



Sample gas filter AGF-PV-30, AGF-PV-S2, AGF-T-30, K-AGF-PV-30, RAF-PV-30, ADF-PV-30

Installation and Operation Instructions

Original instructions





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Read this instruction carefully prior to installation and/or use. Pay attention particularly to all advises and safety instructions to prevent injuries. Bühler Technologies can not be held responsible for misusing the product or unreliable function due to unauthorised modifications.

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Document information

Document No..... BE410011
Version..... 10/2020

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1 Introduction

1.1 Intended Use

The filters were designed specifically for front panel installation in analysers or systems. All types can be used for filtering sample gas.

When used in explosive atmosphere areas

Under certain conditions the filters and filter elements may further be used in areas with explosive atmosphere. The provisions and specifications in chapter "Use in explosive atmosphere areas" must be observed in addition to the other specifications in these operating instructions.

1.2 Design types

If a filter type has special features, these are described separately in the operating manual. When connecting, please note the specific values of the filter, and the correct version when ordering spare parts.

Please refer to the nameplate to identify your model. In addition to the job number it also contains the item number and model designation.

The filters described here are based on the same gas connections and the same mounting diagram.

The marking xx stands for the respective filter element used.

Filter type	Description
AGF-PV-30-xx	Filter with PVDF head
AGF-PV-S2	Filter with PVDF head with swivel nut
AGF-PV-30-xx-A	Filter with PVDF head with swivel nut, with GL 25 condensate drain
AGF-T-30-xx	Filter with PTFE head with swivel nut
ADF-PV-30-L	For adding adsorbent, PVDF filter head
RAV-PV-30-xx	Ambient air filter with PVDF head
K-AGF-PV-30-A	Coalescence filter with PVDF head

Tab. 1: Filter type overview

1.3 Scope of delivery

- 1 x Filter
- Product documentation

2 Safety instructions

2.1 Important notices

Operation of the device is only valid if:

- the product is used under the conditions described in the installation- and operation instruction, the intended application according to the type plate and the intended use. In case of unauthorized modifications done by the user Bühler Technologies GmbH can not be held responsible for any damage,
- when complying with the specifications and markings on the nameplates.
- the performance limits given in the datasheets and in the installation- and operation instruction are obeyed,
- monitoring devices and safety devices are installed properly,
- service and repair is carried out by Bühler Technologies GmbH,
- only original spare parts are used.

This manual is part of the equipment. The manufacturer keeps the right to modify specifications without advanced notice. Keep this manual for later use.

Signal words for warnings

DANGER	Signal word for an imminent danger with high risk, resulting in severe injuries or death if not avoided.
WARNING	Signal word for a hazardous situation with medium risk, possibly resulting in severe injuries or death if not avoided.
CAUTION	Signal word for a hazardous situation with low risk, resulting in damaged to the device or the property or minor or medium injuries if not avoided.
NOTICE	Signal word for important information to the product.

Warning signs

These instructions use the following warning signs:

	Warns of a general hazard		General information
	Warns not to inhale toxic gasses		Wear respiratory equipment
	Warns of corrosive liquids		Wear a safety mask
	Warns of explosive areas		Wear gloves

2.2 General hazard warnings

The equipment must be installed by a professional familiar with the safety requirements and risks.

Be sure to observe the safety regulations and generally applicable rules of technology relevant for the installation site. Prevent malfunctions and avoid personal injuries and property damage.

The operator of the system must ensure:

- Safety notices and operating instructions are available and observed,
- The respective national accident prevention regulations are observed,
- The permissible data and operational conditions are maintained,
- Safety guards are used and mandatory maintenance is performed,
- Legal regulations are observed during disposal,
- compliance with national installation regulations.

Maintenance, Repair

Please note during maintenance and repairs:

- Repairs to the unit must be performed by Bühler authorised personnel.
- Only perform conversion-, maintenance or installation work described in these operating and installation instructions.
- Always use genuine spare parts.
- Do not install damaged or defective spare part. If necessary, visually inspect prior to installation to determine any obvious damage to the spare parts.

Always observe the applicable safety and operating regulations in the respective country of use when performing any type of maintenance.

DANGER

Toxic, corrosive gases



The measuring gas led through the equipment can be hazardous when breathing or touching it.

- a) Check tightness of the measuring system before putting it into operation.
- b) Take care that harmful gases are exhausted to a safe place.
- c) Before maintenance turn off the gas supply and make sure that it cannot be turned on unintentionally.
- d) Protect yourself during maintenance against toxic / corrosive gases. Use suitable protective equipment.



WARNING

Fragile



Leaking toxic or explosive gasses may cause poisoning/injury.

- a) Protect the equipment from external blows.
- b) Protect the unit from falling objects.

2.3 Use in explosive atmosphere areas

Intended Use

AGF-PV-30, AGF-PV-S2, AGF-T-30, K-AGF-PV-30 and RAF-PV-30 filters may be used in Zone 1 and 2 areas with explosive atmosphere. Explosion classes IIA, IIB and IIC are approved. The filters have no innate ignition source and do not fall into the application of Directive 2014/34/EU and therefore do not bear the CE mark.

The filters are marked as follows

Filter type	Marking:
AGF-PV-30	Ex II 2/2G c IIC TX X, -5°C <T _{amb} < +60 °C
AGF-PV-S2	Ex II 2/2G c IIC TX X, -5°C <T _{amb} < +60 °C
AGF-T-30	Ex II 2/2G c IIC TX X, -5°C <T _{amb} < +60 °C
K-AGF-PV-30	Ex II 2/2G c IIC TX X, -5°C <T _{amb} < +60 °C
RAF-PV-30	Ex II 2/2G c IIC TX X, -5°C <T _{amb} < +60 °C

Filter type	Marking:
ADF-PV-30	do not use in EX areas!

