

 **SECURITON**

SecuriRAS ASD 531/532/535

Product Catalogue 2016

Content

1.	Aspirating Systems	5
1.1.	ASD Base Units.....	5
1.2.	Smoke Sensors (SSD)	7
1.3.	Expansion modules	8
1.4.	Demo and Test Equipment.....	10
2.	Engineering and Configuration Tools	11
3.	Tubes and Fittings for Sampling Pipe.....	12
3.1.	PVC Tubes and Fittings.....	13
3.2.	ABS Tubes and Fittings.....	16
3.3.	Flex Pipe Materials.....	19
3.4.	Concrete Inserts.....	20
3.5.	Copper Tube Materials.....	21
3.6.	Stainless Steel Tube Materials	22
3.7.	Special Tubing Parts	24
4.	Sampling Points	25
5.	Clamps, Glue and Cleaner	29
6.	Accessories	31
7.	Spare Parts.....	37
8.	Product Type Index	39

Introduction

Aspirating smoke detection systems need little introduction these days: They are deployed extensively and account for more than 10% of the fire detection market in Europe. Aside from this commercial success, the aspirating technology has become the subject of the European product standard EN 54-20. This standard, in conjunction with the latest Code of Practice, will help to ensure that the reliable performance and good reputation of the technique is not eroded by unapproved and inappropriate products. It is strongly recommended that the system designer becomes familiar with these standards and codes.

EN 54-20

EN 54-20 has introduced a fire sensitivity classification system incorporating classes A, B and C. These classes assign the sensitivity at the sampling points to typical applications:

- **Normal Sensitivity: The same sensitivity as normal optical point detectors (2% - 5% obsc. / m)**
- **Enhanced Sensitivity: Responding to smoke at concentrations between 0.8% and 2% obsc. / m.**
- **High Sensitivity: responding to smoke at concentrations of less than 0.8% obscuration /m.**

It is important to define appropriate requirements / expectations for an aspirating smoke detection system at the earliest possible stage for assuring proper system engineering.

Code of Practice

When designing an air sampling system, considerations must be given to the requirements of relevant local Codes of Practice, Standards and Regulations that are used to govern the design of detection systems. What the designer must bear in mind is that these documents may only deal with the minimum acceptable requirements, often related to the performance of conventional point detectors. High sensitivity smoke detection systems such as the ASD 535 can offer performance far in advance of traditional detection elements and various bodies such as the Fire Industry Association (FIA) have documented the related engineering requirements in their "Code of Practice for Design, Installation, Commissioning & Maintenance of Aspirating Smoke Detector (ASD) Systems"

PipeFlow - Engineering Support at your Fingertips

Designing complex piping systems according to EN 54-20 and in line with the local Code can be challenging. Systems may easily become asymmetrical and you may require engineering tools for proper dimensioning and placing of sampling points. We have created the industry's first and only software tool using physical airflow modelling for precise engineering of flow balanced aspirating systems. In plus, PipeFlow lets you draw your system in 3D and delivers you all documents needed for hassle-free installation, testing and commissioning.

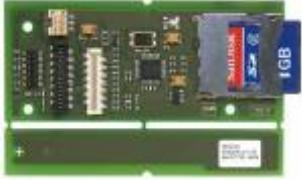
How to read this catalogue

Example of a typical entry for an item

Type & Article Number
Please quote this number when making an enquiry or ordering

Memory Card Module

MCM 35



This Memory Card Module lets you trace up to 18'000 events and logs the measurement data of 80 days. This capability is fixed (SD cards larger than 1GB will not expand it). The board comes with mounting brackets, screws and ribbon cables, but without SD card.

Technical data

Operating Voltage from AMB 35:	5 V DC
Dimensions (H x W x D) :	95x58x17mm
Weight:	43 g
Documentation:	T131195

Illustration Description and technical data

1. Aspirating Systems

1.1. ASD Base Units

Aspirating Smoke Detector (including SSD 31)



ASD 531

11-2000002-01-01-

The SecuriRAS ASD 531 aspirating smoke detector is designed for smaller monitoring areas and for the easiest possible handling.

The ASD 531 is equipped with a highly sensitive smoke sensor SSD 31 using a single sampling pipe network.

The housing provides the option for two expansion modules.

Commissioning and configuration is done directly on the device without any software tool.

For planning the ASD PipeFlow software allows an optimized design of any installation.

Technical data

Mains voltage:	14 to 30 V DC
Ambient temperature:	-10 °C to + 55 °C
Protection class:	IP 54
Dimensions (H x W x D) :	195 x 290 x 140 mm
Case cover material:	ABS-Blend, UL 94-V0
Case Colour:	grey/anthracite
Weight:	1,95 kg
Standards:	EN 54-20 Class A, B and C, EN 54-27 UL 268, FM 3230

Aspirating Smoke Detector



ASD 532

11-2000003-01-01

The SecuriRAS ASD 532 aspirating smoke detector is designed for small to midsize monitoring areas.

The ASD 532 base unit is provided for a highly sensitive smoke sensor SSD 532 (to be ordered separately) for a single sampling pipe network.

The measured smoke level is indicated on a bar graph display.

The housing provides the option for two expansion modules.

Commissioning and configuration is done either directly on the device or via the ASD Config software tool.

For planning the ASD PipeFlow software allows an optimized design of any installation.

Technical data

Mains voltage:	14 to 30 V DC
Ambient temperature:	-20 °C to + 60 °C
Protection class:	IP 54
Dimensions (H x W x D) :	195 x 290 x 140 mm
Case cover material:	ABS-Blend, UL 94-V0
Case Colour:	grey/anthracite
Weight:	1,7 kg
Standards :	EN 54-20 Class A, B and C, EN 54-27

Aspirating Smoke Detector


ASD 535-1

ASD 535-1	1 Sampling pipe / Detector	5000623-0101
ASD 535-2	2 Sampling pipes / Detectors	5000623-0102
ASD 535-3	1 Sampling pipe / Detector, 1 Smoke level display	5000623-0103
ASD 535-4	2 Sampling pipes / Detectors, 2 Smoke level displays	5000623-0104

The SecuriRAS ASD 535 aspirating smoke detector is designed for universal applications mainly for midsize to large monitoring areas. The ASD 535 base units provide space for 1 or 2 highly sensitive smoke sensors SSD 535 (to be ordered separately) for 1 or 2 sampling pipe networks.

The measured smoke level can be indicated on a bar graph display (models -3 and -4). The housing provides the option for four expansion modules.

Commissioning and configuration is done either directly on the device or via the ASD Config software tool.

For planning the ASD PipeFlow software allows an optimized design of any installation.

