



## Pre-separators AK 20 V, 11 LD spec., 165 SS, 167 T

In extractive gas analysis it is important to protect the measuring cells from any type of contaminants. In addition to removing particle contamination, it's also extremely important to separate moisture and condensation.

Depending on the composition of the sample gas, a pre-separator may also need to be installed upstream from the sample gas cooler. This reduces the load on the cooler when the moisture content fluctuates.

In some applications removing the moisture with a pre-separator and downstream coalescence filter may suffice. If the sample gas is pressurised, the pre-separators may be equipped with built-in automatic drain valves.

Various geometric shapes for easy installation

High operating reliability

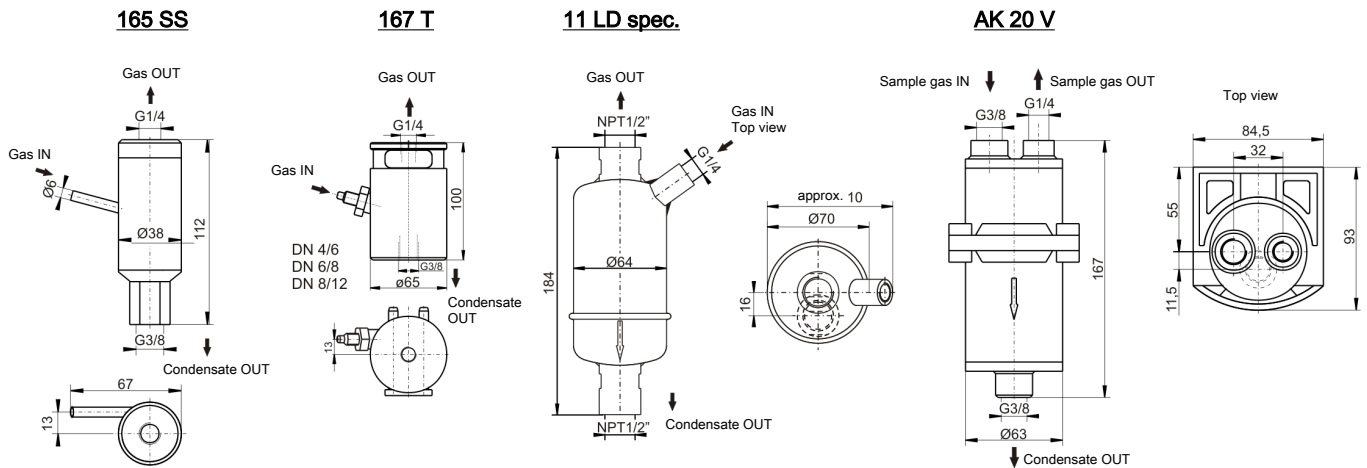
Long life

Various base materials

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Dimensions



Type	165 SS	167 T-V	167 T-P	11 LD spec.	AK 20 V
max. operating pressure:	64 bar abs.	4 bar abs.	4 bar abs.	18 bar abs.	2 bar abs.
max. medium temperature:	180 °C	80 °C	80 °C	200 °C	100 °C
Ambient temperature:	+5 to +80 °C	+5 to +80 °C	+5 to +80 °C	+5 to +80 °C	+5 to +80 °C
max. flow rate:	200 L/h	200 L/h	200 L/h		
Material:	Stainless steel 1.4571	PTFE/Viton	PTFE/Perfluorelastomer	Stainless steel 1.4306, 1.4401, 1.4301	PVDF



Use in explosive areas (additional notices):

The 165 SS, 11 LD spec. and AK 20 V condensate pre-separators meet the fundamental safety requirements of Directive 2014/34/EU and are suitable for use in category 2G, explosion group IIB or IIC areas. The condensate pre-separators are not marked, as they do not have an innate ignition source and Directive 2014/34/EU therefore does not apply.

Non-flammable and flammable gases, explosion class IIB or IIC, which could occasionally be explosive during normal operation may be conveyed through the condensate pre-separator.

Model	165 SS	11 LD spec.	AK 20 V
Zone	1	1	1
Explosion group	IIC	IIC	IIB

The maximum surface temperature  $T_{surf}$  of the equipment is based on the medium temperature  $T_{med}$ .  $T_{surf} \leq T_{med}$  applies

**DANGER**

**Dangerous electrostatic charge (explosion hazard)**



Incendive electrostatic charges may occur when cleaning plastic housing parts and decals (e.g. with a dry cloth or compressed air). The sparks this produces could ignite flammable, explosive atmospheres.

Always clean plastic housing parts and decals **with a damp cloth!**  
Metal housing parts must be earthed.

**DANGER**

**Impact**



Strong blows to the housing can produce sparks, which can ignite an EX atmosphere. Protect the equipment from external impact. Damaged housing parts must be replaced immediately.

**WARNING**

**Gas emanation**



**Health hazard from gas leaks due to incorrect operation or maintenance**

- a) Close the gas supply before beginning installation or maintenance.
- b) Protect yourself from hot and toxic gases.
- c) Wear safety gloves and face shield. Emergent gas could be explosive.



**Ordering instructions**

Item no.	Model
44 11 004	AK 20 V
46 13 099	Centrifugal separator 165 SS
46 12 299	Centrifugal separator 167 T-V, DN 4/6 connection
46 12 399	Centrifugal separator 167 T-V, DN 6/8 connection
46 12 499	Centrifugal separator 167 T-V, DN 8/12 connection
46 12 599	Centrifugal separator 167 T-P, DN 4/6 connection
46 12 699	Centrifugal separator 167 T-P, DN 6/8 connection
46 12 199	Centrifugal separator 167 T-P, DN 8/12 connection
44 10 002	11 LD spec.