The ambient temperatures must not be below -5 °C or above 60 °C.

The highest surface temperature is directly affected by the temperature of the medium introduced. The medium introduced must not exceed the maximum temperature of 100 °C. If necessary, a temperature monitor should be installed.

When operating the filters with moisture detector and controller, these must be inherently safe according to EN 60079-11.

When using a moisture detector, its working temperature may deviate from those specified here and limit the approved ambient temperature range of the filter as well as the permissible medium temperatures.

Depending on the process conditions, pressure or flow sensors may be required for continuous monitoring. If the process holds a risk of flame propagation a flame arrestor must be installed.

The approved explosion class of the inner zone varies by the filter element used. The following table provides an overview of the explosion classification of possible filter elements:

Filter element model:	Suitable for gasses in explosion group:
S2	Group IIC (Zone 1)
S2-KU	Group IIC (Zone 1)
F2	Group IIB (Zone 1)
F25	Group IIB (Zone 1)
F2-L	Group IIB (Zone 1)
F25-L	Group IIB (Zone 1)
12-57-C	Group IIC (Zone 1)

Tab. 2: Gas explosion groups for filter elements

Safety instructions

The following safety notices must absolutely be followed when operating the filter in an area with explosive atmosphere. Failure to do so can result in an explosion hazard.

- Only perform installation-, removal- and maintenance work in non-explosive atmosphere.
- Protect filter from mechanical impact. If necessary, install a cover which withstands at least 4 joule.
- Protect filter from vibration, or avoid vibration. If necessary, mechanically brace supply and discharge lines.
- Observe all limits, operating parameters, etc. specified in these operating instructions and the data sheet.
- Maintenance and cleaning instructions must be followed.
- When used with moist gasses, a condensate separator must be installed. Moist gasses can clog pores in the filter. Gas pressure building up can result in an impermissible temperature rise.
- Observe the grade of filtration of the fine mesh filter and if necessary install a pre-filtration to ensure larger solid particles do not clog the filter prematurely.
- Observe the durability list in this document. Only use media compatible with the filter materials.
- Do not repair the filter. Damaged filter components must be replaced.
- Do not paint, laminate or otherwise coat the filters.
- Observe the applicable constructor regulations, e.g. EN 60079-14, for installation and mounting.
- All metallic parts of the filter must be connected to an earth potential. The resistance of a continuity test must not exceed 1 MΩ (1*10⁶ Ω).
- The sealing materials, e.g. Teflon tape, must be conductive so all parts of the filter are earthed. If necessary, install an earth bridge.

Operation and Control

DANGER



Risk of explosive gasses leaking and crossing zones

Check the filter is tight prior to operation. Inadequately sealed filters can leak. Gas may leak or the ambient atmosphere be drawn in. Use a suitable method for the leakage test, appropriate for the application.

Operation with moisture detector

DANGER



Explosion hazard

To operate the filter in an explosive atmosphere with moisture detector, the moisture detector and controller must be ignition protection class intrinsically safe “i”. The use of non-intrinsically safe components may result in ignition in explosive atmospheres. Also note the specifications under EN 60079-14 in this respect.

Service

Please note the following instructions. Failure to do so may result in explosive gasses escaping and crossing zones.

- Check the filter is tight after any maintenance and the intervals specified in the maintenance schedule. Inadequately sealed filters can leak. Gas may leak or the ambient atmosphere be drawn in. Use a suitable method for the leakage test, appropriate for the application.
- There must be no internal or external Ex atmosphere when performing maintenance. If necessary, flush the filter with inert gas. Switch off pumps on the gas circuit and close supply and discharge lines.
- After performing any maintenance, before closing the filter be sure the pressure spring is installed inside the filter if previously removed, or is seated correctly.

Service schedule

When using the filters in ATEX areas, follow this maintenance schedule:

Component	Interval in operating hours	Work to be performed
Filter element	Weekly, and depending on the contamination level of the filter element.	<ul style="list-style-type: none"> – Visually inspect for contamination. – If contaminated, replace the filter element and O-ring.
O-ring	Every time the filter cover is removed.	<ul style="list-style-type: none"> – Clean O-ring contact surfaces. – Replace O-ring.
Entire filter	Weekly and depending on the external level of contamination.	<ul style="list-style-type: none"> – Remove layers of dust with a damp cloth.
Entire filter	Every 6 months and every time the filter is opened.	<ul style="list-style-type: none"> – Perform a leak test.

When replacing the filter element, the seal must also be replaced.

Cleaning

Dust deposits on the filter must be removed regularly.

Clean the outside of the filter using only a clean, damp cloth (do not use cleaners containing solvents).

DANGER



Spark formation due to electrostatic discharge (explosion hazard)

Only clean the filter with a clean, damp cloth.

3 Transport and storage

Only transport the product inside the original packaging or a suitable alternative.

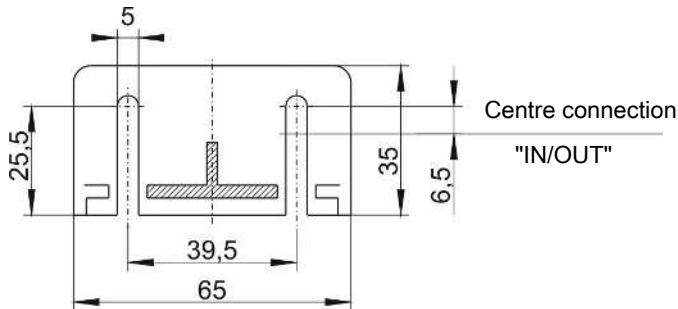
The equipment must be protected from moisture and heat when not in use. It must be stored in a covered, dry and dust-free room at a temperature of -20 °C to 60 °C (-4 °F to 140 °F).

