, carbon dioxide and Novec™ 1230.



Hazard management

Central hazard management for interconnecting individual, autonomously operated safety systems.



Fire prevention with OxyReduct®

The active oxygen reduction system OxyReduct® takes preventive action to ensure that fires cannot develop in the first place.

Fascination fire protection

The desire to protect people from loss caused by fire is what drives us forward. The solutions we offer our customers lie at the core of our day-to-day activities. In close collaboration with our customers and partners, we are committed to further developing practical concepts and improving technical details. Through constant cooperation with research facilities and institutes, the latest scientific findings are promptly incorporated into our developments.

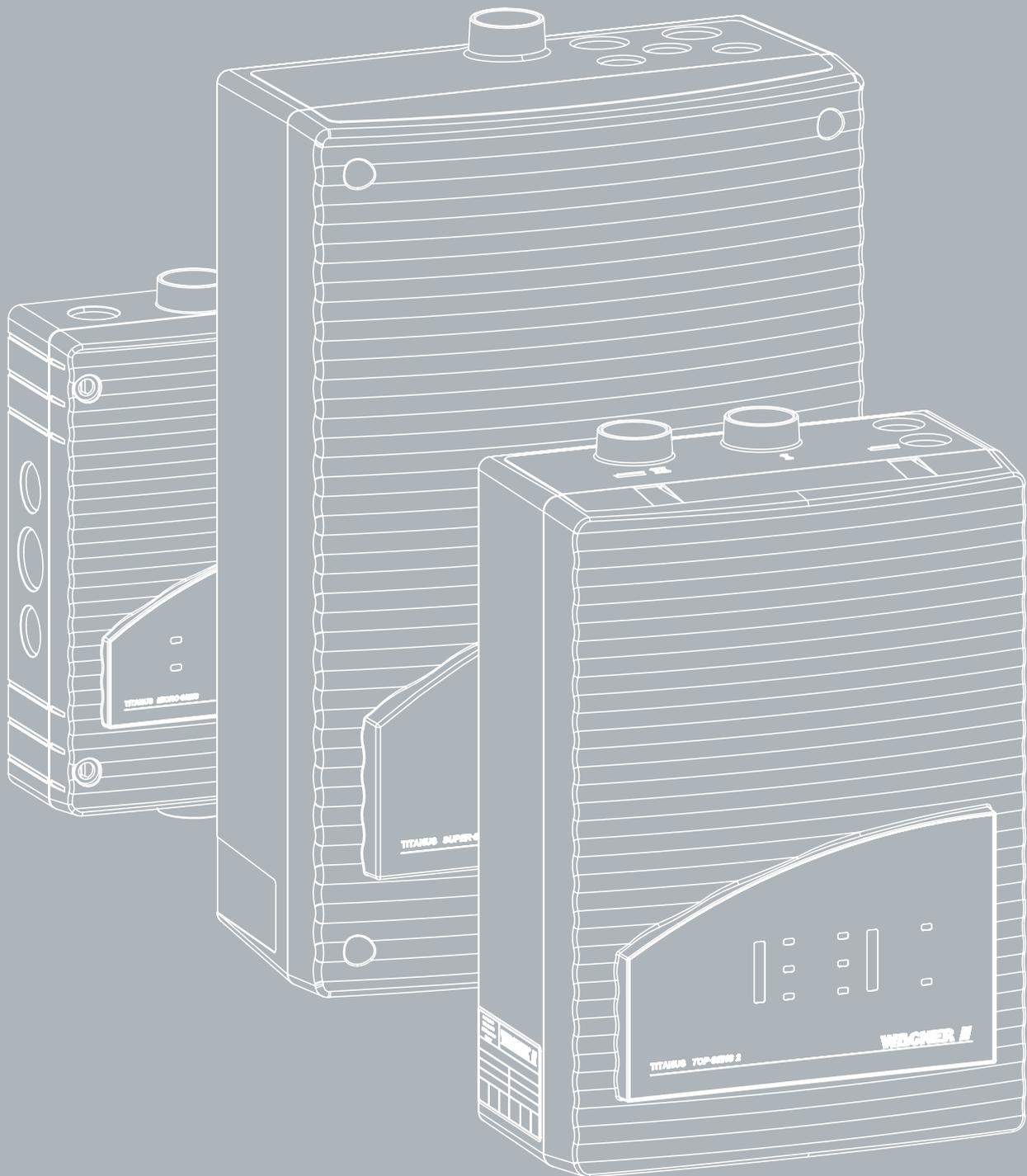
Innovative products

From individual components to complete systems: We supply a product range that is at the forefront of the competition. It offers not only innovative technology and

maximum reliability, but also a modular design for perfect tailoring to the required task. Easy project planning, intuitive handling and low-service operation also result in significant economic benefits.

Reliability in every respect

Long-term collaboration with our customers and partners that comes from a place of trust is especially important to us. It guarantees you and us sound application knowledge and the continuous further development of our products. We tailor our solutions holistically to your individual requirements. Do not hesitate to consult us for demanding applications. You can firmly rely on professional support from competent application engineers.



System overview

System definition

8

System definition

The following chapters provide information on the TITANUS® product range compliant with VdS/EN 54-20 and PBST.

For information on products approved in accordance with UL/ULC/FM/LR/NF, please contact us.



TITANUS® device type	
For small areas	<p>TITANUS MICRO-SENS®</p> <p>The small-size aspirating smoke detector for equipment protection and for monitoring rooms of up to 400 m².</p>
For medium-sized to large areas	<p>TITANUS FUSION®</p> <p>The entry-level aspirating smoke detector for equipment protection and room monitoring with an area of coverage of up to 2 × 1,600 m² (system limit).</p>
For very large areas	<p>TITANUS PRO-SENS® (/net)</p> <p>WAGNER standard aspirating smoke detector for equipment protection and room monitoring with an area of coverage of up to 2 × 3,000 m² (system limit). Optionally with tiered alarm activation and network capability.</p>
For very large areas	<p>TITANUS TOP-SENS®</p> <p>Fully equipped WAGNER aspirating smoke detector for equipment protection and room monitoring with an area of coverage of up to 2 × 3,000 m² (system limit). With bargraph display, tiered alarm activation and network capability.</p>
For monitoring cleanrooms	<p>TITANUS SUPER-SENS®</p> <p>WAGNER aspirating smoke detector specifically designed for monitoring cleanrooms with an area of coverage of max. 2,000 m (system limit).</p>
For monitoring 19" server and control cabinets	<p>TITANUS RACK-SENS®</p> <p>WAGNER solution for integrating state-of-the-art aspirating smoke detection technology into 19" cabinets, from 1 U, optionally with integrated extinguishing function or extinguishing control.</p>

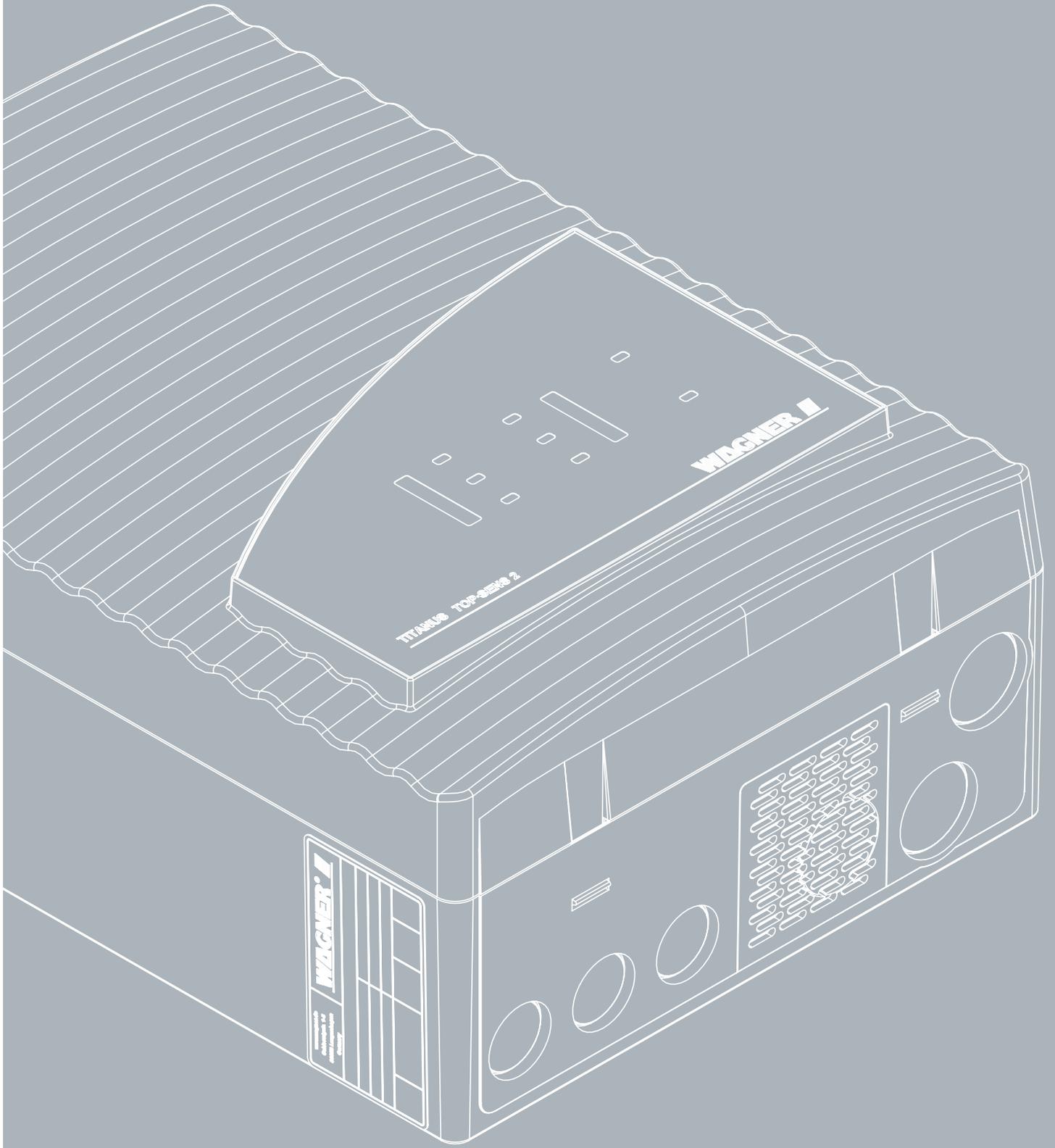
EN 54-20
Classes A, B and C



* Depending on equipment variant

** When using a detector box

*** When using the SL variant and the type SD-1 sound absorber



TITANUS[®] aspirating smoke detectors

TITANUS <i>MICRO·SENS</i> [®]	Device components	12
	Complete set NEW	16
TITANUS <i>FUSION</i> [®]	Device components	18
	Complete set NEW	22
TITANUS <i>PRO·SENS</i> [®]	Device components	24
	Complete set NEW	28
TITANUS <i>PRO·SENS</i> [®] /net	Device components	30
TITANUS <i>TOP·SENS</i> [®]	Device components	36
TITANUS <i>SUPER·SENS</i> [®]		40
TITANUS <i>RACK·SENS</i> [®]		42

TITANUS MICRO-SENS®

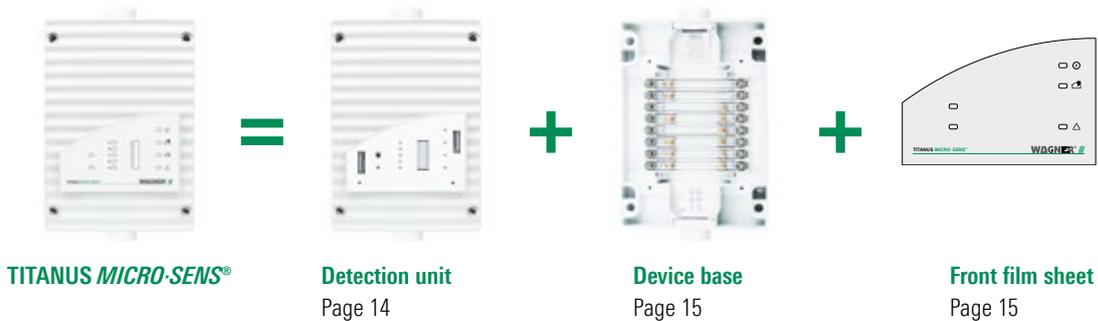
TITANUS MICRO-SENS® is the affordable, compact solution for protecting smaller to medium-sized areas and equipment. Nevertheless, it offers a wide range of performance characteristics and extension options:

- A version with ROOM-IDENT allows the localization of the seat of fire with the accuracy of a point-type smoke detector. The information is displayed on the device and on the monitored rooms.
- A version with additional fan is available for particularly high safety requirements.
- A cold storage variant enables the system to be used in applications down to -40 °C.
- The optional network capability via Ethernet enables the integration of the device into existing or new hazard management systems.

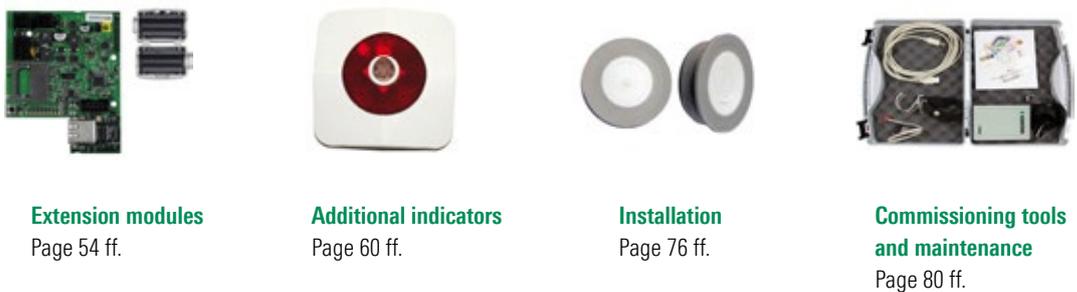
Thanks to the wide range of accessories, the system can be used even under the most demanding environmental conditions. Installer-oriented tools ensure time-optimized commissioning and maintenance. TITANUS MICRO-SENS® is approved by VdS for Classes A, B and C in accordance with EN 54-20 and ISO 7240-20.



Device components



Accessories



Performance characteristics:

- Sensitivity from 0.1% obs/m in main alarm
- False alarm suppression LOGIC-SENS®
- PIPE-GUARD for detecting breakage or clogging of the connected pipe system
- Fast commissioning thanks to automatic initialization
- Dry alarm and fault contacts for connection to any kind of fire alarm control panel
- Optionally available with redundancy fan as an additional safety function in case of fan failure
- Prepared for connection of an Ethernet network module in the accessory housing for integration into hazard management systems
- Connection option for remote display
- Diagnostic tool for extensive service information and hints for troubleshooting

TITANUS MICRO-SENS® detection units with front film sheets and base

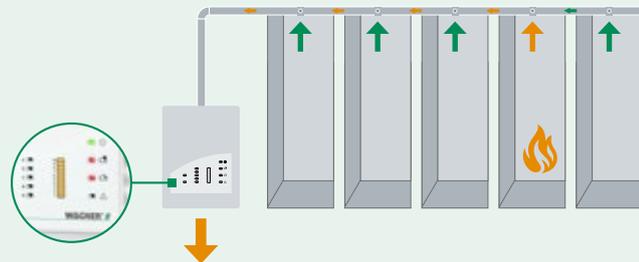
Aspirating smoke detectors for active early fire detection for room monitoring up to 400 m² and for equipment monitoring. The detectors feature visual status indicators for operation, faults and the available number of alarms.

D	VdS	G 206004
AT	PRST	FT 14/973/02/06
EU	CPR	CPR-E003

Data sheet excerpt:

Operating voltage	16 to 30 V DC
Rated voltage	24 V DC
Start-up current limitation to	150 mA
Number of relays	2, expandable*
Max. contact load	1 A / 30 V DC
Storage temperature range	-45 °C to +65 °C
Max. rel. humidity, operation	95% rh (non-condensing)
Dimensions (W × H × D)	140 × 200 × 65 mm
Dimensions with device base	140 × 220 × 70 mm
Housing material	ABS plastics
Housing color	RAL 9018, Papyrus white

* With relay board type RU-1 (09-20-6680) for forwarding ROOM-IDENT localization reports or RU-2 (09-20-6681) for forwarding a pre-alarm signal



VPE 1 unit (applies to all articles below)

i Network module type NU-2 (09-20-6140) required for network integration

Project planning framework for detection units					
Maximum sensitivity in main alarm [% obs/m]	Max. sampling points			Max. pipe length [m]	
	Class C	Class B	Class A	General	I-pipe*
0.1	1 × 8	1 × 8	1 × 8	1 × 50	1 × 40
0.5	1 × 8	1 × 6	1 × 2	1 × 50	1 × 40

Data apply without pipe accessories; with pipe accessories, see project planning tables according to technical manual

* Air sampling pipe without branching

		Detection units					
	Sensitivity in main alarm [% obs/m]	Operating temperature range [°C]	Number of alarm levels	Smoke bargraph display	Article number	Type	Current draw at stand-by (alarm) @ 24 VDC [mA]
Standard	0.1	-20 to +60	1	-	AD-05-4000	DM-TM-10	105 (110)
				×	AD-05-4020	DM-TM-B-10	105 (140)
	0.1	-20 to +60	2	-	AD-05-4521	DM-TMV-10	105 (120)
				×	AD-05-4524	DM-TMV-B-10	105 (150)
	0.5	-20 to +60	1	-	AD-05-4300	DM-TM-50	105 (110)
				×	AD-05-4320	DM-TM-B-50	105 (140)
0.5	-20 to +60	2	-	AD-05-4531	DM-TMV-50	105 (140)	
			×	AD-05-4534	DM-TMV-B-50	105 (150)	
ROOM-IDENT	0.1	-20 to +60	1	-	AD-05-4010	DM-TM-R-10	105 (185)
				×	AD-05-4030	DM-TM-RB-10	105 (215)
	0.1	-20 to +60	2	-	AD-05-4522	DM-TMV-R-10	105 (195)
				×	AD-05-4525	DM-TMV-RB-10	105 (225)
	0.5	-20 to +60	1	-	AD-05-4310	DM-TM-R-50	105 (185)
				×	AD-05-4330	DM-TM-RB-50	105 (215)
0.5	-20 to +60	2	-	AD-05-4532	DM-TMV-R-50	105 (195)	
			×	AD-05-4535	DM-TMV-RB-50	105 (225)	
Cold storage	0.1	-40 to +60	1	-	AD-05-4100	DM-TM-10-F	105 (110)
				×	AD-05-4120	DM-TM-B-10-F	105 (140)
	0.1	-40 to +60	2	-	AD-05-4529	DM-TMV-10-F	105 (120)
				×	AD-05-4530	DM-TMV-B-10-F	105 (150)
	0.5	-40 to +60	1	-	AD-05-4500	DM-TM-50-F	105 (110)
				×	AD-05-4520	DM-TM-B-50-F	105 (140)
0.5	-40 to +60	2	-	AD-05-4539	DM-TMV-50-F	105 (120)	
			×	AD-05-4540	DM-TMV-B-50-F	105 (150)	
Detector box*	0.1	-20 to +60	1	-	AD-05-1500	DM-MB-TM-10	30(38)
				×	AD-05-1510	DM-MB-TM-B-10	30(68)
	0.1	-20 to +60	2	-	AD-05-1505	DM-MB-TMV-10	30(45)
				×	AD-05-1515	DM-MB-TMV-B-10	30(75)
	0.5	-20 to +60	1	-	AD-05-1520	DM-MB-TM-50	30(38)
				×	AD-05-1530	DM-MB-TM-B-50	30(68)
0.5	-20 to +60	2	-	AD-05-1525	DM-MB-TMV-50	30(45)	
			×	AD-05-1535	DM-MB-TMV-B-50	30(75)	

* Detector box for detecting the smoke conducting branch or establishing a cross-zoning alarm verification

Related front film sheets			Device base	
Article number	Type	See figure	Article number	Type
AD-10-1400	FW-TM	A	AD-05-3500	HB-TM
AD-10-1420	FW-TM-B	B		
AD-10-1440	FW-TMV	C		
AD-10-1460	FW-TMV-B	D		
AD-10-1400	FW-TM	A		
AD-10-1420	FW-TM-B	B		
AD-10-1440	FW-TMV	C		
AD-10-1460	FW-TMV-B	D		
AD-10-1410	FW-TM-R	E	AD-05-3500	HB-TM
AD-10-1430	FW-TM-RB	F		
AD-10-1450	FW-TMV-R	G		
AD-10-1470	FW-TMV-RB	H		
AD-10-1410	FW-TM-R	E		
AD-10-1430	FW-TM-RB	F		
AD-10-1450	FW-TMV-R	G		
AD-10-1470	FW-TMV-RB	H		
AD-10-1400	FW-TM	A	AD-05-3500	HB-TM
AD-10-1420	FW-TM-B	B		
AD-10-1440	FW-TMV	C		
AD-10-1460	FW-TMV-B	D		
AD-10-1400	FW-TM	A		
AD-10-1420	FW-TM-B	B		
AD-10-1440	FW-TMV	C		
AD-10-1460	FW-TMV-B	D		
AD-10-1400	FW-TM	A	AD-05-3500	HB-TM
AD-10-1420	FW-TM-B	B		
AD-10-1440	FW-TMV	C		
AD-10-1460	FW-TMV-B	D		
AD-10-1400	FW-TM	A		
AD-10-1420	FW-TM-B	B		
AD-10-1440	FW-TMV	C		
AD-10-1460	FW-TMV-B	D		

Figure A
Art. no. AD-10-1400

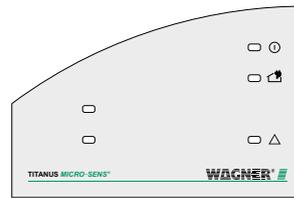


Figure E
Art. no. AD-10-1410

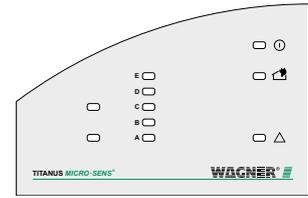


Figure B
Art. no. AD-10-1420

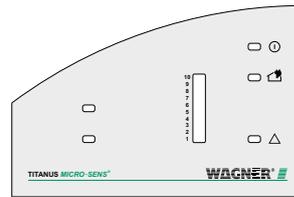


Figure F
Art. no. AD-10-1430

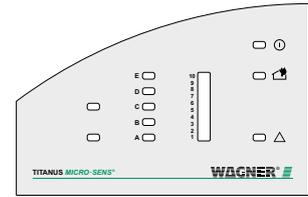


Figure C
Art. no. AD-10-1440

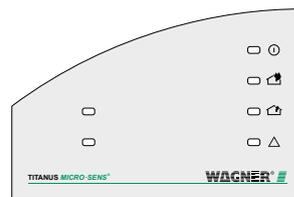


Figure G
Art. no. AD-10-1450

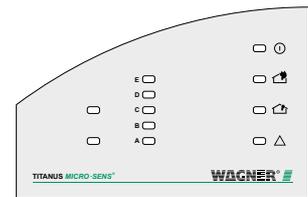


Figure D
Art. no. AD-10-1460

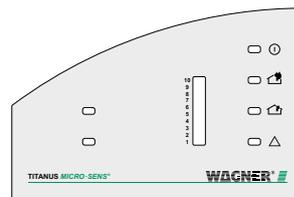
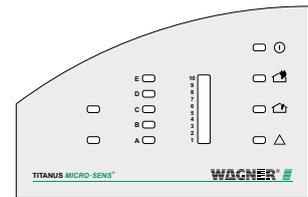
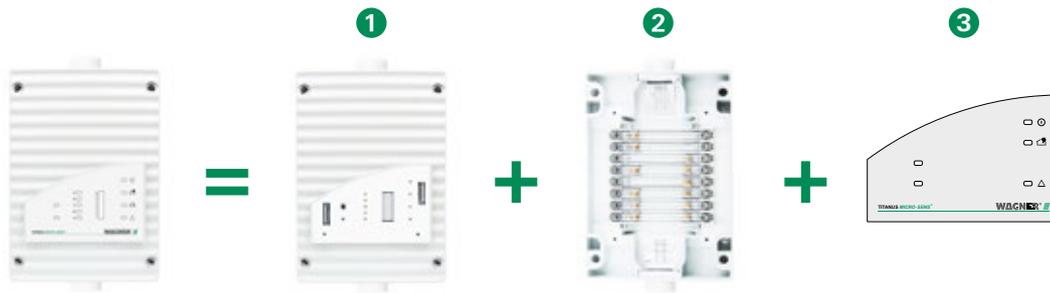


Figure H
Art. no. AD-10-1470



TITANUS MICRO-SENS® complete set



The complete set consists of the detection unit (1), the device base (2) and the front film sheet (3).

TITANUS MICRO-SENS® complete set						NEW
Article number	Type	Maximum sensitivity in main alarm [% obs/m]	Operating temperature range [°C]	Number of alarm levels	Current draw at stand-by (alarm) @ 24 VDC [mA]	
AD-05-4595	TM-10	0.1	-20 to +60	1	105 (110)	
AD-05-4596	TM-50	0.5				
Noise level [dB(A)]	45					
Bus integration	Conventional line					
Max. pipe length [m]	50					
Max. sampling points	8					
Network	Optional					

TITANUS FUSION®

TITANUS FUSION® features the following performance characteristics and extension options:

- By using two detector modules, the area of coverage can be doubled or a cross-zoning alarm verification can be established.
- The standard variant is available for use in applications down to -30 °C.

Thanks to the wide range of accessories, the system can be used even under the most demanding environmental conditions. Installer-oriented tools ensure time-optimized commissioning and maintenance. TITANUS FUSION® is approved by VdS for Classes A, B and C in accordance with EN 54-20 and ISO 7240-20.



Device components



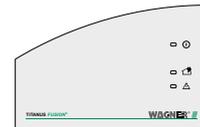
TITANUS FUSION®



Basic device
Page 20



1-2 detector modules
Page 21



Front film sheet
Page 20

Accessories



Extension modules
Page 58 ff.



Additional indicators
Page 61 ff.



Installation
Page 76 ff.



Commissioning tools
and maintenance
Page 80 ff.

Performance characteristics:

- Device prepared for installing up to two type DM-TF-xx-L detector modules, compliant with Classes A, B and C in accordance with EN 54-20
- Depending on variant, with four visual status indicators at the housing front
- Depending on variant, with four dry contacts or integrated esserbus® coupler for forwarding the alarm and fault reports to fire alarm control panels
- Free slots for easily extending the basic configuration
- Connection option for alarm indicators
- Connection sockets for two air sampling pipes with an outer diameter of 25 mm
- Connection socket for air return
- Diagnostic tool for extensive service information and hints for troubleshooting

TITANUS FUSION® basic devices with front film sheets

Aspirating smoke detectors for active early fire detection for room monitoring of up to two areas of 1,600 m each and for equipment monitoring. The detectors feature one alarm level per detector module. Depending on the variant, they can be operated at a sound pressure level of 23 dB(A) and above or from -30 °C.

D	vis	G 216069
EU	CPR	0786 - CPR-21512

Data sheet excerpt:

Operating voltage	14 to 30 VDC
Rated voltage	24 VDC
Start-up current limitation to	max. 350 mA*
Number of relays	4 (variants without bus coupler)
Max. contact load	1 A / 30VDC, max. 24 W
Storage temperature range	-45 °C to +65 °C
Max. rel. humidity, operation	95% rh (non-condensing)
Dimensions (W × H × D)	200 × 292 × 113 mm
Net weight without (with) bus coupler	approx. 1,350 g (approx. 1,500 g)
Housing material	ABS plastics
Housing color	RAL 9018, Papyrus white

* From 270 mA in the SL variant

VPE	1 unit (applies to all articles below)
------------	--

Project planning framework for the basic devices with detector modules

Maximum sensitivity in main alarm [% obs/m]	Basic device variant	Max. sampling points			Max. pipe length [m]	
		Class C	Class B	Class A	General	I-pipe*
0.015	Standard	2 × 20	2 × 12	2 × 8	2 × 160	2 × 120
	SILENT					
0.1	Standard	2 × 20	2 × 12	2 × 8	2 × 160	2 × 120
	SILENT					
0.5	Standard	2 × 15	2 × 7	2 × 3	2 × 160	2 × 120
	SILENT					

Data apply without pipe accessories; with pipe accessories, see project planning tables according to technical manual

* Air sampling pipe without branching

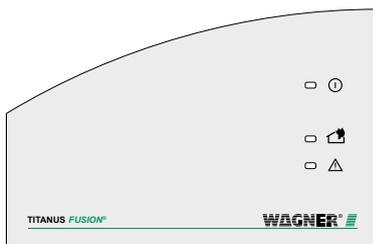
Basic devices							
Variant	Alarm levels per detector module	Sound pressure level from [dB(A)]	Operating temperature range [°C]	Article number	Type	Current draw at stand-by (alarm) @ 24 V DC when using	
						1 detector module [mA]	2 detector modules [mA]
Standard	1 (main alarm)	45	−30 to +60	AD-05-1140	TF-1	200 (210)	220 (240)
SILENT		23*	0 to +40	AD-05-1145	TF-1-SL	140 (150)	170 (180)

* When using the type SD-1/a sound absorber (art. no.: AD-10-1980)

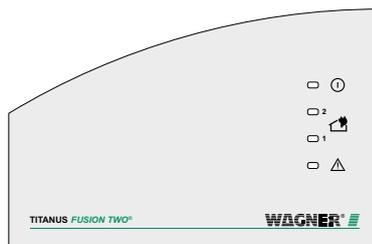
Basic devices with integrated esserbus® coupler							
Variant	Alarm levels per detector module	Sound pressure level from [dB(A)]	Operating temperature range [°C]	Article number	Type	Number of detector modules to be used	Current draw at stand-by (alarm) [mA]
Standard	1 (main alarm)	45	−10 to +50	AD-05-2200	TF-ZE-1	1	215 (240)
				AD-05-2205	TF-ZE-2	2	250 (290)
SILENT		23*	0 to +40	AD-05-2210	TF-SL-ZE-1	1	155 (190)
				AD-05-2215	TF-SL-ZE-2	2	190 (230)

* When using the type SD-1/a sound absorber (art. no.: AD-10-1980)

Related front film sheets				
Alarm levels per detector module	When using 1 detector module		When using 2 detector modules	
	Article number	Type	Article number	Type
1 (main alarm)	AD-10-1260	FW-TF-1	AD-10-1262	FW-TF-2



Type: FW-TF-1 (art. no.: AD-10-1260)



Type: FW-TF-2 (art. no.: AD-10-1262)



TITANUS FUSION® detector modules

Detector modules with the innovative high-power light source (HPLS) for highly sensitive detection of fire aerosols and for consistent response behavior with all types of fires according to EN 54-20, Classes A, B and C. Quick and easy parameterization (e.g. sensitivity, alarm delay period, air flow threshold) via DIL switches.

