

## WET-ALU/Ex – wet dust separator

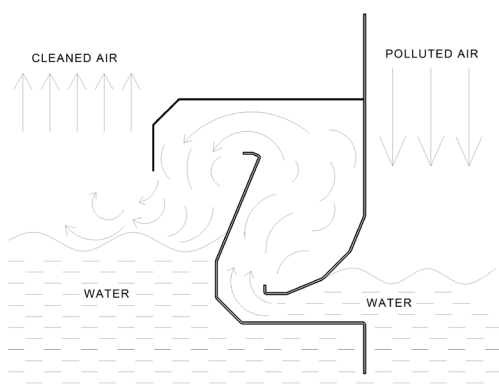


### II 3D Ex h IIIC T200° Dc

#### Application

WET-ALU/Ex wet dust separators are efficient solutions for cleaning the dust-laden air from pollution, during the manufacturing processes. They are irreplaceable in capturing the dusts of dry-, humid-, viscous nature. Additionally, WET-ALU/Ex separators are designed for removal of explosive dusts, especially emitted during the grinding of aluminium.

#### Function



The polluted air flows through a the immersed in the water guiding-plate (backfall) and here the air gets mixed with the water, creating an aerated foamy dust-water mixture with bubbles. Particles that are captured in the separator, create sludge with the water. The sludge sediments in the hopper (collecting the waste) and finally it is collected in a waste container.

Having passed the backfall, the cleaned air is additionally separated from the leftover water particles in the dropper-drainage.

Water level is monitored by means of minimum-maximum-level float indicators.

#### Structure

The system consists of subsequent assemblies:

- mixing chamber – includes a guiding plate, creating a whirl of the dust-water mixture,
- hopper – collecting the waste from the filtration,
- manual shear damper with the container for sludge,
- drainage valve,
- a fan located above the mixing chamber,
- float indicators – a system to control the water level and its refilling, in the mixing chamber,
- degasser – located in the top cover,
- switchgear – installed beyond the Ex-area,
- revision covers of the dropper-drainage.

#### Operational use

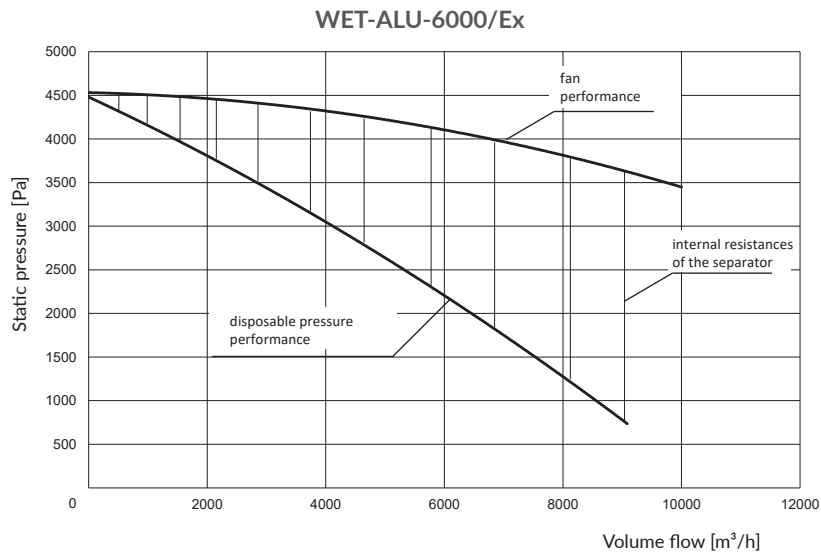
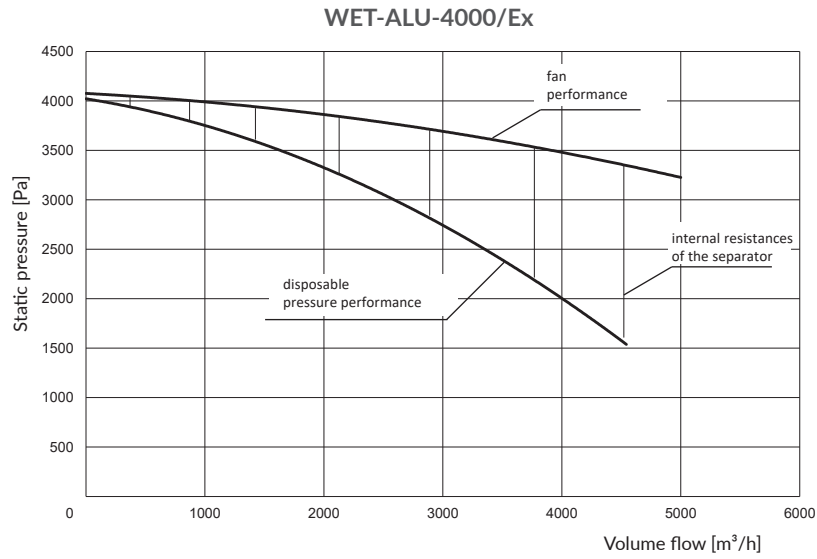
The separator should be connected to the water supply system to provide the appropriate water level in the device.

The appliance is equipped with a double sludge removal system. For everyday sludge discharge is used a sludge container, supplied from the external water supply system. The water washes out the accumulated impurities. Subsequently, the waste is transported to a barrel located near the system.

It is important to remove periodically the sludge that has accumulated in the collective hopper. First, close the manual shear damper and open the drainage valve.

After all the sludge is removed, the water in the mixing chamber refills automatically.