4 Installation and connection

4.1 Installation site requirements

Always use washers on the longitudinal slots when installing the retaining ring flange. Furthermore, verify the filter has been inserted all the way to the end of these longitudinal slots.

The filter should be installed in a way so the filter element can be replaced. If the filter protrudes from a contour, please note this poses a risk of damage.



The maximum gas temperature is 100 °C.

The maximum permissible pressure is 4 bar abs.

Please refer to chapter [Design types](#) [> page 2] for information about the use in explosive areas.

4.2 Connecting the gas lines and the condensate drain

The connections must be made carefully and properly using suitable fittings, and tightened hand-tight.

Please check if your version has G-threads or NPT threads. On the latter, the item number on the nameplate is followed by "I".

An arrow on the filter indicates the flow direction.

When not using the condensate drain, attach a sealing plug to the thread (included).

For special versions without cap nut and/or seal on condensate drain, the operator must ensure proper sealing. We recommend the use of a cap nut (thread GL25) made of PBTP and a silicone gasket with one-sided PTFE cuff.

The head of the filters can be rotated to switch the inlet and outlet sides (type RAV... inlet only).

Perform a leak test with suitable means.

4.3 Connecting a bypass or moisture detector

NOTICE! Not for AGF-T-30. not expedient with RAF-PV-30.

The filter head has a G1/4 female thread, factory sealed with a plug, for installing a bypass or moisture detector.

- To use the thread, unscrew the plug and screw in the fitting or model FF- moisture detector.
- Perform a leak test with suitable means.

5 Operation and control

NOTICE



The device must not be operated beyond its specifications.

6 Maintenance

During maintenance, remember:

- The equipment must be maintained by a professional familiar with the safety requirements and risks.
- Only perform maintenance work described in these operating and installation instructions.
- When performing maintenance of any type, observe the respective safety and operation regulations.
- Only perform maintenance when cool.

DANGER

The gas inside the filter, condensate and used filter elements may be caustic or corrosive.

Sample gas can be harmful.

- Before maintenance turn off the gas supply and surge with air if necessary.
- Exhaust sample gas to a safe place.
- Protect yourself against toxic / corrosive gas during maintenance. Wear appropriate personal protection equipment.



6.1 Replacing the filter element

CAUTION

Gas leakage



The filter should not be dismantled under pressure.
Don't use damaged parts again.

- **AGF-T-30. AGF-PV-S2:** Unscrew the swivel nut, holding on to the glass
- **All others:** Pull the bracket, holding on to the filter glass
- Whilst holding the filter head, move the glass back and forth and carefully remove downward.
- **AGF-PV-30. AGF-PV-S2, AGF-T-30. RAF-PV-30:** Remove the filter element and install a new one
- **ADF-PV-30:** Replace adsorbent
- **K-AGF:**
 - Unscrew the support tube with filter element from the filter head.
 - Pull the filter element off the support tube and attach a new element.
 - Screw the support tube with filter element hand tight into the filter head. The self-sealing is achieved through light contact pressure of the filter element at the front. Avoid excessive seating stress.
- After checking the seal, reinstall the glass whilst holding on to the filter head, slightly moving the glass back and forth, and attach the bracket or tighten the swivel nut. Ensure a proper fit.
- Perform a leak test with suitable means.

NOTICE! Please observe legal regulations when disposing of filter elements.

7 Service and repair

This chapter contains information on troubleshooting and correction should an error occur during operation.

Repairs to the unit must be performed by Bühler authorised personnel.

Please contact our Service Department with any questions:

Tel.: +49-(0)2102-498955 or your agent

If the equipment is not functioning properly after correcting any malfunctions and switching on the power, it must be inspected by the manufacturer. Please send the equipment inside suitable packaging to:

Bühler Technologies GmbH

- Reparatur/Service -

Harkortstraße 29

40880 Ratingen

Germany

Please also attach the completed and signed RMA decontamination statement to the packaging. We will otherwise be unable to process your repair order.

You will find the form in the appendix of these instructions, or simply request it by e-mail:

service@buehler-technologies.com.

7.1 Spare parts and accessories

Please also specify the model and serial number when ordering parts.

Upgrade and expansion parts can be found in our catalog.

Available spare parts:

7.1.1 K-AGF-PV-30-A

Filter*

Item no.	Model	Seal
41 50 699	K-AGF-PV-30-A; G1/4 outlet and inlet	Viton
41 50 699I	K-AGF-PV-30-A-I; NPT 1/4" outlet and inlet	Viton

* one filter element is included with delivery.

Filter element

Item no.	Model	Filter element	Material	Filter surface	Packing unit	Ex application
49 32 002	12-57-C	Screw-in sleeve	Borosilicate fibre	28 cm ²	1 pieces	IIC

7.1.2 AGF-PV-30

Filter*

AGF-PV- AGF-PV-I	30-S2 30-S2-I	30-S2-A 30-S2-A-I	30-F2 30-F2-I	30-F2-A 30-F2-A-I	30-F2-L 30-F2-L-I	30-F25 30-F25-I	30-F25-A 30-F25-A-I	30-F25-L 30-F25-L-I	30-F25-L-A 30-F25-L-A-I	30-AKF 30-AKF-I
Filter fineness	2 µm	2 µm	2 µm	2 µm	2 µm	25 µm	25 µm	25 µm	25 µm	1 µm
Item no. (G1/4)	4150099	4150199	41502999	4151999	4150799	4150299	4150399	4150499	4150599	4153099
Item no. (NPT 1/4")	4150099I	4150199I	41502999I	4151999I	4150799I	4150299I	4150399I	4150499I	4150599I	4153099I
Element	S2	S2	F2	F2	F2-L	F25	F25	F25-L	F25-L	AKF
Dead volume	57 ml	69 ml	57 ml	57 ml	108 ml	57 ml	63 ml	108 ml	117 ml	45 ml
Weight approx.	0.28 kg	0.29 kg	0.24 kg	0.29 kg	0.29 kg	0.23 kg	0.24 kg	0.29 kg	0.30 kg	0.23 kg

* one filter element is included with delivery.