Data sheet excerpt:

Storage temperature range	-45 °C to +65 °C
Net weight	100 g
Housing material	ABS plastics

VPE 1 unit

i Only for use in TITANUS FUSION®

Common performance characteristics:

- False alarm suppression LOGIC-SENS®
- Fast commissioning thanks to automated initialization
- Status indicator for status and fault diagnosis
- For tool-free installation in TITANUS FUSION® aspirating smoke detectors

	Version			Expanded temperature range	
	Operating temperature range			-30 °C to +60 °C	
	Maximum sensitivity in main alarm [% obs/m]	Sensitivity levels [% obs/m]	PIPE-GUARD Air flow monitoring	Article number	Type
With air flow sensor	0.015	0.015	From +/- 10% deviation	AD-10-5600	DM-TF-01-L
		0.030			
		0.060			
		0.120			
	0.1	0.1	From +/- 10% deviation	AD-10-5605	DM-TF-10-L
		0.2			
0.4					
0.8					
0.5	0.5	From +/- 10% deviation	AD-10-5610	DM-TF-50-L	
	1.0				
Without air flow sensor	0.1	0.1	(without)*	AD-10-5620	DM-TF-10-Lp
		0.2			
		0.4			
		0.8			
	0.5	0.5	(without)*	AD-10-5625	DM-TF-50-Lp
		1.0			

* Variants without air flow sensors exclusively for use as a second detector module to establish a cross-zoning alarm verification with an air sampling pipe using a type PA-Y-P or type PY-Y-A adapter.

TITANUS FUSION® complete set



The complete set consists of the basic device (1), one to two detector modules (2) and the front film sheet (3).

TITANUS FUSION® complete set						NEW
Article number	Type	Detector modules used	Operating temperature range [°C]	Number of alarm levels per detector module	Current draw at stand-by (alarm) @ 24 V DC [mA]	
AD-05-2251	TF-10L	1 × DM-TF-10-L*	-30 to +60	1 (main alarm)	215 (240)	
AD-05-2252	TF-50L	1 × DM-TF-50-L**				
AD-05-2255	TF-10L-10L	2 × DM-TF-10-L*				250 (290)
AD-05-2256	TF-10L-50L	1 × DM-TF-10-L*				
		1 × DM-TF-50-L**				
AD-05-2257	TF-50L-50L	2 × DM-TF-50-L**				
Noise level	45 dB(A)					
Bus integration	Conventional line					
Max. pipe length	160 m					
Max. sampling points	20					
Network	-					

* Main alarm from 0.1% obs/m ** Main alarm from 0.5% obs/m

TITANUS PRO-SENS®

TITANUS PRO-SENS® features the following performance characteristics and extension options:

- By using two detector modules, the area of coverage can be doubled or a cross-zoning alarm verification can be established.
- A cold storage variant is available for use in applications down to -40 °C.

Thanks to the wide range of accessories, the system can be used even under the most demanding environmental conditions. Installer-oriented tools ensure time-optimized commissioning and maintenance. TITANUS PRO-SENS® is approved by VdS for Classes A, B and C in accordance with EN 54-20 and ISO 7240-20.



Device components



TITANUS PRO-SENS®



Basic device
Page 26



1–2 detector modules
Page 27



Front film sheet
Page 26

Accessories



Extension modules
Page 58 ff.



Additional indicators
Page 61 ff.



Installation
Page 76 ff.



Commissioning tools and maintenance
Page 80 ff.

Performance characteristics:

- Device prepared for installing up to two type DM-TP-xx-L detector modules, compliant with Classes A, B and C in accordance with EN 54-20
- Depending on variant, with four visual status indicators at the housing front
- Depending on variant, with four dry contacts or integrated esserbus® coupler for forwarding the alarm and fault reports to fire alarm control panels
- Free slots for easily extending the basic configuration
- Connection option for alarm indicators
- Connection sockets for two air sampling pipes with an outer diameter of 25 mm
- Connection socket for air return
- Diagnostic tool for extensive service information and hints for troubleshooting

TITANUS PRO-SENS® basic devices with front film sheets

Aspirating smoke detectors for active early fire detection for room monitoring of up to two areas of 3,000 m² each (max. 1,600 m² acc. to standard) and for equipment monitoring. The detectors feature one alarm level per detector module. Depending on the variant, they can be operated at a sound pressure level of 23 dB(A) and above or from –40 °C.

D	VdS	G 202064
AT	PBST	FT 14/648/02/02
EU	CPD	0786-CPD-20685

Data sheet excerpt:

Operating voltage	14 to 30 VDC
Rated voltage	24 VDC
Start-up current limitation to	max. 350 mA*
Number of relays	4 (variants without bus coupler)
Max. contact load	1 A/30 VDC, max. 24 W
Storage temperature range	–45 °C to +65 °C
Max. rel. humidity, operation	95% rh (non-condensing)
Dimensions (W × H × D)	200 × 292 × 113 mm
Net weight without (with) bus coupler	approx. 1,350 g (1,500 g)
Housing material	ABS plastics
Housing color	RAL 9018, Papyrus white

* From 270 mA in the SL variant

VPE	1 unit (applies to all articles below)
------------	--

Project planning framework for the basic devices with detector modules

Maximum sensitivity in main alarm [% obs/m]	Basic device variant	Max. sampling points			Max. pipe length [m]	
		Class C	Class B	Class A	Total	I-pipe
0.015	Standard	2 × 63	2 × 63	2 × 40	2 × 300	2 × 200
	SILENT					
	SILENT (12 V)*	1 × 100 / 2 × 72	1 × 100 / 2 × 72			
	Cold storage	2 × 63	2 × 63			
0.1	Standard	2 × 40	1 × 32 / 2 × 24	2 × 9	2 × 300	2 × 200
	SILENT					
	SILENT (12 V)*		2 × 32			
	Cold storage		1 × 32 / 2 × 24			
0.5	Standard	2 × 15	2 × 7	2 × 3	2 × 300	2 × 200
	SILENT					
	SILENT (12 V)*					
	Cold storage					

Data apply without pipe accessories; with pipe accessories, see project planning tables according to technical manual

* Fan board type FC-3 (09-20-6830) required

Basic devices							
Variant	Alarm levels per detector module	Sound pressure level from [dB(A)]	Operating temperature range [°C]	Article number	Type	Current draw at stand-by (alarm) @ 24 V DC when using	
						1 detector module [mA]	2 detector modules [mA]
Standard	1 (main alarm)	45	-20 to +60	AD-05-0457	TP-1/a	200 (210)	220 (240)
SILENT		23*	0 to +40	AD-05-0458	TP-1-SL	140 (150)	170 (180)
Cold storage		45	-40 to +60	AD-05-0467	TP-1-F/a	200 (210)	220 (240)

* When using the type SD-1/a sound absorber (art. no.: AD-10-1980)

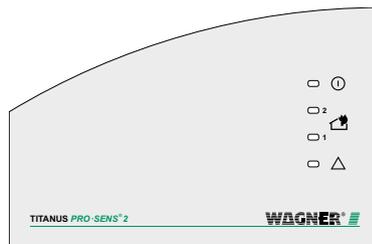
Basic devices with integrated esserbus® coupler							
Variant	Alarm levels per detector module	Sound pressure level from [dB(A)]	Operating temperature range [°C]	Article number	Type	Number of detector modules to be used	Current draw at stand-by (alarm) [mA]
Standard	1 (main alarm)	45	-10 to +50	AD-05-0784	TP-1-ZE	1	215 (240)
				AD-05-0786	TP-2-ZE	2	250 (290)
SILENT		23*	0 to +40	AD-05-0785	TP-1-SL-ZE	1	155 (180)
				AD-05-0787	TP-2-SL-ZE	2	190 (230)

* When using the type SD-1/a sound absorber (art. no.: AD-10-1980)

Related front film sheets				
Alarm levels per detector module	When using 1 detector module		When using 2 detector modules	
	Article number	Type	Article number	Type
1 (main alarm)	AD-10-1035	FW-TP-1	AD-10-1037	FW-TP-2



Type: FW-TP-1 (art. no.: AD-10-1035)



Type: FW-TP-2 (art. no.: AD-10-1037)



TITANUS PRO-SENS® detector modules

Detector modules with the innovative high-power light source (HPLS) for highly sensitive detection of fire aerosols and for consistent response behavior with all types of fires according to EN 54-20, Classes A, B and C. Quick and easy parameterization (e.g. sensitivity, alarm delay period, air flow threshold) via DIL switches.

Data sheet excerpt:

Storage temperature range –45 °C to +65 °C

Net weight 100 g

Housing material ABS plastics

VPE 1 unit

i Only for use in TITANUS PRO-SENS®

Common performance characteristics:

- False alarm suppression LOGIC-SENS®
- Fast commissioning thanks to automated initialization
- Status indicator for status and fault diagnosis
- For tool-free installation in TITANUS PRO-SENS® aspirating smoke detectors

	Version			Standard variants		Cold storage variants	
	Operating temperature range			–20 °C to +60 °C		–40 °C to +60 °C	
	Maximum sensitivity in main alarm [% obs/m]	Sensitivity levels [% obs/m]	PIPE-GUARD Air flow monitoring	Article number	Type	Article number	Type
With air flow sensor	0.015	0.015	From +/- 10% deviation	AD-10-5115	DM-TP-01-L	AD-10-5195	DM-TP-01-L-F
		0.030					
		0.060					
		0.120					
	0.1	0.1	From +/- 10% deviation	AD-10-5100	DM-TP-10-L	AD-10-5190	DM-TP-10-L-F
		0.2					
		0.4					
		0.8					
	0.5	0.5	From +/- 10% deviation	AD-10-5130	DM-TP-50-L	AD-10-5200	DM-TP-50-L-F
1.0							
Without air flow sensor	0.1	0.1	(without)*	AD-10-5145	DM-TP-10-Lp	–	–
		0.2					
		0.4					
		0.8					
	0.5	0.5	(without)*	AD-10-5155	DM-TP-50-Lp	–	–
		1.0					

* Variants without air flow sensors exclusively for use as a second detector module to establish a cross-zoning alarm verification with an air sampling pipe using a type PA-Y-P or type PY-Y-A adapter.

TITANUS PRO-SENS® complete set



The complete set consists of the basic device (1), one to two detector modules (2) and the front film sheet (3).

TITANUS PRO-SENS® complete set						NEW
Article number	Type	Detector modules used	Operating temperature range [°C]	Number of alarm levels per detector module	Current draw at stand-by (alarm) @ 24 V DC [mA]	
AD-05-0651	TP-10L	1 × DM-TP-10-L*	-20 to +60	1 (main alarm)	215 (240)	
AD-05-0652	TP-50L	1 × DM-TP-50-L**				
AD-05-0655	TP-10L-10L	2 × DM-TP-10-L*			250 (290)	
AD-05-0656	TP-10L-50L	1 × DM-TP-10-L*				
		1 × DM-TP-50-L**				
AD-05-0657	TP-50L-50L	2 × DM-TP-50-L**				
Noise level	45 dB(A)					
Bus integration	Conventional line					
Max. pipe length	300 m					
Max. sampling points	63					
Network	-					

* Main alarm from 0.1% obs/m ** Main alarm from 0.5% obs/m

TITANUS PRO-SENS® complete set with esserbus® coupler						NEW
Article number	Type	Detector modules used	Operating temperature range [°C]	Number of alarm levels per detector module	Current draw at stand-by (alarm) @ 24 V DC [mA]	
AD-05-2271	TP-10L-ZE	1 × DM-TP-10-L*	-10 to +50	1 (main alarm)	215 (240)	
AD-05-2272	TP-50L-ZE	1 × DM-TP-50-L**				
AD-05-2275	TP-10L-10L-ZE	2 × DM-TP-10-L*			250 (290)	
AD-05-2276	TP-10L-50L-ZE	1 × DM-TP-10-L*				
		1 × DM-TP-50-L**				
AD-05-2277	TP-50L-50L-ZE	2 × DM-TP-50-L**				
Noise level	45 dB(A)					
Bus integration	Integrated esserbus® coupler					
Max. pipe length	300 m					
Max. sampling points	63					
Network	-					

* Main alarm from 0.1% obs/m ** Main alarm from 0.5% obs/m

TITANUS PRO-SENS®/net

TITANUS PRO-SENS®/net is an optionally network-capable version of TITANUS PRO-SENS®. It features the following performance characteristics and extension options:

- The optional network capability via Ethernet enables the integration of the device into existing or new hazard management systems.
- By using two detector modules, the area of coverage can be doubled or a cross-zoning alarm verification can be established.
- A cold storage variant is available for use in applications down to -40 °C.

Thanks to the wide range of accessories, the system can be used even under the most demanding environmental conditions. Installer-oriented tools ensure time-optimized commissioning and maintenance. TITANUS PRO-SENS®/net is approved by VdS for Classes A, B and C in accordance with EN 54-20 and ISO 7240-20.



Device components



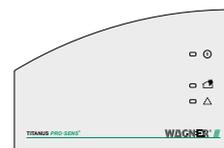
TITANUS PRO-SENS®/net®



Basic device
Page 32



1–2 detector modules
Page 34

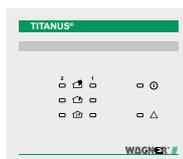


Front film sheet
Page 33

Accessories



Extension modules
Page 54 ff.



Additional indicators
Page 62 ff.



Installation
Page 76 ff.



Commissioning tools and maintenance
Page 80 ff.

Performance characteristics:

- Device prepared for installing up to two type DM-TT-xx-L detector modules, compliant with Classes A, B and C in accordance with EN 54-20
- Depending on variant, with four to eight visual status indicators at the housing front
- Extension module available for monitored shutdown of external equipment with optional display at the housing front
- Depending on variant, with four to eight dry contacts or integrated esserbus® coupler for forwarding the alarm and fault reports to fire alarm control panels
- Free slots for easily extending the basic configuration
- Input for sensitivity switching prepared for accommodating an Ethernet network module for integration into hazard management systems
- Connection option for remote display
- Connection sockets for two air sampling pipes with an outer diameter of 25 mm
- Connection socket for air return
- Diagnostic tool for extensive service information and hints for troubleshooting

TITANUS PRO-SENS®/net basic devices with front film sheets

Aspirating smoke detectors for active early fire detection for room monitoring of up to two areas of 3,000 m² each and for equipment monitoring. The detectors feature up to three alarm levels per detector module. Depending on the variant, they can be operated at a sound pressure level of 23 dB(A) and above or from -40 °C.

D	vis	G 202064
AT	PBST	FT 14/648/02/02
EU	CPD	0786-CPD-20685

Data sheet excerpt:

Operating voltage	14 to 30 VDC
Rated voltage	24 VDC
Start-up current limitation to	max. 460 mA*
Number of relays	4 to 8, depending on number of alarms (variants without bus coupler)
Max. contact load	1 A / 30 VDC, max. 24 W
Storage temperature range	-45 °C to +65 °C
Max. rel. humidity, operation	95% rh (non-condensing)
Dimensions (W × H × D)	200 × 292 × 113 mm
Net weight without (with) bus coupler	approx. 1,350 g (max. 1,600 g)
Housing material	ABS plastics
Housing color	RAL 9018, Papyrus white

* From 270 mA in the SL variant

VPE	1 unit (applies to all articles below)
i	Network module type NU-5 (09-20-6440) required for network integration

Project planning framework for the basic devices with detector modules

Maximum sensitivity in main alarm [% obs/m]	Basic device variant	Max. sampling points			Max. pipe length [m]	
		Class C	Class B	Class A	General	I-pipe
0.015	Standard	2 × 63	2 × 63	2 × 40	2 × 300	2 × 200
	SILENT					
	SILENT (12 V)*	1 × 100 / 2 × 72	1 × 100 / 2 × 72			
	Cold storage	2 × 63	2 × 63			
0.1	Standard	2 × 40	1 × 32 / 2 × 24	2 × 9	2 × 300	2 × 200
	SILENT					
	SILENT (12 V)*		2 × 32			
	Cold storage		1 × 32 / 2 × 24			
0.5	Standard	2 × 15 (2 × 32)**	2 × 7	2 × 3 (2 × 4)**	2 × 300	2 × 200
	SILENT		(2 × 12)**			
	SILENT (12 V)*					
	Cold storage					

Data apply without pipe accessories; with pipe accessories, see project planning tables according to technical manual

* Fan board type FC-3 (09-20-6830) required ** If pre-alarm is evaluated (min. two alarm levels required)

Basic devices						
Alarm levels per detector module	Sound pressure level from [dB(A)]	Operating temperature range [°C]	Article number	Type	Current draw at stand-by (alarm) @ 24 V DC when using	
					1 detector module [mA]	2 detector modules [mA]
1 (main alarm)	45	-20 to +60	AD-05-1250	TP-3	210 (210)	240 (240)
	23*	0 to +40	AD-05-1255	TP-3-SL	140 (150)	170 (180)
	45	-40 to +60	AD-05-1260	TP-3-F	210 (210)	240 (240)
2 (pre-alarm and main alarm)	45	-20 to +60	AD-05-0462	TP-4	210 (220)	240 (250)
	23*	0 to +40	AD-05-0459	TP-4-SL	140 (150)	170 (180)
	45	-40 to +60	AD-05-0463	TP-4-F	210 (220)	240 (250)
3 (info alarm, pre-alarm and main alarm)	45	-20 to +60	AD-05-0665	TP-5	210 (220)	240 (250)
	23*	0 to +40	AD-05-0667	TP-5-SL	140 (150)	170 (180)
	45	-40 to +60	AD-05-0669	TP-5-F	210 (220)	240 (250)

* When using the type SD-1/a sound absorber (art. no.: AD-10-1980)

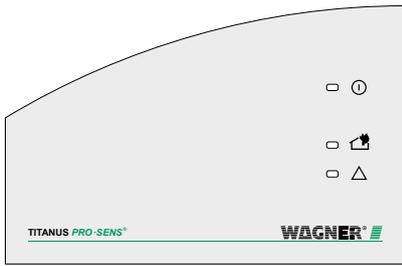
Basic devices with integrated esserbus® coupler							
Variant	Alarm levels per detector module	Sound pressure level from [dB(A)]	Operating temperature range [°C]	Article number	Type	Number of detector modules to be used	Current draw at stand-by (alarm) [mA]
Standard	2 (main and pre-alarm)	45	-10 to +50	AD-05-0464	TP-4-ZE-1	1	225 (250)
				AD-05-0466	TP-4-ZE-2	2	270 (300)
SILENT		23*	0 to +40	AD-05-0468	TP-4-SL-ZE-1	1	155 (170)
				AD-05-0469	TP-4-SL-ZE-2	2	190 (220)
Standard	3 (info alarm, pre-alarm and main alarm)	45	-10 to +50	AD-05-0671	TP-5-ZE-1	1	225 (250)
				AD-05-0673	TP-5-ZE-2	2	270 (300)
SILENT		23*	0 to +40	AD-05-0675	TP-5-SL-ZE-1	1	155 (170)
				AD-05-0677	TP-5-SL-ZE-2	2	190 (220)

* When using the type SD-1/a sound absorber (art. no.: AD-10-1980)

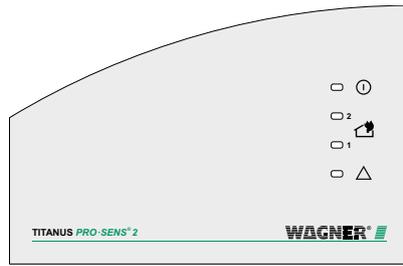
Related front film sheets						
Alarm levels per detector module	When using 1 detector module		When using 2 detector modules			
			Without external shutdown		With external shutdown*	
	Art. no.	Type	Art. no.	Type	Art. no.	Type
1 (main alarm)	AD-10-1035	FW-TP-1	AD-10-1037	FW-TP-2	AD-10-1075	FW-TP-3
2 (pre-alarm and main alarm)	AD-10-1076	FW-TP-4	AD-10-1077	FW-TP-5	AD-10-1078	FW-TP-6
3 (info alarm, pre-alarm and main alarm)	AD-10-1165	FW-TP-7	AD-10-1167	FW-TP-8	AD-10-1169	FW-TP-9

* Shutdown module type SU-2 (09-20-6160) required

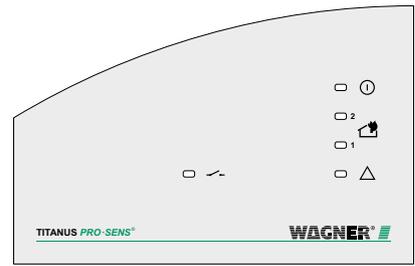
Front film sheets TP-3 (1 alarm level)



FW-TP-1
AD-10-1035

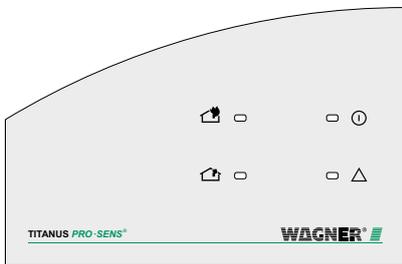


FW-TP-2
AD-10-1037

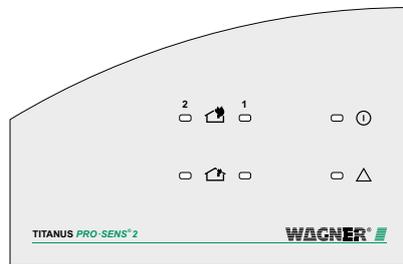


FW-TP-3
AD-10-1075

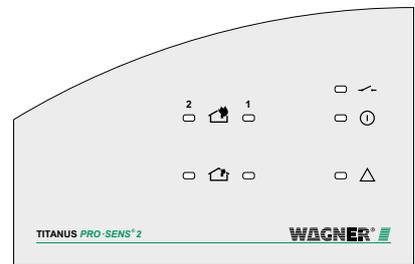
Front film sheets TP-4 (2 alarm levels)



FW-TP-4
AD-10-1076



TP-5
AD-10-1077

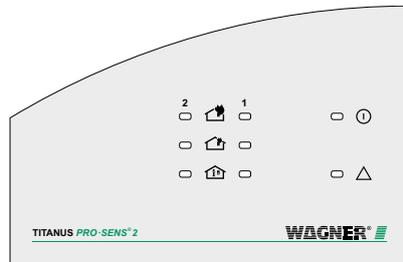


TP-6
AD-10-1078

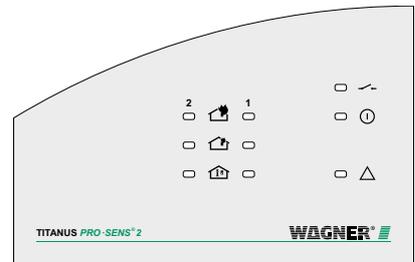
Front film sheets TP-5 (3 alarm levels)



FW-TP-7
AD-10-1165



TP-8
AD-10-1167



TP-9
AD-10-1169


Common performance characteristics:

- False alarm suppression LOGIC-SENS®
- Fast commissioning thanks to automated initialization
- Status indicator for status and fault diagnosis
- For tool-free installation in TITANUS PRO-SENS®/net aspirating smoke detectors

TITANUS PRO-SENS®/net detector modules

Detector modules with the innovative high-power light source (HPLS) for highly sensitive detection of fire aerosols and for consistent response behavior with all types of fires according to EN 54-20, Classes A, B and C. Quick and easy parameterization (e.g. sensitivity, alarm delay period, air flow threshold) via DIL switches.

Data sheet excerpt:

Storage temperature range –45 °C to +65 °C

Net weight 100 g

Housing material ABS plastics

VPE 1 unit

i Only for use in TITANUS PRO-SENS®/net and TITANUS TOP-SENS®

	Version			Standard variants		Cold storage variants	
	Operating temperature range			–20 °C to +60 °C		–40 °C to +60 °C	
	Maximum sensitivity in main alarm [% obs/m]	Sensitivity levels [% obs/m]	PIPE-GUARD Air flow monitoring	Article number	Type	Article number	Type
With air flow sensor	0.015	0.015	From +/- 10% deviation	AD-10-5230	DM-TT-01-L	AD-10-5315	DM-TT-01-L-F
		0.030					
		0.060					
		0.120					
	0.1	0.1	From +/- 10% deviation	AD-10-5210	DM-TT-10-L	AD-10-5310	DM-TT-10-L-F
		0.2					
		0.4					
		0.8					
	0.5	0.5	From +/- 10% deviation	AD-10-5250	DM-TT-50-L	AD-10-5320	DM-TT-50-L-F
1.0							
Without air flow sensor	0.1	0.1	(without)*	AD-10-5265	DM-TT-10-Lp	–	–
		0.2					
		0.4					
		0.8					
	0.5	0.5	(without)*	AD-10-5275	DM-TT-50-Lp	–	–
		1.0					

* Variants without air flow sensors exclusively for use as a second detector module to establish a cross-zoning alarm verification with an air sampling pipe using a type PA-Y-P or type PY-Y-A adapter.

TITANUS TOP-SENS®

The fully equipped TITANUS TOP-SENS® is a general use aspirating smoke detector with a wide range of performance characteristics and extension options:

- Three alarm thresholds allow the establishment of a well thought-out alarm organization.
- The 10-segment bargraph display keeps the user permanently informed of the current smoke load in the area of coverage.
- By using two detector modules, the area of coverage can be doubled or a cross-zoning alarm verification can be established.
- A cold storage variant is available for use in applications down to -40 °C.
- The optional network capability via Ethernet enables the integration of the device into existing or new hazard management systems.

Thanks to the wide range of accessories, the system can be used even under the most demanding environmental conditions. Installer-oriented tools ensure time-optimized commissioning and maintenance. TITANUS TOP-SENS® is approved by VdS for Classes A, B and C in accordance with EN 54-20 and ISO 7240-20.



Device components



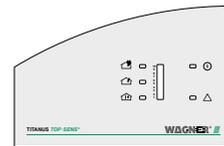
TITANUS TOP-SENS®



Basic device
Page 38



1–2 detector modules
Page 39

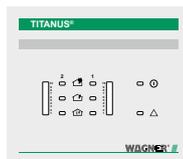


Front film sheet
Page 38

Accessories



Extension modules
Page 54 ff.



Additional indicators
Page 62 ff.



Installation
Page 76 ff.



Commissioning tools
and maintenance
Page 80 ff.

Performance characteristics:

- Device prepared for installing up to two type DM-TP-xx-L detector modules, compliant with Classes A, B and C in accordance with EN 54-20
- Depending on equipment, with four to eight visual status indicators and smoke bargraph display per detector module at the housing front
- Extension module available for monitored shutdown of external equipment with optional display at the housing front
- Depending on variant, with eight dry contacts or integrated esserbus® coupler for forwarding the alarm and fault reports to fire alarm control panels
- Free slots for easily extending the basic configuration
- Input for sensitivity control prepared for accommodating an Ethernet network module for integration into hazard management systems
- Connection option for remote display
- Connection sockets for two air sampling pipes with an outer diameter of 25 mm
- Connection socket for air return
- Diagnostic tool for extensive service information and hints for troubleshooting

TITANUS TOP-SENS® basic devices with front film sheets

Aspirating smoke detectors for active early fire detection for room monitoring of up to two areas of 3,000 m² each and for equipment monitoring. The detectors feature three alarm levels per detector module. Depending on the variant, they can be operated at a sound pressure level of 23 dB(A) and above or from -40 °C.

D	VdS	G 202064
AT	PBST	FT 14/648/02/02
EU	CPD	0786-CPD-20685

Data sheet excerpt:

Operating voltage	14 to 30 VDC
Rated voltage	24 VDC
Start-up current limitation to	max. 460 mA*
Number of relays	8 (variants without bus coupler)
Max. contact load	1 A / 30VDC, max. 24 W
Storage temperature range	-45 °C to +65 °C
Max. rel. humidity, operation	95% rh (non-condensing)
Dimensions (W × H × D)	200 × 292 × 113 mm
Net weight without (with) bus coupler	approx. 1,350 g (max. 1,600 g)
Housing material	ABS plastics
Housing color	RAL 9018, Papyrus white

* From 270 mA in the SL variant

VPE 1 unit (applies to all articles below)

i Network module type NU-5 (09-20-6440) required for network integration

Project planning framework for the basic devices with detector modules

Maximum sensitivity in main alarm [% obs/m]	Basic device variant	Max. sampling points			Max. pipe length [m]	
		Class C	Class B	Class A	General	I-pipe
0.015	Standard	2 × 63	2 × 63	2 × 40	2 × 300	2 × 200
	SILENT					
	SILENT (12 V)*	1 × 100 / 2 × 72	1 × 100 / 2 × 72			
	Cold storage	2 × 63	2 × 63			
0.1	Standard	2 × 40	1 × 32 / 2 × 24	2 × 9	2 × 300	2 × 200
	SILENT					
	SILENT (12 V)*		2 × 32			
	Cold storage		1 × 32 / 2 × 24			
0.5	Standard	2 × 15	2 × 7	2 × 3	2 × 300	2 × 200
	SILENT	(2 × 32)**	(2 × 12)**	(2 × 4)**		
	SILENT (12 V)*					
	Cold storage					

Data apply without pipe accessories; with pipe accessories, see project planning tables according to technical manual

* Fan board type FC-3 (09-20-6830) required ** If pre-alarm is evaluated

Basic devices							
Variant	Alarm levels per detector module	Sound pressure level from [dB(A)]	Operating temperature range [°C]	Article number	Type	Current draw at stand-by (alarm) @ 24 V DC when using	
						1 detector module [mA]	2 detector modules [mA]
Standard	3 (info alarm, pre-alarm and main alarm)	45	-20 to +60	AD-05-1220	TT-1/a	210 (220)	240 (250)
SILENT		23*	0 to +40	AD-05-1240	TT-1-SL	140 (150)	170 (180)
Cold storage		45	-40 to +60	AD-05-1350	TT-1-F/a	210 (220)	240 (250)

* When using the type SD-1/a sound absorber (art. no.: AD-10-1980)

Basic devices with integrated esserbus® coupler							
Variant	Alarm levels per detector module	Sound pressure level from [dB(A)]	Operating temperature range [°C]	Article number	Type	Number of detector modules to be used	Current draw at stand-by (alarm)[mA]
Standard	3 (info alarm, pre-alarm and main alarm)	45	-10 to +50	AD-05-1370	TT-1-ZE	1	215 (260)
				AD-05-1375	TT-2-ZE	2	260 (340)
SILENT	3 (info alarm, pre-alarm and main alarm)	23*	0 to +40	AD-05-1371	TT-1-SL-ZE	1	165 (210)
				AD-05-1376	TT-2-SL-ZE	2	220 (270)

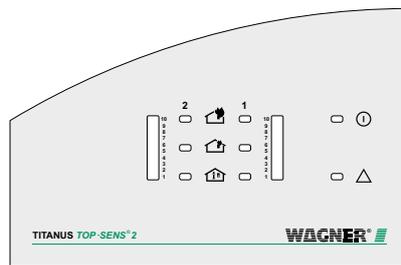
* When using the type SD-1/a sound absorber (art. no.: AD-10-1980)

Related front film sheets						
Alarm levels per detector module	When using 1 detector module		When using 2 detector modules			
			Without external shutdown		With external shutdown*	
	Art. no.	Type	Art. no.	Type	Art. no.	Type
3 (info alarm, pre-alarm and main alarm)	AD-10-1205	FW-TT-1	AD-10-1210	FW-TT-2	AD-10-1225	FW-TT-3

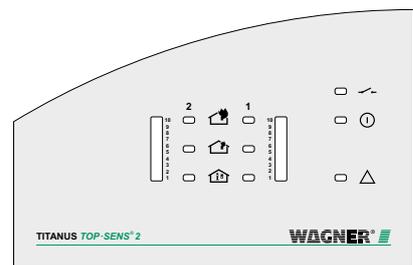
* Shutdown module type SU-2 (09-20-6160) required



FW-TT-1
AD-10-1205



FW-TT-2
AD-10-1210



FW-TT-3
AD-10-1225



TITANUS TOP-SENS® detector modules

Detector modules with the innovative high-power light source (HPLS) for highly sensitive detection of fire aerosols and for consistent response behavior with all types of fires according to EN 54-20, Classes A, B and C. Quick and easy parameterization (e.g. sensitivity, alarm delay period, air flow threshold) via DIL switches.