## Flow charts

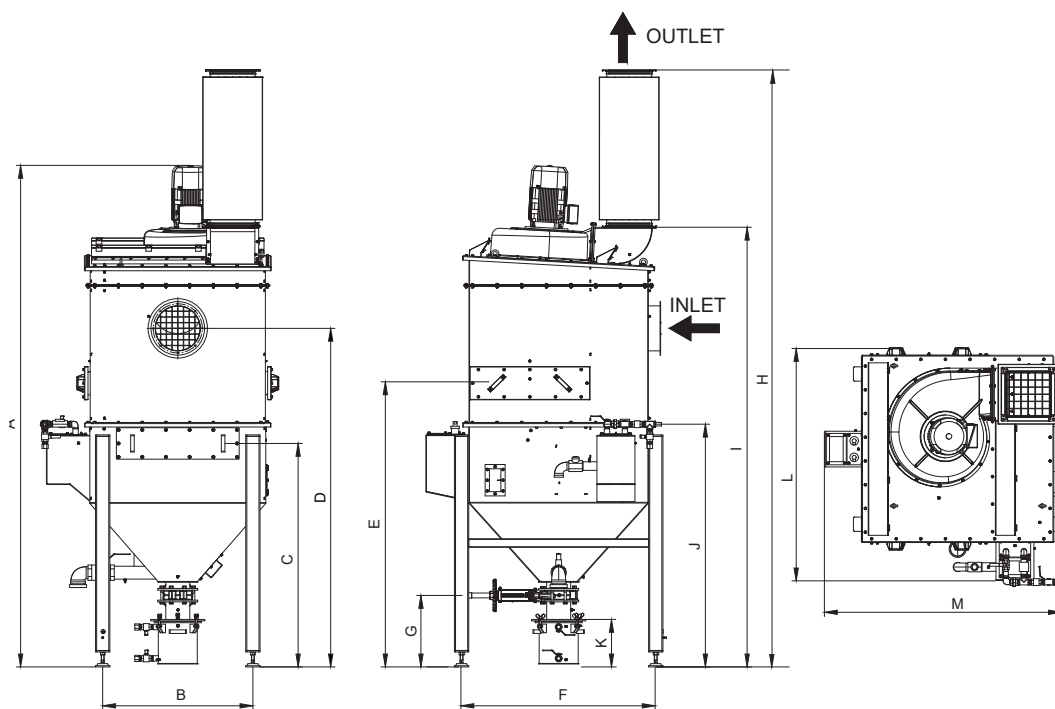


## Technical Data

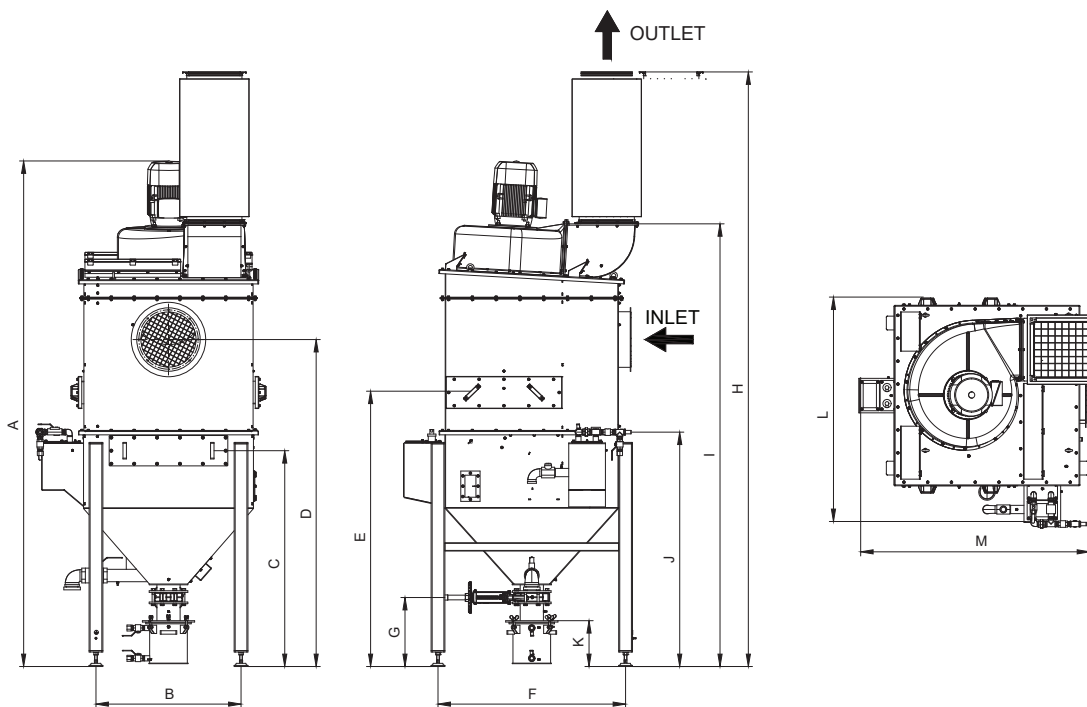
Type	Part No.	Maximum volume flow [m³/h]	Maximum vacuum [Pa]	Supply voltage [V]	Motor rate [kW]	Acoustic pressure level [dB(A)] measured from distance 1m:	Capacity of the water chamber [m³]	Weight [kg]
WET-ALU-4000/Ex	800094	7000	4000	3x400	5,5	72	0,65	937
WET-ALU-6000/Ex	800095	9000	4500	3x400	11	76	0,65	1037

# WET-ALU/Ex

WET-ALU-4000/Ex



WET-ALU-6000/Ex



## Dimensions

Name	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	J [mm]	K [mm]	L [mm]	M [mm]
WET-ALU-4000/Ex	3510	1050	1565	2370	1995	1360	500	4180	3080	1700	330	1625	1660
WET-ALU-6000/Ex	3665	1050	1565	2370	1995	1360	500	4310	3210	1700	330	1625	1660