Technical data

Mains voltage:	10.5 to 30 V DC
Ambient temperature:	-30 °C to + 60 °C
Protection class:	IP 54
Dimensions (H x W x D) :	397 x 265 x 148 mm
Case cover material:	ABS-Blend, UL 94-V0
Case Colour:	grey/anthracite
Weight:	3,85 kg
Standards:	EN 54-20 Class A, B and C
VdS-Approval:	G 208154



ASD 535-2



ASD 535-3



ASD 535-4

1.2. Smoke Sensors (SSD)

Smoke Sensor for ASD 531



SSD 31	Alarm Sensitivity range 0,02% – 10% /m	11-2200009-01-01
---------------	---	-------------------------

The smoke sensor SSD 31 is pre-installed in the ASD 531 and is also available as replacement part.
3 Pre-signals are set on a fixed percentage of the alarm threshold (30/50/70%).

Technical data

Sensitivity range alarm:	0.02 %/m – 10 %/m
Sensitivity range pre-signals:	0.006 %/m – 7 %/m
Ambient temperature:	-10 °C to + 55 °C
Dimensions (H x W x D):	120 x 116 x 95 mm

Smoke Sensor for ASD 532



SSD 532-3	Alarm Sensitivity range 0.02% – 10% /m	11-2000004-03-01
------------------	---	-------------------------

The smoke sensor SSD 532 has to be ordered separately for the ASD 532.
3 Pre-signals can be set between 10 and 90% of the alarm threshold.

Technical data

Sensitivity range alarm:	0.02 %/m – 10 %/m
Sensitivity range pre-signals:	0.002 %/m – 9 %/m
Ambient temperature:	-20 °C to + 60 °C
Dimensions (H x W x D):	120 x 116 x 95 mm

Smoke Sensor for ASD 535



SSD 535-3	Alarm Sensitivity range 0.02 – 10% /m	5000613-0103
------------------	--	---------------------

The smoke sensor SSD 535 has to be ordered separately for the ASD 535.
Pre-signals can be set between 10 and 90% of the alarm threshold.

Technical data

Sensitivity alarm:	0.02 %/m – 10 %/m
Sensitivity range pre-signals:	0.002 %/m – 9 %/m
Ambient temperature:	-30 °C to + 60 °C
Dimensions (H x W x D):	120 x 136 x 95 mm

Fastener plate to cover a smoke sensor chamber



ASD 535 Verschl

11-2300009-01-01

The fastener plate is for closing the 2nd channel when it is temporarily not used. (e.g. Conversion of a room)

The packaging unit of the fastener plate is 50 pieces.

1.3. Expansion modules

Loop I/F module for Special Fire Detectors


XLM 35

SecuriLine eXtended

11-2200003-01-01

With the installation of an XLM 35, special fire detectors like ASDs can be ideally connected via the addressable loop to the SecuriFire fire alarm systems. The normative alarm transmission to the superordinate FACP is then accomplished via the XLM 35..

The XLM 35 module allows also central configuration of special fire detectors with the Config Over Line function.

The module comes with mounting brackets, screws and ribbon cable

Technical data

Dimensions (H x W x D):	95 x 58 x 17 mm
-------------------------	-----------------

Weight:	56 g
---------	------

Loop I/F module for ASD 535


SLM 35

SecuriLine standard

4000286-0101

This loop interface brings faults and alarms to your fire alarm panel and lets you reset the ASD 535 by the panel. Note: ASD configuration is done via USB using ASD config software and a PC. The module comes with mounting brackets, screws and ribbon cable.

Technical data

Dimensions (H x W x D) :	95x58x17 mm
--------------------------	-------------

Weight:	56 g
---------	------

Relay I/F module for ASD 535


RIM 35

5 relays with changeover contacts

4000287-0101

The RIM 35 brings five (5) additional relay outputs to your ASD 535. Expansion limit is two (2) RIM 35 / 10 relays. Each relay can be assigned to any ASD event by programming with the ASD Config software. The module comes with mounting brackets, screws and ribbon cable.

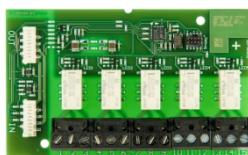
Technical data

Max. relay output load:	50 / 1 / 30 V DC/A/W
-------------------------	----------------------

Dimensions H x W x D) :	95x58x17 mm
-------------------------	-------------

Weight:	85 g
---------	------

Relay I/F module for Special Fire Detectors



RIM 36

11-2200005-01-02

The RIM 36 brings five (5) additional relay outputs to your Special Fire Detector (except ASD 535). Expansion limit is two (2) RIM 35 / 10 relays. Each relay can be assigned to any ASD event by programming with the ASD Config software. The module comes with mounting brackets, screws and ribbon cable.

Technical data

Max. relay output load:	50 / 1 / 30 V DC/A/W
Dimensions (H x W x D):	95x58x17mm
Weight:	85 g

Memory card module for ASD 535



MCM 35

4000285-0101

This Memory Card Module lets you trace up to 16 Million events and stores analogue values like smoke concentration and airflow of at least 83 days depending on the log interval. The module comes with mounting brackets, screws and ribbon cables and SD-Industrial memory card.

Technical data

Dimensions (H x W x D) :	95x58x17 mm
Weight:	43 g

SD-Card Industrial 2GB



SD-Industrial

11-4000007-01-01

SD memory card (industrial) 2GB to use with MCM 35 or directly on-board in ASD 531 (AMB 31) and ASD 532 (AMB 32).

Technical data

Memory:	2 GB
Temperature range:	- 40°C - + 85°C

Serial I/F Module networking of Special Fire Detectors



SIM 35

11-2200000-01-02

For the RS 485 networking of up to 250 Special Fire Detectors like ASD 535 or ASD 532. Using the "ASD Config" configuration software, all ASDs in the network can be visualised and configured from a PC. The module comes with mounting brackets, screws and ribbon cables.

Technical data

Dimensions (H x W x D) :	95x58x17 mm
Weight:	56 g

Serial Master Module for networking of Special Fire Detectors

SMM 535
11-2200001-01-01

This interface connects the RS485 (over SIM 35) networked ASDs to a USB port of a PC. It is powered by the USB port.

Technical data

Power Supply:	USB powered / 5 VDC
Operating temperature:	-30°C to +60°C
Dimensions (H x W x D):	82x89x55 mm
Weight:	165 g

Universal module support for Special Fire Detectors

UMS 35
4301252-0101

Universal module support for the attachment of BX-OI3, SCI 82 and others.

Technical data

Dimensions (H x W x D):	130x11x94 mm
Weight:	60 g

1.4. Demo and Test Equipment

Democase for ASD 535

ASD 535 DCU
VE010953

ASD 535 Democase unit for training and sales presentations.

Containing one ASD 535-4, alarm and fault simulation equipment, buzzer for alarm indication, USB cable for PC connection, power cable (swiss standard & international adapter type F)

Technical data

Dimensions (H x W x D):	580 x 430 x 230 mm
Weight:	14 kg

Democase for ASD 531/532

ASD 531/532 DCU
249702

ASD 531/532 Democase unit for training and sales presentations.

