

Effective filtration of impurities in heating installations

# Magnetic separator with filter and sedimentation tank 3/4", 1" and 1 1/4"



#### THREE STEP CONTAMINATION ELIMINATION

The operation of magnetic separator is based on the principle of hydrocyclone in combination with magnetic and mechanical elimination of impurities.

The factor from the heating system flowing into the separator chamber and is set into swirling motion and subjected to action of magnetic field to separate the magnetic particles.

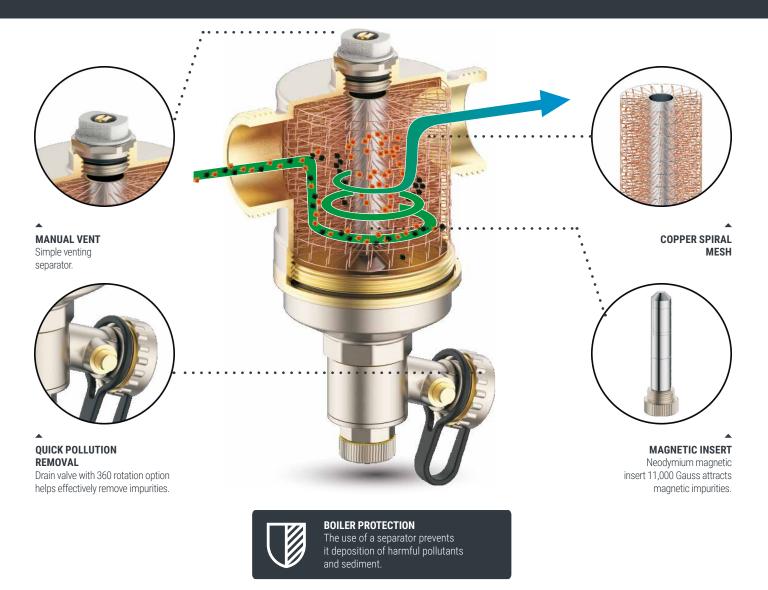
Solid contaminants are captured by the mesh filter located in the lower part of the separator and pass to the settler. The cleaned heating medium, after passing through the mesh filter, flows through the outer jacket filter to the installation.

### **TECHNICAL PARAMETERS**

- P max: 10 bar
- **T max:** 110°C
- Flow rate:
  - Kv= 4,7 m<sup>3</sup>/h (**3/4**"), 5,8 m<sup>3</sup>/h (**1**"), 16,9 m<sup>3</sup>/h (**1 1/4**")
- Magnetic power: 11 000 Gauss
- **Grade of filtration of the mesh insert:** 500 μm

- Magnet type: neodymium
- Body material: brass
- Acceptable fluids: water and water-glycol solution with maximum concentration of 40%

## Magnetic separator with spiral mesh and 1 1/4" magnetic insert



### TWO-STAGE CLEANSING OF THE HEATING MEDIUM IN THE SYSTEM

The heating medium flowing through the chamber of the separator with a large volume decreases its speed. During this stage, the medium also flows through the spiral mesh. The phenomenon of slowing down the flow in this space, combined with even dispersion of the medium on the mesh, causes spontaneous deposition of impurities at the bottom of the separator's chamber.

The second stage of the purification process is the separation of ferromagnetic impurities, caused by the action of a strong magnetic field. Thanks to its design, the separator guarantees low pressure drops and constant flow capacity in the installation.

### TECHNICAL PARAMETERS

- P max: 10 bar
- **T max:** 110°C
- Flow rate:
  - Kv= 25,8 m<sup>3</sup>/h
- Magnetic power: 11 000 Gauss

- Magnet type: neodymium
- Body material: brass
- Acceptable fluids: water and water-glycol solution with maximum concentration of 40%



### Modern dimensions of installations









**Arka Sp. z o.o.** ul. Ogrodowa 5 76-004 Sianów Poland

arka-instalacje.pl