Data sheet excerpt:

Storage temperature range –45 °C to +65 °C

Net weight 100 g

Housing material ABS plastics

VPE 1 unit

i Only for use in TITANUS TOP-SENS® and TITANUS PRO-SENS®/net

Common performance characteristics:

- False alarm suppression LOGIC-SENS®
- Fast commissioning thanks to automated initialization
- Status indicator for status and fault diagnosis
- For tool-free installation in TITANUS TOP-SENS® aspirating smoke detectors

	Version			Standard variants		Cold storage variants	
	Operating temperature range			–20 °C to +60 °C		–40 °C to +60 °C	
	Maximum sensitivity in main alarm [% obs/m]	Sensitivity levels [% obs/m]	PIPE-GUARD Air flow monitoring	Article number	Type	Article number	Type
With air flow sensor	0.015	0.015	From +/- 10% deviation	AD-10-5230	DM-TT-01-L	AD-10-5315	DM-TT-01-L-F
		0.030					
		0.060					
		0.120					
	0.1	0.1	From +/- 10% deviation	AD-10-5210	DM-TT-10-L	AD-10-5310	DM-TT-10-L-F
		0.2					
		0.4					
		0.8					
	0.5	0.5	From +/- 10% deviation	AD-10-5250	DM-TT-50-L	AD-10-5320	DM-TT-50-L-F
1.0							
Without air flow sensor	0.1	0.1	(without)*	AD-10-5265	DM-TP-10-Lp	–	–
		0.2					
		0.4					
		0.8					
	0.5	0.5	(without)*	AD-10-5275	DM-TP-50-Lp	–	–
		1.0					

* Variants without air flow sensors exclusively for use as a second detector module to establish a cross-zoning alarm verification with an air sampling pipe using a type PA-Y-P or type PY-Y-A adapter.

TITANUS SUPER-SENS®

TITANUS SUPER-SENS® is a highly sensitive aspirating smoke detector for use in special applications such as telecommunications and IT areas and for monitoring cleanrooms. It offers a wide range of performance characteristics and extension options:

- Three alarm thresholds enable the establishment of a tiered alarm organization.
- The 10-segment bargraph display keeps the user permanently informed of the current smoke load in the area of coverage.
- The optional network capability via Ethernet enables the integration of the device into existing or new hazard management systems.

Thanks to the wide range of accessories, the system can be used even under the most demanding environmental conditions. Installer-oriented tools ensure time-optimized commissioning and maintenance. TITANUS SUPER-SENS® is approved by VdS for Classes A, B and C in accordance with EN 54-20 and ISO 7240-20.



Device components



TITANUS SUPER-SENS®

Accessories



Extension modules
Page 57 ff.



Additional indicators
Page 61 ff.



Installation
Page 76 ff.



**Commissioning tools
and maintenance**
Page 80 ff.

Performance characteristics:

- Approved in accordance with EN 54-20, Classes A, B and C
- Up to 24 sampling points possible
- Five visual status indicators at the housing front for „operation“, „info alarm“, „pre-alarm“, „main alarm“ and „fault“
- Bargraph display for visual indication of current smoke level
- Eight dry alarm and fault contacts for connection to any kind of fire alarm control panel
- Monitoring of the connected pipe system for breakage and clogging
- Fast commissioning thanks to automated initialization
- Easy extension of the basic configuration
- Prepared for accommodating an Ethernet network module for integration into hazard management systems
- Connection option for remote display
- Connection option for air return via type RA-AD2 pipe adapter
- Diagnostic tool for extensive service information and hints for troubleshooting

TITANUS SUPER-SENS®

Aspirating smoke detectors with integrated detection unit for earliest fire detection in special application areas, compliant with Classes A, B and C according to EN 54-20

D	VdS	G 201035
AT	PBST	FT 14/693/029
EU	CPR	0786-CPD-20781

Data sheet excerpt:

Operating voltage	15 / 17* to 30 V DC
Rated voltage	24 V DC
Current draw in stand-by (24 V)	245 mA
Current draw during alarm (24 V)	320 mA
Start-up current limitation to	450 to 550 mA
Max. contact load	30 W
Operating temperature range	-20 °C to +60 °C
Storage temperature range	-45 °C to +65 °C
Max. rel. humidity, operation	95% rh (non-condensing)
Dimensions (W × H × D)	240 × 366 × 132 mm
Net weight	2,800 g
Housing material	ABS plastics
Housing color	RAL 9018, Papyrus white

* Depending on fan voltage

VPE	1 unit (applies to all articles below)
i	Special galvanic version on request
i	Maximum sensitivity cleanroom version with 0.006% obs/m alarm sensitivity on request

Article no. **AD-05-0800**

**Aspirating smoke detector
Type TITANUS SUPER-SENS®**

Highly sensitive aspirating smoke detector with tiered alarm activation for active early fire detection for room and equipment monitoring.

Project planning framework for TITANUS SUPER-SENS®					
Maximum sensitivity in main alarm [% obs/m]	Max. sampling points			Max. pipe length [m]	
	Class C	Class B	Class A	General	I-pipe *
0.025	1 × 24	1 × 24	1 × 24	1 × 200	1 × 100

Data apply without pipe accessories; with pipe accessories, see project planning tables according to technical manual
* Air sampling pipe without branching

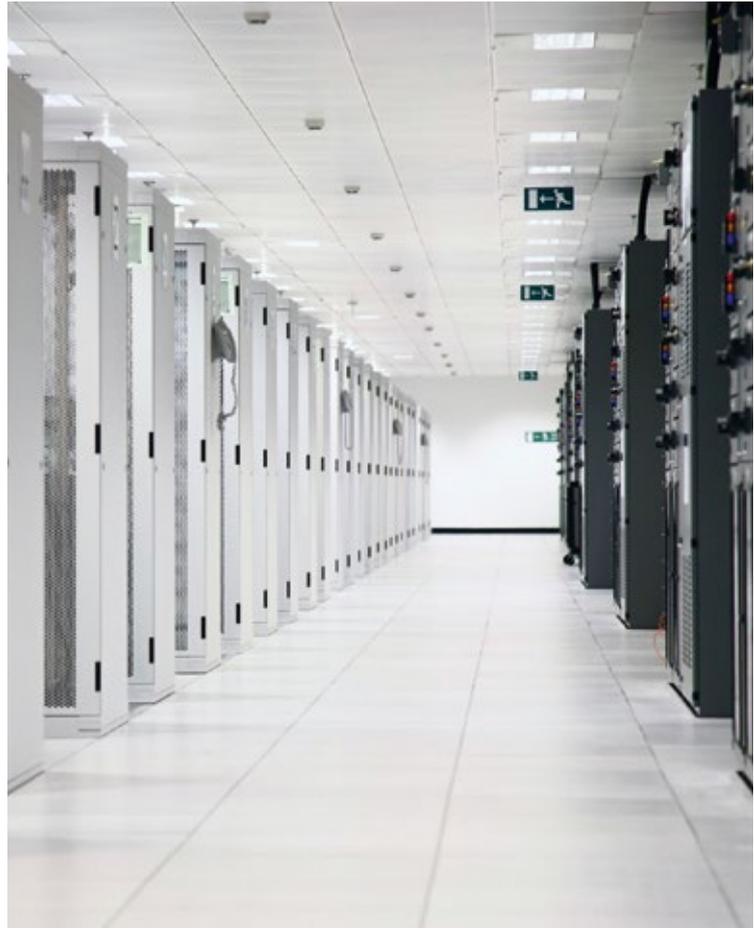
TITANUS RACK-SENS®

The modular TITANUS RACK-SENS® fire protection system is used in 482.6 mm design (19" format) for monitoring electrics and electronics cabinets. The system takes into account the very high safety requirements in the IT sector and offers the advantages of the proven TITANUS® aspirating smoke detectors also for the protection of equipment in 482.6 mm design.

TITANUS RACK-SENS® is optionally available as:

- 482.6 mm module (19") for earliest fire detection, with 44.45 mm height (1 U)
- 482.6 mm module (19") for earliest fire detection with integrated extinguishing agent, with 88.90 mm height (2 U)

On-cabinet versions are available for protecting fully equipped cabinets and for equipment in a design other than the 482.6 mm design. Extension stages enable the system to be adapted individually to the customer requirements.



Device components



TITANUS RACK-SENS® fire detection module in 44.45 mm height (1 U)



TITANUS RACK-SENS® fire detection module with integrated extinguishing agent cylinder in 88.90 mm height (2 U)

TITANUS RACK-SENS® 1 U (44.45 mm)

The TITANUS RACK-SENS® version with 44.45 mm height allows earliest fire detection with minimum space required. The fire detection system recognizes incipient fires at the earliest possible time, while at the same time, the proven LOGIC-SENS® fire pattern recognition pushes cabinet monitoring to a new dimension in terms of false alarm safety. The TITANUS RACK-SENS® fire detection module is suitable for securing open ventilated, open non-ventilated as well as closed air-conditioned cabinets in 482.6 mm design. The system's VdS-approved fire detection unit even meets the highest detection requirements according to EN 54-20 (Classes A, B and C), thus ensuring earliest possible fire detection. Due to its CPD approval in accordance with the EN 54-20 product standard for aspirating smoke detectors, the 24 V variant complies with all requirements for connection to fire detection and fire alarm systems.



Special accessories for cabinet monitoring



TITANUS RACK-SENS®
Fire detection module



Mechanical
accessories



Electric
accessories

Accessories



Response indicator
Page 60 ff.



Air sampling pipes
Page 88 ff.



Fittings
Page 90 ff.



Commissioning tools
and maintenance
Page 80 ff.



Performance characteristics:

- Prepared for installation in cabinets with 482.6 mm design (19")
- False alarm suppression LOGIC-SENS®
- PIPE-GUARD for detecting breakage and clogging of the connected pipe system
- With two alarm levels for a tiered alarm activation concept
- Fast commissioning thanks to plug & play properties and automated initialization
- Six visual status indicators at the housing front for „operation“, „service/blocked“, „released“, „pre-alarm“, „alarm“ and „fault“
- Dry alarm and fault contacts for connection to any fire alarm control panel
- Prepared for accommodating an Ethernet network module for integration into hazard management systems
- Connection option for a response indicator
- Diagnostic tool for extensive service information
- Automatic shutdown of components configurable for the 19" cabinet via optional shutdown module
- Functionality expandable in many ways (e.g. extinguishing control, door contacts)

TITANUS RACK-SENS® 1 U (44.45 mm)

Preconfigured aspirating smoke detector in 482.6 mm design (19") with 44.45 mm height (1 U) for earliest fire detection in open, closed and highly air-conditioned electronics cabinets.

D **VdS** G 206004 (for fire detection element)

EU **CPR** 0786-CPD-20322

Data sheet excerpt:

Operating voltage	15 to 30 V DC
Rated voltage	24 V DC
Current draw in stand-by (24 V)	160 mA (24 V DC)
Current draw during alarm (24 V)	270 mA (24 V DC)
Start-up current limitation to	190 mA (24 V DC)
Max. contact load	1 A / 30 VA / 30 V
Operating temperature range	0 °C to +40 °C
Storage temperature range	-5 °C to +45 °C
Max. rel. humidity, operation	Non-cond. (Class F, DIN 40040)
Dimensions (W × H × D)	482.6 × 43.3 × 300 mm
Housing material	Steel sheet, hot-dip galvanized
Housing color	RAL 7021, Black gray

VPE 1 unit (applies to all articles below)

i Installing accessories may increase the current draw

Project planning framework for detection units

Maximum sensitivity in main alarm [% obs/m]	Max. sampling points			Max. pipe length [m]
	Class C	Class B	Class A	General
0.1	1 × 10	1 × 10	1 × 10	1 × 15
0.5	1 × 10	1 × 6	1 × 2	1 × 15

Data apply without pipe accessories; with pipe accessories, see project planning tables according to technical manual

Article no. **AD-05-4700****Performance characteristics:**

- Alarm sensitivity freely selectable from 0.05 to 2.0% light obscuration/m
- Approved in accordance with EN 54-20, Classes A, B, C

TITANUS RACK-SENS® 1 U
Type TR1-50

Highly sensitive aspirating smoke detector with 44.45 mm height (1 U) for space-saving installation in cabinets with 482.6 mm design (19").

Article no. **AD-05-4705****Performance characteristics:**

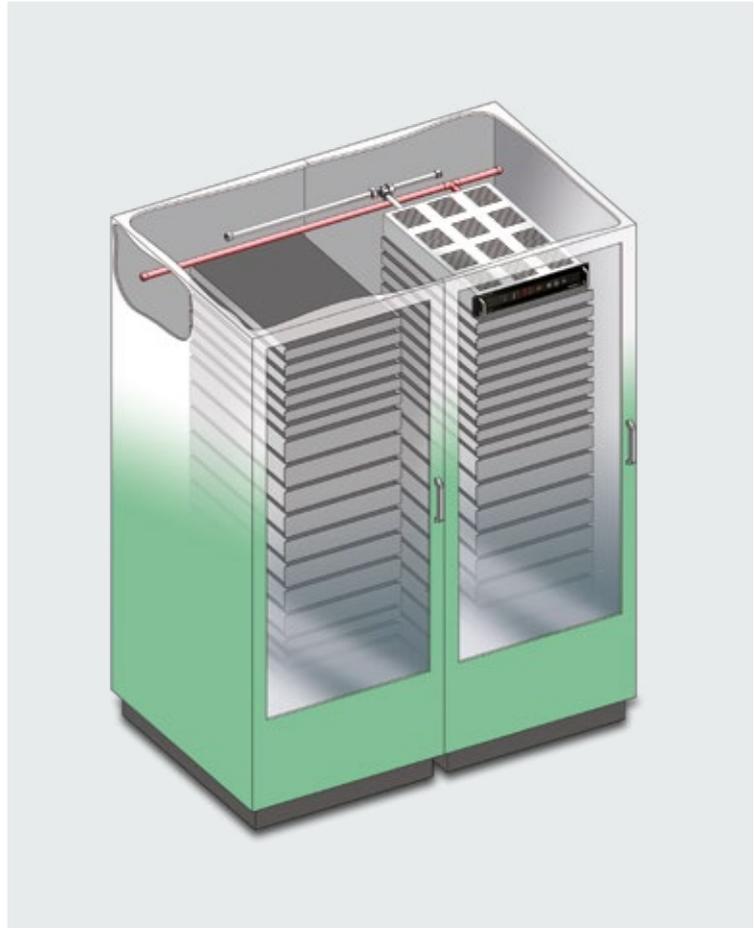
- Alarm sensitivity freely selectable from 0.01 to 2.0% light obscuration/m
- Approved in accordance with EN 54-20, Classes A, B, C

TITANUS RACK-SENS® 1 U
Type TR1-10

Highly sensitive aspirating smoke detector with 44.45 mm height (1 U) for space-saving installation in cabinets with 482.6 mm design (19").

TITANUS RACK-SENS® 2 U (88.90 mm)

The integrated fire detection and extinguishing system TITANUS RACK-SENS® with 88.90 mm height extinguishes fires directly at the source, thus reducing the use of extinguishing agent substantially. The TITANUS RACK-SENS® fire detection and extinguishing module is therefore particularly suited for protecting hermetically sealed cabinets in 482.6 mm design, which otherwise cannot be secured adequately due to the delay in extinguishing gas penetration when using a room extinguishing system. The fire detection unit, for which the 24 V version is VdS-approved, even meets the highest detection requirements according to EN 54-20 (Classes A, B and C), thus ensuring earliest possible fire detection. For low-impact extinguishing while at the same time requiring minimal extinguishing agent supply, the extinguishing agent Novec™ 1230 by 3M™ is offered. Due to its CPD approval in accordance with the EN 54-20 product standard for aspirating smoke detectors, the 24 V variant complies with all requirements for connection to fire detection and fire alarm systems.



Special accessories for cabinet monitoring



TITANUS RACK-SENS®
Fire detection module



Mechanical
accessories



Electric
accessories

Accessories



Response indicator
Page 60 ff.



Air sampling pipes
Page 88 ff.



Fittings
Page 90 ff.



Commissioning tools
and maintenance
Page 80 ff.



Performance characteristics:

- Prepared for installation in cabinets with 482.6 mm design (19")
- Integrated Novec™ gas extinguishing system for automatic extinguishing in case of fire
- Extinguishing agent cylinders with type approval according to Directive 97/23/EC, ADR and TRG-Rw
- Affected cabinet can automatically be shut down
- False alarm suppression LOGIC-SENS®
- PIPE-GUARD for detecting breakage and clogging of the connected pipe system
- Fast commissioning thanks to plug & play properties and automated initialization
- Dry alarm and fault contacts for connection to any fire alarm control panel
- Prepared for accommodating an Ethernet network module for integration into hazard management systems
- Connection option for a response indicator
- Diagnostic tool for extensive service information

TITANUS RACK-SENS® 2 U (88.90 mm)

Integrated system in 482.6 mm design (19") with 88.90 mm height (2 U) for earliest fire detection and extinguishing in closed, air-conditioned and non-air-conditioned electronics cabinets.

- D** **VdS** G 206004 (for fire detection element)
- EU** **CPR** 0786-CPD-20322

Data sheet excerpt:

Operating voltage	15 to 30 V DC
Rated voltage	24 V DC
Current draw in stand-by (24 V)	160 mA (24 V DC)
Current draw during alarm (24 V)	270 mA (24 V DC)
Start-up current limitation to	300 mA (24 V DC)
Extinguishing agent	Novec™ 1230 by 3M™
Max. contact load	1 A / 30 VA / 30 V
Operating temperature range	0 °C to +40 °C
Storage temperature range	-5 °C to +45 °C
Max. rel. humidity, operation	Non-cond. (Class F, DIN 40040)
Dimensions (W × H × D)	482.6 × 88.1 × 670 mm
Housing material	Steel sheet, hot-dip galvanized
Housing color	RAL 7021, Black gray

- VPE** 1 unit (applies to all articles below)
- i** Installing accessories may increase the current draw
- i** An adequate number of door contacts must be ordered separately

Project planning framework for detection units				
Max. smoke sensitivity in main alarm [% obs/m]	Max. sampling points			Max. pipe length [m]
	Class C	Class B	Class A	
0.1	1 × 10	1 × 10	1 × 10	1 × 15
0.5	1 × 10	1 × 6	1 × 2	1 × 15

Data apply without pipe accessories; with pipe accessories, see project planning tables according to technical manual

Article no. **AD-05-4710****Performance characteristics:**

- Alarm sensitivity freely selectable from 0.05 to 2.0% light obscuration/m
- Fire detection element approved in accordance with EN 54-20, Classes A, B, C
- With two alarm levels for a tiered alarm activation concept
- Six visual status indicators at the housing front for „operation“, „service/blocked“, „released“, „pre-alarm“, „alarm“ and „fault“
- Equipped with one extinguishing agent cylinder Novec™ 1230 by 3M™ for up to 2.2 m³ extinguishing capacity

TITANUS RACK-SENS® 2 U**Type TR2-50-NO**

Highly sensitive aspirating smoke detector with 88.90 mm height (2 U) for space-saving installation in cabinets with 482.6 mm design (19”).

Data sheet excerpt:

Extinguishing agent quantity	2 kg
Extinguishing capacity	Up to 2.2 m³
Net weight	Approx. 30 kg

Article no. **AD-05-4715****Performance characteristics:**

- Alarm sensitivity freely selectable from 0.01 to 2.0% light obscuration/m
- Fire detection element approved in accordance with EN 54-20, Classes A, B, C
- With two alarm levels for a tiered alarm activation concept
- Six visual status indicators at the housing front for „operation“, „service/blocked“, „released“, „pre-alarm“, „alarm“ and „fault“
- Equipped with one extinguishing agent cylinder Novec™ 1230 by 3M™ for up to 2.2 m³ extinguishing capacity

TITANUS RACK-SENS® 2 U**Type TR2-10-NO**

Highly sensitive aspirating smoke detector with 88.90 mm height (2 U) for space-saving installation in cabinets with 482.6 mm design (19”).

Data sheet excerpt:

Extinguishing agent quantity	2 kg
Extinguishing capacity	Up to 2.2 m³
Net weight	Approx. 30 kg

Performance characteristics:

- Modular system for fire detection with and without extinguishing option for optimal adaptation to the requirements of the application area

TITANUS RACK-SENS® customized

TITANUS RACK-SENS® is a highly modular system engineered for combining functional units to optimally and cost-efficiently meet the requirements of their respective applications.

The available modules for the TITANUS RACK-SENS® are described below. We will be happy to assist you in selecting the appropriate system and provide you with a quote upon request.

Article no. **AD-05-4815****Additional detector module for TITANUS RACK-SENS® 1 U and 2 U, type TR-DM-50**

Second detector for establishing a cross-zoning alarm verification; for integration into TITANUS RACK-SENS® 1 U or 2 U. Alarm sensitivity from 0.05 to 2.0% light obscuration/m.

Article no. **AD-05-4816****Additional detector module for TITANUS RACK-SENS® 1 U and 2 U, type TR-DM-10**

Second detector for establishing a cross-zoning alarm verification or for additional highly sensitive alarm levels to achieve internal alarm activation at a very early point.

Available for TITANUS RACK-SENS® with 44.45 mm (1 U) and 88.90 mm (2 U) height. Alarm sensitivity from 0.01 to 2.0% light obscuration/m.

Article no. **AD-05-4810****Temp. monitoring for TITANUS RACK-SENS® 1 U and 2 U Type TR-TU**

Module for temperature monitoring in equipment. For connecting up to 5 temperature sensors. Measurement range from -9 °C to +99 °C.

Article no. **AD-05-4820****Smoke bargraph display for TITANUS RACK-SENS® 1 U and 2 U, type TR-TU**

10-segment bargraph display for indicating the current smoke density.

Article no. **AD-05-4805****Network module for TITANUS RACK-SENS® 1 U and 2 U Type TR-NU**

Extension module for integration into existing or new Ethernet networks. Transmission rate 10/100 Mbit, supports 10 BaseT, 100 BaseTX, 100 BaseX. Transmission of device-specific data possible via SNMP protocol and SNMP traps.

Article no. **AD-05-4806**

**Network module for TITANUS RACK-SENS® 1 U and 2 U
Type TR-NU-D**

Extension module for integration into existing or new Ethernet networks. Transmission rate 10/100 Mbit, supports 10 BaseT, 100 BaseTX, 100 BaseX. Transmission of device-specific data possible via SNMP protocol and SNMP traps, as well as data recording for visualization of status and history data on an SD card.

Article no. **AD-05-4807**

**Recording module for TITANUS RACK-SENS® 1 U and 2 U
Type TR-NU-DO**

Extension module for data recording for visualization of status and history data on an SD card.

Article no. **AD-05-4800**

**Mains supply for TITANUS RACK-SENS® 1 U and 2 U
Type TR-PS-1**

Mains supply module for input voltage from 110 V to 230 V AC, incl. charge controller for emergency power supply and batteries. For up to four hours of emergency power supply.

Article no. **AD-05-4840**

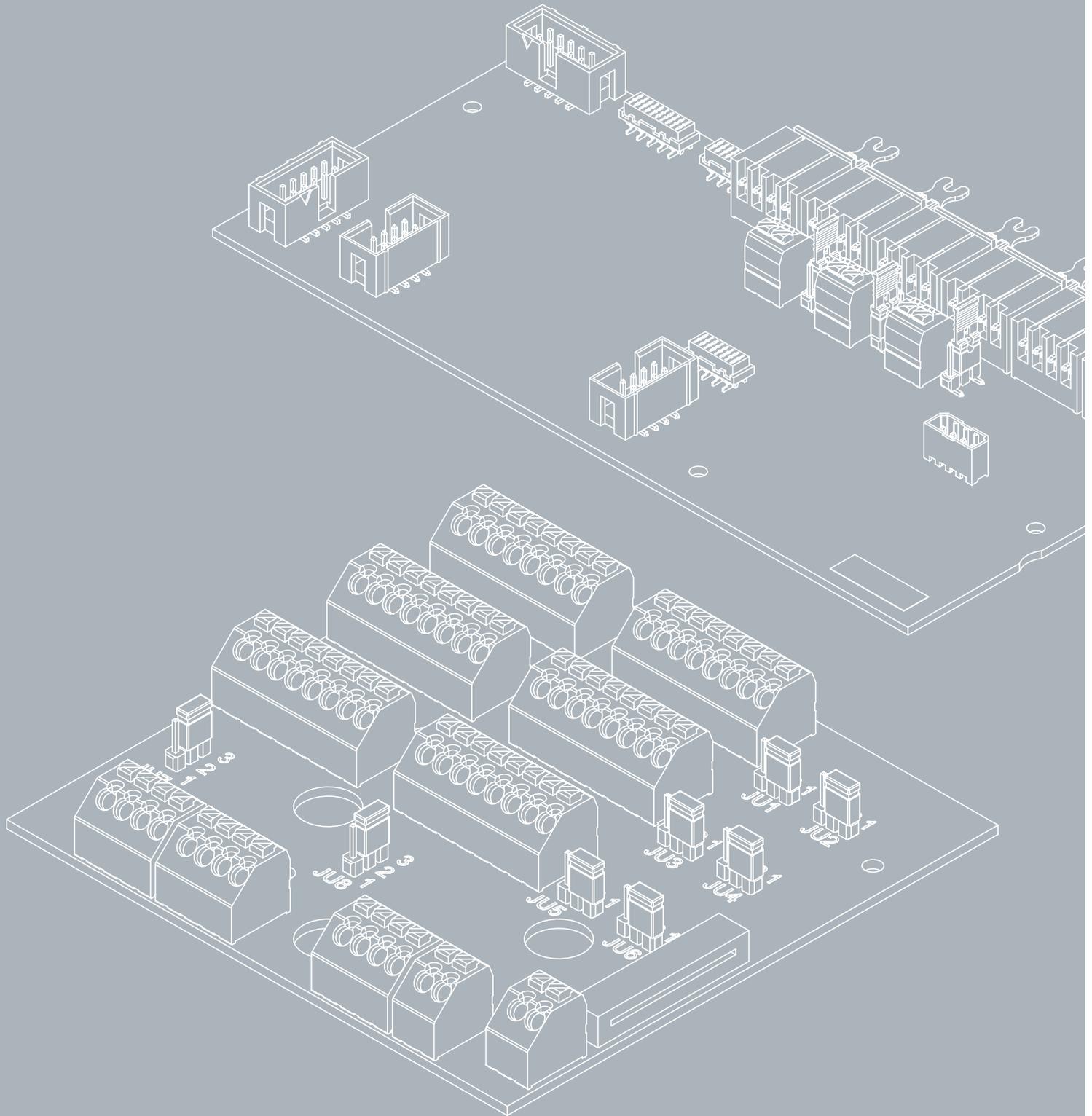
**Novec™ extinguishing agent cylinders for
TITANUS RACK-SENS® 2 U, type TR-EC-NO**

Additional extinguishing agent cylinder for expanding the protected volume. Includes 2 kg Novec™ 1230 3M™ for expanding the protected volume to a maximum of 4.4 m³.

Article no. **AD-05-4835**

**Air return for TITANUS RACK-SENS® 2 U
Type TR-AR2**

Connection port for returning the aspirated air into the monitored equipment. For TITANUS RACK-SENS® with 89.90 mm height (2 U) in on-cabinet housing.



TITANUS® accessories

Network modules	54
Shutdown modules	55
Relay modules	56
Resetting and disconnecting	57
Fan control	58
Additional housing	59
Additional indications in housing	60
Additional indications in wall housing	62
Additional indications for 19" racks	64
Accessories for 19" racks	66
TITANUS <i>RACK·SENS</i> ® special accessories	67
Installation	72
Commissioning tools/maintenance	79

Network modules



Network modules

Extension module for integration into Ethernet networks. To be used for TITANUS *MICRO-SENS*®, TITANUS *PRO-SENS*®/net, TITANUS *TOP-SENS*®, TITANUS *RACK-SENS*® and TITANUS *SUPER-SENS*® systems

Data sheet excerpt:

Operating voltage	14 to 30 V DC
Rated voltage	24 V DC
Weight	160 g
VPE	1 pc

Performance characteristics depending on product variant:

- Establishing a hazard management system
- Transmission of device-specific data via SNMP protocol and SNMP traps
- Visualization of device information via integrated web interface
- Data recording for visualization of status and history data on an SD card
- Use in cold storage areas from –40 °C

Network modules overview							
Suitability for aspirating smoke detector system	Operating temperature range [°C]	TCP/IP, SNMP	Web server (integrated web interface)	Data logger (SD card)	Article number	Type	Current draw (24 V DC) [mA]
TITANUS <i>MICRO-SENS</i> ®*	–20 to +60	×	×	×	09-20-6400	NU-2-D	50
		–	–	×	09-20-6405	NU-2-DO	
	–40 to +60	×	–	–	09-20-6140	NU-2	
		×	×	×	09-20-6410	NU-2-D-F	
		–	–	×	09-20-6415	NU-2-DO-F	
TITANUS <i>TOP-SENS</i> ®, TITANUS <i>PRO-SENS</i> ®/net, TITANUS <i>SUPER-SENS</i> ®	–20 to +60	×	×	×	09-20-6445	NU-5-D	40
		–	–	×	09-20-6450	NU-5-DO	
	–40 to +60	×	–	–	09-20-6440	NU-5	
		×	×	×	09-20-6455	NU-5-D-F	
		–	–	×	09-20-6460	NU-5-DO-F	
TITANUS <i>RACK-SENS</i> ®	–20 to +60	×	–	–	09-20-6420	NU-4	40
		×	×	×	09-20-6425	NU-4-D	
		–	–	×	09-20-6430	NU-4-DO	

* Installation in external housing required. Accessory housing type AB-1 (AD-05-5200) with front film sheet FW-AB-1 (AD-10-1500) recommended.