Filter elements

Item no.	Model	Material	Filter fineness	Filter surface	Packing unit	Ex application
41 01 00 10	S2	Fibreglass	2 µm	80 cm ²	5 pieces	IIC
41 01 00 2	S2	Fibreglass	2 µm	80 cm ²	25 pieces	IIC
41 03 00 50	F2	PTFE	2 µm	60 cm ²	5 pieces	IIB
41 02 00 50	F2-L	PTFE	2 µm	125 cm ²	2 pieces	IIB
41 02 01 30	F25	PTFE	25 µm	60 cm ²	5 pieces	IIB
41 01 01 20	F25-L	PTFE	25 µm	125 cm ²	2 pieces	IIB
41 010 130	AKF	Active carbon	1 µm	45 cm ²	1 pieces	not suitable for use in Ex areas

7.1.3 AGF-T-30

Filter*

AGF-T-	30-S2	30-S2-KU	30-F2	30-F2-L	30-F25	30-F25-L
Filter fineness	2 µm	2 µm	2 µm	2 µm	25 µm	25 µm
Item no.	4151399	4151499	4151799	4151099	4151199	4151299
Element	S2	S2KU	F2	F2-L	F25	F25-L
Dead volume	57 ml	50 ml	57 ml	108 ml	57 ml	108 ml
Weight approx.	0.41 kg	0.35 kg	0.35 kg	0.43 kg	0.35 kg	0.43 kg

* one filter element is included with delivery.

Filter elements

Item no.	Model	Filter element	Material	Filter fineness	Filter surface	Packing unit	Ex application
41 01 00 10	S2	Sleeve	Fibreglass	2 µm	80 cm ²	5 pieces	IIC
41 01 00 2	S2	Sleeve	Fibreglass	2 µm	80 cm ²	25 pieces	IIC
41 01 01 40	S2-KU	Sleeve	Fibreglass	2 µm	61 cm ²	5 pieces	IIC
41 01 01 50	S2-KU	Sleeve	Fibreglass	2 µm	61 cm ²	25 pieces	IIC
41 03 00 50	F2	Sintered PTFE	PTFE	2 µm	60 cm ²	5 pieces	IIB
41 02 01 30	F25	Sintered PTFE	PTFE	25 µm	60 cm ²	5 pieces	IIB
41 02 00 50	F2-L	Sintered PTFE	PTFE	2 µm	125 cm ²	2 pieces	IIB
41 01 01 20	F25-L	Sintered PTFE	PTFE	25 µm	125 cm ²	2 pieces	IIB

7.1.4 RAF-PV-30

Filter*

Item no.	Model	Filter fineness	Element	Connections
41 52 199	RAF-PV-30-S2	2 µm	S2	G1/4
41 52 199I	RAF-PV-30-S2-I	2 µm	S2	NPT 1/4"
41 52 299	RAF-PV-30-F25	25 µm	F25	G1/4
41 52 299I	RAF-PV-30-F25-I	25 µm	F25	NPT 1/4"

* one filter element is included with delivery.

Filter elements

Item no.	Model	Filter element	Material	Filter fineness	Filter surface	Packing unit	Ex application
41 01 001	S2	Sleeve	Fibreglass	2 µm	80 cm ²	5 pieces	IIC
41 01 002	S2	Sleeve	Fibreglass	2 µm	80 cm ²	25 pieces	IIC
41 02 013	F25	PTFE	Sintered PTFE	25 µm	60 cm ²	5 pieces	IIB

7.1.5 ADF-PV-30-L

Filter*

Item no.	Model	Connections
41 52 099	ADF-PV-30-L	G1/4
41 52 099I	ADF-PV-30-L-I	NPT 1/4"

* without adsorbent/absorbent.

8 Disposal

Dispose of parts so as not to endanger the health or environment. Follow the laws in the country of use for disposing of electronic components and devices during disposal.

9 Appendices

9.1 Technical Data

K-AGF-PV-30-A Coalescence Filter

Dead volume	73 ml
Material – Filter head	PVDF
Material – Filter cover	Glass
Material – Gasket	Viton
Thread	G1/4 or NPT 1/4" (see ordering information)
Weight	0.24 kg
Operating pressure max.	4 bar
Operating temperature max.	100 °C

Fine mesh filter AGF-PV-30

Material – Filter head	PVDF
Material – Filter cover	Glass
Material – Gasket	Viton
Thread (A)	G1/4 or NPT 1/4" (see ordering information)
Max. operating pressure	4 bar
Max. operating temperature	100 °C
Mechanical load	Tested based on DNV-GL CG0339 vibration class A (0.7g) 2 Hz-13.2 Hz Amplitude ± 1.0 mm 13.2 Hz -100 Hz 0.7g acceleration

AGF-T-30 Fine mesh filter

Material – Filter head	PTFE
Material – Filter cover	Glass
Material – Gasket	Viton, PTFE shrouded
Operating pressure max.	4 bar
Operating temperature max.	100 °C

