

# Air separator

Ajevent

AT 8070BK

Art. No.	R S K	Application	Performance	Body material	Sealing material	D N	P N	Temperature (°C)	Connection
		F	F	F,R		R	R	R	F,R
80 70 BK 50		Venting water; Di- version particles	Automatic venting, auto- matic drain- age	Ste el		5 0	1 0	0-110	We ld- ing
80 70 BK 65		Venting water; Di- version particles	Automatic venting, auto- matic drain- age	Ste el		6 5	1 0	0-110	We ld- ing
80 70 BK 80		Venting water; Di- version particles	Automatic venting, auto- matic drain- age	Ste el		8 0	1 0	0-110	We ld- ing
80 70 BK 10 0		Venting water; Di- version particles	Automatic venting, auto- matic drain- age	Ste el		1 0 0	1 0	0-110	We ld- ing
80 70 BK 12 5		Venting water; Di- version particles	Automatic venting, auto- matic drain- age	Ste el		1 2 5	1 0	0-110	We ld- ing
80 70 BK 15 0		Venting water; Di- version particles	Automatic venting, auto- matic drain- age	Ste el		1 5 0	1 0	0-110	We ld- ing
80 70 BK F5 0		Venting water; Di- version particles	Automatic venting, auto- matic drain- age	Ste el		5 0	1 0	0-110	Fla ng e
80 70 BK F6 5		Venting water; Di- version particles	Automatic venting, auto- matic drain- age	Ste el		6 5	1 0	0-110	Fla ng e

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80 70 BK F8 00		Venting water; Diversion particles	Automatic venting, automatic drainage	Steel		80	10	0-110	Flange
80 70 BK F1 00		Venting water; Diversion particles	Automatic venting, automatic drainage	Steel		100	10	0-110	Flange
80 70 BK F1 25		Venting water; Diversion particles	Automatic venting, automatic drainage	Steel		125	10	0-110	Flange
80 70 BK F1 50		Venting water; Diversion particles	Automatic venting, automatic drainage	Steel		150	10	0-110	Flange

Dimension range	PN	Temperature range	Material
DN 50-150	10	0 °C to 110 °C	Steel

Rätten till ändringar utan föregående meddelande förbehålls.  
Armatec ansvarar inte för eventuella tryckfel eller missförstånd.  
Dokumentet får kopieras endast i sin helhet.

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## Range of application

For automatic air separation of heating and cooling systems where the fluid is water or glycol. Can be mounted in systems with a mix of water/glycol and water/ethanol, if control and oversight is increased. The valve should not be used in systems with a mix of water/salts.

## Program text

PSF.141 Air separator

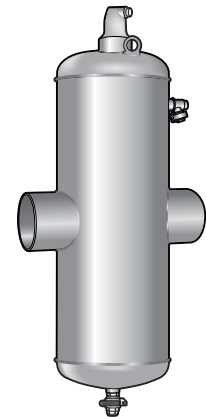
Automatic air-/particle separator AT8070BK... of steel, PN10, gas-/particle separator with dirt protection and a purge valve.

## Quality assurance

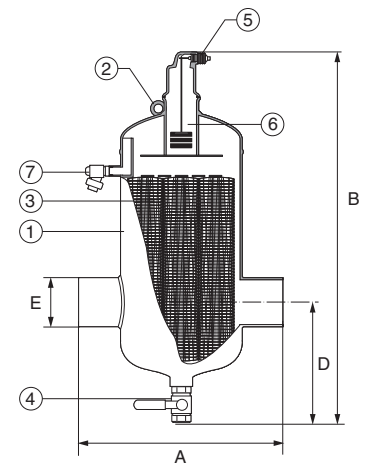
Fulfills the AFS 1999:4, 8§ standards and shall not be CE-marked. All separators are functional- and density tested.

## Details

- |   |   |
|---|---|
| 1 | Body and ends of steel, with weld ends or flanges PN16.   |
| 2 | Lifting-loops to ease at installation   |
| 3 | The spirotube is designed to separate even the smallest microbubbles.   |
| 4 | Manual air valve for removal of large volumes of air at commissioning as well as edge drainage for liquid pollutants. |
| 5 | Automatic air valve supplied with 15mm extraction. Threaded exhaust the air valve doesn't leak and can not be closed  |
| 6 | The ventilation mechanism is located in a separate chamber protected from dirt.                                       |
| 7 | Large dirt chamber makes it rarely need to drain.   |
| 8 | Drain.  |



AT 8070BK



## Dimensions and weight

Connection	50	65	80	100	125	150
A	260	260	370	370	525	525
B	630	630	785	785	1045	1045
D	265	265	345	345	480	480
E (welded ends)	60,3	76,1	88,9	114,3	139,7	168,3
E (flanges)	50	65	80	100	125	150
Weight (weld/flange)	12/17	12/18	30/38	30/40	70/83	70/86
Dimensions in mm, weight in kg						

## Function and design

The unique construction removes loose air as well as dirt particles. The surface magnifier generates motionless zones above and below the flow. The air rises in the motionless zone to be collected in the air chamber and is then released through the automatic valve. Dirt particles that are heavier than water settle and are collected in the dirt chamber to flush out the system through the drain valve. This can be done during full operation. The velocity decreases as the fluid flows into the separation body. Free gas bubbles, particles and sludge separate while passing through the separator.

Separate bubbles lift and enter the float body. The liquid level goes down and

the float sinks. When the float, that is connected to the separation mechanism via a bar, reaches a certain level, the mechanism is affected and air can flow into the free. When the float rises again, the mechanism closes.

The large volume of the air chamber and special design makes the liquid level never reach the drainage mechanism, even if the air in the chamber is compressed to 10 bar.

## Technical information

Connection	50	65	80	100	125	150
Max flow m <sup>3</sup> /h	8	15	20	30	50	75
Pressure drop bar	0,015	0,020	0,018	0,013	0,016	0,017

Values above apply at max. speed 1 meter/second.

## Installing

Since the micro bubbles are released at the hottest point in the plant, the component should be placed on the hottest point in the system.

In a heating system the supply line is often the warmest spot in the plant.

In a heating system, the warmest point is usually on the supply line, as close to the heater as possible. In order to maintain a good absorption effect, the static pressure at the site of installation should not exceed 15-20mvc.

## Maintenance

Maintenance free, no filter changes are necessary. However, for a good- and safe operation, the sludge chamber must be emptied regularly.

## Accessories and options

The air- and particle separator SpiroCombi is available with magnets for an efficient magnetic particle separation and designed for district heating systems (max. 120°C and 16 bar). In addition to steel, there are also stainless steel models. Contact Armatec for more information.

## Marking

Marked with dimension, max. operating pressure, max. operating temperature and the manufacturer's name