

# ABS FLUSHING VALVE

**The programmable flushing valve for a clean deposit-free sump.**

## Energy saving in operation

The ABS system is an "energy saving" system thanks to its programming capability. Other systems must operate each time the pump operates. In order to keep a sump clean it is not necessary to flush with each pumping cycle – twice a day is adequate in many cases.

## Example:

### Other Systems:

The pump with a 10 kW motor starts 5 times per hour and flushes for one minute. This means that electricity consumption for flushing can be as high as 7000 kWhrs in one year!!

In addition the pumping capacity of the pump is "lost" for 5 minutes every hour.

### ABS System:

The flushing valve is programmed to operate for one minute, twice per day.

A pump with 10 kW motor uses only 110 kWhrs for flushing per annum!!

The pumping capacity of the pump is "lost" for only two minutes per day.

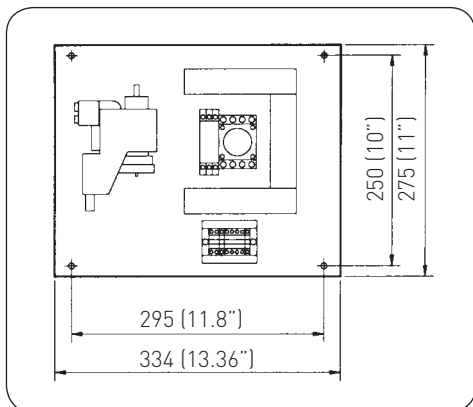
## The Control Unit

The control unit consists of:

Flushing timer relay (1-180 seconds as standard), contactor with delay relay, mini compressor, terminal board.

All parts fitted on a mounting plate.

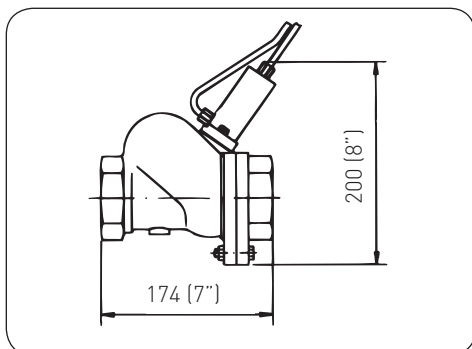
(Housing is available as an accessory).



## ABS flushing valve 2" with internal thread

Supplied as standard are 10 m (30 ft.) twin-air hose and the control unit on a mounting plate suitable for installation in the control panel on site.

Air hose extensions (10 m (30 ft.) with hose connector) are available as accessories



- Automatic sump cleaning
- Avoid manual or mechanical desludging
- Odour reduction
- Large free solids passage with self cleaning rotating ball
- The most cost effective flushing valve available
- Different flushing periods can be chosen
- Can be installed and removed independently
- Easy maintenance

## Materials

Housing \_\_\_\_\_ Cast Iron GG-25  
 Ball \_\_\_\_\_ Synthetic  
 Piston \_\_\_\_\_ Synthetic  
 Fasteners \_\_\_\_\_ Stainless Steel

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## The Problem

Sewage is always a problem liquid. Sewage pumping stations must accept everything that comes into the sewer. The result is that materials are found in a pump sump which:

- Float
- Remain in suspension
- Sink to the bottom as sediment

Organic matter in sewage which remains too long in the pump sump starts to become septic. Odour problems result and problems with pumping or level control can result.

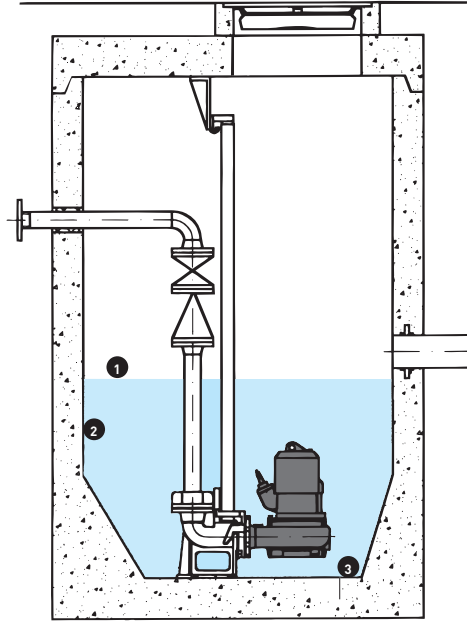
- 1 Floating crusts can form
- 2 Waste and grease attach themselves to the sump walls
- 3 Layers of deposits build up on the sump floor

## The Solution

By fitting the programmable ABS flushing valve, the pumped flow of the pump itself is used to produce an intensive rinsing and flushing of the sump. Pollutants are whirled up. The sump can be maintained in a clean deposit-free condition.

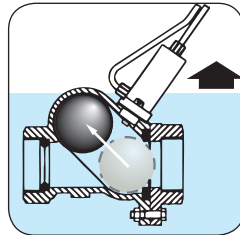
The flushing process is automatically directed by the control unit.

Flushing times from 1 to 180 seconds can be set.

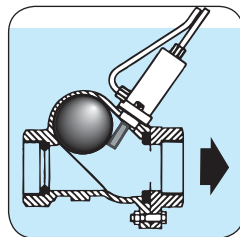


## How does it function

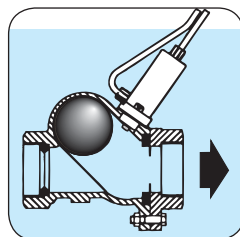
**A** Flushing valve piston inside cylinder (rest position). Water level in pump sump rises. Floating ball in housing floats upwards and valve is opened.



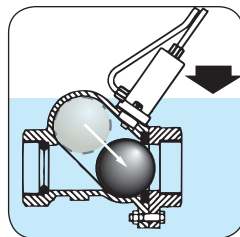
**B** Pump sump is full. By means of the level control system a contact is operated and the mini compressor starts. The piston moves out, the floating ball is held in the upper position, the pre-set timer (approx. 10 seconds) on the pump switches on, flushing begins, the flushing then continues for the length of the pre-set flushing time, e.g. 30 seconds.



**C** Flushing time finished, mini compressor switched off, piston retracts, pump runs on.

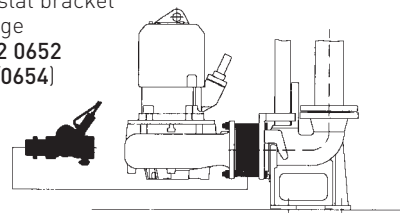


**D** The floating ball is no longer held in position and is sucked downwards by the vacuum produced in the housing. It is then pressed against the outlet opening of the valve thereby closing off the opening. Normal pumping of the effluent into the discharge line then commences.

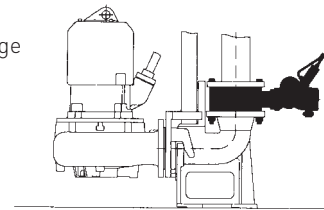


## Installation with intermediate clamping piece (accessory)

Between pedestal bracket and pump flange (pedestal 6 232 0652 or 6 232 0653/0654)



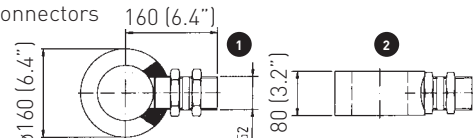
Between discharge flange and pedestal flange (pedestal 6 232 0652)



## Accessories

1 Intermediate clamping piece for pumps and discharge line DN 100 for connection of an ABS flushing valve 2" with 1 gasket and 4 bolts and nuts as well as 1 shut-off cap

2 Air hose extension 10m with connectors



3 Housing for control unit