RAF-PV-30 Ambient air filter

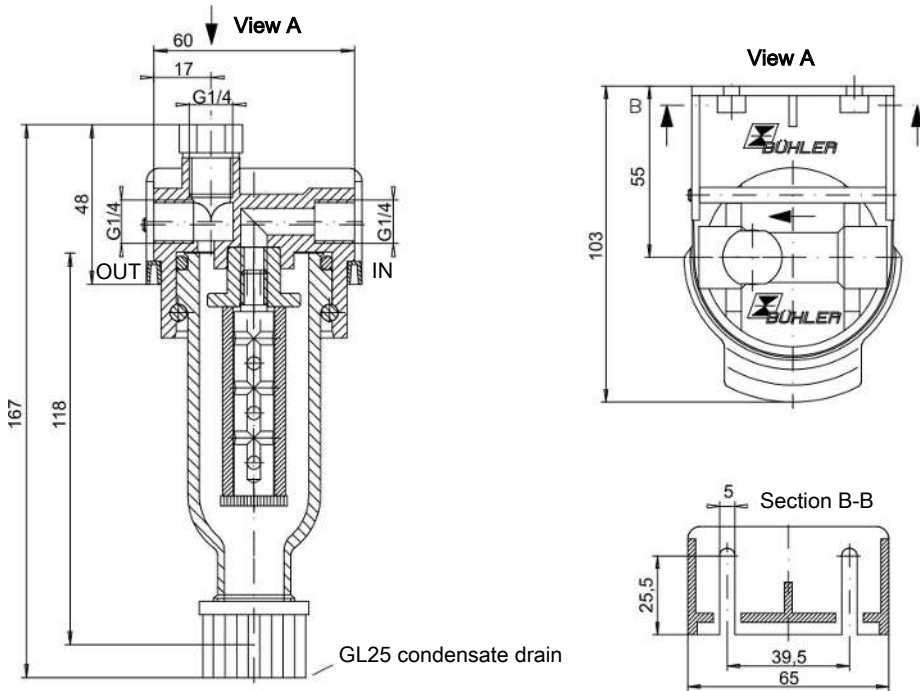
Material – Filter head	PVDF
Material – Filter cover	Glass
Material – Gasket	Viton
Thread (A)	G1/4 or NPT 1/4" (see ordering information)
Weight	approx. 0.28 kg
Operating temperature max.	100 °C

ADF-PV-30-L Ad-/Absorption Filter

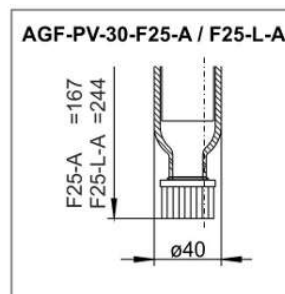
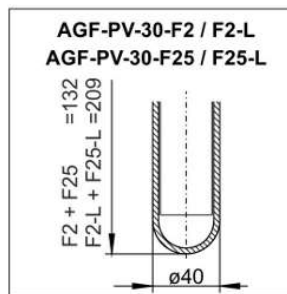
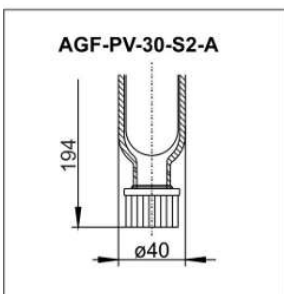
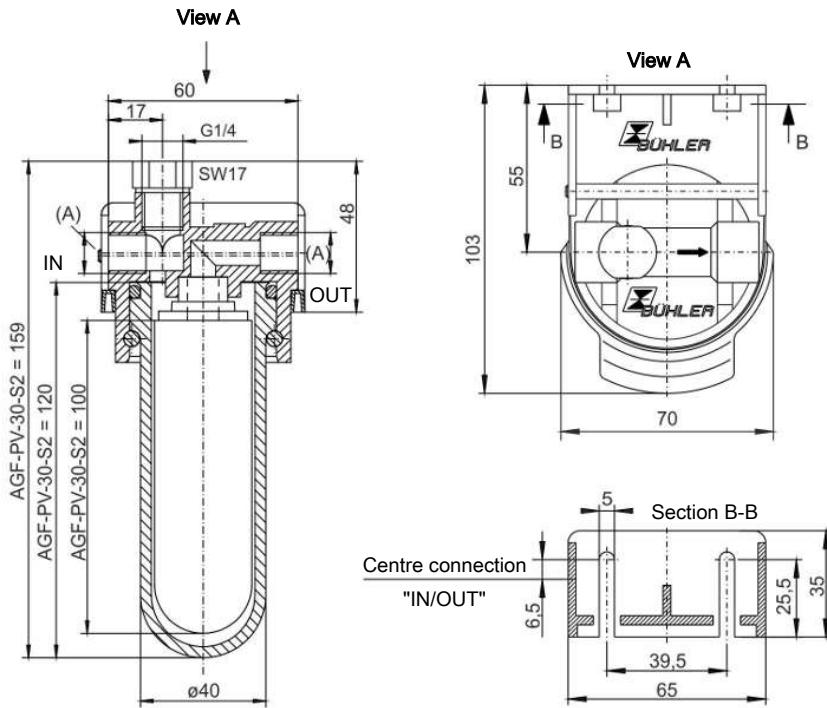
Material – Filter head	PVDF
Material – Filter cover	Glass
Material – Gasket	Viton
Thread	G1/4 or NPT 1/4" (see ordering information)
Weight	approx. 0.3 kg
Fill volume	120 ml
Operating pressure max.	4 bar
Operating temperature max.	100 °C (without adsorbent/absorbent)