Containing one ASD 531 and one ASD 532. For alarm and fault simulation. Equipped with buzzer for alarm indication, Ethernet cable for PC connection of ASD 532. Power cable (swiss standard & international adapter type F)

Technical data

Dimensions (H x W x D):	500 x 354 x 365 mm
Weight:	15 kg

2. Engineering and Configuration Tools

Functional range **partner** level: **Full access** to all available ASD Config software functions.

Functional range **user** level: **Limited access** for ASD Config software.

Basically only read functions and the following write functions are possible:

- Change the current program (e.g. X01-X03, A11,B11 etc.)
But no change of parameters in the X01-X03 programs.
- Project texts
- FW-download
- Adjust the RTC clock
- Change the tool language

ASD Software

Description	Type	Art. Nr.
Planning and calculation software for planning symmetric and asymmetric sampling pipe topologies. (Subject to licence) Requirements: Windows XP / 7 / 8.1; 1 GB RAM; Hard disc space 50 MB	ASD PipeFlow	11-2300031-01-01
ASD PipeFlow Update version only for clients which have a valid licence. Available as download from the Storebox.	ASD PipeFlow Upd	11-2300032-01-01
ASD PipeFlow Trial Test version with a runtime of 30 days. Available as download from the Storebox.	ASD PipeFlow Trial	11-2300033-01-01
ASD configuration tool license w/o USB Dongle. Partner License Extension ASD Config Networking (for an existing dongle)	PL_ASD-Conf_N	VE100400
ASD configuration tool license with USB Dongle. Dongle & Partner License ASD Config Networking.	D&PL_ASD-Conf_N	VE100401
ASD configuration tool license w/o USB Dongle. Partner License Extension ASD Config (for an existing dongle)	PL_ASD-Conf	VE100402
ASD configuration tool license with USB Dongle. Dongle & Partner License ASD Config.	D&PL_ASD-Conf	VE100403
ASD configuration tool license w/o USB Dongle. User License Extension ASD Config Networking, (for an existing dongle).	UL_ASD-Conf_N	VE100404
ASD configuration tool license with USB Dongle. Dongle & User License ASD Config Networking	D&UL_ASD-Conf_N	VE100405
ASD configuration tool license w/o USB Dongle. User License Extension ASD Config (for an existing dongle)	UL_ASD-Conf	VE100406
ASD configuration tool license with USB Dongle. Dongle & User License ASD Config	D&UL_ASD-Conf	VE100407

USB 2.0 cable for connection between ASD 535 and PC



KAB USB 45

238546

USB 2.0 cable for connection between ASD 535 and PC
for commissioning and maintenance via ASD Config

Technical data

Length:	4.5m
Type:	A-B

	ASD 531		ASD 532		ASD 535	
Project planning:	Technical Document	PipeFlow	Technical Document	PipeFlow	Technical Document	PipeFlow
Configuration:	BasiConfig (on board)		EasyConfig (on board) or ASD Config (Software)	ASD Config (Software)	EasyConfig (on board) or ASD Config (Software)	ASD Config (Software)
Filter						
FBS 25 PC	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
FBL 25 PC						
FBX 25 PC	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DFU 535L	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
DFU 535XL						
Capillary tube						
TU 6 PVC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Heating material						
All material	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Detonation flame arrester						
DFA 25-1	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DFA 25-2						
DFA 25-3						
Automatic blow out device						
ADB 01A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ADB 02						
Detector box						
REK 511	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	

3. Tubes and Fittings for Sampling Pipe

3.1. PVC Tubes and Fittings

Tube



TU 25 PVC

50-0500400-01-01

Tube to create sampling pipes.

Technical data

Material:	PVC
Colour:	grey
Length:	5 m
Outer Diameter:	25 mm

Flexible Hose



FH 25 PVC

50-0500111-01-01

Flexible hose to create flexible sampling pipes. To be ordered in lengths per m.

Technical data

Material:	PVC, reinforced
Colour:	grey
Length:	1 m
Outer Diameter:	25 mm

Bend 90°



BE 25 PVC

50-0500402-01-01

Bend 90° for tube TU 25 PVC.

Technical data

Material:	PVC
Colour:	grey
Diameter:	25 mm
Packaging unit:	5 pieces

Angle 90°



AN 25-90 PVC

50-0500404-01-01

Angle 90° for tube TU 25 PVC. Whenever possible use bend BE 25 PVC because of its lower aerodynamic resistance.

Technical data

Material:	PVC
Colour:	grey
Diameter:	25 mm
Packaging unit:	10 pieces

Angle 45°

**AN 25-45 PVC**

50-0500403-01-01

Angle 45° for tube TU 25 PVC.

Technical data

Material:	PVC
Colour:	grey
Diameter:	25 mm
Packaging unit:	10 pieces

T-piece

**TP 25 PVC**

50-0500405-01-01

T-piece for tube TU 25 PVC or FH 25 PVC.

Technical data

Material:	PVC
Colour:	grey
Diameter:	25 mm
Packaging unit:	10 pieces

Cross

**CR 25 PVC**

50-0500407-01-01

Cross for tube TU 25 PVC or FH 25 PVC.

Technical data

Material:	PVC
Colour:	grey
Diameter:	25 mm
Packaging unit:	10 pieces

Socket

**SO 25 PVC**

50-0500406-01-01

Socket to connect two tubes TU 25 PVC or FH 25 PVC.

Technical data

Material:	PVC
Colour:	grey
Diameter:	25 mm
Packaging unit:	10 pieces

Screw-junction piece

SJ 25 PVC
50-0500408-01-01

Screw-junction for tubes TU 25 PVC or FH 25 PVC.

- For tube junctions in deep freeze warehouses in operating state because of the very long cure time in these temperatures.
- Junctions from PVC to ABS can be realized by combination of one SJ 25 PVC and one SJ 25 ABS.

Technical data

Material:	PVC
Colour:	grey
Diameter:	25 mm
Packaging unit:	10 pieces

End-cap

EC 25 PVC
50-0500409-01-01

End-cap for tube TU 25 PVC or FH 25 PVC.

Technical data

Material:	PVC
Colour:	grey
Diameter:	25 mm
Packaging unit:	10 pieces

Compressed-air connection

CC 25 PVC
50-0500420-01-01

Compressed-air connection for tube TU 25 PVC for cleaning the aspirating tube.

Technical data

Material:	PVC
Colour:	grey
Diameter:	25 mm

Ventilation duct flange

DF 25 PVC
50-0500187-01-01

Flange for tube TU 25 PVC for the monitoring of ventilation ducts. Per duct 3 pieces of DF 25 PVC are required, 2 for the aspirating stub, 1 for the air recirculation. Please consider the planning hints.

Technical data

Material:	PVC
Colour:	grey
Diameter:	25 mm

3.2. ABS Tubes and Fittings

Tube



TU 25 ABS

50-0500438-01-01

Tube to create sampling.

Technical data

Material:	ABS
Colour:	light grey
Length:	5 m
Diameter:	25 mm

Bend 90°



BE 25 ABS

50-0500439-01-01

Bend 90° for tube TU 25 ABS.

