

# Flap valves

Flap valves effectively protect plumbing systems from rats entering the buildings.

## KARMAT Flap valves

1. Flap valves and drainage flap valves are made from polypropylene of the highest quality with a supplemented regulator which increases the resistance to sunbeams as well as other atmospheric factors.
2. A market novelty, it is a specially constructed drainage flap valve which protects drainage installations against backward flooding and silting due to increasing water levels above the drainage level. The drainage flap valve is installed directly onto the end of a drainage pipe leading to the drainage ditch or a drainage well.



ZBK 110

### Flap valve ø 110

installed onto sewage pipes ø 110, weight: 0,33 kg



ZBK 160

### Flap valve ø 160

installed onto sewage pipes ø 160, weight: 0,73 kg



ZBK 200

### Flap valve ø 200

installed onto sewage pipes ø 200, weight: 1,16 kg



**NOVELTY!**

ZBK 250

### Flap valve ø 250

installed onto sewage pipes ø 250, weight: 2,25 kg



**NOVELTY!**

ZBK 315

### Flap valve ø 315

installed onto sewage pipes ø 315, weight: 3,9 kg



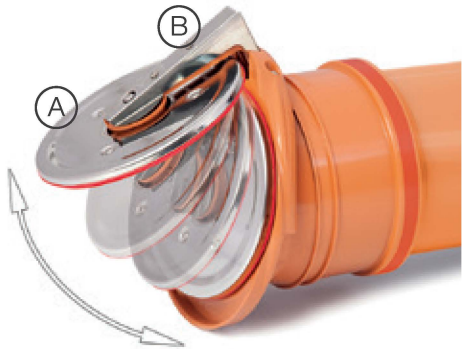
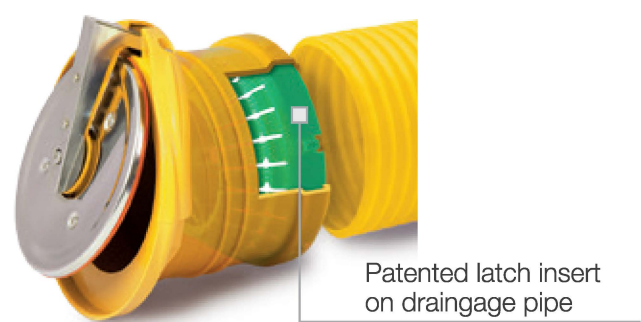
ZBK-DR

### Drainage flap valve with universal coupler

installed onto drainage pipes from ø 72 to ø 100, weight: 0,36 kg

# Reliable and effective connection

A drainage flap valve has a universal connection system consisting of popular Karmat drainage couplers, which enables its installation on drainage pipes or corrugated pipes without holes, from 72 to 100 mm diameter.



All flap valves are equipped with a chromium-nickel cover (A) protecting the flap and gasket. Additionally a chromium-nickel cover of the lever (B) has been introduced. They protect against rodents, atmospheric and the environmental conditions (eg. river flow).

Example of the assembly of the flap valve and drainage flap valve draining water to a drainage ditch.



Flap valve  
**ZBK 110, 160 or 200**

concrete

drainage flap valve  
**ZBK-DR**

granural fill

natural soil



Flap valves are mounted by installers onto the ends of sewage pipes draining into collection wells, septic tanks as well as on drainage pipes draining rain water into ditches or rivers.

Flap valve  $\varnothing$  110 in a  $\varnothing$  315 collection well