AutroGuard® **V-100/AP** base for Autroprime

Features

- AutroGuard® V-100/AP base for Autroprime systems
- Interfaces a selection of AutroGuard protectors to the Autroprime system
- Provides detection benefits from AutroGuard® protector V-430, with the option of integrated sounder and/or VAD
- SelfVerify functionality for supported AutroGuard protectors
- Tool-free wiring for easy and fast connection
- Easy and reliable mounting of protector head
- Integrated short circuit isolator
- Automatic addressing, address follows the base
- Four optional cable entries (knockouts) allow quick entry of the cables to the interior
- Integrated tag holder
- Prepared for both concealed conduit wiring and surface mounted wiring

Description

The AutroGuard® V-100/AP base (standard version) and V-100/APM base (marine version) for Autroprime systems are intended to be used for several variants of the multicriteria protector V-430 series (see part numbers on next page). Autroprime system software version 2.1.5 or newer is required.

All these protectors provide the detection benefits from AutroGuard® protector V-430 series, however there are some functional limitations when used with Autroprime.

Functional limitations - Protector

- Operation Class and Performance Class as legacy MultiSensors (BH-320 series)
- It is possible to configure the unit as Heat only by setting Performance class in both Day and Night modes. In this case there will be a Panel LED "Reduced detection"
- No AutroGuard specific fault messages, only "sensor fault"
- No support of AutroGuard features "Cover Detection" and "Testmode"

- Swapping to a different protector head causes a new unit (which must be configured manually) and a missing unit (which the operator must accept as removed).
- Not possible to scan the detection loop before protector heads are mounted
- Remote output follows the LED indicator

Functional limitations - Sounder/VAD functions

- No per-unit configurability
- The AutroGuard base V-100/AP sets the sounder to "High Volume"
- The AutroGuard base V-100/AP sets the visual alarm device (VAD) to "Open Class 0,5Hz"
- Supports configuration of global sounder pulse patterns
- Supports only the following tones: Continuous, Slow Whoop
- No global settings for VAD
- No SelfVerify for Sounder and VAD functions

Number of Units

Note that there are limitations to how many AutroGuard /AP units there can be on one loop.

There are two limiting factors:

- Number of logical units:
  Each AutroGuard® V-100/AP base counts 3 and the total number of logical units are 135 (120 recommended).
- Loop current: 200 mA loop

The table shows *examples* of loop configurations. Sounder Volume=High, VAD Class=Open Frequency=0.5Hz.

Type	Current	No. of protectors with sounders/ VAD	No. of protectors without sounders/ VAD	Total on detection loop	No. of logical units	Comment
Sounder only	6,3 mA	31	0	31	93	Max. sounders
"	6,3 mA	30	30	60	120	
"	6,3 mA	20	60	80	120	Maxed loop units
VAD only, white	5 mA	40	0	40	120	Max. white VADs
"	5 mA	30	30	60	120	Limited by # logical units
"	5 mA	20	60	80	120	Maxed loop units
VAD only, red	8,7 mA	22	0	22	78	Max. Red VADs
"	8,7 mA	20	50	70	110	
Sounder + VAD, white	11,0 mA	18	0	18	54	Max. sounders + VAD White
"	11,0 mA	15	60	65	105	
Sounder + VAD, red	14,7 mA	13	0	13	39	Max. sounders + VAD Red
"	14,7 mA	10	80	90	110	

Part Numbers

116-V-100/AP	AutroGuard base for Autroprime, standard version
116-V-100/APM	AutroGuard base for Autroprime, marine version
Supported AutroGuard Protectors	
116-V-430	Protector
116-V-430-S	Protector + sounder
116-V-430-VADW	Protector + visual alarm device (VAD), white
116-V-430-VADR	Protector - visual alarm device (VAD), red
116-V-430-S-VADW	Protector + sounder + visual alarm device (VAD), white
116-V-430-S-VADR	Protector + sounder + visual alarm device (VAD), red
116-V-430/M	Protector, marine certification
116-V-430-S/M	Protector + sounder, marine certification
116-V-430-VADW/M	Protector + visual alarm device (VAD), white, marine certification
116-V-430-VADR/M	Protector - visual alarm device (VAD), red, marine certification
116-V-430-S-VADW/M	Protector + sounder + visual alarm device (VAD), white, marine certification
116-V-430-S-VADR/M	Protector + sounder + visual alarm device (VAD), red, marine certification

Mounting and Connections

The base is prepared for easy mounting and fastening of the protector head. To prevent tampering, the protector head can be locked to the base in a one-hand operation by means of a locking tool.

After the protector head is mounted, the loop diagnostic tool AS2000 can be used to scan all loops, view the loop topology and type of bases, and detect possible short-circuits or breaks on the loops.

