



## Automatic Condensate Drains AK 5, AK 20, 11 LD V 38 (-O2)

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.

If the sample gas flowing through the conditioning system is pressurised, drains with automatic drain valves can be used to discharge condensate settling in the sample gas cooler. These do not require any additional energy supply and are available in various material combinations.

For applications with high oxygen concentrations, the product requires special cleaning (free of oil and grease). The automatic condensate drain 11 LD V 38-O2 uses special cleaning processes to remove particles, oil and grease. The contamination limit values are based on EIGA Doc 33/18 "Cleaning of Equipment for oxygen service". In addition, the material used for the 11 LD V 38-O2 is high-quality stainless steel, which has been tested by Bühler Technologies to ensure its suitability for oxygen applications.

Various geometric shapes for easy installation

High operating reliability

Long life

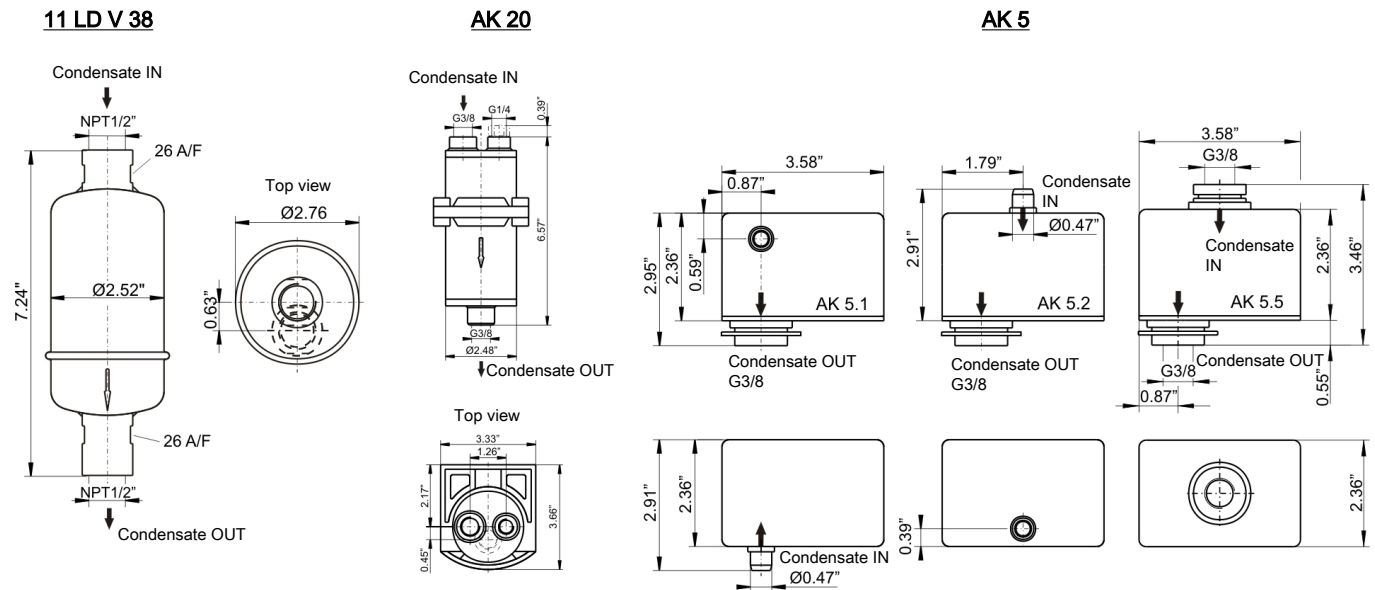
Various base materials

O<sub>2</sub> version with 11 LD V 38 for applications with high-purity oxygen

Cleaning standard based on EIGA Doc 33/18 with regard to freedom from particles, oil and grease (O<sub>2</sub> version)



## Dimensions



Model	11 LD V 38	11 LD V 38-O2	AK 20	AK 5
max. operating pressure:	260 psi abs.*	36 psi abs.	29 psi abs.	29 psi abs.
max. medium temperature:	390 °F	390 °F	210 °F	210 °F
Ambient temperature:	41 to 140 °F	41 to 140 °F	41 to 140 °F	41 to 140 °F
Weight:	1.8 lb	1.8 lb	0.7 lb with wall bracket (gas outlet sealed)	0.6 lb
Material:	Stainless steel 1.4306, 1.4401, 1.4301	Stainless steel 1.4306, 1.4401, 1.4301	PVDF	PVDF

\* For use with high hydrogen concentrations max. 22 psi overpressure.



### Use in explosive areas (additional notices):

The condensate drains 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 drains 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 drains.

Model	11 LD V 38 (-O2)	AK 20	AK 5
Zone	1	1	1
Explosion group	IIC	IIB	IIB

### 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
4410001	11 LD V 38
4410001-O2	11 LD V 38 optimised for oxygen
4510006	AK 5.1 horizontal inlet
4510008	AK 5.2 vertical inlet
4510028	AK 5.5
4410004	AK 20