9.2 Dimensions

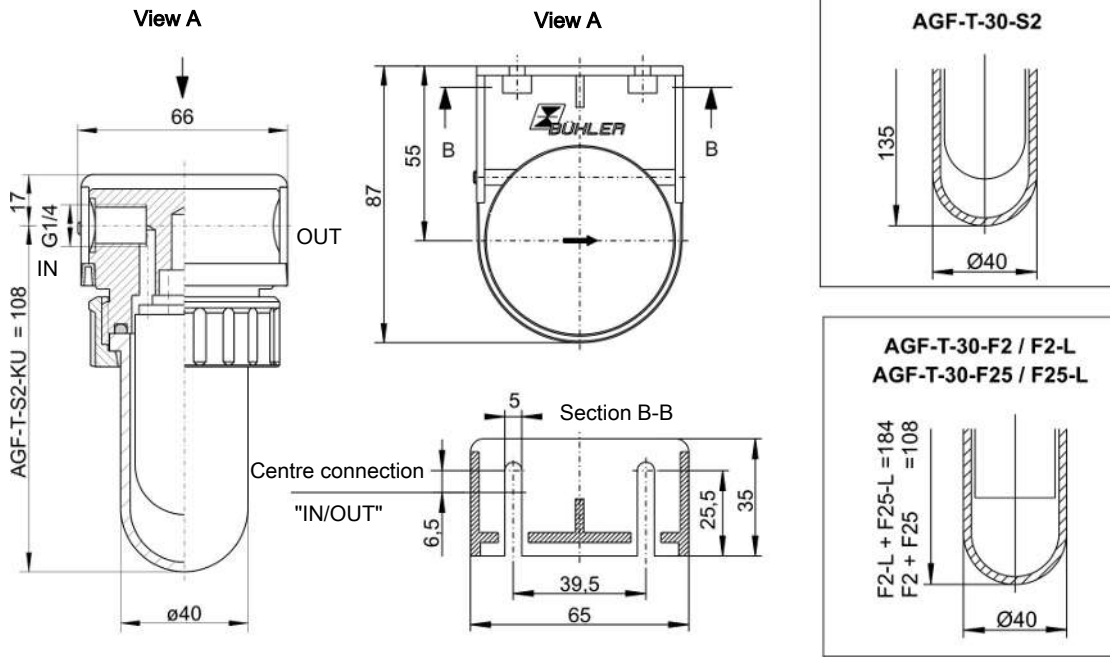
K-AGF-PV-30-A



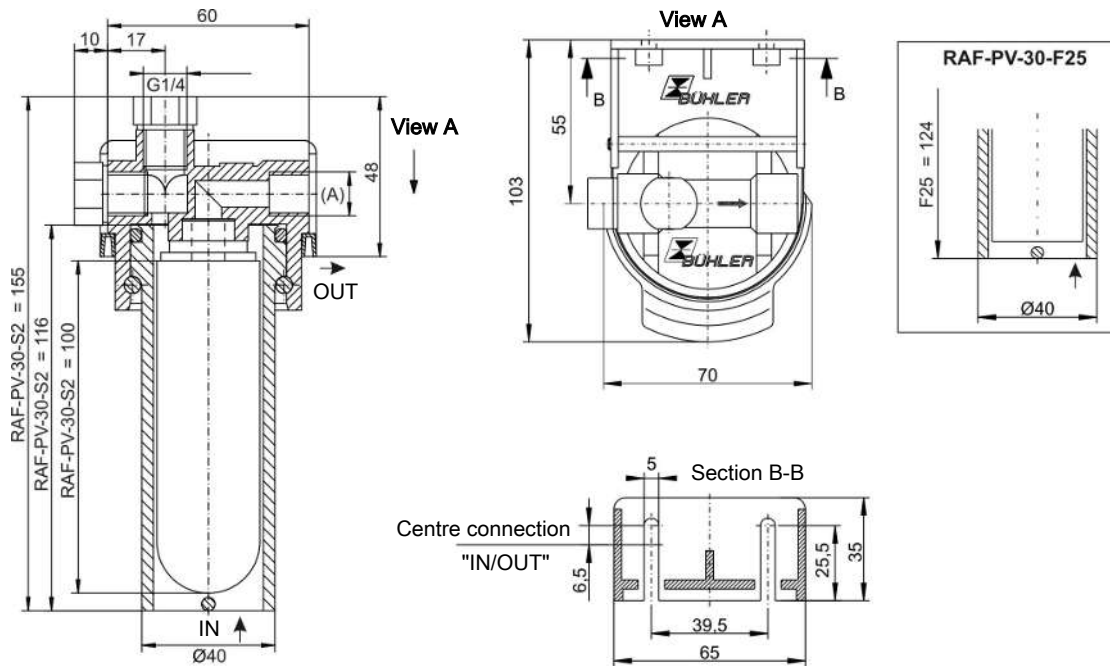
AGF-PV-30



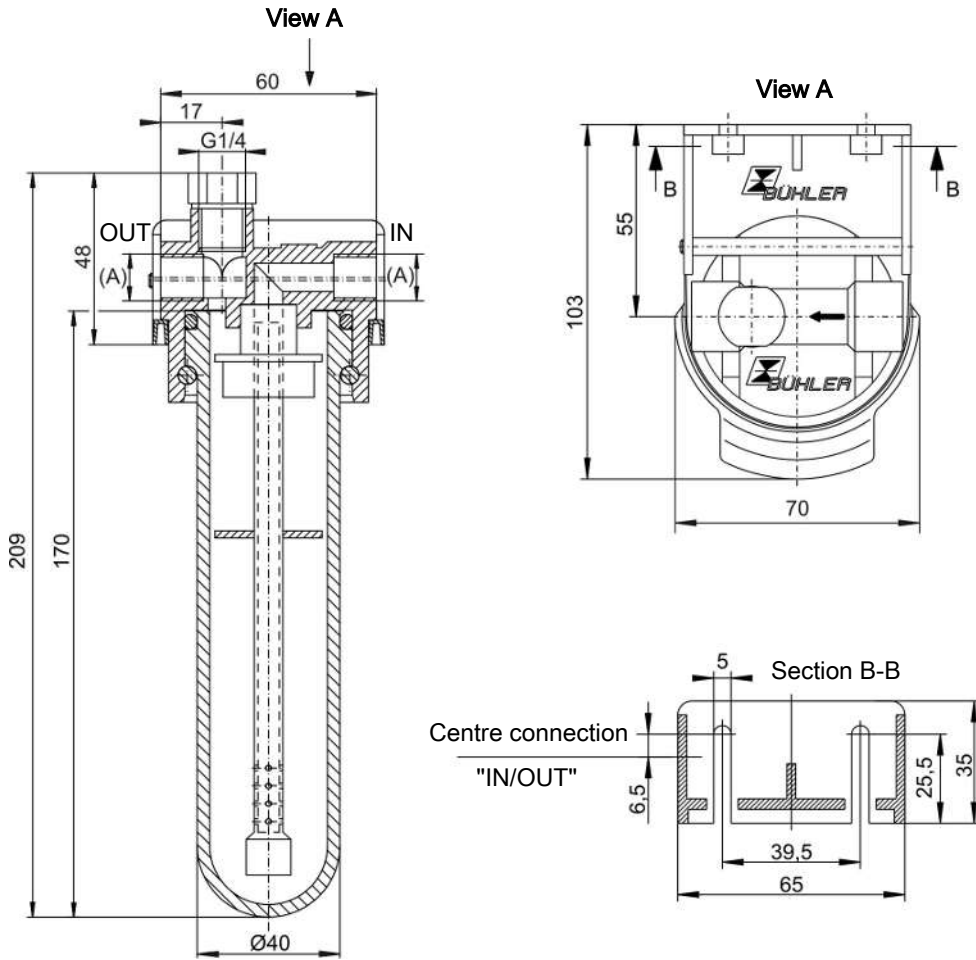
AGF-T-30



RAF-PV-30



ADF-PV-30-L



10 Attached documents

- Declaration of Conformity HX410002
- RMA - Decontamination Statement

Herstellererklärung Manufacturer Declaration



Hiermit erklärt Bühler Technologies GmbH, dass die nachfolgenden Produkte keine „Geräte“ im Sinne der Richtlinie **2014/34/EU (Atex)** sind und somit nicht mit einem CE-Zeichen versehen sind.

Herewith Bühler Technologies GmbH declares that the following products are not „equipment“ for the purpose of Directive **2014/34/EU (Atex)**, respectively, and therefore are not labeled with the CE mark.

Produkt / products: Analysefilter / Sample gas filter
Typ / type: K-AGF-PV-30...-A, -A-I
AGF-PV-30...-S2, -S2-A, -F2, -F2-A, -F2-L, -F2-RA, -F25, -F25-A, -F25-L, -F25-L-A, -0,1-RA
AGF-PV-I-30...-S2-I, -S2-A-I, -F2-I, -F2-A-I, -F2-L-I, F2-RA-I, -F25-I, -F25-A-I, -F25-L-I, -F25-L-A-I, -0,1-RA-I
AGF-T-30...-S2, -S2-KU, -F2, -F2-L, -F25, -F25-L
RAF-PV-30...-S2, -S2-I, -F25, -F25-I

Die oben erwähnten Produkte besitzen keine eigenen Zündquellen, solange für Einbau, Montage, Betrieb, Wartung und Reinigung sämtliche Sicherheitsbestimmungen der Technischen Dokumentation und die einschlägigen Sicherheitsvorschriften (z.B. EN 60079-0, EN 60079-14, etc.) eingehalten werden. Beachten sie auch die Hinweise in den zugehörigen Datenblättern.

The products specified above have no own ignition sources, provided all safety regulations in the technical documentation and the relevant safety instructions (e.g. EN 60079-0, EN 60079-14, etc.) are observed during installation, assembly, operation, maintenance and cleaning. Note also the indications in the associated datasheets.