Technical data

Material:	ABS
Colour:	light grey
Diameter:	25 mm
Packaging unit:	10 pieces

Angle 90°



AN 25-90 ABS

50-0500441-01-01

Angle 90° for tube TU 25 ABS. Whenever possible use bend BE 25 ABS because of its lower aerodynamic resistance.

Technical data

Material:	ABS
Colour:	light grey
Diameter:	25 mm
Packaging unit:	10 pieces

Angle 45°



AN 25-45 ABS

50-0500440-01-01

Bend 45° for tube TU 25 ABS.

Technical data

Material:	ABS
Colour:	light grey
Diameter:	25 mm
Packaging unit:	10 pieces

T-piece

TP 25 ABS

T-piece for tube TU 25 ABS.

50-0500442-01-01
Technical data

Material:	ABS
Colour:	light grey
Diameter:	25 mm
Packaging unit:	10 pieces

Socket

SO 25 ABS

Socket to connect two tubes TU 25 ABS.

50-0500443-01-01
Technical data

Material:	ABS
Colour:	light grey
Diameter:	25 mm
Packaging unit:	10 pieces

Screw-junction piece

SJ 25 ABS
50-0500444-01-01

Screw-junction for tube TU 25 ABS.
For tube junctions in deep freeze warehouses in operating state because of the very long cure time in these temperatures. Junctions from ABS to PVC can be realized by combination of one SJ 25 ABS and one SJ 25 PVC.

Technical data

Material:	ABS
Colour:	light grey
Diameter:	25 mm
Packaging unit:	10 pieces

End-cap

EC 25 ABS
50-0500445-01-01

End-cap for tube TU 25 ABS.

Technical data

Material:	ABS
Colour:	light grey
Diameter:	25 mm
Packaging unit:	10 pieces

Compressed-air connection

**CC 25 ABS**

50-0500419-01-01

Compressed-air connection for tube TU 25 PVC for cleaning the aspirating tube.

Technical data

Material:	ABS
Colour:	grey
Diameter:	25 mm

Ventilation duct flange

**DF 25 ABS**

50-0500186-01-01

Flange for tube TU 25 ABS for the monitoring of ventilation ducts. Per duct 3 pieces of DF 25 ABS are required, 2 for the aspirating stub, 1 for the air recirculation. Please consider the planning hints.

Technical data

Material:	ABS
Colour:	grey
Diameter:	25 mm

3.3. Flex Pipe Materials

Flexible tube



FT 21 PA

50-0500475-01-01

Flexible tube for sampling stub flex and equipment monitoring.

Technical data

Material:	PA
Colour:	black
Outer Diameter:	21.2 mm
Length:	1 m

Self sealing coupling M20



SC 20ST PA

50-0500477-01-01

Self sealing coupling straight to connect flexible tube (FT 21 PA) with a tube TU 25 XXX. To use together with the screw ring AD 20 XXX.

Order for the connection of TU 25 XXX with FT 21 PA (e.g. with T-piece):

TU 25 XXX – TP 25 XXX – AD 20 XXX – SC 20ST PA – FT 21 PA

Technical data

Pipe connection:	25 mm
Material:	PA
Diameter:	M20, 21,2 mm
Packaging unit:	10 pieces

Self sealing coupling M20



SC 20BE PA

50-0500476-01-01

Same as SC 20 ST PA but bent.

Technical data

Pipe connection:	25 mm
Material:	PA
Diameter:	M20, 21,2 mm
Packaging unit:	10 pieces

Adapter M20



AD 20 PVC

50-0500414-01-01

AD 20 ABS

50-0500449-01-01

Ring nut to use together with SC 20XX PA. The rings have to be glued into PVC/ABS sockets, T-pieces with diameter 25mm.

Technical data

Pipe connection:	25 mm
Material:	PVC / ABS
Diameter:	M20
Packaging unit:	10 pieces

3.4. Concrete Inserts

Tube


FT 32C
On demand

Tube for concrete insertion. (To be purchased locally)

Technical data

Material:	PE (KRF 32 M)
Colour:	red
Outer Diameter:	32 mm

T-branch connection


TP 32C
235024

T-branch connection for tube FT 32C.

Technical data

Material:	PVC
Colour:	grey
Outer Diameter:	32 mm

Sampling point, T-piece


SP 32C T
235008

T-piece with sampling point tube for FT 32C.

Technical data

Material:	PVC
Colour:	grey
Outer Diameter:	32 mm

Sampling point, L-piece


SP 32C L
235016

L-piece with sampling point for tube for FT 32C.

Technical data

Material:	PVC
Colour:	grey
Outer Diameter:	32 mm

Sampling rosette


SP 15 PVC
115312

To be used together with sampling points SP 32T and SP 32C.

Technical data

Diameter a:	16 mm
Diameter b:	30 mm
Material:	PVC

3.5. Copper Tube Materials

Tube		TU 22 Cu	0.101187
		Tube to create sampling pipes for the ASD 535.	
		<i>Technical data</i>	
		Material:	Cu
		Outer Diameter:	22 mm
		Length:	5m
Bend 90°		BE 22 Cu	50-0500484-01-01
		Bend for tube TU 22 Cu.	
		<i>Technical data</i>	
		Material:	Cu
		Outer Diameter:	22 mm
T-piece		TP 22 Cu	50-0500487-01-01
		T-piece for tube TU 22 Cu.	
		<i>Technical data</i>	
		Material:	Cu
		Outer Diameter:	22 mm
Socket		SO 22 Cu	50-0500486-01-01
		Socket to connect two tubes TU 22 Cu.	
		<i>Technical data</i>	
		Material:	Cu
		Outer Diameter:	22 mm
Adapter		AD 22-25 Cu	50-0500488-01-01
		Adapter for the junction of tubes TU 25 PVC and TU 22 Cu. To use together with adapter-socket AD 25-Inch xxx.	
		<i>Technical data</i>	
		Material:	Cu
		Outer Diameter:	22 mm – $\frac{3}{4}$ "
End-cap		EC 22 Cu	50-0500485-01-01
		End-cap for tube TU 22 Cu.	
		<i>Technical data</i>	
		Material:	Cu
		Outer Diameter:	22 mm

3.6. Stainless Steel Tube Materials

Tube

TU 22 StSteel
0.101134

Tube to create sampling pipes.

Technical data

Material:	Stainless steel
Outer Diameter:	22 mm
Length:	6m

Bend 90°

BE 22 StSteel
50-0500489-01-01

Bend 90° for tube TU 22 StSteel.

Technical data

Material:	Stainless steel
Outer Diameter:	22 mm

T-piece

TP 22 StSteel
50-0500492-01-01

T-piece for tube TU 22 StSteel.

Technical data

Material:	Stainless steel
Outer Diameter:	22 mm

Socket

SO 22 StSteel
50-0500491-01-01

Socket to connect two tubes TU 22 StSteel.

