

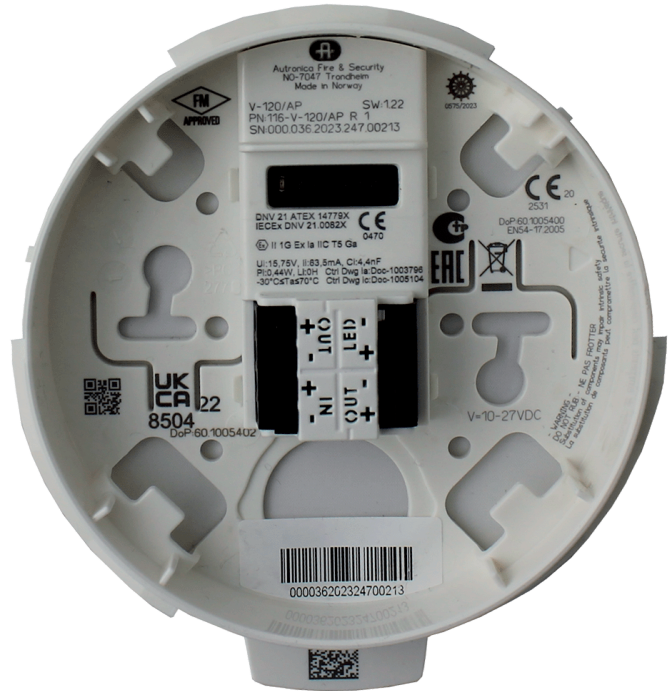


PRODUCT DATASHEET

AutroGuard® Ex base V-120/AP for Autroprime

Features

- Intrinsically safe Ex ia
- AutroGuard® Ex base V-120/AP for Autroprime systems to be used for the multicriteria protector V-530-EXIA
- Provides detection benefits from AutroGuard® protector V-530-EXIA
- SelfVerify functionality
- 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® Ex base **V-120/AP** for Autroprime systems is intended to be used for the multicriteria protector V-530-EXIA (see part number on next page).

NOTE:

Autroprime system software version 2.1.8 or newer is required.

The protector provides the detection benefits from AutroGuard® protector V-530-EXIA, 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.
- 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

Number of Units / Limitations

Note that there are limitations to how many AutroGuard /AP units there can be on one loop. The limiting factors are as follows:

- The number of addresses a unit occupies (logical units). Autroprime has a total of 135 addresses, recommended no more than 120 addresses. The V-120/AP base with AutroGuard V-530-EXIA occupies 1 address.
- Loop current: maximum 250 mA per loop
 - a) See loop current consumption in the datasheet for V-530-EXIA. Do not plan to use 100% of the available current - the system must operate with e.g. wire breaks.
 - b) Note that when the loop current increases the corresponding maximum loop resistance goes down. In most installations 200 mA is a good compromise between cable diameter and useful distance.

Part Numbers

116-V-120/AP	AutroGuard Ex base V-120/AP for Autroprime
Supported AutroGuard Protectors	
116-V-530-EXIA	Multicriteria protector

Accessories

Part number	Description
116-WAS-2000	AS2000 loop diagnostic tool
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	Testfire smoke and heat sensor test tool

Mounting

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 $\varnothing = 25$ 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.

