



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.

- 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

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”

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-20 | Testfire XTR2 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:

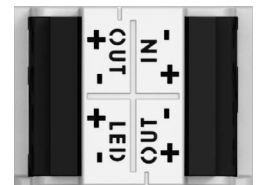
- one $\varnothing = 25$ mm cable entry/exit used to feed wiring from inside and through the ceiling (concealed conduit wiring)
- four cable entries for surface-mounted wiring

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

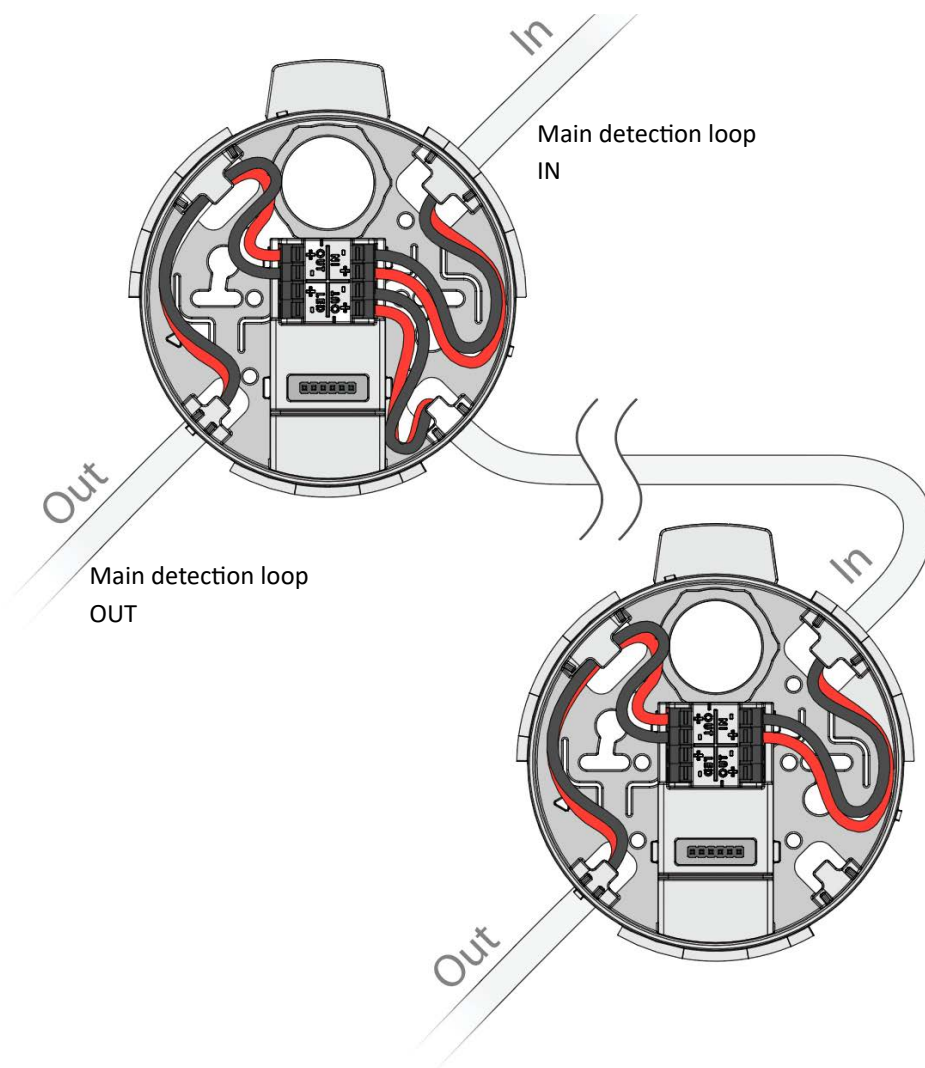
Connections

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 | |



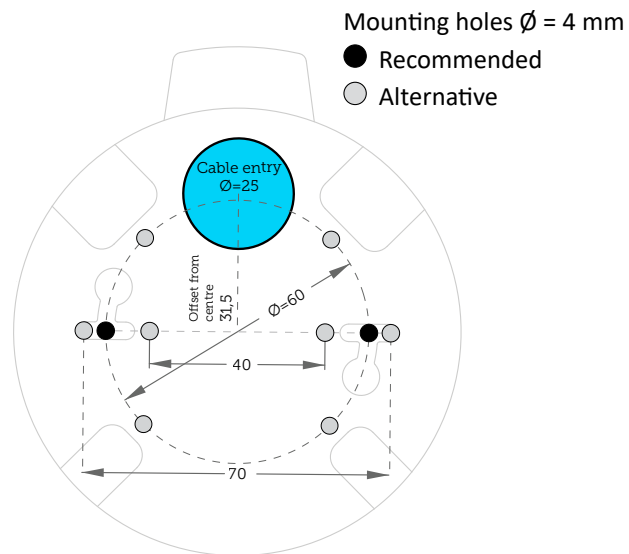
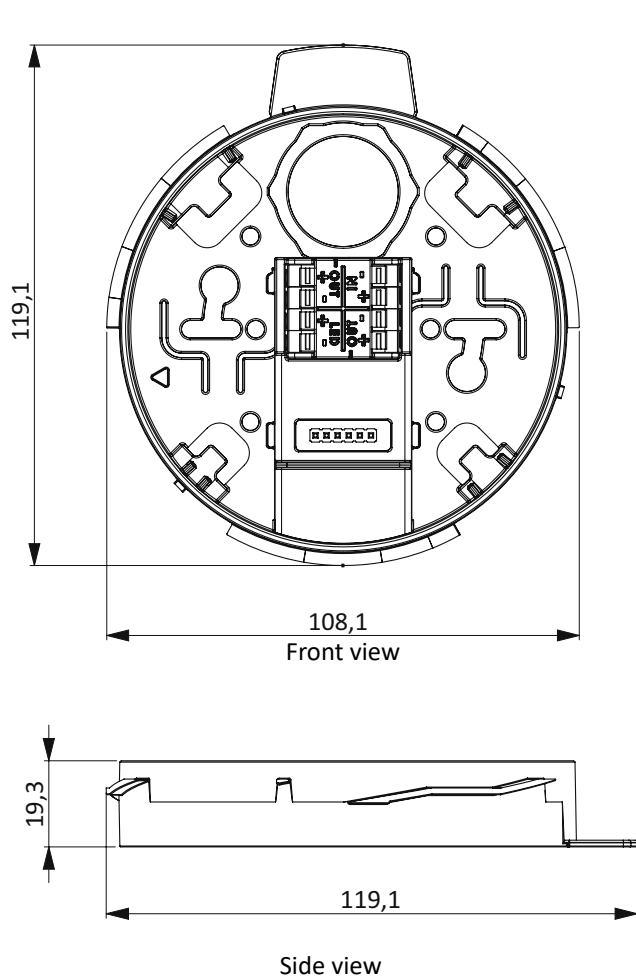
Note that the colors of the wires in the illustration below are used as a reference only and may differ. Make sure that + and - are connected correctly according to the table above.



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/kcmill | 26 to 14 |
| System compatibility | Requires Autroprime system version 2.1.8 or later | |
| 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 | | |

Dimensions and outlines (in mm)



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.