Technical data

Material:	Stainless steel
Outer Diameter:	22 mm

Adapter

AD 22-25 StSteel
50-0500493-01-01

Adapter for the junction of tubes TU 25 PVC or TU 25 ABS and TU 22 StSteel. To use together with adapter-socket AD 25-Inch PVC or AD 25-Inch ABS.

Technical data

Material:	Stainless steel
Outer Diameter:	22 mm-¾"

Adapter-socket

AD 25-Inch PVC
50-0500415-01-01

Adapter-socket for the junction of tubes TU 25 PVC and TU 22 StSteel. To use together with adapter AD 22-25 StSteel.

Technical data

Material:	PVC
Diameter:	25 mm – $\frac{3}{4}$ "
Packaging unit:	10 piece

Adapter-socket

AD 25-Inch ABS
50-0500447-01-01

Adapter-socket for the junction of tubes TU 25 ABS and TU 22 StSteel. To use together with adapter AD 22-25 StSteel.

Technical data

Material:	ABS
Diameter:	25 mm – $\frac{3}{4}$ "
Packaging unit:	10 pieces

End-cap

EC 22 StSteel
50-0500490-01-01

End cap for tube TU 22 StSteel.

Technical data

Material:	Stainless steel
Outer Diameter:	22 mm

3.7. Special Tubing Parts

Tube



TU 6 PVC

Tube for sampling stub capillary.

50-0500401-01-01

Technical data

Material:	PA
Colour:	grey
Length:	5 m
Outer Diameter:	6 mm
Inner Diameter:	4 mm

Reduction for sampling point Capillary



RE 25-6 PVC

50-0500412-01-01

Reduction 25mm to 6 mm (TU 25 PVC - TU 6 PVC) for sampling point type "capillary" Has to be glued into T-piece TP 25 PVC.

Technical data

Material:	PVC
Diameter:	25 - 6 mm
Packaging unit:	10 pieces

Reduction ¾" – 25mm



RE ¾-25 PVC

50-0500496-01-01

RE ¾-25 ABS

50-0500495-01-01

Reduction for ¾" tube to 25mm tube (TU 25 PVC or ABS).

Technical data

Material:	PVC / ABS
Diameter:	¾" / 25 mm

4. Sampling Points

Sampling hole clip	Clip x.x PA	
	CLIP 2.0 PA	50-0500463-01-01
	CLIP 2.5 PA	50-0500464-01-01
	CLIP 3.0 PA	50-0500465-01-01
	CLIP 3.5 PA	50-0500466-01-01
	CLIP 4.0 PA	50-0500467-01-01
	CLIP 4.5 PA	50-0500468-01-01
	CLIP 5.0 PA	50-0500469-01-01
	CLIP 5.5 PA	50-0500470-01-01
	CLIP 6.0 PA	50-0500471-01-01
	CLIP 6.5 PA	50-0500472-01-01
	CLIP 7.0 PA	50-0500473-01-01

Sampling hole on aspirating pipe (clip).
 Available with different diameter according to the project data.
 Only for PVC and ABS pipes with 25 mm diameter
 Packaging unit: 10 pieces

Technical data

Hole diameter	Type
2.0 mm	CLIP 2.0 PA
2.5 mm	CLIP 2.5 PA
3.0 mm	CLIP 3.0 PA
3.5 mm	CLIP 3.5 PA
4.0 mm	CLIP 4.0 PA
4.5 mm	CLIP 4.5 PA
5.0 mm	CLIP 5.0 PA
5.5 mm	CLIP 5.5 PA
6.0 mm	CLIP 6.0 PA
6.5 mm	CLIP 6.5 PA
7.0 mm	CLIP 7.0 PA

Maintenance clip	Clip-REV PA	
		50-0500474-01-01
	Clip without hole for revision purpose.	
	Packaging unit: 10 pieces	

Technical data

Pipe connection:	25 mm
Material:	PA

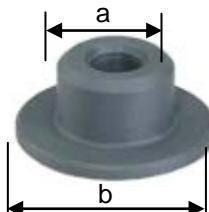
Sampling-funnel

SF ABS
50-0500421-01-01

Sampling-funnel for tubes TU 25XXX. For sampling points exposed to high air current like monitoring of server racks or air conditioners.

Technical data

Pipe connection:	25 mm
Hole diameter:	5 mm
Material:	ABS

Rosette for sampling tube stiff

SP 36 PVC
50-0500416-01-01
SP 36 ABS
50-0500450-01-01

For tubes TU 25 PVC/ABS to create the sampling point type "sampling tube stiff with rosette". Has to be glued into the tubes TU 25 PVC or ABS. Various outer diameters (b) on demand available.

Technical data

Diameter a:	21.5 mm
Diameter b:	36 mm
Material:	PVC / ABS
Packaging unit:	10 pieces

Sampling point for ceiling duct

SP M20 PVC
50-0500413-01-01
SP M20 ABS
50-0500081-01-01

Sampling point for ceiling ducts to connect flex sampling pipe (FT 21 PA.). To connect the flex sampling pipe FT 21 PA. Inclusive self sealing coupling SC 20ST PA.

Technical data

Material:	PVC / ABS
Colour:	white / grey
Diameter:	M20, 36mm
Installation depth :	PVC 25mm ABS 35mm

Sampling point for ceiling duct (Set)

SP M20 PVC-Set
50-0500478-01-01
SP M20 ABS-Set
50-0500480-01-01

Sampling point for ceiling ducts. Complete set incl. T-Piece TP 25XXX, flex sampling pipe (FT 21 PA) and sampling point (SP M20 XXX).

Technical data

Material:	PVC
Length sampling stub:	0.8 m

Sampling point Capillary (set)

SP TU6 PVC Set
50-0500098-01-01

To create the sampling point type "Capillary".

Complete capillary tube-set for the installation in sampling pipes TU 25 PVC. Incl. T-piece TP 25 PVC, reduction RE 25-6 PVC and capillary stub 1.5m.

Technical data

Length:	1.5 m
Colour:	gray, RAL 7011
Diameter outside:	6 mm
Diameter inside:	4 mm

Sampling point with heating


HEAT 3.0 PVC	red	50-0500423-01-01
HEAT 3.5 PVC	blue	50-0500424-01-01
HEAT 4.0 PVC	green	50-0500425-01-01
HEAT 4.5 PVC	black	50-0500426-01-01
HEAT 5.0 PVC	brown	50-0500427-01-01

To install the aspirating pipe in deep-freeze rooms to prevent the freezing of the aspirating holes. HEAT X.X is the relevant diameter for ASD PipeFlow-calculations (3.0/3.5/4.0/4.5/5.0mm)

Technical data

Pipe connection:	25 mm
Hole Diameter	Type
5,7 mm	HEAT 3.0 PVC
6,1 mm	HEAT 3.5 PVC
6,3 mm	HEAT 4.0 PVC
6,7 mm	HEAT 4.5 PVC
7,1 mm	HEAT 5.0 PVC

Sampling point with heating


HEAT 3.0 ABS	red	50-0500451-01-01
HEAT 3.5 ABS	blue	50-0500452-01-01
HEAT 4.0 ABS	green	50-0500453-01-01
HEAT 4.5 ABS	black	50-0500454-01-01
HEAT 5.0 ABS	brown	50-0500455-01-01

Same as HEAT X.X PVC but in ABS.