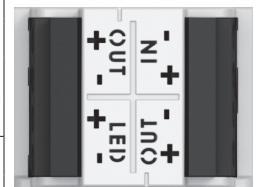The base features alternative cable entries/exits:

• one Ø = 25 mm cable entry/exit used to feed wiring from inside and through the ceiling (concealed conduit wiring)
• four cable entries for surface-mounted wiring

A data matrix code on the protector base's tagholder contains information on the part number, version, serial number and type.
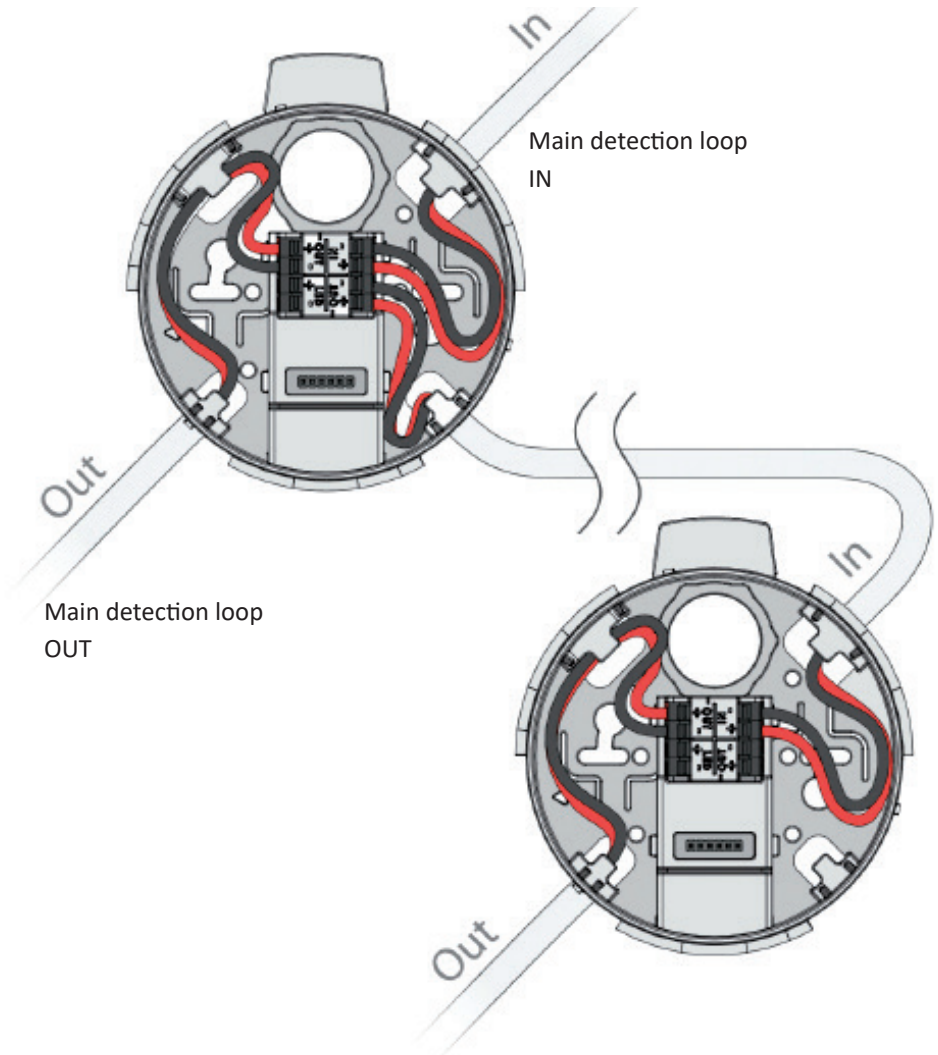
Connections

The connectors are "push-in" type, and do not require tools for stiff cables. See specification.

Connector	Description	Remarks
IN +	Loop + input	
IN -	Loop - input	
OUT +	Loop + output (Main/Branch)	Note that either of the outputs on the connector can be used for the main loop or a branch-off.
OUT -	Loop - output (Main/Branch)	
OUT +	Loop + output (Main/Branch)	
OUT -	Loop - output (Main/Branch)	
LED +	Remote LED + output	LED connection to external LED indicator as Fire Protection Equipment (FPE). Maximum 5 mA.
LED -	Remote LED - output	

Note that the colors of the wires in the illustration below are used as a reference only and may differ. Make sure + and - are connected correctly according to the table above.