Unter Beachtung aller Vorgaben der Betriebsanleitung sowie Beiblätter für Sonderversionen können die Feinfilter in Gasatmosphären der Explosionsgruppen IIA, IIB und IIC eingesetzt werden, die gelegentlich explosiv sind (Zone 1).

Bei Verwendung von Glasfaser-Filterelementen dürfen durch die Filter Gasatmosphären der Explosionsgruppen IIA, IIB und IIC geleitet werden, die gelegentlich explosiv sind (Zone 1). Durch Filterelemente aus PTFE dürfen nur Gasatmosphären der Explosionsgruppen IIA und IIB geleitet werden.

While observing all specifications and procedures of the instruction manual and supplements for special versions, the sample gas filters can be installed in atmospheres of explosion groups IIA, IIB and IIC, which are likely to explode occasionally (Zone 1).

When using fiberglass-sample gas filter elements atmospheres of explosion groups IIA, IIB and IIC, which are likely to explode occasionally (Zone 1), may be conveyed through the sample gas filter. Through sample gas filter elements made of PTFE only atmospheres of explosion groups IIA and IIB (Zone 1) may be conveyed.

Das oben beschriebene Produkt der Erklärung erfüllt die einschlägigen Harmonisierungsrechtsvorschriften der Union:

The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:
EN ISO 80079-36:2016 **EN ISO 80079-37:2016**

Zusätzlich wurden folgende nationale Normen, Richtlinien oder Spezifikationen berücksichtigt:
In addition, the following national standards, guidelines or specifications have been used:

TRGS 727

Die alleinige Verantwortung für die Ausstellung dieser Herstellererklärung trägt der Hersteller.
This declaration of manufacture is issued under the sole responsibility of the manufacturer.

Dokumentationsverantwortlicher für diese Herstellererklärung ist Herr Stefan Eschweiler mit Anschrift am Firmensitz.

The person authorised to compile the technical file is Mr. Stefan Eschweiler located at the company's address.