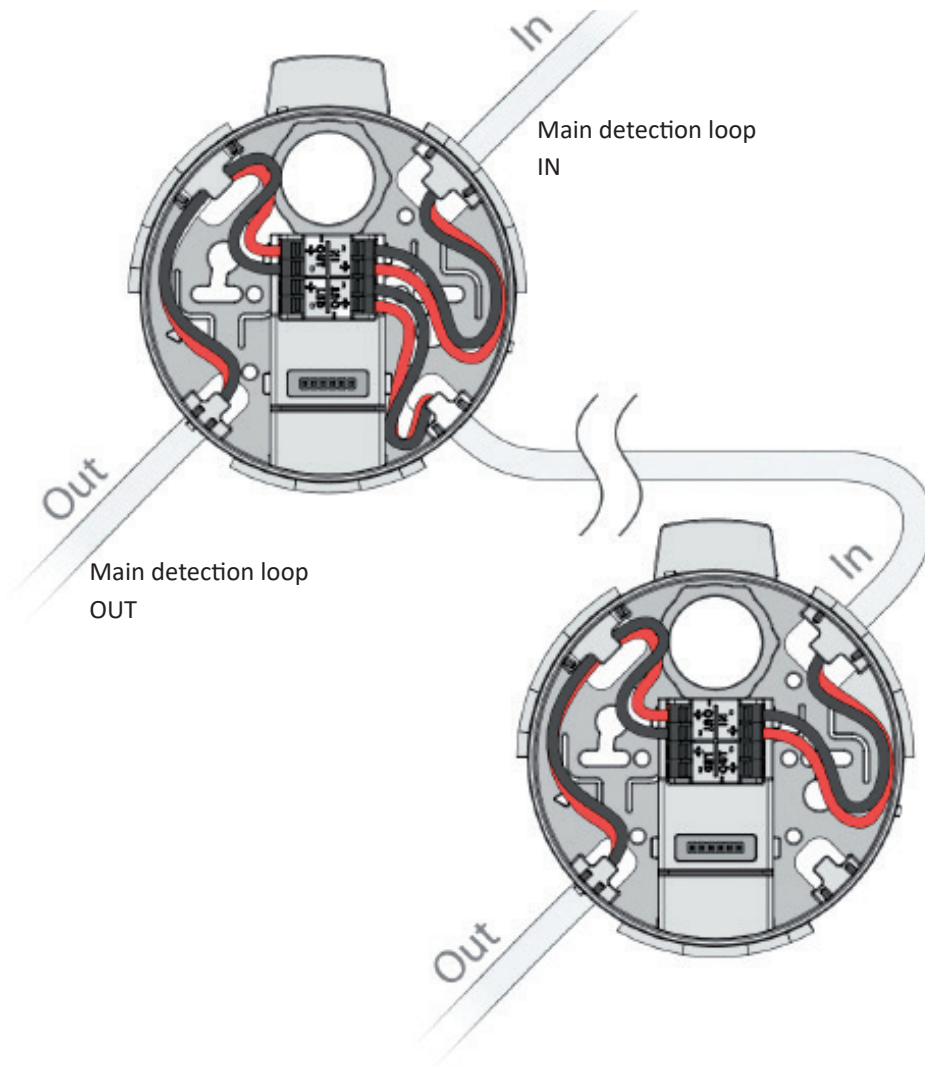
Connections

The connectors are “push-in” type, and do not require tools for stiff cables. See specification on next page.

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	Not in use
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 that + and - are connected correctly according to the table above.



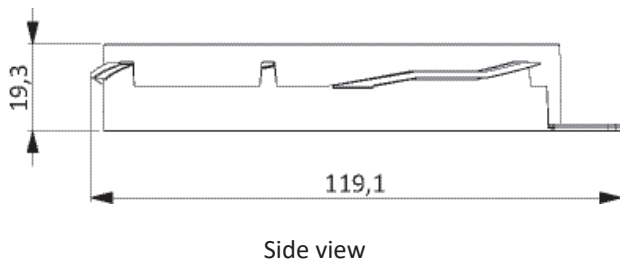
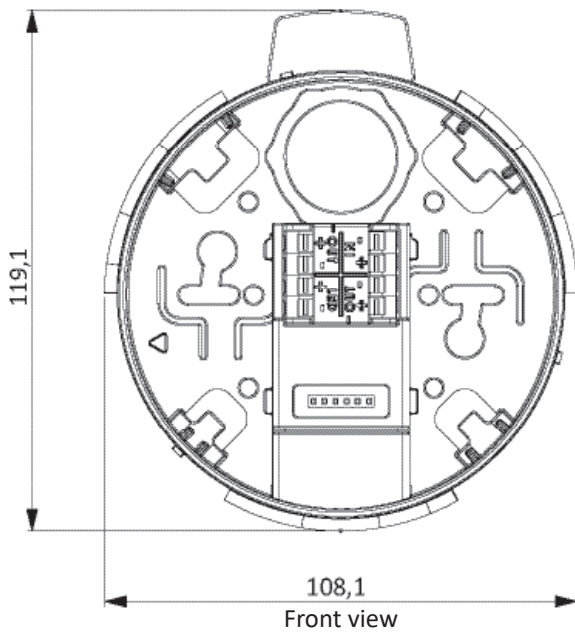
Branch-off

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

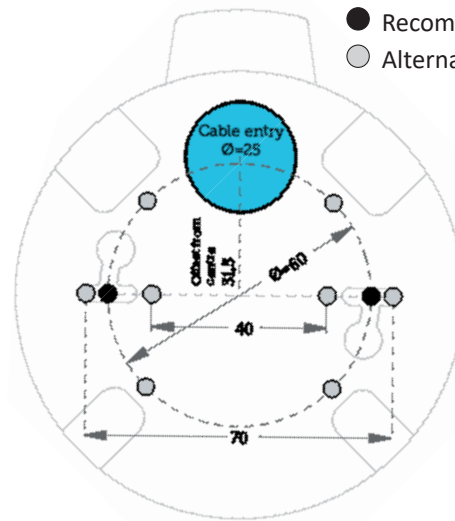
Dimensions	Height = 19.3 mm (49.6 mm including protector) Diameter = 108.1 mm (119.1 mm including tag holder)	
Weight	45 g	
Housing material	PC ABS, flammability classification UL94 V-0	
Colour	White: RAL9010	
Ingress protection	IP44D with protector (IP55 when used with conduit box)	
Current consumption 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	
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 mm ² and up to a maximum of 2.5 mm ²)	
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/kcmil	26 to 14
System compatibility	Requires Autroprime version 2.1.8 and newer versions	
Operating temperature	-30 to +70 °C	
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	
Ex certification	ATEX/IECEX	
For details on certification, refer to the Autronica product portal		



Mounting holes $\varnothing = 4$ mm

● Recommended

○ Alternative



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.