Modules for shutting down external equipment

Shutdown modules

Extension modules and adapter cables for monitored shutdown of external equipment for TITANUS *PRO-SENS*®/net and TITANUS *TOP-SENS*®

Common performance characteristics:

- Visual status indicator for completed shutdown at the housing front
- Shutdown can be released via external release input

Article no. **09-20-6150**



Shutdown module TITANUS *TOP-SENS*® Type SU-1

Extension module for monitored shutdown of external equipment

Data sheet excerpt:

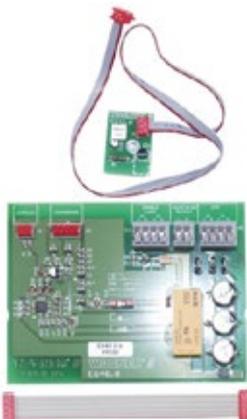
Operating voltage	17 to 30 V DC
Rated voltage	24 V DC
Current draw in stand-by (24 V)	6 mA
Current draw during alarm (24 V)	45 mA
Operating temperature range	-40 °C to +60 °C
Weight	67 g

VPE 1 pc

Performance characteristics:

- Intended for installation in aspirating smoke detector TITANUS *TOP-SENS*®

Article no. **09-20-6160**



Shutdown module TITANUS *PRO-SENS*®/net Type SU-2

Extension module for monitored shutdown of external equipment

Data sheet excerpt:

Operating voltage	17 to 30 V DC
Rated voltage	24 V DC
Current draw in stand-by (24 V)	6 mA
Current draw during alarm (24 V)	45 mA
Operating temperature range	-40 °C to +60 °C
Weight	67 g

VPE 1 pc

Performance characteristics:

- Intended for installation in aspirating smoke detector TITANUS *PRO-SENS*®/net

Relay modules for TITANUS MICRO-SENS®

Relay modules

Extension modules with dry alarm contacts

Article no. **09-20-6680**



Relay module for TITANUS MICRO-SENS® Type RU-1

Extension module with 5 dry alarm contacts for forwarding the localization of the alarm location by TITANUS MICRO-SENS® with ROOM-IDENT

Data sheet excerpt:

Operating temperature range -40 °C to +60 °C

VPE 1 pc

i For installation in accessory housing type AB-1 (AD-05-5200)

Performance characteristics:

- One relay contact per alarm location

Article no. **09-20-6681**



Relay module for TITANUS MICRO-SENS® Type RU-2

Extension module with 5 dry contacts for connection to TITANUS MICRO-SENS® with pre-alarm

Data sheet excerpt:

Operating temperature range -40 °C to +60 °C

VPE 1 pc

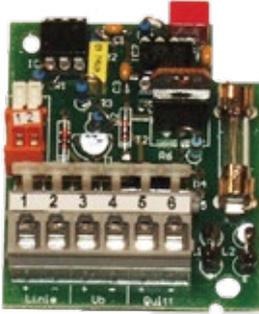
i For installation in accessory housing type AB-1 (AD-05-5200)

Performance characteristics:

- Two relay contacts each (change-over contacts) for "pre-alarm" and "alarm"
- 1 relay contact (change-over contact) for "collective fault"

Reset boards and buttons for reset and disconnection**Resetting and disconnecting**

Circuit board for resetting aspirating smoke detectors via the detector line and buttons for manual disconnection or resetting

Article no. **09-20-5481****Reset board
Type E548/c**

Extension circuit board for resetting the alarm and fault reports from the aspirating smoke detector via the detector line

Data sheet excerpt:

Current draw	5 to 50 mA
Dimensions (L × W)	57 × 45 mm
Operating temperature range	-40 °C to +60 °C

VPE 1 pc

Performance characteristics:

- Circuit board for use in TITANUS® aspirating smoke detectors or in the housing for TITANUS® accessories

Article no. **AD-10-4200****Reset and disconnect button
Type RTT-1**

Enables the aspirating smoke detectors to be reset or the devices to be disconnected from a higher-level fire alarm control panel

Data sheet excerpt:

Operating voltage	14 to 30 V DC
Rated voltage	24 V DC
Current draw in stand-by (24 V)	6 mA
Current draw during alarm (24 V)	45 mA
Max. contact load	30 W
Dimensions (W × H)	35.56 × 133.5 mm
Dimensions (19")	3 U, 7 DU
Operating temperature range	-35 °C to +70 °C

VPE 1 pc

Performance characteristics:

- Circuit board for use in TITANUS® aspirating smoke detectors or in the housing for TITANUS® accessories
- Operation via external command unit in 482.6 mm (19") frame

Accessory circuit board for controlling the fan voltage

Fan control

Accessory circuit board for fan control

Article no. **09-20-6830**



Fan control for aspirating smoke detectors Type FC-3

Accessory circuit board for operating aspirating smoke detectors with very high aspiration capacity and short transport times. To be used in "SL" variants of TITANUS *FUSION*®, TITANUS *PRO-SENS*®, TITANUS *PRO-SENS*®/net and TITANUS *TOP-SENS*® systems

Data sheet excerpt:

Operating temperature range	0 °C to +40 °C
-----------------------------	----------------

VPE	1 pc
-----	------

Performance characteristics:

- Three fan stages (10 V, 11 V and 12 V)

Housing to accommodate accessories**Additional housing**

Wall housing to accommodate accessory modules, circuit boards and input modules for aspirating smoke detectors

Article no. **AD-05-5200**



**Housing for TITANUS® accessories
Type AB-1**

Additional housing for TITANUS® accessories

Data sheet excerpt:

Dimensions (W × H × D)	140 × 200 × 70 mm
Housing material	ABS plastics
Housing color	RAL 9018, Papyrus white

VPE 1 pc

i Front film sheet AD-10-1500 required

Performance characteristics:

- Integrated mounting plate for attaching accessories such as input module, network module or reset board

Article no. **AD-10-1500**



**Front film sheet for TITANUS® additional housing
Type FW-AB-1**

Front film sheet for TITANUS® additional housing type AB-1

Data sheet excerpt:

Weight	3 g
--------	-----

VPE 1 pc

Additional indications for remote information

TITANUS MICRO-SENS®

Remote displays and response indicators for additional visualization of status information and response indicators for identifying the seat of fire via ROOM-IDENT

Article no. **AD-05-2100**



Performance characteristics:

- Eight visual status indicators at the housing front for "operation", "alarm", "fault" and alarm location displays
- Bargraph display for visual indication of current smoke level
- Option for reading out extensive service information and hints for troubleshooting
- Installation at a maximum distance of 1,000 m cabling length possible

TITANUS MICRO-SENS® remote display Type RD-TM

Remote display in wall housing for additional visualization of the status information of a TITANUS MICRO-SENS® at selected points

Data sheet excerpt:

Operating voltage	15 to 30 V DC
Rated voltage	24 V DC
Current draw in stand-by (24 V)	15 mA
Current draw during alarm (24 V)	50 mA
Dimensions (W × H × D)	150 × 200 × 70 mm
Operating temperature range	-40 °C to +60 °C
Housing material	ABS plastics
Housing color	RAL 9018, Papyrus white

VPE 1 pc

i Requires same front film sheet as for the connected basic device

Article no. **AD-05-2000**



Response indicator Type DJ-TM

Visual addressable alarm location indicator for TITANUS MICRO-SENS®/TITANUS RACK-SENS®

Data sheet excerpt:

Operating voltage	15 to 30 V DC
Current draw in stand-by (24 V)	2 mA
Current draw during alarm (24 V)	8 mA
Dimensions (W × H × D)	85 × 85 × 45 mm
Housing color	RAL 9010, Pure white

VPE 1 pc

Additional indications for remote information

TITANUS PRO-SENS®

Visual remote display for connection to dry contacts
of automatic fire detectors

Article no. **BM-20-0205**



Performance characteristics:

- Suitable for mounting on door frames

Response indicator Type FDAI 91

Visual remote display to indicate the alarm status for
TITANUS FUSION® and TITANUS PRO-SENS®

Data sheet excerpt:

Operating voltage	5 to 8 V DC
Rated voltage	6 V DC
Current draw during alarm	35 mA
Dimensions (W × H × D)	62 × 37 × 24 mm
Operating temperature range	-25 °C to +80 °C

VPE 1 pc

Article no. **BM-20-0225**



Performance characteristics:

- For mounting on walls

Response indicator Type FDAI 92

Visual remote display to indicate the alarm status for
TITANUS FUSION® and TITANUS PRO-SENS®

Data sheet excerpt:

Operating voltage	5 to 8 V DC
Rated voltage	6 V DC
Current draw during alarm	35 mA
Dimensions (W × H × D)	85 × 85 × 28 mm
Operating temperature range	-25 °C to +80 °C

VPE 1 pc

Additional indications in wall housing

Additional indications in wall housing

Displays in wall housing for additional visualization of the status information of TITANUS *PRO-SENS*®/net, *TOP-SENS*® and *SUPER-SENS*® aspirating smoke detectors at a selected point

Data sheet excerpt:

Operating voltage	8 to 30 V DC
Rated voltage	24 V DC
Dimensions (W × H × D)	150 × 150 × 57 mm
Housing material	ABS plastics
Housing color	RAL 7035, Light gray
Performance characteristics	<ol style="list-style-type: none"> 1. Installation at a maximum distance of 1,000 m 2. Display of all status indications of the connected detector and of the bargraph display (if any) at the housing front

Remote display for detector type	Number of detector modules	Remote display in wall housing			Related front film sheet	
		Current draw at stand-by (alarm) [mA]	Article number	Type	Article number	Type
TITANUS <i>PRO-SENS</i> ®/net TP-3	1	10 (12)	AD-05-1305	RD-TP	AD-05-1420	FW-RD-TP
	2				AD-05-1430	FW-RD-TP2
TITANUS <i>PRO-SENS</i> ®/net TP-4	1	10 (12)	AD-05-1300	RD-TT	AD-05-1435	FW-RD-TP-4
	2				AD-05-1440	FW-RD-TP-5
TITANUS <i>PRO-SENS</i> ®/net TP-5	1	10 (12)	AD-05-1300	RD-TT	AD-05-1437	FW-RD-TP-6
	2				AD-05-1442	FW-RD-TP-7
TITANUS <i>TOP-SENS</i> ® TT-1/a	1	10 (65)	AD-05-1300	RD-TT	AD-05-1320	FW-RD-TT
	2				AD-05-1325	FW-RD-TT2
TITANUS <i>SUPER-SENS</i> ®	1	10 (65)	AD-05-0270	PAG3-TITANUS	AD-10-0225	FW3-PAG

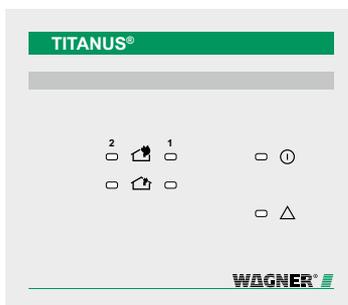
Remote display on the example of

TITANUS *TOP-SENS*®,
Art. no. AD-05-1300



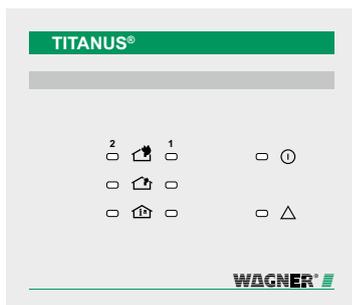
Front film sheet on the example of

TITANUS *PRO-SENS*® TP-4,
2 detector modules, art. no. AD-05-1440



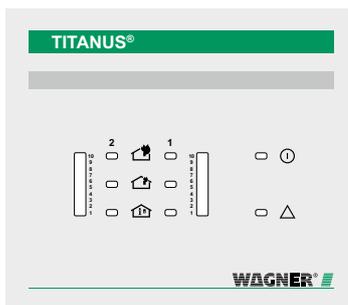
Front film sheet on the example of

TITANUS *PRO-SENS*® TP-5,
Art. no. AD-05-1442



Front film sheet on the example of

TITANUS *TOP-SENS*®,
2 detector modules, art. no. AD-05-1325



Additional indications for 19" racks

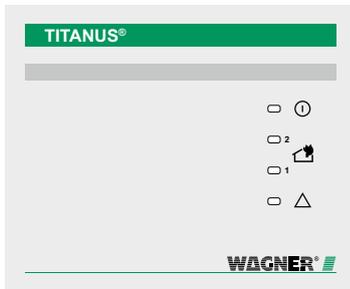
Additional indications for 19" racks	
Displays in 19" format for additional visualization of the status information of TITANUS PRO-SENS®/net, TITANUS TOP-SENS® and TITANUS SUPER-SENS® aspirating smoke detectors at a selected point	
Data sheet excerpt:	
Operating voltage	8 to 30 V DC
Rated voltage	24 V DC
Housing material	ABS plastics
Housing color	RAL 7035, Light gray
Performance characteristics	1. Installation at a maximum distance of 1,000 m 2. Display of all status indications of the connected detector and of the bargraph display (if any) at the front
VPE 1 pc	

Remote display for 19" racks						
Remote display for detector type	Number of detector modules	Current draw at stand-by (alarm) [mA]	Dimensions (W × H) [mm]	Dimensions (19")	Article number	Type
TITANUS PRO-SENS®/net TP-3	1	10 (11)	161 × 133.5	3 U, 28 DU*	AD-05-1400	RDW-TP-19"
	2	10 (12)			AD-05-1410	RDW-TP2-19"
TITANUS PRO-SENS®/net TP-4	1	10 (12)	161 × 133.5	3 U, 28 DU*	AD-05-1405	RDW-TP-4-19"
	2	10 (14)			AD-05-1415	RDW-TP2-4-19"
TITANUS PRO-SENS®/net TP-5	1	10 (13)	161 × 133.5	3 U, 28 DU*	AD-05-1406	RDW-TP-5-19"
	2	10 (16)			AD-05-1416	RDW-TP2-5-19"
TITANUS TOP-SENS® TT-1/a	1	10 (35)	161 × 133.5	3 U, 28 DU*	AD-05-1310	RDW-TT-19"
	2	10 (65)			AD-05-1315	RDW-TT2-19"
TITANUS SUPER-SENS®	1	10 (65)	121 × 133.5	3 U, 21 DU*	AD-05-0280	PAW3-TITANUS
With diagnostic interface for DIAG+						

* U = rack units, DU = depth units

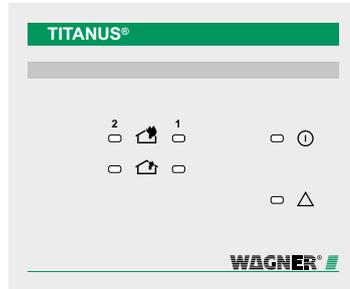
Remote display on the example of

TITANUS *PRO-SENS*®/net TP-3,
1 detector module, art. no. AD-05-1410



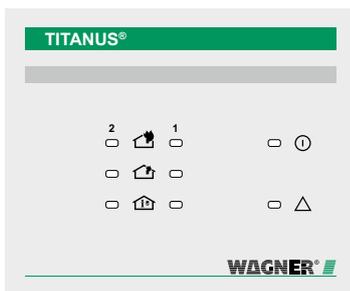
Remote display on the example of

TITANUS *PRO-SENS*®/net TP-4,
2 detector modules, art. no. AD-05-1415



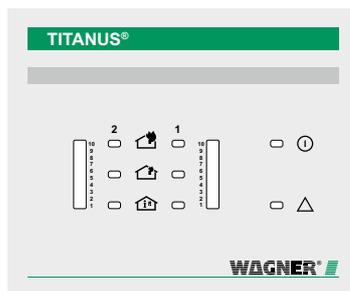
Remote display on the example of

TITANUS *PRO-SENS*®/net TP-5,
2 detector modules, art. no. AD-05-1416



Remote display on the example of

TITANUS *TOP-SENS*®,
2 detector modules, art. no. AD-05-1315



Blank cover plates 482.6 mm (19")**Blank cover plates 482.6 mm (19")**

Blank cover plate for closing an unused slot in a 19" frame

Article no. **AD-10-0300****Blank cover plate for remote display
Type BP-RD-1**

For closing unused slots in cabinets with 482.6 mm design (19"), besides remote displays

Data sheet excerpt:

Dimensions (W × H)	106.68 × 133.35 mm
Dimensions (19")	3 U, 21 DU
Housing color	RAL 9018, Papyrus white

VPE 1 pc

Article no. **AD-10-0305****Blank cover plate for remote display
Type BP-RD-2**

For closing unused slots in cabinets with 482.6 mm design (19"), besides remote displays

Data sheet excerpt:

Dimensions (W × H)	142.24 × 133.35 mm
Dimensions (19")	3 U, 28 DU
Housing color	RAL 9018, Papyrus white

VPE 1 pc

Article no. **08-90-0110****Subrack 482.6 mm (19")
Type BGT-160Z-3**

Subrack to accommodate 19" remote displays in 482.6 mm design (19")

Data sheet excerpt:

Dimensions (W × H)	483 × 133.5 mm
Dimensions (19")	3 U, 84 DU

VPE 1 pc

Accessories for equipment monitoring

TITANUS RACK-SENS® special accessories

Accessories for monitoring 19" cabinets and electronic equipment

Article no. **AD-05-5050**



Depth-variable sliding rail Type SB-1

Depth-variable sliding rail for use in cabinets with 482.6 mm design (19"), manufacturer Rittal; max. load 80 kg

Data sheet excerpt:

Dimensions (W × H × D)	85 × 85 × 45 mm
------------------------	-----------------

Weight	1.8 kg
--------	--------

VPE	2 pcs
-----	-------

Performance characteristics:

- Length adjustable from 590 to 930 mm

Article no. **AD-05-5140**



Cable management box Type SRB-TR1

Cable management box for fitting to the housing rear of TITANUS RACK-SENS® 1 U

Data sheet excerpt:

Dimensions (W × H × D)	155 × 38 × 84 mm
------------------------	------------------

Material	Galvanized steel sheet
----------	------------------------

VPE	1 pc
-----	------

Performance characteristics:

- For covering the cabling
- For strain relief using cable ties for the connection cables of connectors X1 to X5

Article no. **BM-35-6615**
Manual release for extinguishing systems (yellow)
Type HME/1021/11/17/28
Manual release for extinguishing systems with replaceable label plate for use in conventional line
VdS G 218046
Data sheet excerpt:

Dimensions (W × H × D)	126 x 126 x 35 mm
Net weight	420 g
Housing material	Aluminum
Operating temperature range	-20 °C to +60 °C

VPE 1 pc

i Matching key: SCHL-HFM/HM, BM-35-6728

Performance characteristics:

- Dry contact
- Exchangeable working and terminating resistor

Article no. **AD-05-5025**
TITANUS RACK-SENS® door contact
Type DS-TR
Door contact to monitor a cabinet door for equipment protection
Data sheet excerpt:

Weight	0.2 kg
--------	--------

Article no. **AD-05-5005**
Shutdown module for TITANUS RACK-SENS® 1 U/2 U
Type SU-3
Extension module for monitored shutdown of external equipment
Data sheet excerpt:

Operating temperature range	0 °C to +40 °C
-----------------------------	----------------

VPE 1 pc

Performance characteristics:

- Additional inputs for door contact switch
- Output for connecting a shutdown relay
- Designed for installation on a hat rail

Article no. **AD-05-5000**

Extinguishing / shutdown module for TITANUS RACK-SENS® 1 U, type ESU-1

Extension module for controlling separate extinguishing agent cylinders and monitored shutdown of external equipment

Data sheet excerpt:

Operating temperature range	0 °C to +40 °C
-----------------------------	----------------

VPE	1 pc
-----	------

i	Already integrated in TITANUS RACK-SENS® 2 U
---	--

Performance characteristics:

- Inputs for manual release line, pressure monitoring and door contact switches
- Outputs for connecting two extinguishing fans and one monitored shutdown relay
- Designed for installation on a hat rail

Article no. **AD-05-5040**

Shutdown relay for TITANUS RACK-SENS® 1 U and 2 U Type SR-1

Extension module for monitored shutdown of external equipment

Data sheet excerpt:

Rated voltage	21 V DC
---------------	---------

Contact load	250 V AC / 8 A
--------------	----------------

Temperature range	-40 °C to +70 °C
-------------------	------------------

Connections	max.1 × 4 mm ² / 2 × 2.5 mm ²
-------------	---

Dimensions (W × H × D)	15.5 × 81.9 × 75 mm
------------------------	---------------------

VPE	1 pc
-----	------

Performance characteristics:

- Designed for installation on a hat rail

Article no. **AD-05-5035****TITANUS RACK-SENS® temperature sensor
Type TS-1****Sensor for temperature monitoring in equipment; for connection to temperature monitoring module type TR-TU****Data sheet excerpt:**

Resistance value at 25 °C	10 k Ohm
Operating temperature range	-40 °C to +125 °C

VPE 1 pc

Article no. **AD-05-5020****TITANUS RACK-SENS® extinguishing fan
Type EF-1****Extinguishing fan for spreading gaseous extinguishing agent in closed equipment****Data sheet excerpt:**

Operating voltage	16 to 28 V DC
Rated voltage	24 V DC
Current draw	250 mA
Operating temperature range	0 °C to +40 °C

VPE 1 pc

Performance characteristics:

- On mounting plate incl. protective cage

Article no. **AD-05-5060****TITANUS RACK-SENS® extinguishing pipe
Type EP-1****For extinguishing two directly adjacent equipment elements that are not isolated from each other****Data sheet excerpt:**

Length	800 mm
--------	--------

VPE 1 pc

Article no. **AD-05-5055****TITANUS RACK-SENS® extinguishing pipe extension
Type EPE-1**

For optimally adjusting the position of the extinguishing pipe
in the protected equipment

Data sheet excerpt:

Length	300 mm
--------	--------

VPE	1 pc
-----	------

Article no. **AD-05-5010****TITANUS RACK-SENS® on-cabinet housing 44.45 mm (1 U)
Type HS-TR1**

On-cabinet housing for space-saving installation of a TITANUS RACK-SENS®
with 44.45 mm height (1 U) on an equipment element to be monitored

Data sheet excerpt:

Weight	5.0 kg
--------	--------

Depth	330 mm
-------	--------

Color	RAL 7021, powder-coated
-------	-------------------------

VPE	1 pc
-----	------

Performance characteristics:

- Incl. two installed sliding rails
- Incl. four installed housing feet
- Incl. 12 M5 captive nuts

Article no. **AD-05-5015****TITANUS RACK-SENS® on-cabinet housing 88.90 mm (2 U)
Type HS-TR2**

On-cabinet housing for space-saving installation of a TITANUS RACK-SENS®
with 88.90 mm height (2 U) on an equipment element to be monitored.
For monitoring airtight equipment, we recommend the air return option
(see "TITANUS RACK-SENS® customized").

Data sheet excerpt:

Weight	10.0 kg
--------	---------

Depth	700 mm
-------	--------

Color	RAL 7021, powder-coated
-------	-------------------------

VPE	1 pc
-----	------

Performance characteristics:

- Incl. two installed sliding rails
- Incl. four installed housing feet

Holders for installing aspirating smoke detectors

Device holders

Device holders for installing aspirating smoke detectors on racks

Article no. **AD-10-0250**



Device holder for aspirating smoke detectors Type MT-1

For installing TITANUS® aspirating smoke detectors to racks etc.

Data sheet excerpt:

Dimensions (L × W)	432 × 92 mm
Net weight	1.16 kg

VPE 1 pair

Pipe adapters for TITANUS® aspirating smoke detectors

Pipe adapters

Special adapters for connecting pipe systems, e.g. for establishing a cross-zoning alarm verification for equipment protection, for doubling the number of alarm levels and for connecting to device holders for TITANUS® aspirating smoke detectors

Article no. **01-10-9245**



Pipe adapter Type PA-Y-P

Adapter for connecting a pipe system to a TITANUS *FUSION*®, TITANUS *PRO-SENS*®, TITANUS *PRO-SENS*®/net and TITANUS *TOP-SENS*® aspirating smoke detector with two detector modules

Data sheet excerpt:

Operating temperature range	−10 °C to +60 °C
Material	PVC
Color	Dark gray

VPE 1 pc

Performance characteristics:

- For implementing a cross-zoning alarm verification and/or doubling the alarm levels

Article no. **01-10-9255**
Pipe adapter
Type PA-Y-A

Adapter for connecting a pipe system to a TITANUS *FUSION*®, TITANUS *PRO-SENS*®/net and TITANUS *TOP-SENS*® aspirating smoke detector with two detector modules

Data sheet excerpt:

Operating temperature range	-40 °C to +80 °C
Material	ABS
Color	Light gray

VPE	1 pc
-----	------

Performance characteristics:

- For implementing a cross-zoning alarm verification and/or doubling the alarm levels

Article no. **AD-10-0310**
Pipe adapter for TITANUS *SUPER-SENS*®
Type RA-AD2

For connecting an air return to the aspirating smoke detector TITANUS *SUPER-SENS*®

Data sheet excerpt:

Operating temperature range	-40 °C to +80 °C
Material	PE
Color	White

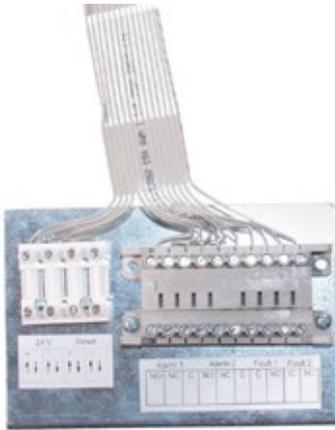
VPE	1 pc
-----	------

Adapter for connection lines

Connection kit

Adapter for connecting 1.5 to 2.5 mm² lines to TITANUS *FUSION*® and TITANUS *PRO-SENS*®

Article no. **AD-05-0485**



Connection kit for TITANUS *FUSION*® and TITANUS *PRO-SENS*®, type KT-TP-1

Adapter for connecting TITANUS *FUSION*® and TITANUS *PRO-SENS*® using connection lines with a cross section of 1.5 to 2.5 mm²

Data sheet excerpt:

Weight	377 g
--------	-------

VPE	1 pc
-----	------

Performance characteristics:

- Screw terminals for power supply, reset input and for alarm and fault contacts
- Incl. connecting cable to mainboard of TITANUS *FUSION*® and TITANUS *PRO-SENS*®

Accessories for noise reduction

Sound absorber

Sound absorber for noise reduction of aspirating smoke detectors in noise-sensitive applications

Article no. **AD-10-1980**



Sound absorber for aspirating smoke detectors Type SD-1/a

Sound absorber for connection to the pipe outlet of a TITANUS® aspirating smoke detector; reduces the operating noise of aspirating smoke detectors by up to 10 dB(A)

Data sheet excerpt:

Weight	454 g
--------	-------

Housing material	ABS
------------------	-----

Housing color	RAL 9018, Papyrus white
---------------	-------------------------

VPE	1 pc
-----	------

Kits for dust protection of aspirating smoke detectors

Dust protection kits

IP protection kits for protecting TITANUS® aspirating smoke detectors from ingress of dust when used under particularly adverse ambient conditions

Article no. **AD-05-0530**



Extension kit Type KT-HS-2

Kit for implementing protection category IP52 for TITANUS *FUSION*®, TITANUS *PRO-SENS*®, TITANUS *PRO-SENS*®/net and TITANUS *TOP-SENS*®

VPE 1 pc

Performance characteristics:

- Incl. housing lid with molded seal
- Suitable for type HS-x housings
- Incl. foam rubber seal
- Incl. sealing labels
- Excl. front film sheet

Article no. **AD-05-0540**



Extension kit Type KT-HS-3

Kit for protection from ingress of dust for TITANUS *FUSION*®, TITANUS *PRO-SENS*®, TITANUS *PRO-SENS*®/net and TITANUS *TOP-SENS*®

VPE 1 pc

Performance characteristics:

- Incl. foam rubber seal
- Suitable for type HS-x housings
- Incl. sealing labels

Accessories for cabling of TITANUS® aspirating smoke detectors

Cable entries

Entries, glands and fittings for cabling of TITANUS® aspirating smoke detectors with varying cable cross sections

Article no. **AD-05-0900**



Cable entry set Type KES-PG11

5 PG11 cable entries for cable cross sections from 8 to 12 mm;
for use with TITANUS *SUPER-SENS*®

VPE 1 pc

Performance characteristics:

- Incl. five ferrite rings

Article no. **AD-05-0910**



Cable entry set Type KES-PG16

5 PG16 cable entries for cable cross sections from 9 to 18 mm;
for use with TITANUS *SUPER-SENS*®

VPE 1 pc

Performance characteristics:

- Incl. five ferrite rings

Article no. **AD-05-0930**



Cable entries Type M20-MS

M20 membrane cable entries for cable cross sections from 1 to 13 mm;
for use with TITANUS *MICRO-SENS*®, TITANUS *FUSION*®,
TITANUS *PRO-SENS*®, TITANUS *PRO-SENS*®/net and TITANUS *TOP-SENS*®

Data sheet excerpt:

Protection class	IP66
------------------	------

VPE 100 pcs

Article no. **AD-05-0940**
Cable entries
Type M25-MS

M25 membrane cable entries for cable cross sections from 1 to 18 mm;
 for use with TITANUS *MICRO-SENS*®, TITANUS *FUSION*®,
 TITANUS *PRO-SENS*®, TITANUS *PRO-SENS*®/net and TITANUS *TOP-SENS*®

Data sheet excerpt:

Protection class	IP66
------------------	------

VPE	100 pcs
-----	---------

Article no. **AD-05-0950**
Fittings
Type M20

M20 cable entries for cable cross sections from 8 to 13.5 mm;
 for use with TITANUS *MICRO-SENS*®, TITANUS *FUSION*®,
 TITANUS *PRO-SENS*®, TITANUS *PRO-SENS*®/net and TITANUS *TOP-SENS*®