Ratingen, den 07.01.2020

Stefan Eschweiler
Geschäftsführer – Managing Director

Frank Pospiech
Geschäftsführer – Managing Director

RMA-Formular und Erklärung über Dekontaminierung

RMA-Form and explanation for decontamination



RMA-Nr./ RMA-No.

Die RMA-Nummer bekommen Sie von Ihrem Ansprechpartner im Vertrieb oder Service./ You may obtain the RMA number from your sales or service representative.

Zu diesem Rücksendeschein gehört eine Dekontaminierungserklärung. Die gesetzlichen Vorschriften schreiben vor, dass Sie uns diese Dekontaminierungserklärung ausgefüllt und unterschrieben zurücksenden müssen. Bitte füllen Sie auch diese im Sinne der Gesundheit unserer Mitarbeiter vollständig aus./ This return form includes a decontamination statement. The law requires you to submit this completed and signed decontamination statement to us. Please complete the entire form, also in the interest of our employee health.

Firma/ Company

Firma/ Company
Straße/ Street
PLZ, Ort/ Zip, City
Land/ Country

Ansprechpartner/ Person in charge

Name/ Name
Abt./ Dept.
Tel./ Phone
E-Mail
Serien-Nr./ Serial No.
Artikel-Nr./ Item No.

Gerät/ Device
Anzahl/ Quantity
Auftragsnr./ Order No.

Grund der Rücksendung/ Reason for return

- Kalibrierung/ Calibration Modifikation/ Modification
 Reklamation/ Claim Reparatur/ Repair
 andere/ other

bitte spezifizieren/ please specify

Ist das Gerät möglicherweise kontaminiert?/ Could the equipment be contaminated?

- Nein, da das Gerät nicht mit gesundheitsgefährdenden Stoffen betrieben wurde./ No, because the device was not operated with hazardous substances.
 Nein, da das Gerät ordnungsgemäß gereinigt und dekontaminiert wurde./ No, because the device has been properly cleaned and decontaminated.
 Ja, kontaminiert mit:/ Yes, contaminated with:



explosiv/
explosive



entzündlich/
flammable



brandfördernd/
oxidizing



komprimierte
Gase/
compressed
gases



ätzend/
caustic



giftig,
Lebensgefahr/
poisonous, risk
of death



gesundheitsge-
fährdend/
harmful to
health



gesund-
heitschädlich/
health hazard



umweltge-
fährdend/
environmental
hazard

Bitte Sicherheitsdatenblatt beilegen!/ Please enclose safety data sheet!

Das Gerät wurde gespült mit:/ The equipment was purged with:

Diese Erklärung wurde korrekt und vollständig ausgefüllt und von einer dazu befugten Person unterschrieben. Der Versand der (dekontaminierten) Geräte und Komponenten erfolgt gemäß den gesetzlichen Bestimmungen.

This declaration has been filled out correctly and completely, and signed by an authorized person. The dispatch of the (decontaminated) devices and components takes place according to the legal regulations.

Falls die Ware nicht gereinigt, also kontaminiert bei uns eintrifft, muss die Firma Bühler sich vorbehalten, diese durch einen externen Dienstleister reinigen zu lassen und Ihnen dies in Rechnung zu stellen.

Should the goods not arrive clean, but contaminated, Bühler reserves the right, to commission an external service provider to clean the goods and invoice it to your account.

Firmenstempel/ Company Sign

Datum/ Date

rechtsverbindliche Unterschrift/ Legally binding signature



Die Analyse defekter Baugruppen ist ein wesentlicher Bestandteil der Qualitätssicherung der Firma Bühler Technologies.

Um eine aussagekräftige Analyse zu gewährleisten muss die Ware möglichst unverändert untersucht werden. Es dürfen keine Veränderungen oder weitere Beschädigungen auftreten, die Ursachen verdecken oder eine Analyse unmöglich machen.

Bei elektronischen Baugruppen kann es sich um elektrostatisch sensible Baugruppen handeln. Es ist darauf zu achten, diese Baugruppen ESD-gerecht zu behandeln. Nach Möglichkeit sollten die Baugruppen an einem ESD-gerechten Arbeitsplatz getauscht werden. Ist dies nicht möglich sollten ESD-gerechte Maßnahmen beim Austausch getroffen werden. Der Transport darf nur in ESD-gerechten Behältnissen durchgeführt werden. Die Verpackung der Baugruppen muss ESD-konform sein. Verwenden Sie nach Möglichkeit die Verpackung des Ersatzteils oder wählen Sie selber eine ESD-gerechte Verpackung.

Beachten Sie beim Einbau des Ersatzteils die gleichen Vorgaben wie oben beschrieben. Achten Sie auf die ordnungsgemäße Montage des Bauteils und aller Komponenten. Versetzen Sie vor der Inbetriebnahme die Verkabelung wieder in den ursprünglichen Zustand. Fragen Sie im Zweifel beim Hersteller nach weiteren Informationen.

Analysing defective assemblies is an essential part of quality assurance at Bühler Technologies.

To ensure conclusive analysis the goods must be inspected unaltered, if possible. Modifications or other damages which may hide the cause or render it impossible to analyse are prohibited.

Electronic assemblies may be sensitive to static electricity. Be sure to handle these assemblies in an ESD-safe manner. Where possible, the assemblies should be replaced in an ESD-safe location. If unable to do so, take ESD-safe precautions when replacing these. Must be transported in ESD-safe containers. The packaging of the assemblies must be ESD-safe. If possible, use the packaging of the spare part or use ESD-safe packaging.

Observe the above specifications when installing the spare part. Ensure the part and all components are properly installed. Return the cables to the original state before putting into service. When in doubt, contact the manufacturer for additional information.