Technical data

Pipe connection:	25 mm
Hole Diameter	Type
5,7 mm	HEAT 3.0 ABS
6,1 mm	HEAT 3.5 ABS
6,3 mm	HEAT 4.0 ABS
6,7 mm	HEAT 4.5 ABS
7,1 mm	HEAT 5.0 ABS

Heat Resistor

Heat Resistor
135224

Replacement for the sampling point with heating HEAT X.X PVC/ABS.

Technical data

Resistor:	220 Ω
-----------	-------

Cable connection fitting

CCF 25 PVC
50-0500428-01-01
CCF 25 ABS
50-0500456-01-01

Cable connection fitting set for T-junctions of the tubes in deep-freeze rooms.

Technical data

Pipe connection diameter:	25 mm
---------------------------	-------

Silicon litz wire

SLW 0.5 wt (white)
50-0500483-01-01
SLW 0.5 bk (black)
50-0500482-01-01

Silicon litz wire 0.5mm² to connect the heating resistors in the heating nozzles HEAT X.X PVC/ABS.

Technical data

Packaging unit:	100m
-----------------	------

Wiring connection unit

WCU 535
5000635.0101

For the introduction of the supply of the sampling point with heatin into the aspirating tube, with internal clamps. For more details please see the guidelines for deep freeze-warehouses.

Technical data

Dimensions (H x W x D):	80 x 82 x 85 mm
-------------------------	-----------------

Material:	PC
-----------	----

Pipe connection diameter:	25 mm
---------------------------	-------

Weight:	317g
---------	------

5. Clamps, Glue and Cleaner

Pipe clamp



PC 25 PP

50-0500461-01-01

Pipe clamp, type "Goema" for tubes TU 25XXX.

Technical data

Pipe connection:	25 mm
Material:	PP

Pipe clamp



PC 25 PVC

50-0500462-01-01

Pipe clamp, type "IKS" for tubes TU 25XXX.

Technical data

Pipe connection:	25 mm
Material:	PP
Packaging unit:	100 pieces

Pipe clamp „CLIC“



PC 25 PA

186309

Pipe clamp „CLIC“, type "Egli Fischer" for tubes TU 25XXX.

Technical data

Pipe connection:	25 mm
Material:	PA

PVC glue



Glue 125 PVC

50-0500432-01-01

Glue to connect the PVC pipes and fittings.

Technical data

Quantity:	125 ml
-----------	--------

PVC glue



Glue 500 PVC

50-0500433-01-01

Glue to connect the PVC pipes and fittings.

Technical data

Quantity:	500 ml
-----------	--------

PVC glue



Glue 1000 PVC

50-0500434-01-01

Glue to connect the PVC pipes and fittings.

Technical data

Quantity:	1000 ml
-----------	---------

ABS glue

**Glue 500 ABS****50-0500460-01-01**

Glue to connect the ABS pipes and fittings.

Technical data

Quantity:	500 ml
-----------	--------

Cleaner for PVC and ABS

**Cleaner 1000****50-0500437-01-01**

To clean the pipes and fittings (PVC and ABS) before gluing.

Technical data

Quantity:	1000 ml
-----------	---------

6. Accessories

Detector Box



REK 511

199443

For the localization of a fire in a separate room, when a single ASD is monitoring several rooms. To use together with the SSD 515-Xs smoke detector. Has to be installed in every stub, which leads to a single room from the main tube.

Technical data

Operating voltage:	18-28 VDC
Ambient temperature:	0 °C to + 50 °C
Dimensions (H x W x D):	186 x 122 x 85 mm

Scattered light smoke detector for REK 511



SSD 515-1S	sensitivity 1.2%/m	5000604-0101
SSD 515-2S	sensitivity 0.6%/m	5000604-0102
SSD 515-3S	sensitivity 0.3%/m	5000604-0103

The SSD 515-xS (Scattered Light Smoke Detector) is the smoke sensor for the accessory device REK 511 (full addressing) for the Aspirating Smoke Detector of the ASD and RAS product family. The SSD 515-xS operates according to the scattered light principle and is designed so that it optimally meets the specific requirements of smoke detection in association with an Aspirating Smoke Detector. The detector has alarm threshold tracking and is additionally available with various sensitivities. By choosing the appropriate detector sensitivity, application-specific detection properties of the Aspirating Smoke Detector are possible.

Technical data

Operating voltage:	18 to 28VDC
Ambient temperature:	-20 °C to + 60 °C
Protection class:	IP 44
Case colour:	white
Dimensions (D x H):	80 x 56mm

Filter box small



FBS 25 PC

50-0500143-01-01

Filter box small including filter-mat. Inserted into the sampling pipe before ASD.
To be used in slightly dusty rooms.

Technical data

Dimensions (H x W x D):	80 x 82 x 85 mm
Material:	PC
Pipe connection diameter:	25 mm

Filter mat small for filter box small


FBS 25 PC EFM 5er

30-6800022-01-01

Filter-mat for filter box small.
Packaging of 5 pieces

Technical data

Dimensions (H x W x D):	80 x 80 x 20 mm
-------------------------	-----------------

Filter box large


FBL 25 PC

0.100733

Filter box large including filter-mat. Inserted into the sampling pipe before ASD. To be used in dusty rooms.

Technical data

Dimensions (H x W x D):	120 x 122 x 85 mm
-------------------------	-------------------

Material:	PC
-----------	----

Pipe connection diameter:	25 mm
---------------------------	-------

Filter mat large for filter box large


FBL 25 PC EFM 5er

30-6800024-01-01

Replacement filter mat for the filter box large.
Packaging of 5 pieces

Technical data

Dimensions (H x W x D):	117 x 80 x 80 mm
-------------------------	------------------

Filter box extra large


FBX 25 PC

50-0500184-01-01

Filter box extra large including 2 filter-mats and 1 holder for the filter-mat. Inserted into the sampling pipe before ASD. To be used in very dusty rooms.

Technical data

Dimensions (H x W x D):	250 x 160 x 90 mm
-------------------------	-------------------

Material:	PC
-----------	----

Pipe connection diameter:	25 mm
---------------------------	-------

Filter mat for filter box extra large


Filter-Mat X

0.101235

Filter-mat for filter box extra large.

Packaging of one piece. Technical data

Dimensions (H x W x D) :	155 x 85 x 65 mm
--------------------------	------------------

Holder for Filter-Mat X


Holder Filter-Mat X

50-0500185-01-01

1 holder is included in the FBX 25 PC for the filter-mat at the bottom side.

Dust filter unit large



DFU 535L

6900433

Dust filter unit large.