VPE	100 pcs
-----	---------

Article no. **AD-05-0955**
Fittings
Type M25

M25 cable entries for cable cross sections from 9 to 18.5 mm;
 for use with TITANUS *MICRO-SENS*®, TITANUS *FUSION*®,
 TITANUS *PRO-SENS*®, TITANUS *PRO-SENS*®/net and TITANUS *TOP-SENS*®

VPE	100 pcs
-----	---------

Article no. **AD-05-0960**
Cable gland
Type Snaptec M20

M20 screw-in cable gland with strain relief for cable diameters from
 7 to 12 mm; for use with TITANUS *MICRO-SENS*®, TITANUS *FUSION*®,
 TITANUS *PRO-SENS*®, TITANUS *PRO-SENS*®/net and TITANUS *TOP-SENS*®

Data sheet excerpt:

Protection class	IP54
------------------	------

VPE	50 pcs
-----	--------

Article no. **AD-05-0970**
Cable gland
Type Snaptec M25

M25 screw-in cable gland with strain relief for cable diameters from 10 to 17 mm; for use with TITANUS *MICRO-SENS*®, TITANUS *FUSION*®, TITANUS *PRO-SENS*®, TITANUS *PRO-SENS*®/net and TITANUS *TOP-SENS*®

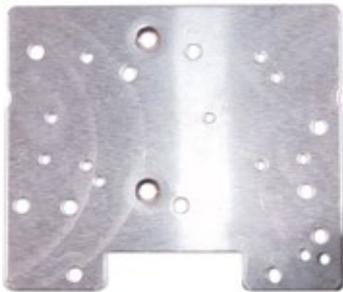
Data sheet excerpt:

Protection class	IP54
------------------	------

VPE	50 pcs
-----	--------

Kits for installing extension modules**Installation kits**

Kits for installing extension modules in TITANUS® aspirating smoke detectors

Article no. **AD-05-0492**
Installation kit for extension modules
Type KT-HS-1

Installation kit for installing extension modules in TITANUS *FUSION*®, TITANUS *PRO-SENS*®, TITANUS *PRO-SENS*®/net and TITANUS *TOP-SENS*®

VPE	1 pc
-----	------

Accessories for function checks

Test pipe and test adapter

Test equipment for quick and reliable function checks on the detection units of TITANUS® aspirating smoke detectors

Article no. **01-10-8020**

PVC test adapter

Type PA-PVC

Test equipment for quick function checks on the detection units in aspirating smoke detectors; for installation in air sampling pipe systems with an outer diameter of 25 mm

Data sheet excerpt:

Operating temperature range	-10 °C to +60 °C
Color	Dark gray

VPE	1 pc
-----	------

Article no. **01-10-8030**

ABS test adapter

Type PA-ABS

Test equipment for quick function checks on the detection units in aspirating smoke detectors; for installation in air sampling pipe systems with an outer diameter of 25 mm

Data sheet excerpt:

Operating temperature range	-40 °C to +80 °C
Color	Light gray

VPE	1 pc
-----	------

Article no. **AD-10-0550**

Test pipe for aspirating smoke detectors

Type DIAG-Pipe

Test pipe for function checks on the air flow sensors of aspirating smoke detectors

Data sheet excerpt:

Length	630 mm
Weight	140 g

VPE	1 pc
-----	------

Performance characteristics:

- Prepared for connecting a pressure measuring device

Accessories for the diagnosis of aspirating smoke detectors

Diagnostic tools

Diagnostic tools and accessories for reading out device information and hints for troubleshooting

Article no. **AD-05-0566**



Diagnostic tool Type DIAG 3/b

Diagnostic tool for reading out extensive service information and hints for troubleshooting; for use with TITANUS *MICRO-SENS*®, TITANUS *FUSION*®, TITANUS *PRO-SENS*®, TITANUS *PRO-SENS*®/net, TITANUS *TOP-SENS*® and TITANUS *RACK-SENS*®

VPE 1 pc

i Incl. diagnostic software

Performance characteristics:

- Data transmission between device and PC takes place via the diagnostic interface included in delivery
- Holder for TITANUS *MICRO-SENS*®, TITANUS *FUSION*®, TITANUS *PRO-SENS*®, TITANUS *PRO-SENS*®/net, TITANUS *TOP-SENS*® and TITANUS *RACK-SENS*® included in delivery

Article no. **AD-05-0600**



Diagnostic tool Type DIAG+

Diagnostic tool for TITANUS *SUPER-SENS*® for reading out extensive service information and hints for troubleshooting

VPE 1 pc

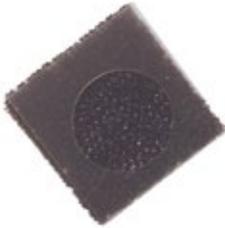
i Incl. diagnostic software

Performance characteristics:

- Data transmission between device and PC takes place via the diagnostic interface included in delivery

Miscellaneous replacement items**Maintenance**

Replacement items for performing maintenance on aspirating smoke detectors

Article no. **AD-05-3580****Air filter for TITANUS MICRO-SENS®**
Type SP-TM-5

Air filter elements (25 ppi) for type HB-TM device base

VPE 10 pcsArticle no. **AD-05-3585****Filter element for TITANUS RACK-SENS®**
Type SP-TR-1Replacement element for the internal air filter of TITANUS RACK-SENS®
in 1 U and 2 U variants**VPE** 10 pcs

Article no. **AD-10-0410**

Air filter for TITANUS *SUPER-SENS*® air flow sensor
Type LF-AWM3100V

Protects the air flow sensor of TITANUS *SUPER-SENS*®
from dirt and dust particles

VPE 1 pc

Article no. **AD-05-3570**

Jumper for TITANUS *MICRO-SENS*® air flow initialization
Type SP-TM-2

Jumper for air flow initialization of the TITANUS *MICRO-SENS*®
detection units

VPE 10 pcs

Article no. **AD-05-3560**

TITANUS *MICRO-SENS*® cover screws
Type SP-TM-3

Cover screws for TITANUS *MICRO-SENS*®
detection unit and air filter types: LF-AD(-1/-2)/a

VPE 10 pcs

Article no. **01-45-5297**

TITANUS *SUPER-SENS*® cover screws
Type CN-TSS/a

1 cover screw set for the TITANUS *SUPER-SENS*®
aspirating smoke detector housing

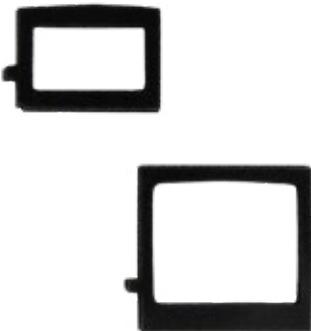
VPE 4 pcs

Article no. **AD-10-4630****TITANUS FUSION®**, **TITANUS PRO-SENS®**,
TITANUS TOP-SENS® cover plate
Type CP-HS-1Self-adhesive cover plate for sealing the second air duct in
TITANUS FUSION®, **TITANUS PRO-SENS®**, **TITANUS PRO-SENS®/net**
and **TITANUS TOP-SENS®**

VPE 10 pcs

Article no. **AD-05-0535****TITANUS®** sticker
Type ST-S1Sticker with **TITANUS®** lettering; suitable for sealing or securing
TITANUS® aspirating smoke detectors

VPE 1 pc

Article no. **AD-10-4620****Sealing kit for detector module**
Type SL-DMSelf-adhesive replacement seals for **TITANUS FUSION®**, **TITANUS PRO-SENS®**,
TITANUS PRO-SENS®/net and **TITANUS TOP-SENS®** detector modules

VPE 10 pcs

Article no. **AD-10-4600**
Connection cable
Type CC-DM

Replacement ribbon cable for connecting TITANUS *FUSION*®, TITANUS *PRO-SENS*®, TITANUS *PRO-SENS*®/net and TITANUS *TOP-SENS*® detector modules to the mainboard of the aspirating smoke detector

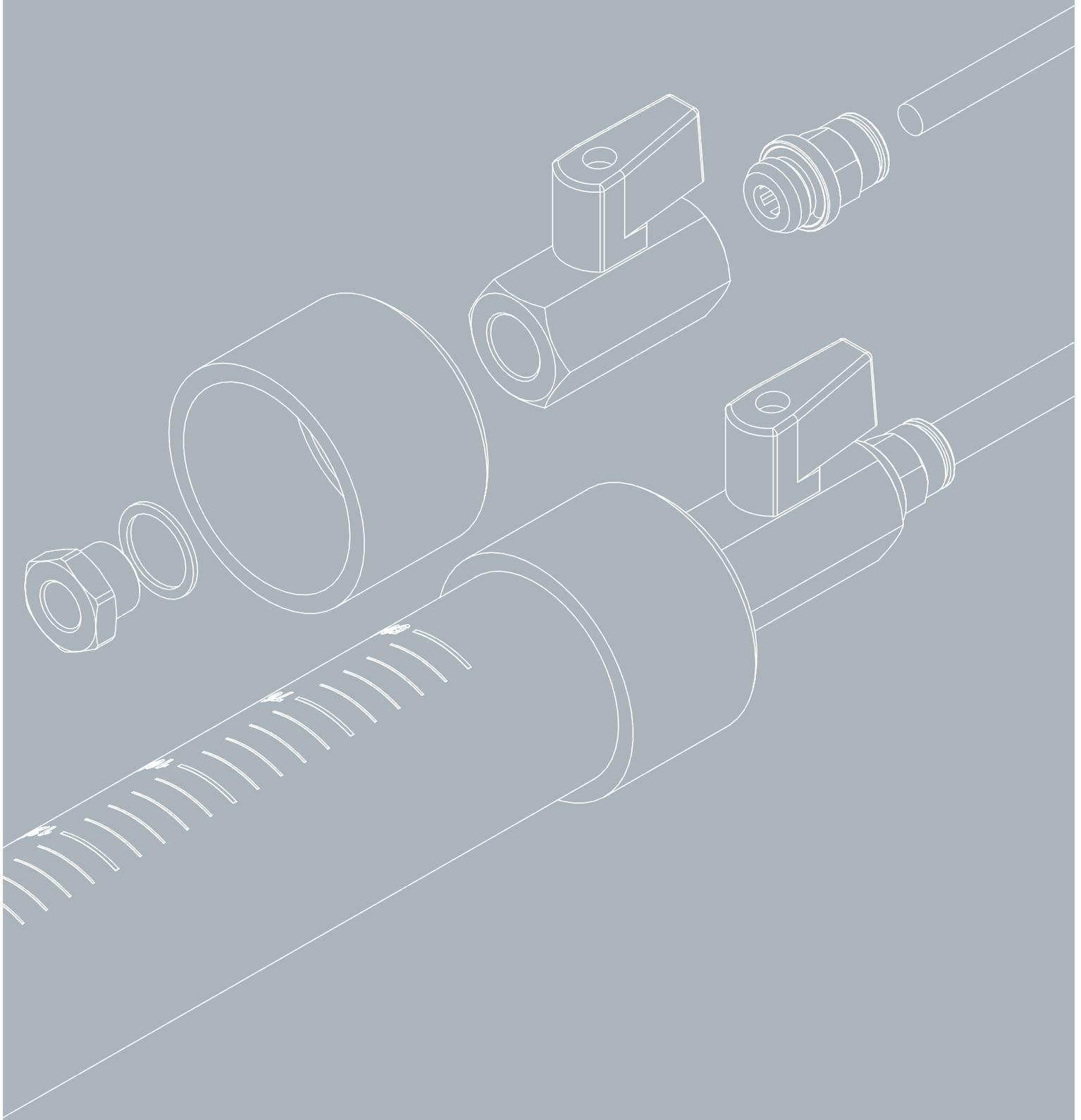
 1 pc
Article no. **AD-05-0575**
Adapter cable for diagnostic interface
Type AC-DIAG 3

For connecting the diagnostic interface type DIAG 3 and DIAG 3/a to TITANUS *FUSION*®, TITANUS *PRO-SENS*®, TITANUS *PRO-SENS*®/net and TITANUS *TOP-SENS*® aspirating smoke detectors

 1 pc
Article no. **AD-05-0576**
Adapter cable for diagnostic interface
Type AC-DIAG 3/a

For connecting the diagnostic interface type DIAG 3/b to TITANUS *FUSION*®, TITANUS *PRO-SENS*®, TITANUS *PRO-SENS*®/net and TITANUS *TOP-SENS*® aspirating smoke detectors

 1 pc



Pipe systems and components

Air sampling pipe and fittings	88
Accessories	92
Aspiration-reducing film sheets	98
Aspiration reductions	100
Climate monitoring	102
Condensate separation	103
Pipe cleaning	104
Filter technology	112
Monitoring of potentially explosive areas	117
Ceiling feed-through	119
Equipment monitoring	120
Fire-resistant collar	127

Pipe system overview

For establishing a TITANUS® aspirating smoke detector system, pipe components with various diameters are available in PVC and ABS:

■ Pipe diameter

As standard, the air sampling pipes and fittings are manufactured with 25 mm outer diameter. A larger diameter (32 mm or 40 mm) should be used in compliance with the specifications from the technical manual.

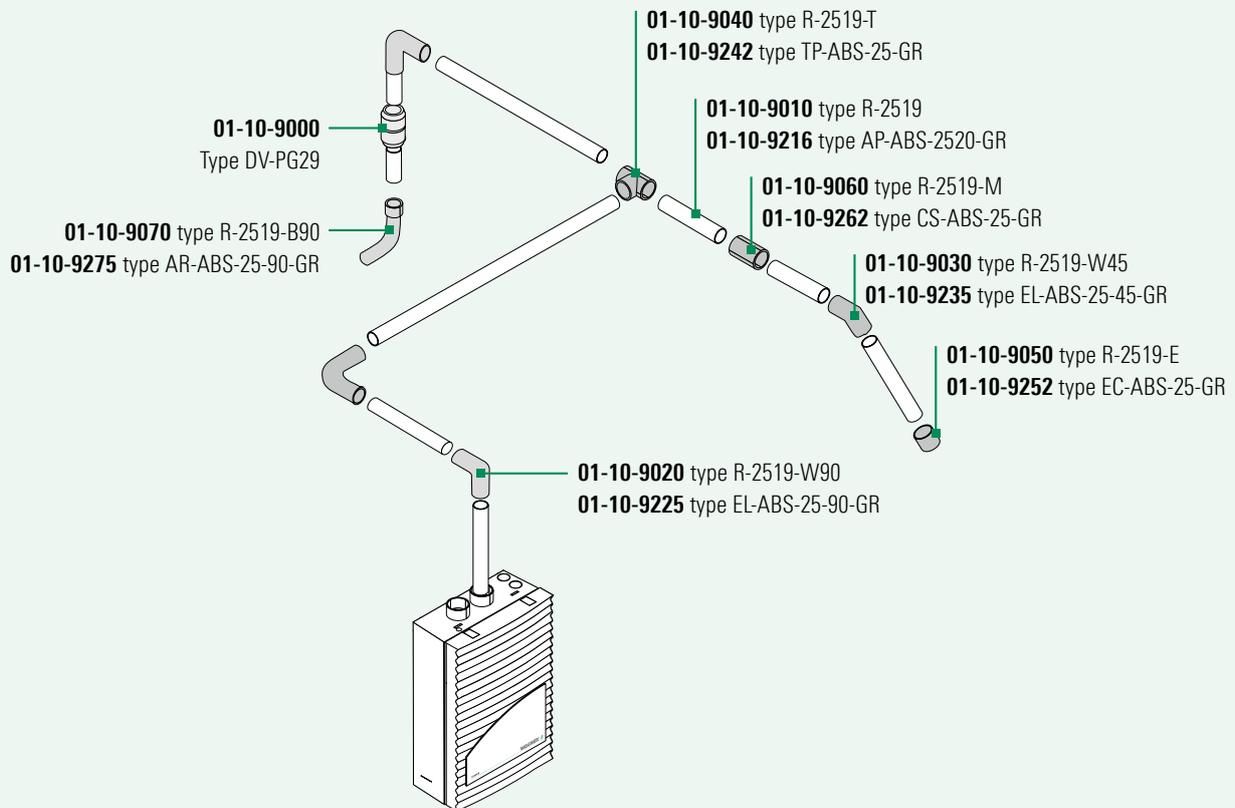
■ Pipe material

In general, the PVC version is sufficient for air sampling pipes. However, in cold storage areas and in areas where halogen-free installation systems are required, ABS piping must be used. The same applies to fittings. The pipe components offered meet the requirements stated in EN 54-20, in accordance with EN 61386-1 Class 1131.

The diagram below shows combination options with the components of a 25 mm pipe system.



Pipe system for smoke aspiration, 25 mm (sample setup)



Air sampling pipe

Air sampling pipe

Air sampling pipe for establishing a pipe system for room and equipment monitoring; meets the requirements according to EN 61386-1 for the stated temperature range

Air sampling pipe								
Outer diameter [mm]	Material	Halogen-free	Packing unit [m/pc]	Article number	Type	Inner diameter [mm]	Color	Operating temperature range [°C]
25	PVC	–	5.0	01-10-9010	R-2519	21.2	Dark gray	–10 to +60
		–	5.0	01-10-6010	RR-2519	21.2	Red	
	ABS	×	5.0	01-10-9216	AP-ABS-2520-GR	21.0	Light gray	–40 to +80
		×	2.5	01-10-9215	AP-ABS-2520-GR	21.0	Light gray	
		×	5.0	01-10-6216	AP-ABS-2520-RD	21.0	Red	
		×	2.5	01-10-6215	AP-ABS-2520-RD	21.0	Red	
32	PVC	–	5.0	01-10-8410	R-3218	28.4	Dark gray	–10 to +60
	ABS	×	5.0	01-10-8310	ABSR-3220	28.0	Light gray	–40 to +80
40	PVC	–	5.0	01-10-8210	R-4019	36.2	Dark gray	–10 to +60
	ABS	×	5.0	01-10-8110	ABSR-4025	35.0	Light gray	–40 to +80

Pipe colors and materials



Dark gray
(PVC)



Light gray
(ABS, halogen-free)



Red
(PVC and ABS, halogen-free)

Fittings for air sampling pipe

Fittings for air sampling pipe

Fittings for establishing a pipe system for room and equipment monitoring; meet the requirements according to EN 61386-1 for the stated temperature range

PVC					
-10 °C to +60 °C					
For pipe outer diameter [mm]	Color	Type	Article number	Type	Packing unit [pcs]
25	Dark gray	90° bend	01-10-9070	R-2519-B90	10
		90° elbow	01-10-9020	R-2519-W90	
		45° elbow	01-10-9030	R-2519-W45	
		T-piece	01-10-9040	R-2519-T	
		Coupler	01-10-9060	R-2519-M	
		End cap	01-10-9050	R-2519-E	
25	Red	90° bend	01-10-6070	RR-2519-B90	10
		90° elbow	01-10-6020	RR-2519-W90	
		45° elbow	01-10-6030	RR-2519-W45	
		T-piece	01-10-6040	RR-2519-T	
		Coupler	01-10-6060	RR-2519-M	
		End cap	01-10-6050	RR-2519-E	
32	Dark gray	90° bend	01-10-8470	R-3218-B90	10
		90° elbow	01-10-8420	R-3218-W90	
		45° elbow	01-10-8430	R-3218-B45	
		T-piece	01-10-8440	R-3218-T	
		Coupler	01-10-8460	R-3218-M	
		End cap	01-10-8450	R-3218-E	
40	Dark gray	90° bend	01-10-8270	R-4019-B90	5
		90° elbow	01-10-8220	R-4019-W90	10
		45° elbow	01-10-8230	R-4019-W45	5
		T-piece	01-10-8240	R-4019-T	10
		Coupler	01-10-8260	R-4019-M	10
		End cap	01-10-8250	R-4019-E	10
32/25	Dark gray	Reducing socket	01-10-8480	R-3225-R	10
32/25	Red	Reducing socket	01-10-6080	RR-3225-R	10
40/25	Dark gray	Reducing socket	01-10-8280	R-4025-R	10

Fittings



ABS (halogen-free)					
-40 °C to +80 °C					
For pipe outer diameter [mm]	Color	Type	Article number	Type	Packing unit [pcs]
25	Light gray	90° bend	01-10-9275	AR-ABS-25-90-GR	10
		90° elbow	01-10-9225	EL-ABS-25-90-GR	
		45° elbow	01-10-9235	EL-ABS-25-45-GR	
		T-piece	01-10-9242	TP-ABS-25-GR	
		Coupler	01-10-9262	CS-ABS-25-GR	
		End cap	01-10-9252	EC-ABS-25-GR	
25	Red	90° bend	01-10-6275	AR-ABS-25-90-RD	10
		90° elbow	01-10-6225	EL-ABS-25-90-RD	
		45° elbow	01-10-6235	EL-ABS-25-45-RD	
		T-piece	01-10-6242	TP-ABS-25-RD	
		Coupler	01-10-6262	CS-ABS-25-RD	
		End cap	01-10-6252	EC-ABS-25-RD	
32	Light gray	90° bend	01-10-8370	ABSR-3220-B90	10
		90° elbow	01-10-8320	ABSR-3220-W90	
		45° elbow	01-10-8330	ABSR-3220-W45	
		T-piece	01-10-8340	ABSR-3220-T	
		Coupler	01-10-8360	ABSR-3220-M	
		End cap	01-10-8350	ABSR-3220-E	
40	Light gray	90° bend	01-10-8170	ABSR-2518-B90	5
		90° elbow	01-10-8120	ABSR-4025-W90	10
		45° elbow	01-10-8130	ABSR-4025-W45	5
		T-piece	01-10-8140	ABSR-4025-T	10
		Coupler	01-10-8160	ABSR-4025-M	10
		End cap	01-10-8150	ABSR-4025-E	10
40/32/25	Light gray	Reducing socket	01-10-8380	ABSR-40x32x25-R	10
40/32/25	Red	Reducing socket	01-10-6280	ABSR-40x32x25-R	10

Pipe connection pieces

Article no. **01-10-9000**



Double screw fitting Type DV-PG29

Screw fitting to make a disengageable connection of two air sampling pipes with an outer diameter of 25 mm

Data sheet excerpt:

Temperature range	-40 °C to +100 °C
-------------------	-------------------

VPE 1 pc

Article no. **01-10-9207**



ABS adhesive screw fitting Type CJ-ABS-25-GR

Adhesive screw fitting to make a disengageable connection of two ABS air sampling pipes with an outer diameter of 25 mm

Data sheet excerpt:

Color	Gray
Temperature range	-40 °C to +80 °C

VPE 10 pcs

Article no. **01-10-9005**



PVC adhesive screw fitting Type KV-R-2519

Adhesive screw fitting to make a disengageable connection of two PVC air sampling pipes with an outer diameter of 25 mm

Data sheet excerpt:

Color	Gray
Temperature range	-10 °C to +100 °C

VPE 10 pcs

**Adhesives and sealants
for pipe components**

Adhesives and sealants

**Accessories for bonding pipe components, removing adhesive residues
and sealing threads**

Article no. **01-90-1000**



**PVC adhesive
Type TI60**

Adhesive for PVC plastics

Data sheet excerpt:

Temperature resistance	0 °C to +60 °C
Storage temperature range	+5 °C to +35 °C

VPE 125 g

Article no. **01-90-1070**



**ABS adhesive
Type TIS10**

Adhesive for ABS plastics

Data sheet excerpt:

Temperature resistance	-40 °C to +60 °C
Storage temperature range	+5 °C to +50 °C

VPE 0.5 l

Article no. **01-90-1010**



**Plastic cleaner
Type TM20N**

Cleaning agent for bonding points on ABS and PVC plastics

Data sheet excerpt:

Operating temperature range	0 °C to +35 °C
Storage temperature range	0 °C to +35 °C

VPE 125 ml

Article no. **01-90-1080**
Plastic cleaner
Type TM8N
Cleaning agent for bonding points on ABS and PVC plastics
Data sheet excerpt:

Operating temperature range	0 °C to +35 °C
Storage temperature range	0 °C to +35 °C

VPE	1 l
-----	-----

Article no. **01-90-1668**
Thread sealing tape
Type GDB-Rück90
Thread sealing tape for producing gas-tight threaded connections
Data sheet excerpt:

Material	PTFE
Width	12.7 mm
Thickness	0.09 mm
Length	13.7 m
Thread reversing angle	90°
Temperature range	-240 °C to +260 °C

Article no. **01-90-1720**
Sealing tape
Type DB-Teflon
Thread sealing tape for producing gas-tight threaded connections
Data sheet excerpt:

Material	PTFE
Width	12 mm
Thickness	0.1 mm
Length	12 m
Thread reversing angle	45°
Temperature range	-200 °C to +260 °C

Pipe shears for cutting air sampling pipes**Tools**

Shears with easy and safe handling for separating pipe components

Article no. **85-20-2821**

**Pipe shears
Type D200107**

For shortening air sampling pipes made of plastics (PVC and ABS)
up to a max. outer diameter of 42 mm

VPE 1 pc

Connecting parts and fastenings for establishing pipe systems

Fastenings

Screw fittings, adapters and connecting parts for the transition between different pipe components as well as accessories for fastening the pipe system in the application area

Article no. **01-35-0440**



Pressure clamp for air sampling pipe Type 18/30

Pressure clamp with multiple snap-in positions for optionally clamping with play or firm seating. Can be used for 25 mm air sampling pipe

Data sheet excerpt:

Material	Polyamide
Temperature range	-40 °C to +140 °C
VPE	25 pcs

Article no. **01-35-0450**



Pressure clamp for air sampling pipe Type 27/43

Pressure clamp with multiple snap-in positions for optionally clamping with play or firm seating. Can be used for 32 mm and 40 mm air sampling pipe

Data sheet excerpt:

Material	Polyamide
Temperature range	-40 °C to +140 °C
VPE	100 pcs

Article no. **01-35-1075**



Clamp for air sampling pipe Type NG 23

For 25 mm air sampling pipe

Data sheet excerpt:

Material	Polypropylene
Temperature range	-30 °C to +90 °C
VPE	100 pcs

Article no. **01-35-1080**
**Clamp for air sampling pipe
Type NG 29**

For 32 mm air sampling pipe

Data sheet excerpt:

Material	Polypropylene
Temperature range	-30 °C to +90 °C

VPE	100 pcs
-----	---------

Article no. **01-35-1085**
**Pipe clamp for air sampling pipe
Type PC-BC**

For 40 mm air sampling pipe

Data sheet excerpt:

Material	Polypropylene
Temperature range	-30 °C to +90 °C

VPE	10 pcs
-----	--------

Performance characteristics:

- With clamping bracket

Article no. **01-35-2450**
**Plastic pipe clamp
Type CLIC-PA**

For 25 mm air sampling pipe

Data sheet excerpt:

Material	Polyamide
Temperature range	-40 °C to +90 °C

VPE	1 pc
-----	------

Aspiration-reducing film sheets

Marking tape

Marking tape for securing aspiration-reducing film sheets on the pipe system;
with red marking for easily locating the sampling points during inspections

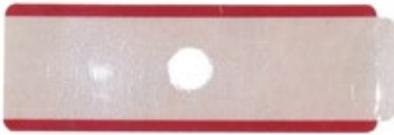
Data sheet excerpt:

Operating temperature range -20 °C to $+60\text{ °C}$

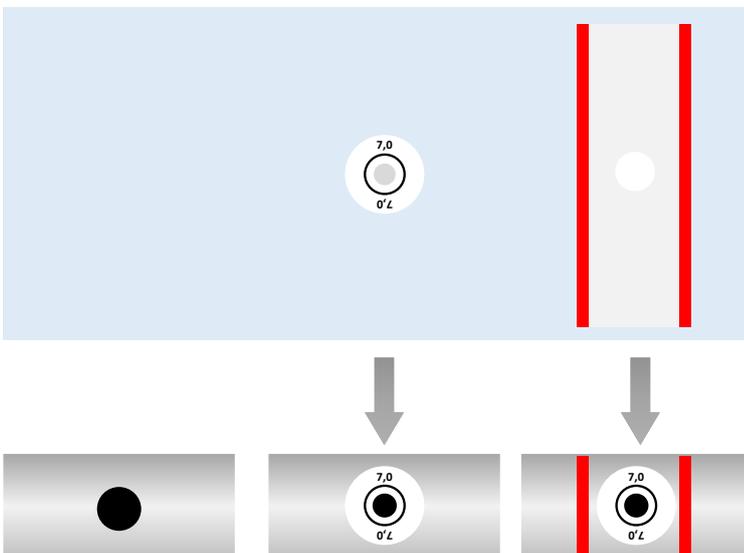
VPE 10 pcs / bag

Article no. **01-10-9330**

Marking tape for aspiration-reducing film sheet
Type AF-BR



Attaching aspiration-reducing film sheets



Aspiration-reducing film sheets

Aspiration reductions for defined sampling points. The film sheets allow easy installation and prevent whistling noises during operation. In addition, they are provided with a size identification mark which can be checked quickly. For uniform detection across all sampling points, the aperture diameters must be selected according to the respective project planning specifications.

