

# Export

## frog

Flap Valves &  
Outlet Pieces



CLEVER  
Products



Clever Products is specialized in production of FROG flap valves from PVC-U, PP and HDPE. The flap can be made from plastic or stainless steel.



Bespoke solutions - individualized for your market - and our wide standard range offers unique possibilities for a business relation. Available from OD 50 mm to OD 500 mm.



Developed with the experience of over 20 years in civil engineering we ship them all over the world. Our customers are pipe manufacturers, trading companies and maybe you.



FROGs are fitted on the end of a pipeline. They provide effective protection against the intrusion of rats, frogs, mice, small nest-building animals (risks of blockage) and other vermin.

FROGs are fitted with a sinking valve element and prevent floodwater as far as possible or completely from flowing back into the piping system. The exterior hinged joint prevents blockages, whilst the full pipe cross-section remains usable as a hydraulic conduit.

**Possible uses:**

- Outlets in bodies of water & shafts
- biogas plants
- percolation plants
- overflows
- pond management
- fish farms
- drainage outlets
- dry stench traps
- systems using rainwater
- roof drainage
- back-pressure protection and lots more besides.

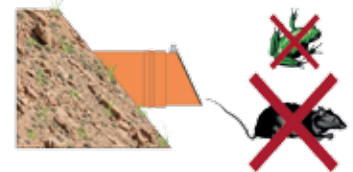
At Clever Products FrogFactory in Ketsch we manufacture the probably most extensive program of outlet pieces and flap valves in Europe.

Our DE-Models – Made in Germany – are proven in practise and became the standard products of lots of customers at home and abroad. Custom-made products and individual problem-solving make our product range perfect.



**FROG  with stainless steel flap valves**

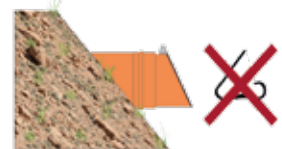
- Valve element & screw connections made of V4A stainless steel 1.457
- Removable, weather-resistant, non-ageing EPDM sealing
- Protected, hydraulic loss-neutral DUOX double joint with one capsule bearing & two sliding bearings
- Permanently smooth-running
- Dirt-tolerant, wear-resistant, maintenance-free
- Rat-proof flap, metal-coated pivot pin



Protection against small animals



Backflow prevention



Protection against bad odors

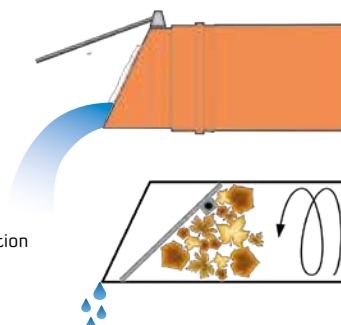


- Sealing flap valve in front of the pipe
- Flap valve bearing on the outside – no risk of blockage
- Full hydraulic performance is maintained

**DISADVANTAGES of conventional models (no original FROGs)**



- Flap valve & bearing pin are installed in the pipe cross-section
- High hydraulic losses
- High risk of blockage
- Not leakproof





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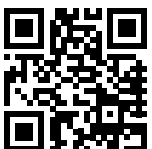


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All information is non-binding.

