

# HYDROK U.K.

Water Engineering Solutions

## HYDROSLIDE® Flow Control Regulators



  
sustainable engineering solutions

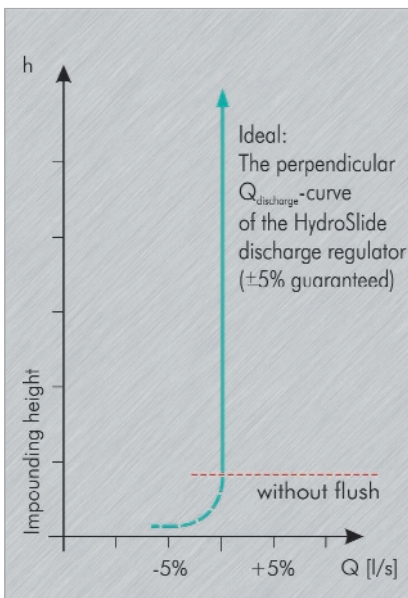
Water Management Systems - Flow Control & Flood Alleviation - HYDROSLIDE®

## HYDROSLIDE®

With increasing demands upon the control of flows within water systems the modern mechanical flow regulators are now required to provide increasingly accurate and reliable operation.

The maintenance of such units from ground level is becoming a standard requirement along with the ability to retrofit into existing manholes.

The HYDROSLIDE® flow regulator provides a proven cost effective technique for regulating flows from as little as 2 l/s. The float activated mechanism of the HYDROSLIDE® is designed to maintain a constant discharge without the use of external energy sources. The flow area is adjusted to perfectly match any increase or decrease in the upstream water level providing a constant discharge throughout the head range. These units can also be provided to control varying flows at varying upstream head levels to provide a discharge solution in line with Environmental Agency requirements particularly related to surface water discharges.



Preselection	
Discharge flow [l/s]	Nominal size [DR]
1 - 5	100
5 - 25	200/150
25 - 35	200
35 - 60	250
60 - 100	300
100 - 200	400
200 - 330	500
330 - 550	600
550 - 770	700
770 - 1080	800
1080 - 1450	900
1450 - 1880	1000
... - 5200	on request

① Application only in stormwater  
② Application of automatic system  
③ With hand pulley

### Advantages and Benefits

- Sewer flow control
- Surface water flow control within SUDS systems
- Controlled discharge of storm retention tanks
- Flow control in to sewage treatment works
- Prevention of downstream flooding
- Utilisation of the upstream storage volumes within the sewer network

### Operating Principles

The HYDROSLIDE® remains in the open position during dry weather flow. As the inflow within the flow control chamber increases and exceeds the capacity of the fully opened unit, the increasing water level causes the float to rise, this in turn causes the variable orifice of the HYDROSLIDE® to be adjusted so that a constant discharge is maintained throughout the head range.

- The flow rate is maintained constant for head variations of up to twelve times the nominal valve inlet diameter. For a unit with a nominal diameter of 200mm the upstream water level may vary from 0 to 2.4m while maintaining a constant discharge.

- The HYDROSLIDE® flow passage area is largest at the most critical time during dry weather flow e.g. at the beginning of a storm event when the sewer lines are being flushed and at the end of a storm event when the sewer lines are emptying, thereby reducing the chances and frequency of blockage.