Data sheet excerpt:

Operating temperature range	-20 °C to +60 °C
VPE 10 pcs	
i Marking tape type AF-BR for securing against detaching required	
i Not for use in cold storage areas and/or when using an air purge system	



Aspiration-reducing film sheets

Aperture diameter [mm]	Color: gray		Color: white	
	Article number	Type	Article number	Type
2.0	01-10-9390	AF-2.0	01-10-9790	AFW-2.0
2.5	01-10-9395	AF-2.5	01-10-9795	AFW-2.5
3.0	01-10-9400	AF-3.0	01-10-9800	AFW-3.0
3.2	01-10-9410	AF-3.2	01-10-9810	AFW-3.2
3.4	01-10-9420	AF-3.4	01-10-9820	AFW-3.4
3.6	01-10-9430	AF-3.6	01-10-9830	AFW-3.6
3.8	01-10-9440	AF-3.8	01-10-9840	AFW-3.8
4.0	01-10-9450	AF-4.0	01-10-9850	AFW-4.0
4.2	01-10-9460	AF-4.2	01-10-9860	AFW-4.2
4.4	01-10-9470	AF-4.4	01-10-9870	AFW-4.4
4.6	01-10-9480	AF-4.6	01-10-9880	AFW-4.6
5.0	01-10-9490	AF-5.0	01-10-9890	AFW-5.0
5.2	01-10-9500	AF-5.2	01-10-9900	AFW-5.2
5.6	01-10-9510	AF-5.6	01-10-9910	AFW-5.6
6.0	01-10-9520	AF-6.0	01-10-9920	AFW-6.0
6.8	01-10-9530	AF-6.8	01-10-9930	AFW-6.8
7.0	01-10-9540	AF-7.0	01-10-9940	AFW-7.0

Aspiration reductions

Plastic clip

Plastic clip for fixing type AK-x.y aspiration reductions to the air sampling pipe; suitable for use in cold storage areas and when using an air purge system

Data sheet excerpt:

Operating temperature range $-40\text{ }^{\circ}\text{C}$ to $+65\text{ }^{\circ}\text{C}$

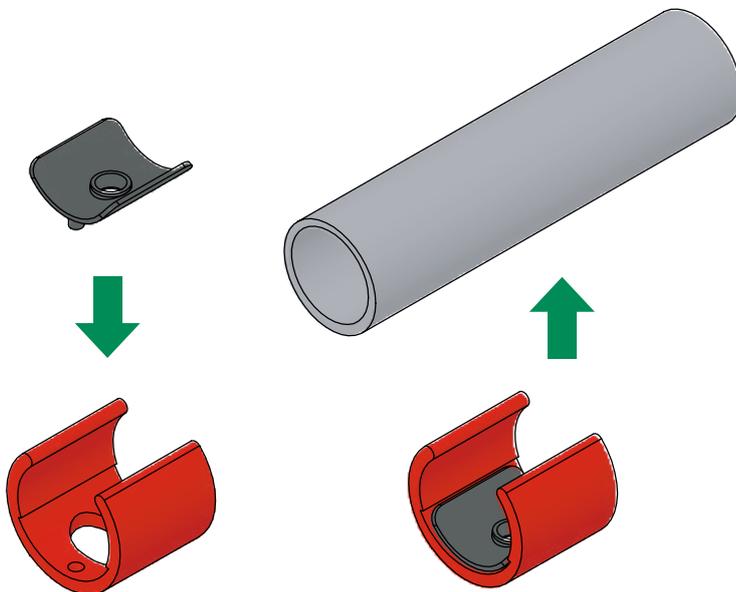
VPE 10 pcs / bag

Article no. **01-10-9750**

Plastic clip
Type AK-C



Plastic clip for aspiration reduction



Aspiration reductions

Aspiration reductions with defined sampling points for use in cold storage areas and/or when using an air purge system. The reductions allow easy installation and prevent whistling noises during operation. For uniform detection across all sampling points, the aperture diameters must be selected according to the respective project planning specifications

Data sheet excerpt:

Operating temperature range -40 °C to +65 °C

VPE 10 pcs

i Plastic clips type AK-C (01-10-9750) required for fixing.

**Aspiration reductions**

Aperture diameter [mm]	Article number	Type
2.0	01-10-9580	AK-2.0
2.5	01-10-9590	AK-2.5
3.0	01-10-9600	AK-3.0
3.2	01-10-9610	AK-3.2
3.4	01-10-9620	AK-3.4
3.6	01-10-9630	AK-3.6
3.8	01-10-9640	AK-3.8
4.0	01-10-9650	AK-4.0
4.2	01-10-9660	AK-4.2
4.4	01-10-9670	AK-4.4
4.6	01-10-9680	AK-4.6
5.0	01-10-9690	AK-5.0
5.2	01-10-9700	AK-5.2
5.6	01-10-9710	AK-5.6
6.0	01-10-9720	AK-6.0
6.8	01-10-9730	AK-6.8
7.0	01-10-9740	AK-7.0

Accessories for monitoring a climatic duct

Duct adapter

Accessories for highly sensitive monitoring of a convection air conditioning system with a TITANUS® aspirating smoke detector

Article no. **VE-10-0500**



Duct adapter Type E700-KA

Adapter for installing an air sampling pipe on an air duct

Data sheet excerpt:

Inner diameter	Pipe feed-through 26 mm
Net weight	164 g

VPE 1 pc

Article no. **VE-10-0510**



Blank cover plate for duct adapter Type E700-KAB

Blank cover plate for closing an unused bypass opening for systems for monitoring an air duct

Data sheet excerpt:

Net weight	454 g
------------	-------

VPE 1 pc

Separator for condensing humidity**Condensate separator**

Condensate separator for separating and collecting condensed fluids upstream of the aspirating smoke detector

Article no. **AD-10-0647**

**Condensate separator
Type KA-1**

Condensate separator for collecting and draining condensate from the air sampling pipe system; automatic water drain possible for areas with heavy condensation

Data sheet excerpt:

Operating temperature range	0 °C to +60 °C
Dimensions (W × H × D)	68 × 600 × 36 mm
Net weight	620 g
Material	PVC
Color	Light gray

VPE 1 pc

Performance characteristics:

- Plastic housing with manual drain valve
- Adhesive joint for integration into a pipe system

Pipe cleaning

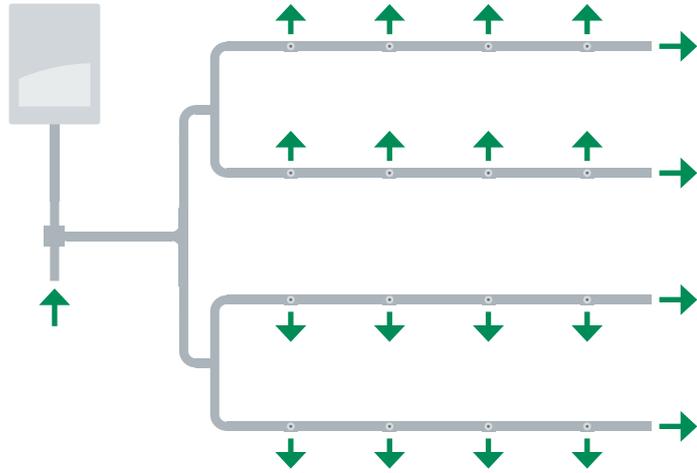
An air purge system is used for cleaning the pipe system and/or sampling points in areas that are difficult to access:

- In very dusty applications, the deposits forming in the pipe system are blown out with overpressure via the non-return valves at the sampling branch ends.
- In cold storage areas, the sampling points are de-iced with short bursts of compressed air. Plastic clips enable icing to be blown off in this case.

Depending on how often a pipe system has to be purged, the use of a manual air purge system or an automatic air purge system is recommended.

Important:

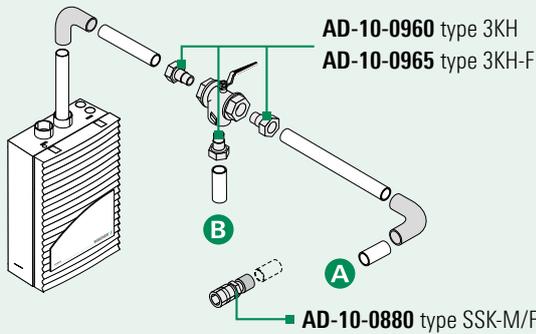
When using an air purge system in a cold storage area, ABS piping must be used in any case.



Manual air purge system

(sample setup; project planning must be performed in accordance with the manual.)

Connections: A – compressed air supply, B – pipe system



Purging of the pipe system by operating a three-way ball valve

Aspiration reductions for air purging:

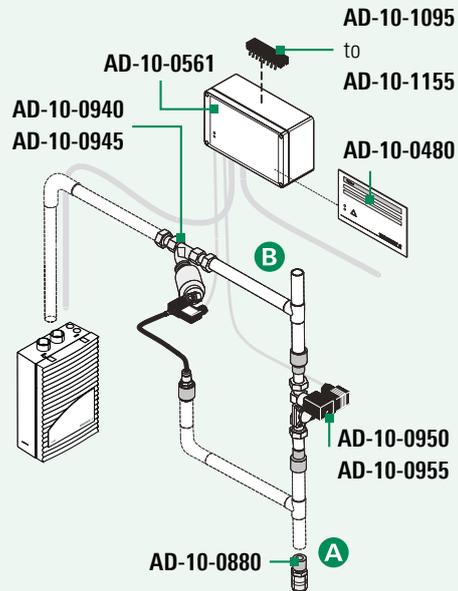
01-10-9750 type AK-C

01-10-9580 to 01-10-9740

Automatic air purge system

(sample setup; project planning must be performed in accordance with the manual.)

Connections: A – compressed air supply, B – pipe system



Automatic purging via a microcontroller-commanded device – particularly for frequent purging in case of heavy soiling or icing up

Aspiration reductions for air purging:

01-10-9750

01-10-9580 to 01-10-9740

For valve control performance characteristics, please refer to the microcontroller specifications

Valve control

Accessories for establishing a valve control for automatically controlling the purging process. Various microcontrollers are available for different purging and settling times

Article no. **AD-10-0561**



Performance characteristics:

- Enables air purging of two separate pipe systems
- Device prepared for accommodating a micro-controller that is adapted to the operating conditions

**Valve control
Type VSK1/c**

For automatic purging of iced up or soiled pipe systems

Data sheet excerpt:

Operating voltage	24 V DC (14 to 30 V DC)
Rated voltage	24 V DC
Current draw in stand-by (24 V)	20 mA
Current draw during valve control (24 V)	100 mA
Operating temperature range	-40 °C to +60 °C
Dimensions (W × H × D)	200 × 140 × 80 mm
Housing material	ABS plastics
Housing color	RAL 7035, Light gray

- VPE** 1 pc
- i** Required front film sheet: AD-10-0480
- i** Required microcontrollers: see page 106

Article no. **AD-10-0480**



**Front film sheet for valve control
Type FW-VC**

For indicating the operating status of the valve control

- VPE** 1 pc

Microcontroller for valve control



Microcontroller for valve control

NEW

Programmed microcontroller for controlling the automatic air purging process of the valve control, for purging soiled or iced-up pipe systems. A fault reported by the aspirating smoke detector is forwarded after two purging cycles if the purging process failed to remedy the fault (e.g. in case of pinched pipes).

Data sheet excerpt:

Performance characteristics

Air purging in case of fault, and optionally also as prophylaxis

VPE 1 pc

i For installation in valve control type VSK1/c

Microcontroller							
Use for	Air purging		Purging time [s]	Settling time [s]	Test time [s]	Article number	Type
	In case of fault	Prophylactic					
Soiling	×	–	1 × 10	20	55	AD-10-1095	MC-VC-R-7
	×	Every 24 h	1 × 10	20	55	AD-10-1105	MC-VC-R-8
	×	Every 24 h	1 × 20	12	55	AD-10-1155	MC-VC-R-11
	×	Every 3 h	1 × 10	20	55	AD-10-1145	MC-VC-R-10
	×	Every 60 min	1 × 10	20	55	AD-10-1135	MC-VC-R-9
Icing up	×	–	3 × 5	10	55	AD-10-1115	MC-VC-F-3
	×	Every 24 h	3 × 5	10	55	AD-10-1125	MC-VC-F-4

Valves for automatic air purge systems

Valves
Valves for compressed air connection, to relieve the pipe system and automatically separate an aspirating smoke detector from the connected pipe system

Article no. **AD-10-0940**



Performance characteristics:

- Pneumatically controlled 2/2-way piston valve (angled seat) with fitted pilot valve (currentless open)
- Prepared for connecting to 25 mm pipe systems

Shutoff valve with pilot valve / fittings
Type AVK-PV

For separating an aspirating smoke detector from the connected pipe system during an automatic air purging process

Data sheet excerpt:

Switching voltage	24 V DC
Operating temperature range	-10 °C to +60 °C
Operating pressure	Max. 16 bar
Control pressure	4 to 10 bar
Material	Red brass
Control cylinder	Stamped brass
Seat gasket	PTFE
Spindle gasket	NBR
VPE	1 pc

Article no. **AD-10-0945**



Performance characteristics:

- Pneumatically controlled 2/2-way piston valve (angled seat) with fitted pilot valve (currentless open)
- Prepared for connecting to 25 mm pipe systems

Shutoff valve with pilot valve / fittings
Type AVK-PV-F

For separating an aspirating smoke detector from the connected pipe system during an automatic air purging process in cold storage areas

Data sheet excerpt:

Switching voltage	24 V DC
Operating temperature range	-40 °C to +60 °C
Operating pressure	Max. 16 bar
Control pressure	4 to 10 bar
Material	Red brass
Control cylinder	Stamped brass
Seat gasket	PTFE
Spindle gasket	EPDM
VPE	1 pc

Article no. **AD-10-0950****Performance characteristics:**

- Servo-controlled seat valve (currentless closed) with diaphragm seal
- Prepared for connecting to 25 mm pipe systems

**Compressed air valve including fittings
Type DVK13**

For releasing a compressed air supply connected to the pipe system during an automatic air purging process

Data sheet excerpt:

Switching voltage	24 V DC
Operating temperature range	-10 °C to +60 °C
Operating pressure	0.3 to 20 bar
Material	Brass
Control cylinder	Stamped brass
Spindle gasket	NBR

VPE 1 pc

Article no. **AD-10-0955****Performance characteristics:**

- Servo-controlled seat valve (currentless closed) with diaphragm seal
- Prepared for connecting to 25 mm pipe systems

**Compressed air valve including fittings
Type DVK13-F**

For releasing a compressed air supply connected to the pipe system during an automatic air purging process in cold storage areas

Data sheet excerpt:

Switching voltage	24 V DC
Operating temperature range	-40 °C to +60 °C
Operating pressure	0.3 to 20 bar
Material	Brass
Control cylinder	Stamped brass
Spindle gasket	EPDM

VPE 1 pc

The ball valve performance characteristics are assigned to the individual types

Ball valves

Ball valves for separating an aspirating smoke detector manually from the connected air sampling pipe

Article no. **AD-10-0970**



Performance characteristics:

- Incl. three transition screw connections for connecting to a 25 mm pipe system

**2-way ball valve including fittings
Type 2KH**

For separating an aspirating smoke detector manually from the connected pipe system

Data sheet excerpt:

Operating temperature range	-45 °C to +180 °C
Length	188 mm
Operating pressure	Max. 50 bar
Housing material	Stainless steel
Ball material	Stainless steel
Seal	PTFE
Hand lever	Steel, plastic-coated

VPE 1 pc

Article no. **AD-10-0960**



Performance characteristics:

- Incl. three transition screw connections for connecting to a 25 mm pipe system

**3-way ball valve including fittings
Type 3KH**

For separating an aspirating smoke detector manually from the connected pipe system during an air purging process

Data sheet excerpt:

Operating temperature range	-20 °C to +150 °C
Length	194 mm
Operating pressure	Max. 16 bar
Housing material	Brass, nickeled
Ball material	Brass, chromed
Seal	PTFE
Hand lever	Steel, plastic-coated

VPE 1 pc

Article no. **AD-10-0965****Performance characteristics:**

- Incl. three transition screw connections for connecting to a 25 mm pipe system

**3-way ball valve including fittings
Type 3KH-F**

For separating an aspirating smoke detector manually from the connected pipe system during an air purging process in cold storage areas

Data sheet excerpt:

Operating temperature range	-40 °C to +80 °C
Length	194 mm
Operating pressure	Max. 10 bar
Housing material	Brass, nickeled
Ball material	Brass, chromed
Seal	PTFE
Hand level	Steel, plastic-coated

VPE 1 pc

Article no. **AD-10-0925****Performance characteristics:**

- Incl. three transition screw connections for connecting to a 25 mm pipe system

**3-way ball valve including fittings
Type 3KH-PVC**

For separating an aspirating smoke detector manually from the connected pipe system during an air purging process

Data sheet excerpt:

Operating temperature range	0 °C to +50 °C
Length	131 mm
Operating pressure	Max. 10 bar
Material	PVC
Seal	PTFE

VPE 1 pc

Article no. **AD-10-0915****Performance characteristics:**

- Incl. three transition screw connections for connecting to a 25 mm pipe system

**3-way ball valve including fittings
Type 3KH-ABS**

For separating an aspirating smoke detector manually from the connected pipe system during an air purging process. Can be used in cold storage areas and/or for halogen-free project planning

Data sheet excerpt:

Operating temperature range	-40 °C to +50 °C
Length	131 mm
Operating pressure	Max. 10 bar
Material	ABS
Seal	PTFE

VPE 1 pc

Pipe closures for air purge systems

Non-return valve

Valve for cleaning the pipe system by means of bursts of compressed air

Article no. **01-10-9380**



Performance characteristics:

- Installation is done at the end of each piping branch for pipe systems with an air purge system

**Non-return valve, spring-loaded
Type RSV-R25**

For cleaning the pipe system during an air purging process

Data sheet excerpt:

Connection diameter	25 mm
Color	Dark gray
Minimum opening pressure	0.5 bar
Housing material	PVC
Operating temperature range	0 °C to +50 °C

VPE 1 pc

i Not suitable for cold storage applications!

Installation and connection accessories for air purge systems

Accessories

Quick-connect coupling for establishing an air purge system

Article no. **AD-10-0880**



Performance characteristics:

- Incl. transition connection for connecting to a 25 mm pipe system

**Quick-connect coupling with fittings
Type SSK-M/F**

For detachable connection of a compressed air supply to a pipe system

Data sheet excerpt:

Operating temperature range	-20 °C to +80 °C
-----------------------------	------------------

VPE 1 pc

For specific performance characteristics, please refer to the descriptions of the filter types

Air filters

Air filters for separating dust particles from the aspirated air in order to extend the inspection intervals

Article no. **AD-10-1975**



Performance characteristics:

- Coarse filter for use in standard applications
- Suitable for wall mounting

Air filter for TITANUS® Type LF-AD-k

NEW

Filters dirt and dust particles out of the air aspirated by the aspirating smoke detector

Data sheet excerpt:

Operating temperature range	-30 °C to +60 °C
Dimensions (W × H × D)	80 × 85 × 82 mm
Housing material	ABS plastics
Housing color	RAL 7035, Light gray

VPE 1 pc

Article no. **AD-10-1960**



Performance characteristics:

- Use in standard applications
- Suitable for wall mounting
- Filters particles from a size of approx. 15 µm
- Filter for separating dust particles such as insects, fibres, hair and pollen

Air filter for TITANUS® Type LF-AD/a

Filters dirt and dust particles out of the air aspirated by the aspirating smoke detector

Data sheet excerpt:

Operating temperature range	-30 °C to +60 °C
Dimensions (W × H × D)	130 × 193 × 95 mm
Housing material	ABS plastics
Housing color	RAL 9018, Papyrus white

VPE 1 pc

Article no. **AD-10-1963**
**Air filter for TITANUS®
Type LF-AD-1/a**
Filters dirt and dust particles out of the air aspirated by the aspirating smoke detector
Data sheet excerpt:

Operating temperature range	-30 °C to +60 °C
Dimensions (W × H × D)	130 × 193 × 95 mm
Housing material	ABS plastics
Housing color	RAL 9018, Papyrus white

VPE 1 pc

Performance characteristics:

- Use in standard applications
- Suitable for wall mounting
- Filters particles from a size of approx. 10 µm
- Filter for separating dust particles such as insects, fibres, hair and pollen, paint pigments and finer dusts

Article no. **AD-10-1966**
**Air filter for TITANUS®
Type LF-AD-2/a**
Filters fine dirt and dust particles out of the air aspirated by the aspirating smoke detector
Data sheet excerpt:

Operating temperature range	-30 °C to +60 °C
Dimensions (W × H × D)	130 × 193 × 95 mm
Housing material	ABS plastics
Housing color	RAL 9018, Papyrus white

VPE 1 pc

Performance characteristics:

- Use in applications with fine particulate contamination
- Suitable for wall mounting
- Filters particles from a size of approx. 5 µm
- Filter for separating particles such as fine particulate matter

Article no. **AD-10-0336****Filter element**
Type LF-AD-E-k

NEW

Replacement element for air filter type LF-AD-k, consisting of one coarse filter mat

Data sheet excerpt:

Operating temperature range -30 °C to +60 °C

VPE 1 set

Article no. **AD-10-0330****Filter element**
Type LF-AD-E

Replacement element for air filter type LF-AD, consisting of one fine, one medium and one coarse filter mat each

Data sheet excerpt:

Operating temperature range -30 °C to +80 °C

VPE 1 set

Article no. **AD-10-0335****Filter element for air filter LF-AD**
Type LF-AD-E_Sonder

Replacement element for air filter type LF-AD-1, consisting of 3 fine filter mats

Data sheet excerpt:

Operating temperature range -30 °C to +80 °C

VPE 1 set

Article no. **AD-10-0332****Filter element for air filter LF-AD-2**
Type LF-AD-E-2

Replacement element for air filter type LF-AD-2, consisting of one ultra-fine, one medium and one coarse filter mat each

Data sheet excerpt:

Operating temperature range -30 °C to +80 °C

VPE 1 set

For specific performance characteristics, please refer to the descriptions of the filter types

Special filters

Special air filters for separating dust particles from very dusty areas

Data sheet excerpt:

Operating temperature range	-20 °C to +60 °C
Diameter	80 mm

Article no. **AD-10-2000**



Special filter for TITANUS® aspirating smoke detectors Type SF-650

Filters ultra-fine dirt and dust particles out of the air aspirated by the aspirating smoke detector

Data sheet excerpt:

Length	673 mm
--------	--------

VPE 1 pc

Performance characteristics:

- Use in heavily contaminated areas where longer service lives are required
- Housing resistant to many organic and inorganic chemicals, fuels and hot water
- Filters particles from a size of approx. 1 µm

Article no. **AD-10-2010**



Special filter for TITANUS® aspirating smoke detectors Type SF-400

Filters ultra-fine dirt and dust particles out of the air aspirated by the aspirating smoke detector

Data sheet excerpt:

Length	418 mm
--------	--------

VPE 1 pc

Performance characteristics:

- Use in heavily contaminated areas
- Housing resistant to many organic and inorganic chemicals, fuels and hot water
- Filters particles from a size of approx. 1 µm

Article no. **AD-10-1920**
Filter element
Type SF-650-E

Replacement element for special filter type SF-650

Data sheet excerpt:

Operating temperature range	-20 °C to +60 °C
Length × diameter	508 × 64 mm
Material	Polypropylene

VPE	1 pc
-----	------

Article no. **AD-10-1930**
Filter element
Type SF-400-E

Replacement element for special filter type SF-400

Data sheet excerpt:

Operating temperature range	-20 °C to +60 °C
Length × diameter	254 × 64 mm
Material	Polypropylene

VPE	1 pc
-----	------

Detonation flame arresters and accessories



Detonation flame arresters

Accessories for monitoring rooms in which the formation of explosive gas/air mixtures or vapor/air mixtures is to be expected; for use in TITANUS FUSION®, TITANUS PRO-SENS®, TITANUS PRO-SENS®/net and TITANUS TOP-SENS®

Article no. **01-10-7051**

Performance characteristics:

- EC type-tested
- Incl. transition screw connection on one end for connecting to the air sampling pipe system

**Detonation flame arrester, set
Type EG IIA/a**

For protecting potentially explosive areas from possible ignition of gas/air mixtures or vapor/air mixtures by the aspirating smoke detectors used to monitor these areas

Data sheet excerpt:

Pipe connecting thread	G ¾"
Explosion group	II A
Length × diameter	112 × 80 mm
Gap width	0.7 mm
Flame filter	3-fold
VPE	1 pc

Article no. **01-10-7061**

Performance characteristics:

- EC type-tested
- Incl. transition screw connection on one end for connecting to the air sampling pipe system

**Detonation flame arrester, set
Type EG IIB3/a**

For protecting potentially explosive areas from possible ignition of gas/air mixtures or vapor/air mixtures by the aspirating smoke detectors used to monitor these areas

Data sheet excerpt:

Pipe connecting thread	G ¾"
Explosion group	II B 3
Length × diameter	135 × 80 mm
Gap width	0.5 mm
Flame filter	5-fold
VPE	1 pc

Article no. **01-10-7071****Performance characteristics:**

- EC type-tested
- Incl. two reducing nipples and a transition screw connection for connecting to the air sampling pipe system

**Detonation flame arrester, set
Type EG IIC/a**

For protecting potentially explosive areas from possible ignition of gas/air mixtures or vapor/air mixtures by the aspirating smoke detectors used to monitor these areas

Data sheet excerpt:

Pipe connecting thread	G 1"
Explosion group	II C
Length × diameter	145 × 100 mm
Gap width	0.2 mm
Flame filter	5-fold
VPE	1 pc

Article no. **01-10-9016****Steel air sampling pipe with screw connection
Type R-2525-St**

Pre-assembled air sampling pipe for connecting the detonation flame arrester to the aspirating smoke detector

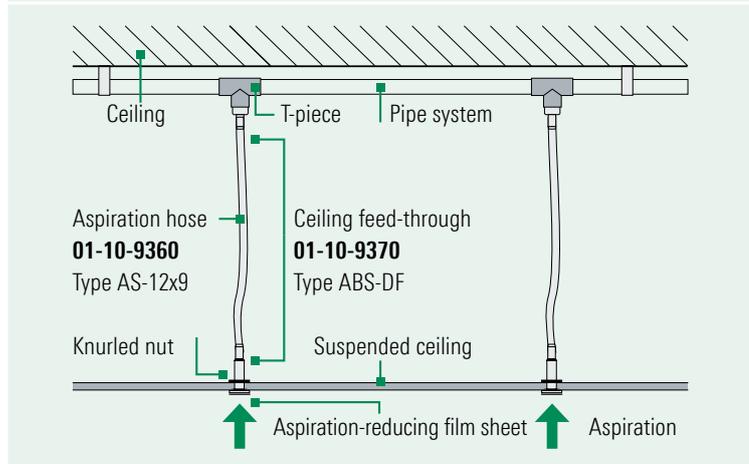
Data sheet excerpt:

Outer diameter	25 mm
Inner diameter	20 mm
Color	Steel gray
VPE	1 m / unit

Accessories for inconspicuous monitoring of aesthetically demanding areas

Ceiling feed-through

Accessories for installing a pipe system in suspended ceilings. Discrete design thanks to ceiling feed-through



Sample setup for a ceiling feed-through

Article no. **01-10-9360**



**Aspiration hose 12 x 9 mm
Type AS-12 x 9**

Aspiration hose for ceiling feed-through

Data sheet excerpt:

Operating temperature range	-10 °C to +40 °C
Material	PE
Color	White
VPE	50 meters

Article no. **01-10-9370**



**Ceiling feed-through
Type ABS-DF**

For installing a sampling point on a suspended ceiling with a max. thickness of 35 mm

Data sheet excerpt:

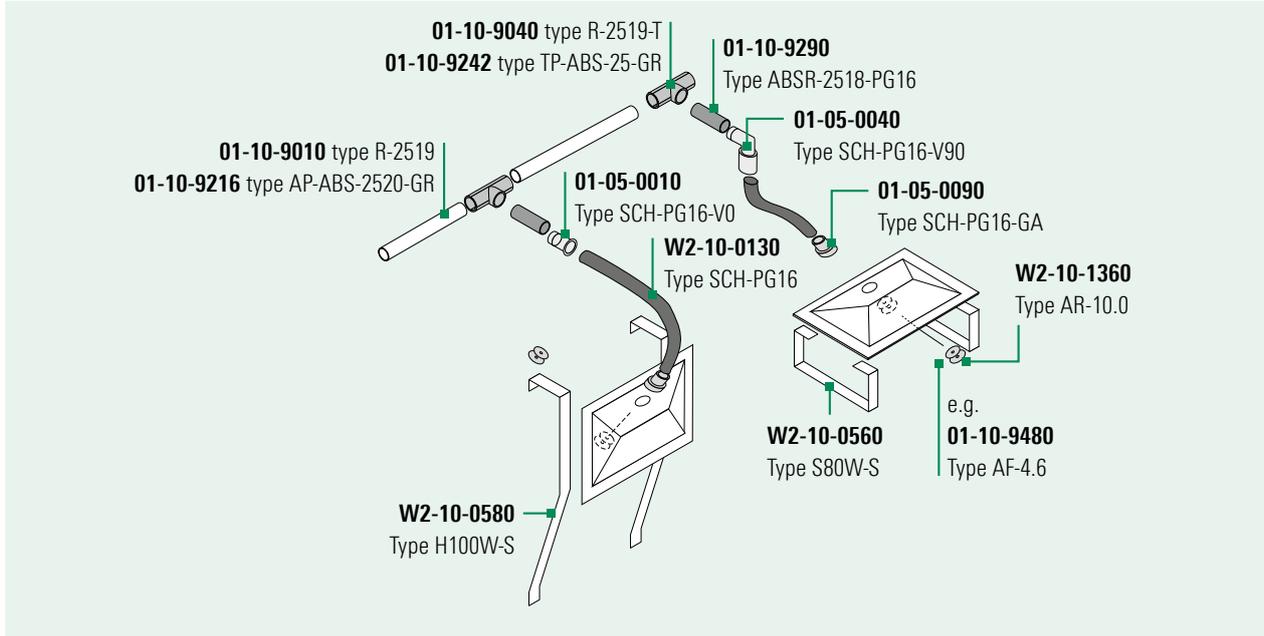
Operating temperature range	-40 °C to +80 °C
Color	White
VPE	10 pcs / bag

Performance characteristics:

- Complete with fitting set for the ceiling board and connection adapter for the aspiration hose

Accessories for equipment monitoring**Aspiration funnel and pipe cap**

Accessories for monitoring closed equipment such as switch cabinets, server cabinets or production machines



Sample setup for an aspiration funnel

Article no. **W2-10-0510****Aspiration funnel
Type ASTW****For concentrating the exhaust air on monitored equipment****Data sheet excerpt:**

Dimensions (W × H × D)	260 × 160 × 40 mm
Material	Metal
Color	Papyrus white

VPE 1 pc

Article no. **W2-10-0130****Aspiration hose
Type SCH-PG16****Halogen-free aspiration hose for constructing flexible pipe transitions in a pipe system****Data sheet excerpt:**

Outer diameter	21.2 mm
Inner diameter	16.0 mm
Operating temperature range	-50 °C to +95 °C
Color	Gray
Recomm. screw thread	M20 × 1.5; PG 16
Bending radius	35 mm
Material	Polyamide

VPE 50 meters

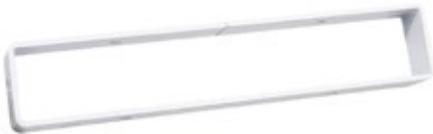
i For required adapters and glands, see page 122

Article no. **01-10-9350**
Aspiration hose
Type SCH-P-25
Aspiration hose for constructing flexible pipe transitions in a pipe system
Data sheet excerpt:

Outer diameter	25 mm
Inner diameter	20 mm
Operating temperature range	-10 °C to +55 °C
Bending radius	75 mm
Material	PVC

VPE 25 meters
Article no. **W2-10-0560**
Spacer bracket set 80 mm
Type S80W-S
For installing an aspiration funnel at a distance of 80 mm from the monitored equipment
Data sheet excerpt:

Color	RAL 9018, Papyrus white
-------	-------------------------

VPE 1 pc
Article no. **W2-10-0570**
Spacer bracket set 30 mm
Type S30W-S
For installing an aspiration funnel at a distance of 30 mm from the monitored equipment
Data sheet excerpt:

Color	RAL 9018, Papyrus white
-------	-------------------------

VPE 1 pc
Article no. **W2-10-0580**
Suspension bracket set 90 mm
Type H100W-S
For suspended installation of an aspiration funnel at a distance of 90 mm from the monitored equipment
Data sheet excerpt:

Color	RAL 9018, Papyrus white
-------	-------------------------

VPE 1 pc

Article no. **01-05-0010**
Hose gland
Type SCH-PG16-VO
Straight transition from aspiration hose to air sampling pipe with PG16 internal thread
 1 pc
Article no. **01-05-0040**
Hose gland
Type SCH-PG16-V90
90° transition from aspiration hose to air sampling pipe with PG16 internal thread
 1 pc
Article no. **01-05-0090**
PG16 thread adapter
Type SCH-PG16-GA
Adapter for transition from aspiration hose to aspiration reduction Type AR-10.0
 1 pc
Article no. **01-10-9290**
Pipe with PG16 internal thread, halogen-free
Type ABSR-2518-PG16
Fitting for establishing a pipe system for room and equipment monitoring
Data sheet excerpt:

Color	Light gray
Operating temperature range	-40 °C to +80 °C

 5 pcs/ bag

Article no. **W2-10-1360**



**Aspiration reduction
Type AR-10.0**

Aspiration reduction, featuring a 10 mm hole for attaching an aspiration-reducing film sheet

Data sheet excerpt:

Exterior dimensions	PG 16
Operating temperature range	-40 °C to +80 °C

VPE 10 pcs / bag

i Article no.: 01-10-9290 required

Article no. **01-10-9300**



**Pipe cap
Type R-RH**

Fitting for establishing a pipe system for equipment monitoring; prepared for attaching an aspiration-reducing film sheet

Data sheet excerpt:

Operating temperature range	-20 °C to +60 °C
Material	PVC
Color	Dark gray

VPE 10 pcs / bag

Article no. **01-10-9310**



**Pipe cap, halogen-free
Type ABS-RH**

Fitting for establishing a pipe system for equipment monitoring; prepared for attaching an aspiration-reducing film sheet

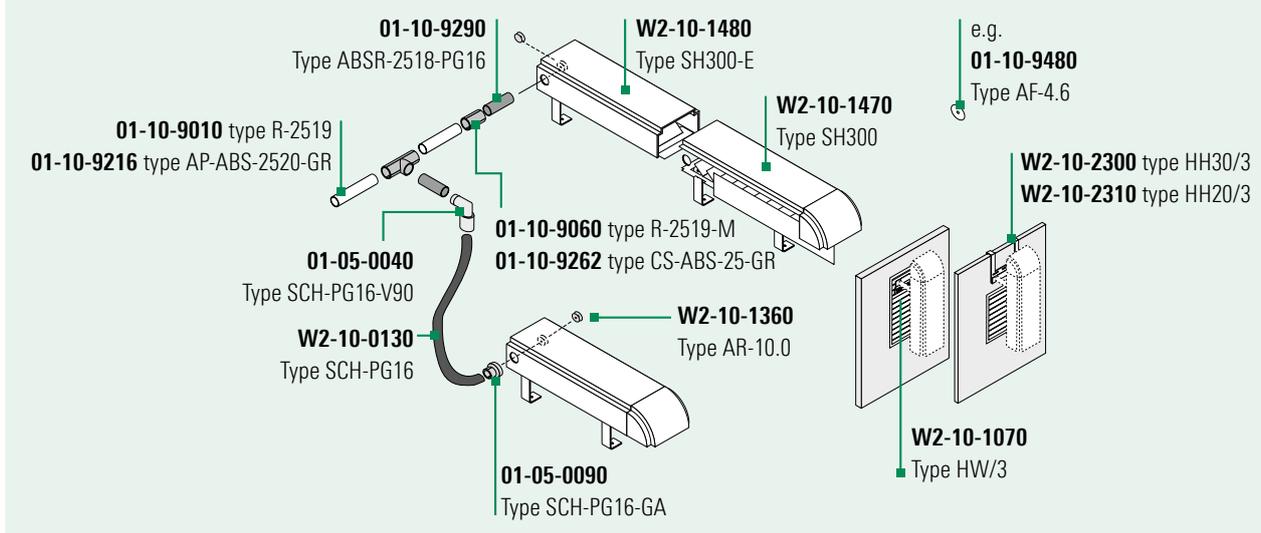
Data sheet excerpt:

Operating temperature range	-40 °C to +80 °C
Material	ABS
Color	Light gray

VPE 10 pcs / bag

Accessories for collecting the exhaust air**Collecting hood****Hood for collecting the exhaust air from an equipment element to be monitored****Data sheet excerpt:**

Length	300 mm
Material	Metal
Color	Papyrus white



Sample setup for a collecting hood

Article no. **W2-10-1470****Collecting hood
Type SH300**

Patented exhaust air collecting hood with air guide fins for connection via air sampling pipe or aspiration hose to an aspirating smoke detector with adjustable mounting height

VPE 1 pc

Article no. **W2-10-1480****Extension for collecting hood
Type SH300-E**

Patented exhaust air collecting hood with air guide fins for connection via air sampling pipe or aspiration hose to an aspirating smoke detector with adjustable mounting height

VPE 1 pc

Article no. **W2-10-1070**
Holding bracket
Type HW/3

For attaching a collecting hood type SH300 to the exhaust air openings of an equipment element to be monitored

Data sheet excerpt:

Material	Metal
Color	RAL 9018, Papyrus white

VPE	1 pc
------------	------

Article no. **W2-10-2300**
Suspension bracket
Type HH30/3

For attaching a collecting hood type SH300 to the exhaust air openings of an equipment element to be monitored

Data sheet excerpt:

Suspension width	Max. 30 mm
Material	Metal
Color	RAL 9018, Papyrus white

VPE	1 pc
------------	------

Article no. **W2-10-2310**
Suspension bracket
Type HH20/3

For attaching a collecting hood type SH300 to the exhaust air openings of an equipment element to be monitored

Data sheet excerpt:

Suspension width	Max. 20 mm
Material	Metal
Color	RAL 9018, Papyrus white

VPE	1 pc
------------	------

Article no. **AD-10-4710****Device holder for aspirating smoke detectors
Type MT-2**

Device holder for stand-alone installation of **TITANUS FUSION®**,
TITANUS PRO-SENS®, **TITANUS PRO-SENS®/net**, **TITANUS TOP-SENS®**

Data sheet excerpt:

Dimensions (W × H × D)	200 × 365 × 184 mm
Net weight	1.8 kg
Material	Steel sheet, painted
Color	RAL 9018, Papyrus white

VPE 1 pc

i Pipe adapter type PA-W-P or PA-W-A required

Performance characteristics:

- Cut-outs for pipe feed-through and adapter cable of the optional shutdown module

Article no. **01-10-9065****Pipe adapter
Type PA-W-P**

Adapter for connecting the pipe system to an aspirating smoke detector
when using the device holder type MT-2

Data sheet excerpt:

Operating temperature range	-10 °C to +60 °C
Material	PVC
Color	Dark gray

VPE 1 pc

Article no. **01-10-9265****Pipe adapter
Type PA-W-A**

Adapter for connecting the pipe system to an aspirating smoke detector
when using the device holder type MT-2

Data sheet excerpt:

Operating temperature range	-40 °C to +80 °C
Material	ABS
Color	Light gray

VPE 1 pc

Fire-resistant collar for air sampling pipe



Fire-resistant collar

Fire-resistant collar for wall and ceiling feed-through of flammable pipe systems in firewalls; meets the requirements for fire resistance Class R90

Data sheet excerpt:

Operating temperature range	-35 °C to +105 °C
Material	ABS

i Approval number: Z-19.17-416

Article no. **01-10-8060**

Performance characteristics:

- Tested for fire resistance class R90 and approved for flammable pipes made of PVC and ABS
- Wall thickness for feed-through must be at least 175 mm

Fire-resistant collar for firewalls

Type R90/<300

Fire-resistant collar for wall and ceiling feed-through of flammable pipe systems in firewalls; to be used for walls and ceilings up to 300 mm thickness

VPE 1 pc

Article no. **01-10-8065**

Performance characteristics:

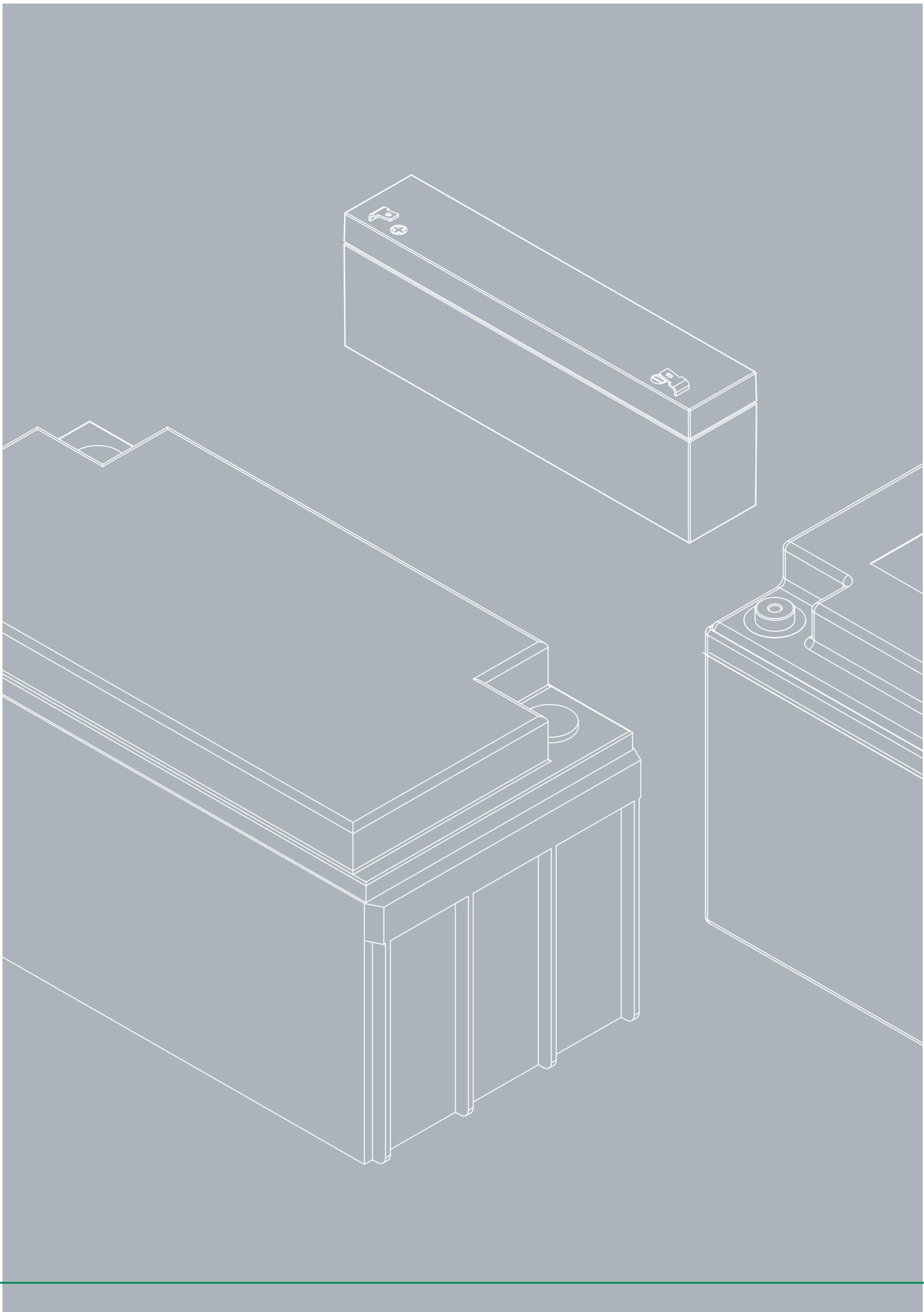
- Tested for fire resistance class R90 and approved for flammable pipes made of PVC and ABS up to an outer diameter of 140 mm
- Wall thickness for feed-through must be at least 175 mm

Fire-resistant collar for firewalls

Type R90/>300

Fire-resistant collar for wall and ceiling feed-through of flammable pipe systems in firewalls; to be used for walls and ceilings up to 300 mm thickness

VPE 1 pc



Power supplies

Power supplies in wall housing	130
Power supplies in 19" format	133
Batteries	135
Electrical accessories	136
Accessories for 19" format	138

For technical data and performance characteristics, please refer to the respective power supply types

Power supplies in housing

Power supplies for aspirating smoke detectors in wall housing

Common performance characteristics:

- Version in accordance with EN 54-4/A2
- Dry contacts for "mains fault" and "battery fault"
- Battery fusing
- Battery deep discharge protection
- Integrated overvoltage protection

Article no. **SV-10-0160**



Performance characteristics:

- Battery capacity 12 Ah
- Four visual status indicators at the housing front for "mains fault", "battery fault", "output voltage 1 present" and "output voltage 2 present"

Power supply

Type BNL-3-12-H

Battery-buffered power supply in wall housing

VaS **G 210040**

Data sheet excerpt:

Input voltage	230 V +/- 15%, 50 to 60 Hz
Output voltage	27.2 V DC +/- 2%
Output current	3 A (incl. battery charge)
Max. contact load	24 V DC / 1 A or 120 V AC / 0.5 A
Operating temperature range	-5 °C to +40 °C
Dimensions (W x H x D)	248 x 322 x 126 mm
Housing material	Steel sheet / plastic
Housing color	Light gray

VPE 1 pc

Article no. **SV-10-0165****Performance characteristics:**

- Battery capacity 12 Ah
- Four visual status indicators at the housing front for "mains fault", "battery fault", "output voltage 1 present" and "output voltage 2 present"

**Power supply
Type BNL-3-24-H****Battery-buffered power supply in wall housing**

VdS G 210040

Data sheet excerpt:

Input voltage	230 V +/- 15%, 50 to 60 Hz
Output voltage	27.2 V DC +/- 2%
Output current	3 A (incl. battery charge)
Max. contact load	24 V DC / 1 A or 120 V AC / 0.5 A
Operating temperature range	-5 °C to +40 °C
Dimensions (W x H x D)	289 x 350 x 189 mm
Housing material	Steel sheet
Housing color	Light gray

VPE 1 pc

Article no. **SV-10-0170****Performance characteristics:**

- Battery capacity 12 Ah
- Four visual status indicators at the housing front for "mains fault", "battery fault", "output voltage 1 present" and "output voltage 2 present"

**Power supply
Type BNL-6-24-H****Battery-buffered power supply in wall housing**

VdS G 210041

Data sheet excerpt:

Input voltage	230 V +/- 15%, 50 to 60 Hz
Output voltage	27.2 V DC
Output current	6 A (incl. battery charge)
Max. contact load	24 V DC / 1 A or 120 V AC / 0.5 A
Operating temperature range	-5 °C to +40 °C
Dimensions (W x H x D)	289 x 350 x 189 mm
Housing material	Steel sheet
Housing color	Light gray

VPE 1 pc

Article no. **SV-10-0185**
Power supply
Type AkkuTEC 2412 VdS C
VdS G 209167
Data sheet excerpt:

Input voltage	230 V +/- 15%, 50 to 60 Hz
Output voltage	21.6 to 28.3 V DC
Output current	12 A (incl. battery charge)
Max. contact load	30 V DC / 0.5 A
Operating temperature range	-5 °C to +40 °C
Dimensions (W x H x D)	464 x 608 x 213 mm
Housing material	Steel sheet
Housing color	Light gray

VPE 1 pc
Performance characteristics:

- Min. battery capacity: 26 Ah
- Max. battery capacity: 65 Ah
- Four visual status indicators at the housing front for "operation", "collective fault", "mains fault" and "battery fault"

For technical data and performance characteristics, please refer to the respective power supply types

Power supplies 482.6 mm (19")

Power supplies and installation accessories for aspirating smoke detectors for installation in 482.6 mm (19") subracks

Common performance characteristics:

- Version in accordance with EN 54-4/A2
- Dry contacts for "mains fault" and "battery fault"
- Battery fusing
- Battery deep discharge protection
- Integrated overvoltage protection

Article no. **SV-10-0460**



Performance characteristics:

- Battery capacity 2 × 12 V DC / 38 Ah
- Four visual status indicators for "mains fault", "battery fault", "output voltage 1 present" and "output voltage 2 present"

Power supply Type BNL-6-38-R

Battery-buffered power supply in 482.6 mm (19") frame

Data sheet excerpt:

Input voltage	230 V +/- 15%, 50 to 60 Hz
Output voltage	27.2 V DC +/- 2%
Output current	6 A (incl. battery charge)
Max. contact load	24 V DC / 1 A or 120 V AC / 0.5 A
Operating temperature range	-5 °C to +40 °C
Dimensions (W × H)	482.6 × 133.5 mm
Dimensions (19")	3 U, 84 DU
Color	Light gray

VPE 1 pc

Article no. **SV-10-0470**



Performance characteristics:

- Battery capacity 2 × 12 V DC / 65 Ah
- Four visual status indicators for "mains fault", "battery fault", "output voltage 1 present" and "output voltage 2 present"

Power supply Type BNL-8-65-R

Battery-buffered power supply in 482.6 mm (19") frame

VaS G 210140

Data sheet excerpt:

Input voltage	230 V +/- 15%, 50 to 60 Hz
Output voltage	27.2 V DC +/- 2%
Output current	8 A (incl. battery charge)
Max. contact load	24 V DC / 1 A or 120 V AC / 0.5 A
Operating temperature range	-5 °C to +40 °C
Dimensions (W × H × D)	482.6 × 133.5 mm
Dimensions (19")	3 U, 84 DU
Color	Light gray

VPE 1 pc

Article no. **SV-10-0480****Performance characteristics:**

- Battery capacity 2 × 12 V DC / 65 Ah
- Four visual status indicators at the housing front for "mains fault", "battery fault", "output voltage 1 present" and "output voltage 2 present"

Power supply
Type BNL-12-65-R

Battery-buffered power supply in 482.6 mm (19") frame; prepared for connection of two external batteries (max. 12 V / 65 Ah), on the bottom of the 19" cabinet

Vas **G 210081**
Data sheet excerpt:

Input voltage	230 V +/- 15%, 50 to 60 Hz
Output voltage	27.2 V DC +/- 2%
Output current	12 A (incl. battery charge)
Max. contact load	24 V DC / 1 A or 120 V AC / 0.5 A
Operating temperature range	-5 °C to +40 °C
Dimensions (W × H)	482.6 × 133.5 mm
Dimensions (19")	3 U, 84 DU
Color	Light gray

VPE 1 pc

Batteries

Batteries	
Maintenance-free lead batteries for integration in battery-buffered power supplies	
Data sheet excerpt:	
Operating temperature range	0 °C to +40 °C
Performance characteristics	With VdS approval
VPE	1 pc
	

Sample photo

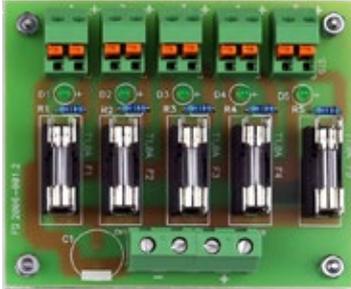
Batteries					
Capacity [Ah]	Dimensions [mm]	Weight, gross [kg]	VdS number	Article number	Type
2.1	178 × 35 × 66	1.0	G 103115	10-90-0200	CT2.1-12
7	151 × 65 × 99	2.4	G 103049	10-90-0300	CT7-12
12	155 × 100 × 100	3.8	G 103050	10-90-0450	CT12-12
17	181 × 77 × 167	5.7	G 103051	10-90-0500	CT17-12
18	181 × 167 × 77	5.3	G 114019	10-90-0510	CT18-12
24	180 × 130 × 175	8.3	G 103052	10-90-0600	CT24-12
26	175 × 166 × 125	8.2	G 109112	10-90-0610	CT26-12
38	200 × 175 × 165	13.0	G 103053	10-90-0700	CT38-12
44	198 × 157 × 167	13.3	G 111002	10-90-0710	CT44-12
65	348 × 178 × 167	21.0	G 104035	10-90-0800	CT65-12

Electrical accessories for installing power supplies

Electrical accessories

Electrical accessories for installing power supplies in subracks with 482.6 mm design (19")

Article no. **SV-10-0410**



Fuse module

Type FU-1

Extension module for individual fusing of the consumers connected to a power supply

Data sheet excerpt:

Micro-fuses	5 × 1 A/slow-blow
-------------	-------------------

Dimensions (W × H × D)	90 × 100 × 35 mm
------------------------	------------------

VPE	1 pc
-----	------

Performance characteristics:

- Up to five consumers can be connected

Article no. **SV-10-0415**



Fuse module

Type FU-2

Extension module for individual fusing of the consumers connected to a power supply

Data sheet excerpt:

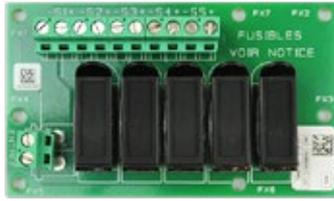
Micro-fuses	3 × 4 A/fast-blow
-------------	-------------------

Dimensions (W × H × D)	43 × 78 × 25 mm
------------------------	-----------------

VPE	1 pc
-----	------

Performance characteristics:

- Up to three consumers can be connected

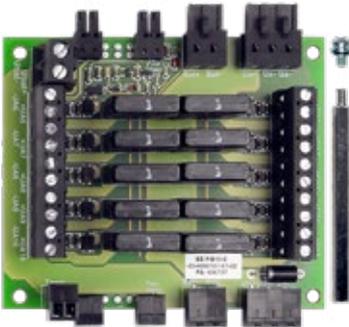
Article no. **SV-10-0420**
**Fuse module
Type FU-3**
Extension module for individual fusing of the consumers connected to a power supply
Data sheet excerpt:

Micro-fuses	5 × 4 A / fast-blow
Dimensions (W × H × D)	59 × 99 × 25 mm

VPE 1 pc

Performance characteristics:

- Up to five consumers can be connected

Article no. **SV-10-0430**
**Fuse module
Type FU-4**
Extension module for individual fusing of the consumers connected to a power supply
Data sheet excerpt:

Micro-fuses	10 × 1 A / slow-blow
Dimensions (W × H × D)	120 × 107 × 68 mm

VPE 1 pc

Performance characteristics:

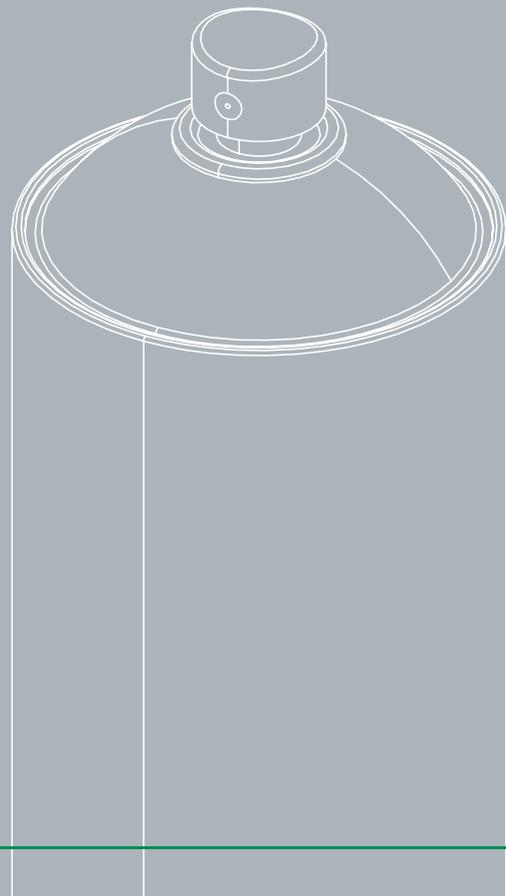
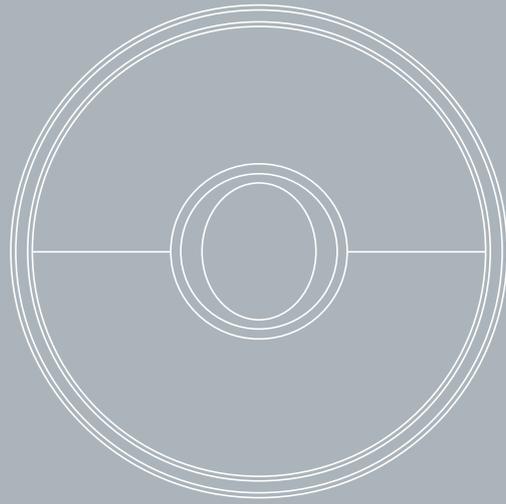
- Up to 10 consumers can be connected

Mechanical accessories for installing power supplies**Mechanical accessories**Article no. **08-20-1100****Battery holder
Type AF-1****Battery holder for cabinet system TS 8806**

VPE 1 pc

Article no. **08-20-1110****Profile rail for battery holder
Type PB-AF-1****Profile rail for attaching batteries to the battery holder type AF-1**

VPE 1 pc



Smoke and aerosol generation

Pyrolysis system	142
Smoke cartridges NEW	143
Smoke matches NEW	144
Smoke pen	145
Spray aerosol NEW	146
Remote testing system NEW	147

Response test for highly sensitive aspirating smoke detectors

Pyrolysis/fire tests

Pyrolysis system and accessories for performing reproducible response tests for testing highly sensitive aspirating smoke detectors. The pyrolysis tests are carried out on site and are used for checking the project planning as well as for regular function checks within the scope of an inspection.

Article no. **95-10-0500**



Pyrolysis system Type PYS 100

For performing reproducible response tests on early fire detection systems; set consists of: pyrolysis unit, pyrolysis box, transport case, accessories

Data sheet excerpt:

Transport case dimensions (W × H × D)	600 × 500 × 300 mm
Weight	19 kg

VPE 1 pc

Article no. **95-10-0230**



Test coils for pyrolysis system PYS 100 Type TW-VE-E90

Standardized test coils for simulating the pyrolysis of electrical cables and components

Data sheet excerpt:

Length	2 m
--------	-----

VPE 10 pcs

Performance characteristics:

- Ready-cut 0.8 mm single wire with halogen-free insulation
- For response tests in rooms and electrical devices/cabinets

Smoke cartridges

Smoke cartridges

NEW

Smoke cartridges for testing smoke detectors and checking air flow conditions, e.g. in IT areas. Generate chlorine-free smoke



Smoke cartridges							
Smoke volume [m ³]	Smoke duration [secs.]	Smoke color	Dimensions [mm]	Cartridge weight [g]	Article number	Type	Content [pcs/box]
2.5	40	White	32 × Ø 14	3	BM-50-0005	Pure-AX 3	10
8.5	90	White	32 × Ø 18	9	BM-50-0010	Pure-AX 9	10
17	180	White	63 × Ø 18	18	BM-50-0015	Pure-AX 18	5
55	180	White	63 × Ø 32	60	BM-50-0020	Pure-AX 60	5

Smoke matches**Smoke matches**

Tools for performing response tests with TITANUS® aspirating smoke detectors; also suitable for use in oxygen-reduced environments (OxyReduct®)

Article no. **BM-50-1000**

**Smoke matches****Type SPLINTAX 25****NEW**

Smoke matches for testing the fire detection of aspirating smoke detectors

Data sheet excerpt:

Smoke time	20 secs.
Smoke volume	approx. 0.7 m ³
Weight per smoke match	1 g
Diameter	4 mm
Length	45 mm

Tools for response tests**Tools**

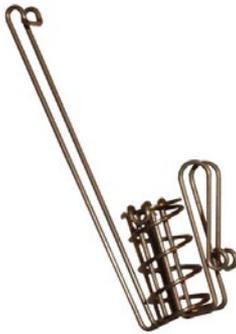
Tools for performing response tests with TITANUS® aspirating smoke detectors

Article no. **AD-05-0590****Smoke pen
Type CT-1**

Smoke pen for testing the fire detection of aspirating smoke detectors and commissioning the ROOM-IDENT seat of fire localization

VPE 1 pc**Performance characteristics:**

- Incl. six smoke wicks (sufficient for approx. two hours of smoke generation each)

Article no. **AD-05-0595****Holder for smoke pen
Type AK-CT-1**

Holder for attaching the smoke pen type CT-1 to telescoping rods or extension pipes

VPE 1 pcArticle no. **AD-05-0597****Smoke wicks
Type SP-CT-1**

Smoke wicks for smoke pen type CT-1

VPE 6 pcs

Spray aerosol**Spray aerosol**

Tool for performing a response test with TITANUS® aspirating smoke detectors and test adapters

Article no. **BM-10-1000**

**Smoke aerosol
Type ORM und DO11****NEW**

Spray can with 250 ml test aerosol for optical smoke detectors

VPE 12 pcs

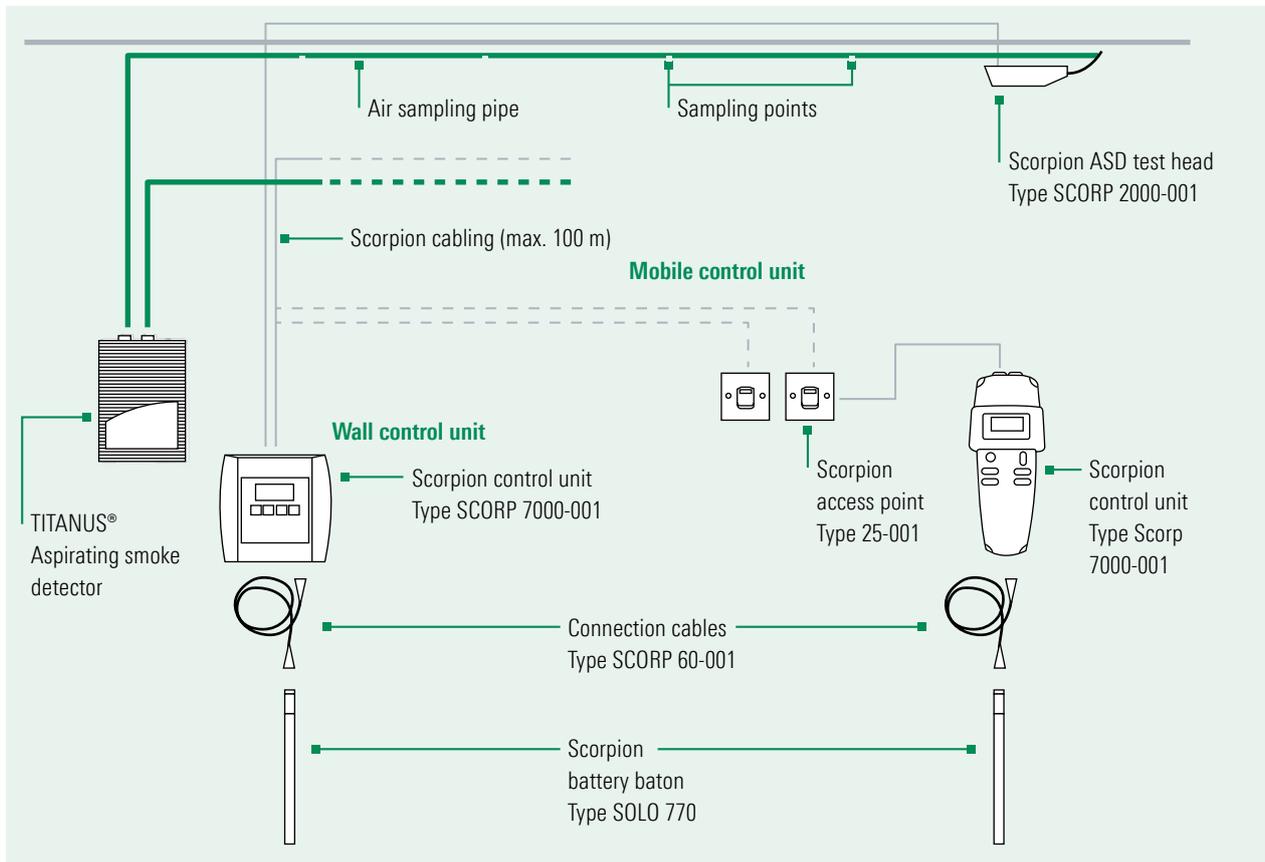


Remote testing system

Scorpion remote testing system

Test system for performing the response tests of aspirating smoke detectors with difficult-to-access sampling points

Sample installation with wall control unit or mobile control unit



Article no. **95-10-0600**



Performance characteristics:

- Permanent installation at the end of a piping branch
- Up to 240 triggers possible
- Connection to Scorpion control unit Type 7000-001 or 8000-001

Scorpion ASD test head
Type SCORP 2001-001

NEW

Test head for remote smoke generation

Data sheet excerpt:

Operating temperature range	0 °C to +60 °C
Max. connection length	100 m
Dimensions (L × W × H)	155 × 54 × 34 mm
IP protection category	IP20
Color	Red

VPE 1 pc

Article no. **95-10-0625**
Scorpion control unit
Type Scorp 7000-001

NEW

Mobile control unit for Scorpion remote testing system**Data sheet excerpt:**

Operating temperature range	+5 °C to +45 °C
-----------------------------	-----------------

VPE

1 pc

i	Scorpion battery baton type SOLO 770 required
---	---

i	Scorpion access point type 25-001 required
---	--

Performance characteristics:

- Battery-powered
- Evaluation of transport time
- Mobile handheld device

Article no. **95-10-0620**
Scorpion control unit
Type SCORP 8000-001

NEW

Control unit for Scorpion remote testing system for controlling up to 8 Scorpion test heads type SCORP 2001-001**Data sheet excerpt:**

Operating temperature range	+5 °C to +45 °C
-----------------------------	-----------------

Dimensions (L × W × H)	150 × 155 × 37 mm
------------------------	-------------------

IP protection category	IP40
------------------------	------

VPE

1 pc

i	Scorpion battery baton type SOLO 770 required
---	---

Performance characteristics:

- Battery-powered
- Evaluation of transport time
- Intended for wall mounting

Article no. **BM-25-6271**
Scorpion battery baton
Type SOLO 770

NEW

Battery baton for power supply of Scorpion control units

Data sheet excerpt:

Operating temperature range	+5 °C to +45 °C
Battery capacity	3.000 mAh
Dimensions (L × W × H)	81 × 139 × 48 mm

VPE 1 pc

i Connection cable type SCORP 60-001 required

i Charger type SOLO 727-001 required

Performance characteristics:

- Charging time with charger type SOLO 727-001 max. 90 min.

