PRODUCT DATASHEET

AutroGuard® **V-110** and **V-120** base for protector series V-530

Features

- Certified according to IEC61508 SIL2 (pending)
- Intrinsically safe EX ia/EX ic (V-120)
- Tool-free wiring for easy and fast connection – no tools are required
- 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 microcontroller for communication with detection loop
- Integrated tag holder
- No-loop-break
- Ultra-low current consumption
- Prepared for both concealed conduit wiring and surface mounted wiring

SIL2
IEC 61508
(pending)

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

General

AutroGuard® V-110 and V-120 bases are the standard bases for the SIL2 certified (pending) multicriteria protector V-530 series. The V-110 has a remote LED output, and the V-120 is Ex certified.

The bases are prepared for easy mounting and fastening of the protector head. With a locking tool, the protector head can also be locked to the base in a one-hand operation.

A microcontroller inside the protector base makes the base "intelligent". In this way, the base itself can communicate with the fire alarm panel. 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 before protector heads are mounted.

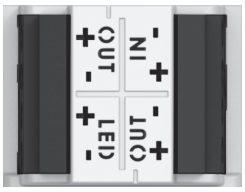
The bases feature alternative cable entries/exits:

- 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

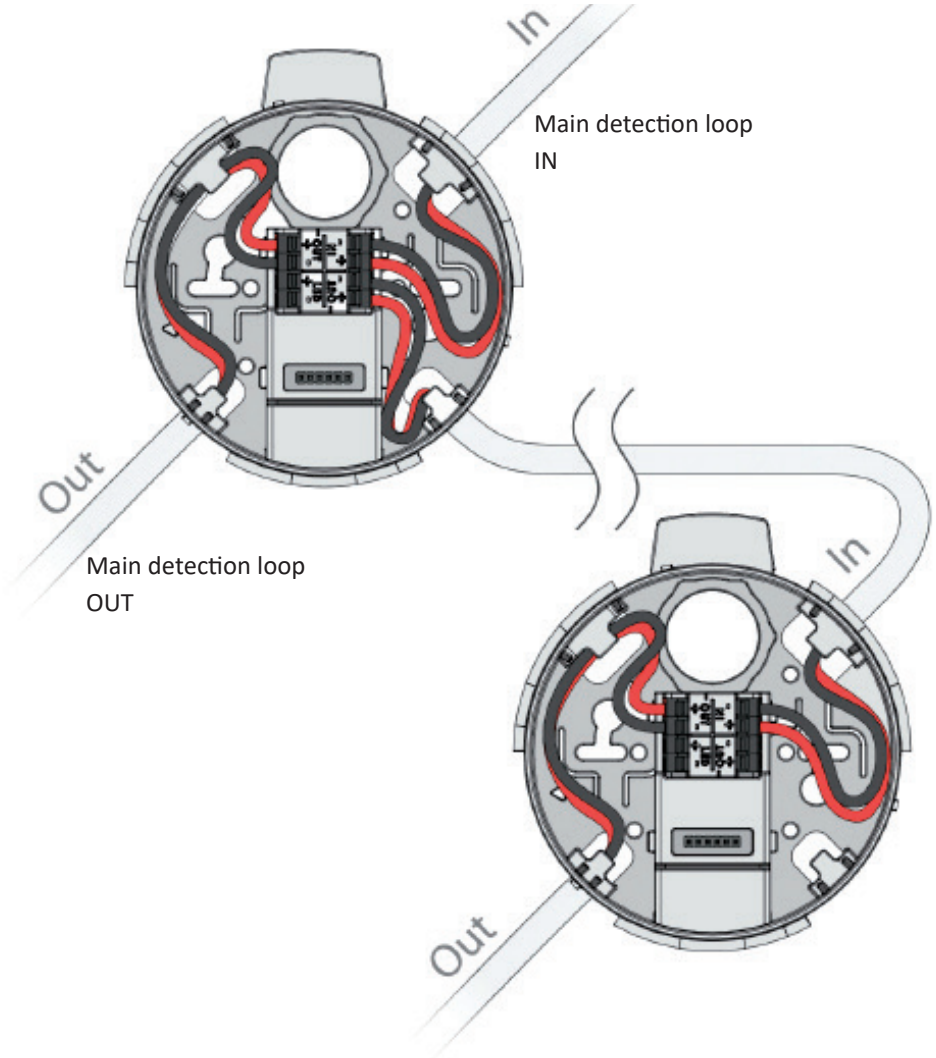
Connections

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	Applies to V-110. 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 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 (172 g including protector)	
Housing material	PC ABS, flammability classification UL94 V-0	