To be used in dusty rooms. Inserted into the sampling pipe before ASD.

Technical data

Dimensions (H x W x D):	165 x 220 x 220 mm
Material:	steel 37, black
Pipe connection diameter:	40/25 mm
Weight :	1600g

Replacement cartridge for DFU 535L



DFU 535L RC

6900434

Replacement cartridge for dust filter unit large.

Technical data

Weight :	170g
----------	------

Dust filter unit extra large



DFU 535XL

6900435

Dust filter unit extra large.

To be used in very dusty rooms. Inserted into the sampling pipe before ASD.

Technical data

Dimensions (H x W x D):	230 x 250 x 250 mm
Material:	steel 37, black
Pipe connection diameter:	40/25 mm
Weight:	2000g

Replacement cartridge for DFU 535XL



DFU 535XL RC

6900436

Replacement cartridge for dust filter unit extra large.

Technical data

Weight:	520g
---------	------

Dirt trap box



DTB 25 PC

6900285

Dirt trap box

To be used in very dusty rooms. Inserted into the sampling pipe before dust filter of any type and ASD.

Technical data

Dimensions (H x W x D) :	160 x 250 x 90 mm
Material:	PC
Pipe connection diameter:	25 mm

Water retaining box

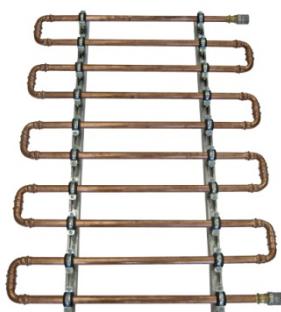
WRB 25 PVC
6900286
WRB 25 ABS
50-0500057-01-01

Water retaining box standard

Used in rooms with high humidity. Inserted into the sampling pipe before DTB 25 PC (when used), any types of dust filters (when used) and ASD.

Technical data

Dimensions (H x W x D):	335 x 250 x 90 mm
Material:	PC
Pipe connection diameter:	25 mm

Air cooler and water separator

LK 35 – PVC
50-0500122-01-01
LK 35 – ABS
50-0500123-01-01

Is used as an air cooler when the sampling pipe is in a room >60°C. Can also be used as a water separator in rooms with high amount of air humidity and / or condensing water because of temperature differences. For more details see the technical documentation.

Technical data

Dimensions (H x W x D):	1000 x 730 x 80 mm
Material:	Copper pipe d=22x1 mm
Weight:	8 Kg
VdS-Approval:	G208154
CPD-Approval:	0768-CPD-20600

Automatic blow out device

ADB 01A
50-0500131-01-02

The automatic blow-out device ADB-01A is used in areas which are polluted with a high amount of dust- and dirt particles. With the blow-out device, 1 sampling pipe is automatically blown out and cleaned, to prevent fault messages caused by clogged aspiration points and also to avoid false alarms. At the same time, the life-time of the „optical scattered-light-detector“ located in the aspiration system is substantially increased.

Technical data

Mains voltage:	15 to 30 V DC
Pressure connection:	(constant) 4 bar constant
Dimensions (H x W x D):	275 x 380 x 180 mm
Pipe connection diameter:	25 mm

Automatic blow out device



ADB 02

50-0500132-01-02

Same as ADB 01A except: Version for 2 sampling pipes.

Technical data

Mains voltage:	15 to 30 V DC
Pressure connection:	(constant) 4 bar constant
Dimensions (H x W x D):	500 x 500 x 210 mm
Pipe connection diameter:	25 mm

Manual ball valve



MV 25 PVC

50-0500175-02-01

MV 25 ABS

50-0500174-02-01

Manual ball valve for revision and cleaning works with compressed air.

Technical data

Material:	PVC
Pipe connection diameter:	25 mm

Detonation flame arrester



DFA 25-3

50-0500139-01-01

Detonation flame arrester for explosion zones. Equipment category IIC. 2 pieces are needed per sampling tube. For more details see the technical documentation.

Technical data

Pipe connection diameter:	25 mm
---------------------------	-------

Detonation flame arrester



DFA 25-2

50-0500084-01-02

Same as DFA 25-3 but equipment category IIB.

Technical data

Pipe connection diameter:	25 mm
---------------------------	-------

Detonation flame arrester



DFA 25-1

50-0500085-01-02

Same as DFA 25-3 but equipment category IIA.

Technical data

Pipe connection diameter:	25 mm
---------------------------	-------

Noise reduction housing

Insulation housing
50-0500073-01-01

The noise insulation housing is used as an accessory part for the aspirating smoke detector ASD 535 in areas where a low level of noise is required. If the ventilator noise from the aspirating smoke detector is found to be disruptive and changing the location of the evaluation unit is not possible, the aspirating smoke detector can be integrated into a noise insulation housing.

Technical data

Sound pressure level:	20 dB (A)
Dimensions (H x W x D) :	500 x 500 x 300 mm
Material:	Steel sheet
Weight :	21,5 kg
Protection class:	IP 54

Additional housing for SecuriRAS ASD 535

ASD Housing Ex
50-1200001-01-01

The additional housing is designed for the integration of an aspirating smoke detector ASD 535. The additional housing should be used as additional personal protection in explosive areas. If there is danger of operations related damage (e.g. lift truck operations) to the aspirating smoke detector, the additional housing can serve as a mechanical protection measure.

Technical data

Material:	Steel sheet
Dimensions (H x W x D):	500 x 500 x 300 mm
Weight:	21 kg
Protection class:	IP 54

Cleaning Kit SecuriRAS ASD

Cleaning Kit
50-0500062-01-01
Transport case for Cleaning Kit
50-0500095-01-01

The cleaning kit is generally used for service and maintenance work on aspirating smoke detectors. It is used for cleaning suction pipes that can be blown out and aspirated at high power. Adaptation to the respective suction pipes is possible with the supplied accessory materials.

Technical data

Supply voltage:	230 VAC	
Power consumption:	1100 W	
Compressed air	capacity:	
Air volume" approx.	1500 l/minr	
Operating pressure approx		230 mbar
Weight (without accessories):	3400 g	

7. Spare Parts

Main board for ASD 531



AMB 31

11-2200012-01-01

Repair exchange for the ASD 531.

Technical data

Dimensions (H x W x D): 250 x 160 x 15 mm

Main board for ASD 532



AMB 32

11-2200013-01-01

Repair exchange for the ASD 532.

Technical data

Dimensions (H x W x D): 250 x 160 x 15 mm

Main board for ASD 535-1 and -3



AMB 35-1

4301218-0101

Repair exchange for the ASD 535-1 and -3.

Technical data

Dimensions (H x W x D): 125 x 176 x 20 mm

Main board for ASD 535-2 and -4



AMB 35-2

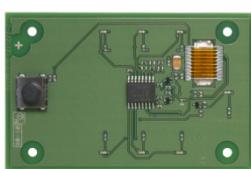
4301218-0102

Repair exchange for the ASD 535-2 and -4.