Article no. **95-10-0655**
Connection cables
Type SCORP 60-001

NEW

Cable for connecting the type SOLO 770 battery baton to a Scorpion control unit

VPE 1 pc

Article no. **95-10-0651**
Charger
Type SOLO 727-001

NEW

Quick charger for charging the Scorpion battery baton via socket or car cigarette lighter

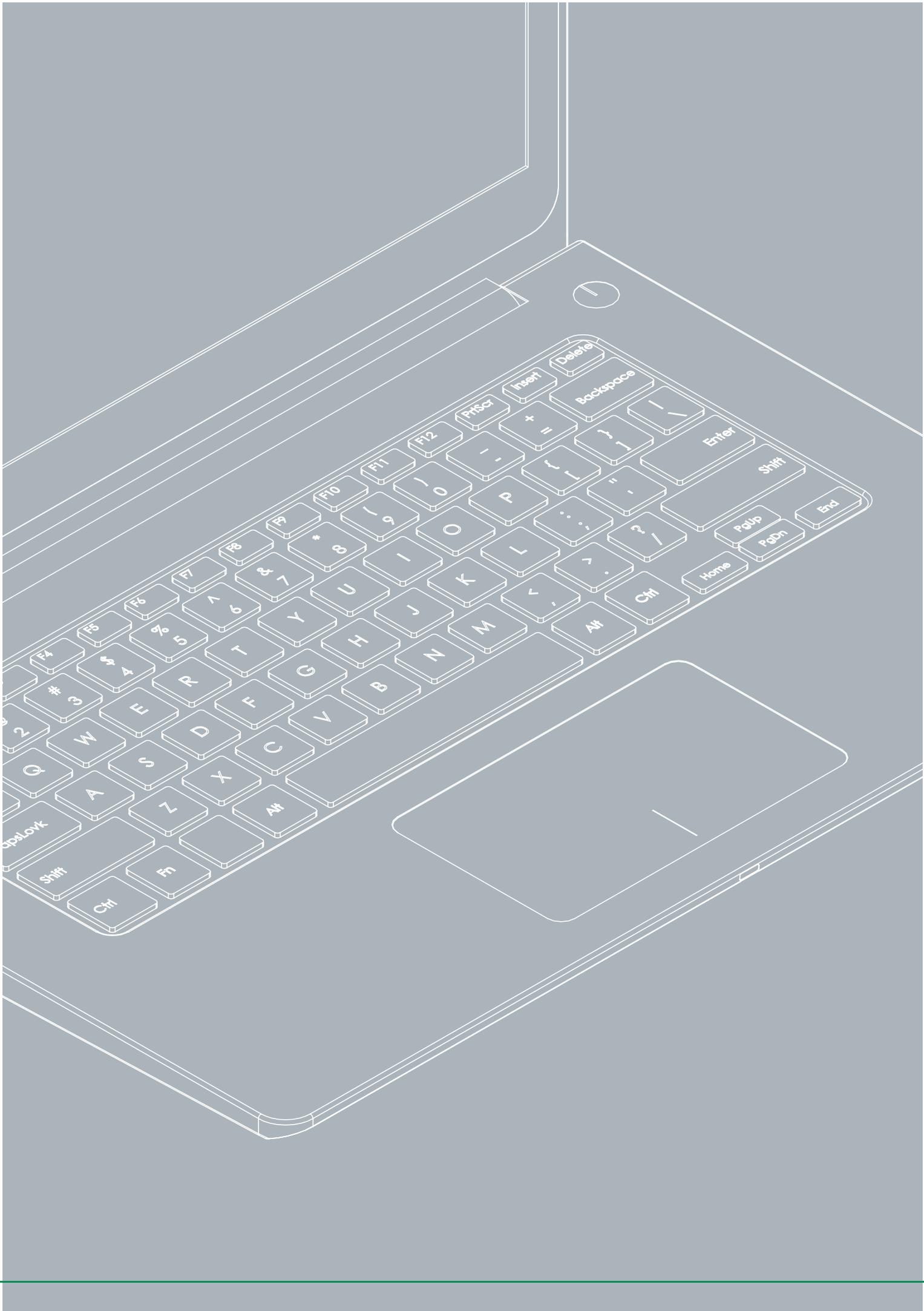
VPE 1 pc

Article no. **95-10-0630**
Scorpion Access Point
Type 25-001

NEW

Remote access point for mobile connection of the Scorpion control unit type SCORP 7000-001 to an ASD test head type SCORP 2001-001

VPE 1 pc



Project planning software



Project planning software

Software for project planning of TITANUS® aspirating smoke detectors

TITANUS *PipeXpress*® Type TF-SC-1

Intuitive PC software for fast project planning of TITANUS® aspirating smoke detectors

Data sheet excerpt:

Operating system	Windows XP and later
Min. PC requirements	1 GHz, CD drive
Hard disk capacity, RAM	100 MB, 512 MB
VPE	1 pc

Performance characteristics:

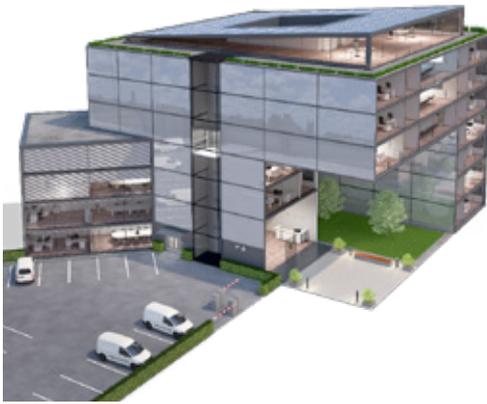
- Pipe project planning and determining the required sensitivity within seconds
- For project planning in accordance with EN 54-20 / ISO 7240-20 and UL / NFPA
- Available in 15 languages
- With certificate of conformity
- Unique assurance in project planning in case of deviations between planning and implementation
- Approved in accordance with VdS and UL/ULC
- No software training required

Visualization and hazard management

Visualization and hazard management

Scalable software for centralized collection of relevant data from TITANUS® aspirating smoke detectors for visualization or for setting up a hazard management system.

Article no. **on request**



Software WinGuard

Type WinGuard

WinGuard is a flexible, scalable solution for visualizing TITANUS® aspirating smoke detectors or setting up hazard management systems. The solution is available both as a stand-alone system and as a distributed system for a virtually unlimited number of sites, and can be optimally tailored to customer needs via the number of control stations and data point units.

WinGuard facilitates, among other things, the import of CAD files, the printing of fire department run maps and, depending on the equipment, e.g. notification by voice message, text message or email as well as remote access via an app (iOS, Android).

For more detailed information on how to structure your visualization or hazard management system, please get in touch with your WAGNER contact person.

VPE 1 pc

Performance characteristics:

- Central monitoring, control and linking of subsystems
- Predefined procedures for correct action in case of emergency
- Central operating unit for linking different subsystems
- More than 400 interfaces to systems from the sectors of building services and security technology, fire protection, IT and communications
- Modular scalability – from stand-alone systems to global networks with unlimited number of sites
- Correct user response thanks to workflow events and intuitive visualization
- Seamless documentation of all events

Tools for networking and data analysis

Tools for networking and data analysis

Software for centralized collection of relevant data from TITANUS® aspirating smoke detectors for visualization or for setting up a hazard management system.

Data sheet excerpt:

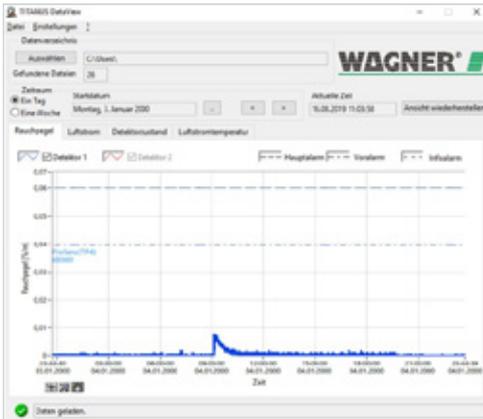
Operating system	Windows XP and later
Min. PC requirements	1 GHz processor
Hard disk capacity	650 MB
Main memory	512 MB RAM



TITANUS® EventView
Type EventView

PC software for visualizing the alarms and faults from TITANUS® aspirating smoke detectors with timestamp and fault information

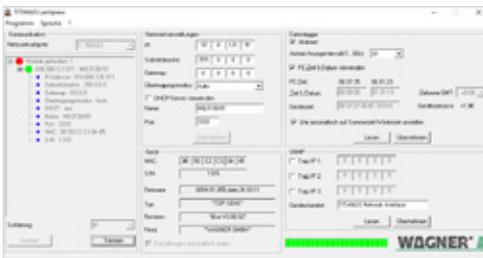
VPE 1 pc



TITANUS® DataView
Type DataView

PC software for time-related visualization of the history data from TITANUS® aspirating smoke detectors (air flow, smoke level, detector status); provides zoom, scaling and print function and a display of alarm levels

VPE 1 pc



TITANUS® LanXpress
Type LanXpress

PC software for integrating the network cards of TITANUS® aspirating smoke detectors and for assigning IP addresses

VPE 1 pc

Article number index

Article no.	Page/s	Article no.	Page/s	Article no.	Page/s
01-05-0010	122	01-10-8270	90	01-10-9275	91
01-05-0040	122	01-10-8280	90	01-10-9290	122
01-05-0090	122	01-10-8310	89	01-10-9300	123
01-10-6010	89	01-10-8320	91	01-10-9310	123
01-10-6020	90	01-10-8330	91	01-10-9330	98
01-10-6030	90	01-10-8340	91	01-10-9350	121
01-10-6040	90	01-10-8350	91	01-10-9360	119
01-10-6050	90	01-10-8360	91	01-10-9370	119
01-10-6060	90	01-10-8370	91	01-10-9380	111
01-10-6070	90	01-10-8380	91	01-10-9390	99
01-10-6080	90	01-10-8410	89	01-10-9395	99
01-10-6215	89	01-10-8420	90	01-10-9400	99
01-10-6216	89	01-10-8430	90	01-10-9410	99
01-10-6225	91	01-10-8440	90	01-10-9420	99
01-10-6235	91	01-10-8450	90	01-10-9430	99
01-10-6242	91	01-10-8460	90	01-10-9440	99
01-10-6252	91	01-10-8470	90	01-10-9450	99
01-10-6262	91	01-10-8480	90	01-10-9460	99
01-10-6275	91	01-10-9000	92	01-10-9470	99
01-10-6280	91	01-10-9005	92	01-10-9480	99
01-10-7051	117	01-10-9010	89	01-10-9490	99
01-10-7061	117	01-10-9016	118	01-10-9500	99
01-10-7071	118	01-10-9020	90	01-10-9510	99
01-10-8020	79	01-10-9030	90	01-10-9520	99
01-10-8030	79	01-10-9040	90	01-10-9530	99
01-10-8060	127	01-10-9050	90	01-10-9540	99
01-10-8065	127	01-10-9060	90	01-10-9580	101
01-10-8110	89	01-10-9065	126	01-10-9590	101
01-10-8120	91	01-10-9070	90	01-10-9600	101
01-10-8130	91	01-10-9207	92	01-10-9610	101
01-10-8140	91	01-10-9215	89	01-10-9620	101
01-10-8150	91	01-10-9216	89	01-10-9630	101
01-10-8160	91	01-10-9225	91	01-10-9640	101
01-10-8170	91	01-10-9235	91	01-10-9650	101
01-10-8210	89	01-10-9242	91	01-10-9660	101
01-10-8220	90	01-10-9245	72	01-10-9670	101
01-10-8230	90	01-10-9252	91	01-10-9680	101
01-10-8240	90	01-10-9255	73	01-10-9690	101
01-10-8250	90	01-10-9262	91	01-10-9700	101
01-10-8260	90	01-10-9265	126	01-10-9710	101

Article no.	Page/s	Article no.	Page/s	Article no.	Page/s
01-10-9720	101	09-20-6160	55	AD-05-0462	32
01-10-9730	101	09-20-6400	54	AD-05-0463	32
01-10-9740	101	09-20-6405	54	AD-05-0464	32
01-10-9750	100	09-20-6410	54	AD-05-0466	32
01-10-9790	99	09-20-6415	54	AD-05-0467	26
01-10-9795	99	09-20-6420	54	AD-05-0468	32
01-10-9800	99	09-20-6425	54	AD-05-0469	32
01-10-9810	99	09-20-6430	54	AD-05-0485	74
01-10-9820	99	09-20-6440	54	AD-05-0492	78
01-10-9830	99	09-20-6445	54	AD-05-0530	75
01-10-9840	99	09-20-6450	54	AD-05-0535	83
01-10-9850	99	09-20-6455	54	AD-05-0540	75
01-10-9860	99	09-20-6460	54	AD-05-0566	80
01-10-9870	99	09-20-6680	56	AD-05-0575	84
01-10-9880	99	09-20-6681	56	AD-05-0576	84
01-10-9890	99	09-20-6830	58	AD-05-0590	145
01-10-9900	99	10-90-0200	135	AD-05-0595	145
01-10-9910	99	10-90-0300	135	AD-05-0597	145
01-10-9920	99	10-90-0450	135	AD-05-0600	80
01-10-9930	99	10-90-0500	135	AD-05-0651	28
01-10-9940	99	10-90-0510	135	AD-05-0652	28
01-35-0440	96	10-90-0600	135	AD-05-0655	28
01-35-0450	96	10-90-0610	135	AD-05-0656	28
01-35-1075	96	10-90-0700	135	AD-05-0657	28
01-35-1080	97	10-90-0710	135	AD-05-0665	32
01-35-1085	97	10-90-0800	135	AD-05-0667	32
01-35-2450	97	85-20-2821	95	AD-05-0669	32
01-45-5297	82	95-10-0230	142	AD-05-0671	32
01-90-1000	93	95-10-0500	142	AD-05-0673	32
01-90-1010	93	95-10-0600	147	AD-05-0675	32
01-90-1070	93	95-10-0620	148	AD-05-0677	32
01-90-1080	94	95-10-0625	148	AD-05-0784	26
01-90-1668	94	95-10-0630	149	AD-05-0785	26
01-90-1720	94	95-10-0651	149	AD-05-0786	26
08-20-1100	138	95-10-0655	149	AD-05-0787	26
08-20-1110	138	AD-05-0270	62	AD-05-0800	41
08-90-0110	66	AD-05-0280	64	AD-05-0900	76
09-20-5481	57	AD-05-0457	26	AD-05-0910	76
09-20-6140	54	AD-05-0458	26	AD-05-0930	76
09-20-6150	55	AD-05-0459	32	AD-05-0940	77

Article no.	Page/s	Article no.	Page/s	Article no.	Page/s
AD-05-0950	77	AD-05-1530	14	AD-05-4530	14
AD-05-0955	77	AD-05-1535	14	AD-05-4531	14
AD-05-0960	77	AD-05-2000	60	AD-05-4532	14
AD-05-0970	78	AD-05-2100	60	AD-05-4534	14
AD-05-1140	20	AD-05-2200	20	AD-05-4535	14
AD-05-1145	20	AD-05-2205	20	AD-05-4539	14
AD-05-1220	38	AD-05-2210	20	AD-05-4540	14
AD-05-1240	38	AD-05-2215	20	AD-05-4595	16
AD-05-1250	32	AD-05-2251	22	AD-05-4596	16
AD-05-1255	32	AD-05-2252	22	AD-05-4700	45
AD-05-1260	32	AD-05-2255	22	AD-05-4705	45
AD-05-1300	62	AD-05-2256	22	AD-05-4710	48
AD-05-1305	62	AD-05-2257	22	AD-05-4715	48
AD-05-1310	64	AD-05-2271	28	AD-05-4800	50
AD-05-1315	64	AD-05-2272	28	AD-05-4805	49
AD-05-1320	62	AD-05-2275	28	AD-05-4806	50
AD-05-1325	62	AD-05-2276	28	AD-05-4807	50
AD-05-1350	38	AD-05-2277	28	AD-05-4810	49
AD-05-1370	38	AD-05-3500	15	AD-05-4815	49
AD-05-1371	38	AD-05-3560	82	AD-05-4816	49
AD-05-1375	38	AD-05-3570	82	AD-05-4820	49
AD-05-1376	38	AD-05-3580	81	AD-05-4835	50
AD-05-1400	64	AD-05-3585	81	AD-05-4840	50
AD-05-1405	64	AD-05-4000	14	AD-05-5000	69
AD-05-1406	64	AD-05-4010	14	AD-05-5005	68
AD-05-1410	64	AD-05-4020	14	AD-05-5010	71
AD-05-1415	64	AD-05-4030	14	AD-05-5015	71
AD-05-1416	64	AD-05-4100	14	AD-05-5020	70
AD-05-1420	62	AD-05-4120	14	AD-05-5025	68
AD-05-1430	62	AD-05-4300	14	AD-05-5035	70
AD-05-1435	62	AD-05-4310	14	AD-05-5040	69
AD-05-1437	62	AD-05-4320	14	AD-05-5050	67
AD-05-1440	62	AD-05-4330	14	AD-05-5055	71
AD-05-1442	62	AD-05-4500	14	AD-05-5060	70
AD-05-1500	14	AD-05-4520	14	AD-05-5140	67
AD-05-1505	14	AD-05-4521	14	AD-05-5200	59
AD-05-1510	14	AD-05-4522	14	AD-10-0225	62
AD-05-1515	14	AD-05-4524	14	AD-10-0250	72
AD-05-1520	14	AD-05-4525	14	AD-10-0300	66
AD-05-1525	14	AD-05-4529	14	AD-10-0305	66

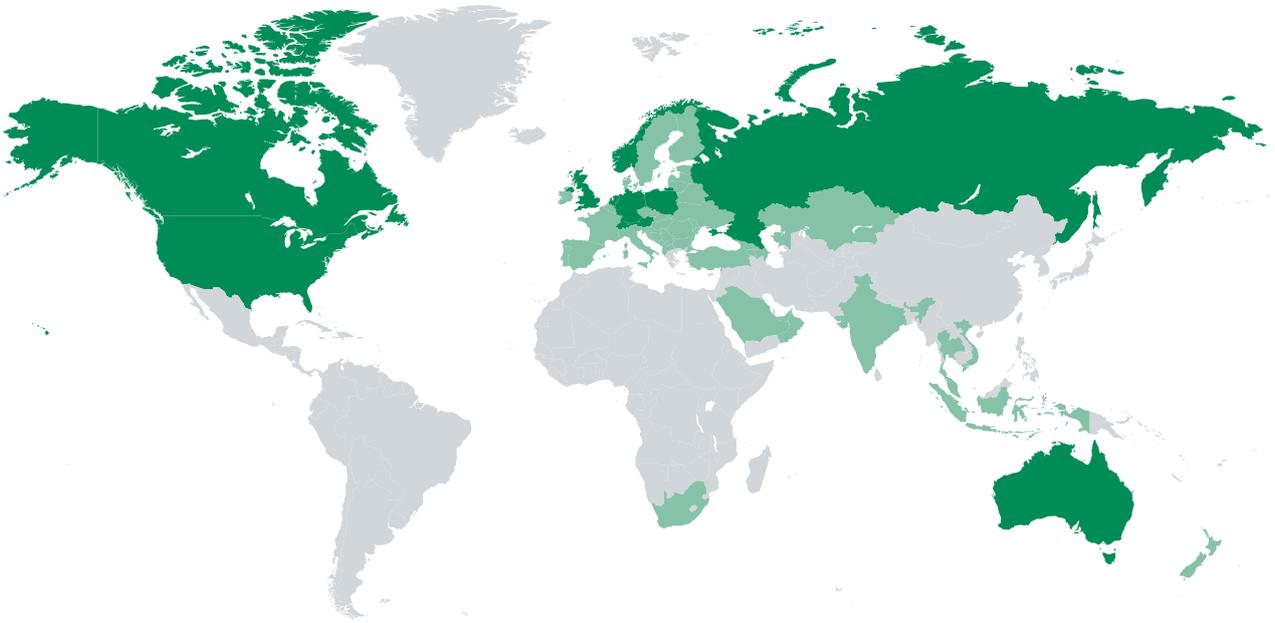
Article no.	Page/s	Article no.	Page/s	Article no.	Page/s
AD-10-0310	73	AD-10-1225	38	AD-10-5610	21
AD-10-0330	114	AD-10-1260	20	BM-10-1000	146
AD-10-0332	114	AD-10-1262	20	BM-20-0205	61
AD-10-0335	114	AD-10-1400	15	BM-20-0225	61
AD-10-0336	114	AD-10-1410	15	BM-25-6271	149
AD-10-0410	82	AD-10-1420	15	BM-50-0005	143
AD-10-0480	105	AD-10-1430	15	BM-50-0010	143
AD-10-0550	79	AD-10-1440	15	BM-50-0015	143
AD-10-0561	105	AD-10-1450	15	BM-50-0020	143
AD-10-0647	103	AD-10-1460	15	BM-50-1000	144
AD-10-0880	111	AD-10-1470	15	SV-10-0160	130
AD-10-0915	110	AD-10-1500	59	SV-10-0165	131
AD-10-0925	110	AD-10-1920	116	SV-10-0170	131
AD-10-0940	107	AD-10-1930	116	SV-10-0185	132
AD-10-0945	107	AD-10-1960	112	SV-10-0410	136
AD-10-0950	108	AD-10-1963	113	SV-10-0415	136
AD-10-0955	108	AD-10-1966	113	SV-10-0420	137
AD-10-0960	109	AD-10-1975	112	SV-10-0430	137
AD-10-0965	110	AD-10-1980	74	SV-10-0460	133
AD-10-0970	109	AD-10-2000	115	SV-10-0470	133
AD-10-1035	26	AD-10-2010	115	SV-10-0480	134
AD-10-1035	32	AD-10-4200	57	VE-10-0500	102
AD-10-1037	26	AD-10-4600	84	VE-10-0510	102
AD-10-1037	32	AD-10-4620	83	W2-10-0130	120
AD-10-1075	32	AD-10-4630	83	W2-10-0510	120
AD-10-1076	32	AD-10-4710	126	W2-10-0560	121
AD-10-1077	32	AD-10-5100	27	W2-10-0570	121
AD-10-1078	32	AD-10-5115	27	W2-10-0580	121
AD-10-1095	106	AD-10-5130	27	W2-10-1070	125
AD-10-1105	106	AD-10-5190	27	W2-10-1360	123
AD-10-1115	106	AD-10-5195	27	W2-10-1470	124
AD-10-1125	106	AD-10-5200	27	W2-10-1480	124
AD-10-1135	106	AD-10-5210	34, 39	W2-10-2300	125
AD-10-1145	106	AD-10-5230	34, 39	W2-10-2310	125
AD-10-1155	106	AD-10-5250	34, 39		
AD-10-1165	32	AD-10-5310	34, 39		
AD-10-1167	32	AD-10-5315	34, 39		
AD-10-1169	32	AD-10-5320	34, 39		
AD-10-1205	38	AD-10-5600	21		
AD-10-1210	38	AD-10-5605	21		

Key word index

Key word	Page(s)	Key word	Page(s)
Adapter cable	84	Fire-resistant collar	127
Additional housing	59	Fittings	90 ff.
Additional indications 19"	64	Fuse module	136 f.
Additional indications in wall housing	62	<i>FUSION</i> [®] basic devices	20
Adhesive (ABS adhesive, PVC adhesive)	93	<i>FUSION</i> [®] complete set	22
Adhesive screw fitting	92	<i>FUSION</i> [®] detector modules	21
Air filter	81, 112 ff.	<i>FUSION</i> [®] front film sheets	20
Air filter element	81, 114	Holding bracket	125
Air sampling pipe	89	Hose gland	122
Aspiration funnel	120	Installation kit for extension modules	78
Aspiration hose	119 ff.	Jumper	82
Aspiration reduction	123	LanXpress	154
Aspiration reductions	100	Manual release for extinguishing systems	68
Aspiration-reducing film sheets	98 f.	Marking tapes	98
Ball valve	109 f.	<i>MICRO-SENS</i> [®] complete set	16
Batteries	135	<i>MICRO-SENS</i> [®] detection units	14
Blank cover plates	66	<i>MICRO-SENS</i> [®] front film sheets	15
Cable entries	76	Network modules	54
Cable management box	67	Non-return valve	111
Cable glands	77	On-cabinet housing	71
Ceiling feed-through	119	Pipe adapter	72 f., 126
Clamps	96 f.	Pipe cap	123
Cleaner	94	Pipe shears	95
Collecting hood	124	Pipe with internal thread	122
Compressed air valve	108	<i>PipeXpress</i> [®]	152
Condensate separator	103	Plastic clip	100
Cover screws	82	Power supply	130 ff.
DataView	154	<i>PRO-SENS</i> [®] basic devices	26
Detonation flame arresters	117 f.	<i>PRO-SENS</i> [®] complete set	28
Device holder	72	<i>PRO-SENS</i> [®] detector modules	27
Diagnostic tool	80	<i>PRO-SENS</i> [®] /net basic devices	32
Door contact	68	<i>PRO-SENS</i> [®] /net detector modules	34
Double screw fitting	92	<i>PRO-SENS</i> [®] /net front film sheets	33
Duct adapter	102	Pyrolysis system	142
EventView	154	Quick-connect coupling	111
Extension kit	75	<i>RACK-SENS</i> [®] 1 U	43 ff.
Extinguishing fan	70	<i>RACK-SENS</i> [®] 2 U	46 ff.
Extinguishing module	69	Relay modules	56
Fan control	58	Remote displays	60
Filter element	116	Reset and disconnect button	57

Key word	Page(s)
Reset modules	57
Response indicators	60 f.
Scorpion remote testing system	147
Sealing kit	83
Sealing tape	94
Shutoff valve	107
Shutdown modules	55
Shutdown relay	69
Smoke aerosol	146
Smoke cartridges	143
Smoke matches	144
Smoke pen	145
Smoke wicks	145
Sound absorber	74
Spacer bracket	121
Special filters	115
Subrack	66
<i>SUPER-SENS</i> [®]	40 f.
Suspension bracket	121
Temperature sensor	70
Test adapter	79
Test coils	142
Test pipe	79
<i>TOP-SENS</i> [®] basic devices	38
<i>TOP-SENS</i> [®] detector modules	39
<i>TOP-SENS</i> [®] front film sheets	38
Valve control	105
WinGuard	153
μ-controller	106

Fire protection as Holistic Solution. Trendsetting. Worldwide.



WAGNER Group GmbH (Headquarter)

Schleswigstraße 1–5

30853 Langenhagen

Phone: +49. 511. 97383-0

E-Mail: info@wagnergroup.com



You can find your personal
WAGNER contact at

www.wagnergroup.com



**Technology leadership in technical fire
protection – by innovative solutions
that protect lives and assets:**

Fire Detection

Aspirating smoke detectors: TITANUS®

Fire Prevention

Oxygen reduction: OxyReduct®

Fire Extinguishing

Gas extinguishing technology: FirExting®

Hazard Management

Organization: VisuLAN®