

Pre-coolers

AK 20 V, 11 LD spec., 165 SS and 167 T



In applications with entrained liquid droplets or high vapor content in the sample gas stream, the installation of additional condensate separators upstream of the final cooler may be useful. In some applications, these separators may be an appropriate alternative to a gas cooler either as stand-alone units or in combination with a coalescing filter.

Model AK 20 V - with automatic drain valve

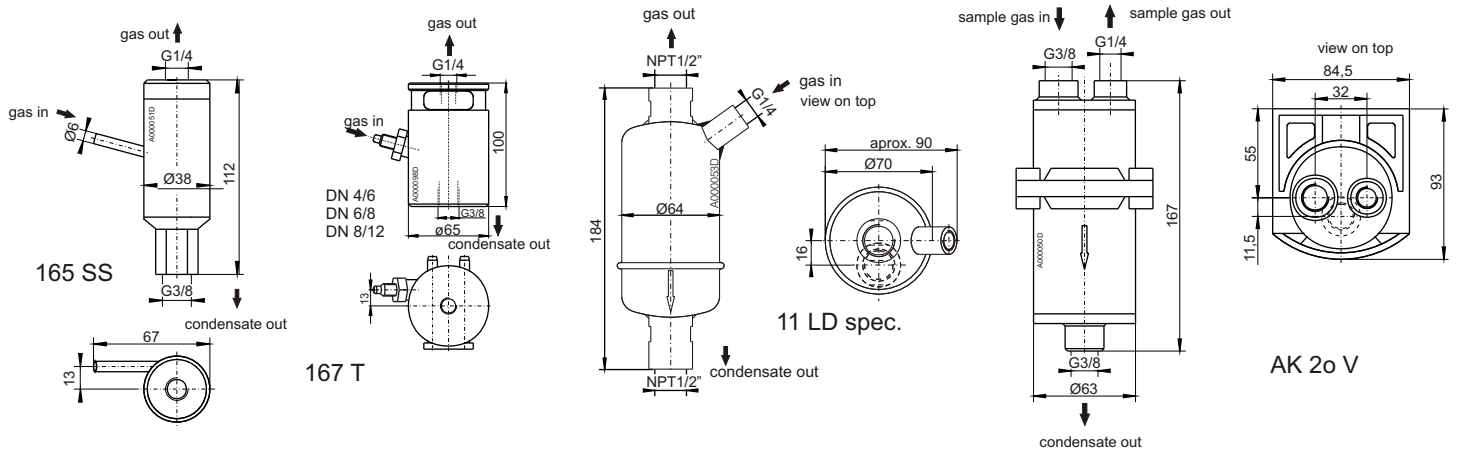
Vertically mounted, the AK 20 V serves as a separator upstream of, for example, a cooler or as a stand-alone condensate trap. The unit has an integrated drain valve with low friction pivot points giving an exceptionally long, maintenance-free life.

Model 11 LD spec. - with automatic drain valve

Mounted vertically, the 11 LD spec. serves as an up-stream separator with an integrated drain valve. The drain valve has no mechanical pivot points resulting in an exceptionally long maintenance-free life.

Models 165 SS and 167 T

These models are a combination of a centrifugal separator and a coarse filter. The upper end of the enclosure contains a coarse demister which removes both moisture and particulate.



Model	165 SS	167 T-V	167 T-P	11 LD spec.	AK 20 V
Max. op. pressure	64 bar/930 psi	4 bar/60 psi	4 bar/60 psi	18 bar/160 psi	2 bar/29 psi
Max. op. temperature	180 °C/ 360 °F	80 °C/ 180 °F	80 °C/ 180 °F	200 °C/ 390 °F	100 °C/ 210 °F
Max. gasflow 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 and 1.4301	PVDF



Application in explosive atmosphere (additional indications):

Range of use in explosive atmosphere :

Pre-coolers (Pre-separator)

Type	165 SS	11 LD	AK 20
Zone	1	1	1
Group	IIC	II C	IIB

The maximum surface temperature T_{surf} of the equipment corresponds to the gas-temperature T_{med} ; ($T_{surf} \leq T_{med}$)

There is no Ex-designation on the type plate of the equipment, because they are not within the scope of directive 94/9/EC. However the equipment corresponds to the essential requirements of the directive 94/9/EC. Therefore they can be used in explosive atmosphere (zone1)

Attention !



Electrostatic charge

Clean plastic parts and labels with damp cloth only.
Connect metallic parts to ground

Attention !



Gas emission

Protect the equipment against being hit.
Life- and explosion risk may result from gas leakage due to improper use.

Attention !



Gas emission during maintenance

During maintenance or inspection **release the process pressure or switch off the process**. Use face protection and gloves. **The gas in the process may be harmful or explosive!**

Please indicate with order

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



Attention! The liquid can be harmful.
Honor the safety regulations!