Colour	White: RAL9010	
Ingress protection	IP44D (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 (Yellow LED indicator ON) – (base + protector)	2.3 mA	
Remote LED output (V-110)	5 mA (non-supervised)	
Cable requirements	Minimum 0.14 mm² / AWG26 Maximum 2.5 mm² / 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 mm² to 2.5 mm²
	Conductor cross section, flexible	0.14 mm² to 2.5 mm²
	Conductor cross section, flexible, with ferrule without plastic sleeve	0.25 mm² to 1.5 mm²
	Conductor cross section, flexible, with ferrule with plastic sleeve	0.25 mm² to 1.5 mm²
	Conductor cross section AWG/kcmill	26 to 14
System compatibility	• V-430/V-530: AutroSafe system version 4.11 or newer • System version 4.11.3 or newer is required for variants with integrated alarm devices. • AutroGuard Protectors require AutroSafe loop panel: version 1.6 or newer • AutroGuard Protectors require Autroprime version 2.2.0 • Loop Driver Module BSD-310/BSD-311 revision 7 or newer	
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	
Ex certification, V-120	ATEX/IECEX	
For details on certification, refer to the Autronica product portal.		

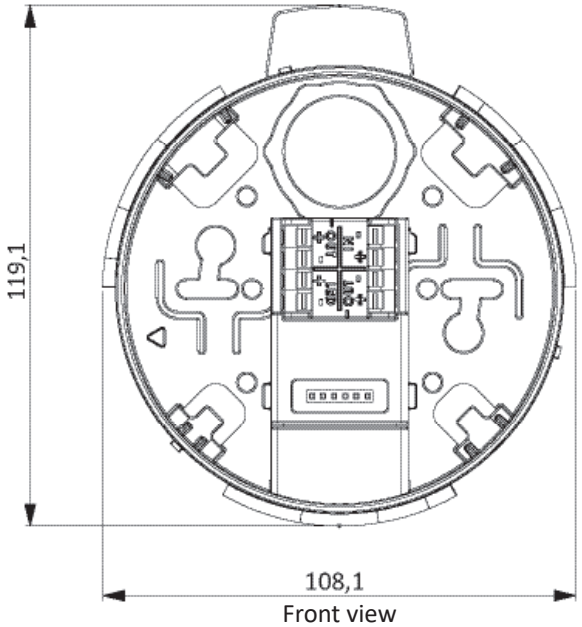
Part numbers

116-V-110	V-110 standard base with SIL2 certification (pending), with remote LED output. White
116-V-120	V-120 EX base with SIL2 certification (pending), without remote LED output, Ex certified. White

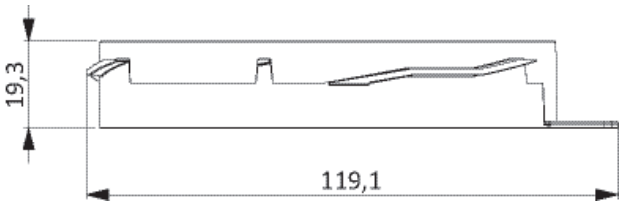
Accessories

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

Dimensions and outlines (in mm)

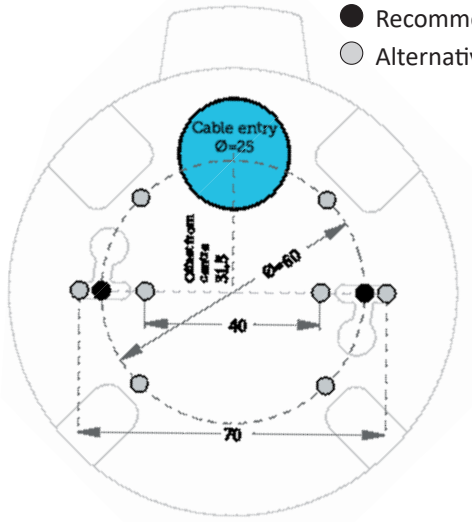


Front view



Side view

Mounting holes Ø = 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.