Main detection loop
IN

Main detection loop
OUT

Branch-off

If necessary, a branch-off can be connected to a detection loop if the existing cable layout requires this. Note that redundancy will be lost and safety is reduced on the branch-off.
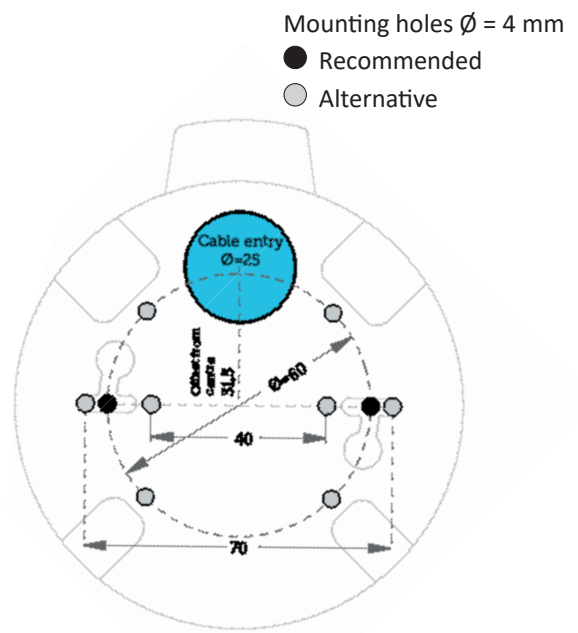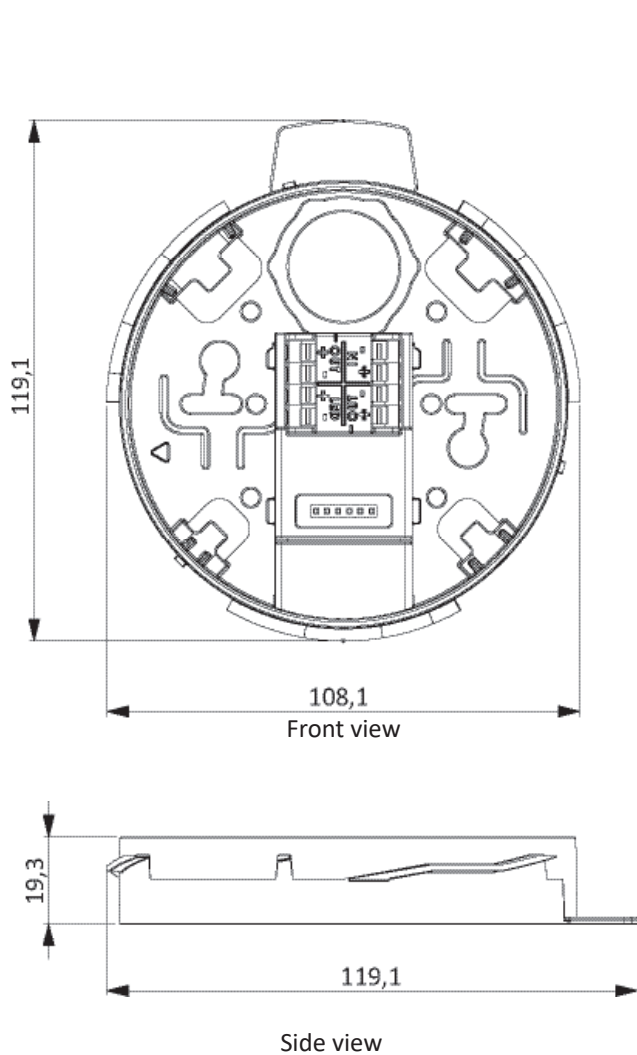
Local regulations apply.

Technical specifications

Dimensions	Height = 19.3 mm (49.6 mm including protector) Diameter = 108.1 mm (119.1 mm including tag holder)	
Weight	45 g	
Housing material	PC ABS, flammability classification UL94 V-0	
Colour	White: RAL9010	
Ingress protection	IP44D with protector (IP55 when used with conduit box)	
Current consumption base - Average	60 µA	
Current consumption protector - Average	60 µA	
Current consumption - Normal (base + protector)	120 µA	
Current consumption - Alarm (Red LED indicator ON) – (base + protector)	1,8 mA	
Current consumption - Fault	2.3 mA	
Remote LED output	5 mA (non-supervised)	
Cable requirements	Minimum 0.14 mm^2 / AWG26 Maximum 2.5 mm^2 / AWG14 The connectors are "push-in" type, and do not require tools for stiff cables with larger cross section (> 0.5 mm² and up to a maximum of 2.5 mm²)	
Connection capacity	Conductor cross section, solid	0.14 mm^2 to 2.5 mm^2
	Conductor cross section, flexible	0.14 mm^2 to 2.5 mm^2
	Conductor cross section, flexible, with ferrule without plastic sleeve	0.25 mm^2 to 1.5 mm^2
	Conductor cross section, flexible, with ferrule with plastic sleeve	0.25 mm^2 to 1.5 mm^2
	Conductor cross section AWG/kcmill	26 to 14
System compatibility	• AutroGuard Protectors require Autroprime version 2.1.5 and newer versions	
Operating temperature	-30 to +70 °C (+80 °C when configured as heat protector)	
Storage temperature	Maximum 85 °C	
Operating humidity	10 % - 95 % RH (non-condensing)	
Country of origin	Norway	
EN 54 approval short circuit isolator	EN 54-17:2005	

CE

Accessories

Part number	Description
116-WAS-2000	AS2000 loop diagnostic tool
116-BWP-143A/AG	Air duct sampling unit
116-BWP-143A-SS/AG	Air duct sampling unit, stainless steel
116-BWP-100/20/AG	Conduit box 20 mm
116-BWP-100/25/AG	Conduit box 25 mm
116-WBJ-220	AutroGuard removal tool
116-WBJ-5/07	Test gas
116-WBJ-10	Testifire smoke and heat sensor test tool

Mounting holes Ø = 4 mm
⬤ Recommended
◯ Alternative

Front view

Side view

A template in scale 1:1 is found on the bottom of the protector base's packing.

Note that when holes are to be made in the ceiling, take into consideration that the cable entry of the protector base is not in the center of the base.