Technical data

Dimensions (H x W x D): 125 x 176 x 20 mm

Basic control board for standard display of ASD 535-1 and -2



BCB 35

4301220-0101

Repair exchange for the standard display unit (without smoke level display)

Technical data

Dimensions (H x W x D): 90 x 59 x 9 mm

Basic control board for advanced display of ASD 535-3 and -4



ACB 35

4301221-0101

Repair exchange for the advance display unit (with smoke level display)

Technical data

Dimensions (H x W x D): 90 x 142 x 9 mm

Replacement battery



CR 2032

11-4000002-01-01

Replacement battery for AMB 31, AMB 32 and AMB 35

Air flow sensor for ASD 531 and ASD 532

AFS 32
11-2200007-01-01

 Repair exchange for air flow sensor for ASD 531 / 532 incl.
connection wire

Air flow sensor for ASD 535

AFS 35
4000300

 Repair exchange for air flow sensor for ASD 535 incl.
connection wire

Technical data

 Dimensions (H x W x D): **15 x 14 x 115 mm**
Aspirating fan unit for ASD 531 and ASD 532

AFU 32
11-2200008-01-01

 Repair exchange for the aspirating fan unit complete for
ASD 531/532.

Aspirating fan unit for ASD 535

AFU 35
4000299

 Repair exchange for the aspirating fan unit complete for
ASD 535.

Technical data

 Dimensions (H x W x D): **138 x 185 x 58 mm**
Rotary Snap Lock for ASD 531/532/535

RSL 35

)

4301315-0101

Repair exchange for the ASD 531/532/535 housing.

Technical data

 Material: **ABS / steel**

 Packaging unit: **4 pieces**
Insect protection screen for ASD 531/532/535

IPS 35
11-2300012-01-01

Insect protection screen for the ASD 531/532/535 housing.

Technical data

 Material: **steel**

 Packaging unit: **2 pieces**

8. Product Type Index

A

ACB 35.....	37
AD 20 ABS.....	19
AD 20 PVC	19
AD 22-25 Cu	21
AD 22-25 StSteel	22
AD 25-Inch ABS.....	23
AD 25-Inch PVC	23
ADB 01A	34
ADB 02.....	35
ADW 531/532 DCU.....	10
ADW 535 DCU.....	10
AFS 32.....	38
AFS 35	38
AFU 32.....	38
AFU 35.....	38
AMB 31	37
AMB 32	37
AMB 35-1	37
AMB 35-2.....	37
AN 25-45 ABS	16
AN 25-45 PVC	14
AN 25-90 ABS	16
AN 25-90 PVC	13
ASD 531	5
ASD 532	5
ASD 535 Verschl	7
ASD 535-1	6
ASD 535-2	6
ASD 535-3	6
ASD 535-4	6
ASD Housing Ex	36
ASD PipeFlow.....	11
ASD PipeFlow Test.....	11
ASD PipeFlow Upd	11

B

BCB 35.....	37
BE 22 Cu	21
BE 22 StSteel	22
BE 25 ABS	16
BE 25 PVC	13

C

CC 25 ABS	18
CC 25 PVC	15
CCF 25 ABS	28
Cleaner 1000	30
Cleaning Kit	36
CLIP 2.0 PA	25
CLIP 2.5 PA	25
CLIP 3.0 PA	25
CLIP 3.5 PA	25
CLIP 4.0 PA	25
CLIP 4.5 PA	25
CLIP 5.0 PA	25
CLIP 5.5 PA	25

CLIP 6.0 PA.....	25
CLIP 6.5 PA.....	25
CLIP 7.0 PA.....	25
Clip-REV PA.....	25
CR 2032	37
CR 25 PVC	14

D

D&PL_ASD-Conf	11
D&PL_ASD-Conf_N	11
D&UL_ASD-Conf	12
D&UL_ASD-Conf_N	12
DF 25 ABS	18
DF 25 PVC	15
DFA 25-1	35
DFA 25-2	35
DFA 25-3	35
DFU 535L	33
DFU 535L RC	33
DFU 535XL	33
DFU 535XL RC	33
DTP 25 PC	33

E

EC 22 Cu	21
EC 22 StSteel	23
EC 25 ABS	17
EC 25 PVC	15

F

FBL 25 PC	32
FBL 25 PC EFM 5er	32
FBS 25 PC	31
FBS 25 PC EFM 5er	32
FH 25 PVC	13
Filter-Mat X	32
FT 21 PA	19
FT 32C	20

G

Glue 1000 PVC	29
Glue 125 PVC	29
Glue 500 ABS	30
Glue 500 PVC	29

H

HEAT 3.0 ABS	27
HEAT 3.0 PVC	27
HEAT 3.5 ABS	27
HEAT 3.5 PVC	27
HEAT 4.0 ABS	27
HEAT 4.0 PVC	27
HEAT 4.5 ABS	27
HEAT 4.5 PVC	27
HEAT 5.0 ABS	27
HEAT 5.0 PVC	27
Heat Resistor	28

I

IPS 35.....	38
-------------	----

K

KAB USB 45	12
------------------	----

L

LK 35 - ABS	34
LK 35 - PVC	34

M

MCM 35.....	9
MV 25 ABS	35
MV 25 PVC	35

N

Noise insulation housing	36
-------------------------------	----

P

PC 25 PA	29
PC 25 PP	29
PC 25 PVC	29
PL_ASD-Conf	11
PL_ASD-Conf_N	11

R

RE 25-6 PVC	24
REK 511	31
RIM 35	8
RIM 36	9

S

SC 20BE PA	19
SC 20ST PA	19
SD-Industrial	9
SF ABS	26
SIM 35	9
SJ 25 ABS	17
SJ 25 PVC	15
SLM 35	8
SLW 0.5 bk	28
SLW 0.5 wt	28
SMM 35	10
SO 22 Cu	21
SO 22 StSteel	22
SO 25 ABS	17
SO 25 PVC	14
SP 15 PVC	20
SP 32C L	20
SP 32C T	20
SP 36 ABS	26
SP 36 PVC	26
SP M20 ABS	26
SP M20 ABS-Set	26
SP M20 PVC	26
SP M20 PVC-Set	26
SP TU6 PVC Set	27

SSD 31.....	7	TP 32C.....	20	UMS 35.....	10
SSD 515-1S	31	Transport case for Cleaning			
SSD 515-2S	31	Kit	36		
SSD 515-3S	31	TU 22 Cu	21	WCU 535.....	28
SSD 532-3	7	TU 22 StSteel	22	WRB 25 ABS	34
SSD 535-3	7	TU 25 ABS.....	16	WRB 25 PVC.....	34
		TU 25 PVC.....	13		
		TU 6 PVC.....	24		
				X	
TP 22 Cu.....	21			XLM 35	8
TP 22 StSteel.....	22				
TP 25 ABS	17				
TP 25 PVC	14				
		UL_ASD-Conf.....	12		
		UL_ASD-Conf_N	11		

