

PRODUCT DATASHEET

AutroGuard® Air duct sampling unit stainless steel BWP-143A-SS/AG

Features

- Designed for AutroGuard® protectors V-530-EXIA and V-530-EXIC for use in hazardous areas (EX zones)
- Optional support for AutroGuard protectors V-430 and V-530 by replacing the base
- Detects smoke in ventilation ducts
- Reduces dust and other deposits on the detector
- Stainless steel version (AISI316L)
- Terminal blocks for easy connection

Description

The AutroGuard Air Duct Sampling Unit BWP-143A-SS/AG is designed for early detection of smoke and combustion products in ventilation ducts of commercial and industrial applications.

The principle of operation is based on the Venturi effect. The unit is mounted on the outside of the duct with the sampling tubes extending into the HVAC duct. Air flowing through the duct will cause a differential pressure across the inlet tube and the exhaust tube. This pressure sets up an airflow through the housing where the airflow is forced to pass the detector head.

Air sampling pipes

The length of the sampling pipes should be between 2/3 and the full width of the duct (approximately).

Air sampling pipes are available in several lengths and must be ordered separately. See pipekit list for part numbers and lengths.

When using sampling pipes above the length of 800 mm, it should be considered if mechanical support inside the duct is needed.

The unit is delivered with 6 holes for glands or plugs Ø20 mm. Plastic plugs for transport is included. The type of glands and plugs must be according to local regulations and requirements.

Glands, plugs and locking nuts are NOT part of delivery and must be specified separately. An overview of some available fittings in Autronica's portfolio is listed on the next page.



Hazardous and safe areas

The product includes a V-120 EX base for use with AutroGuard protectors V-530-EXIA or V-530-EXIC in hazardous areas.

For use in safe areas, the V-120 EX base must be replaced:

- For AutroGuard V-430, install a V-100 base.
- For AutroGuard V-530, install a V-110 base.

Part number	Description
116-BWP-143A-SS/AG	Air duct sampling unit (stainless steel) for AutroGuard® protectors

Autronica delivers the following pipekits in different lengths:

Part number	Description
116-BJ-358/100	Pipekit L =100 mm
116-BJ-358/150	Pipekit L =150 mm
116-BJ-358/300	Pipekit L =300 mm
116-BJ-358/550	Pipekit L =550 mm
116-BJ-358/800	Pipekit L =800 mm
116-BJ-358/1000	Pipekit L =1000 mm
116-BJ-358/1500	Pipekit L =1500 mm



Autronica delivers the following cable glands:

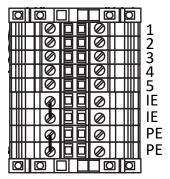
Part number	Description	
116-6571-070.2020	CABLE GLAND A2LBFNP20M20 - (Ø20mm) - Nickel plated brass - IP66 and IP68 - Cable dia. min 9,4mm / max 14,0mm	
116-6530-030.0020	SPMH/NP/M20 BLIND PLUG - (Ø20mm) - Nickel plated brass - IP66 and IP68	
116-6531-006.0920	GLAND NUT M20X1.5 BRASS - (Ø20mm) - Nickel plated brass	
116-6571-072.2020	CABLE GLAND M20 A2LDSSF/20 SS - (Ø20mm) - Stainless steel - IP66 and IP68 - Cable dia. min 9,4mm / max 14,0mm	
116-6530-030.0120	BLIND PLUG M20 SPMH1SF/M20 - (Ø20mm) - Stainless steel - IP66 and IP68	
116-6531-020.0020	GLAND NUT ACSLN/M20X1.5 SS - (Ø20mm) - Stainless steel	

Technical specifications

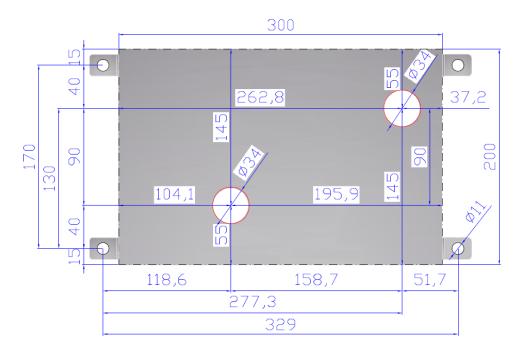
Dimensions box		HxWxD = 200x300x118,5mm
Materials		AISI316L, acc. NS-EN-10088-2, 1.4404
Colour		Grey (stainless steel)
Weight 116-BWP-143A-SS/AG 116-BJ-358/100 116-BJ-358/150		4280 g 123 g 172 g 322 g
116-BJ-358/300 116-BJ-358/550 116-BJ-358/800		522 g 570 g 820 g
Air velocity in duct	When used in EX zones	1-9 m/s
	When used in safe areas	1-25 m/s
Maximum ambient pressure when used in EX zones		1.0848 bar
Cable termination		Terminal
Maintenance		Depends on the local environment. Recommended actions 6-12 months after installations. Includes cleaning, visual inspection, re-tightening of screws and glands. For details, refer to Mounting Instructions.
Service		No serviceable parts.
Degree of protection		IP66 - Depending on the chosen glands and blind plugs

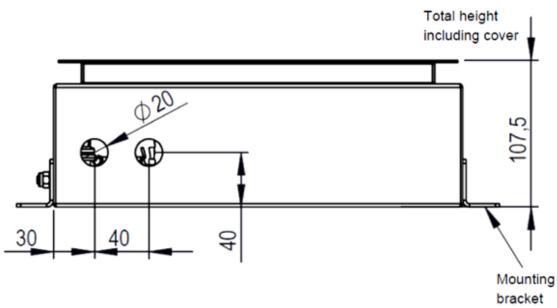
Field cable connection

- 1. Pos (+) Alcom Loop IN
- 2. Pos (+) Alcom Loop OUT
- 3. Neg (-) Alcom Loop IN
- 4. Neg (-) Alcom Loop OUT
- 5. Spare
- 6. IE Instrument Earth
- 7. IE Instrument Earth
- 8. PE Safety/Protective Earth
- 9. PE Safety/Protective Earth



Dimensions (mm)





Air direction

