

HydroSlide® Automatic Regulator Type GM

External energy-free flow regulator with automatic blockage clearance

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The Challenge

Modern hydraulic management concepts require regulating devices to be considered. Ideally the flow curve is perpendicular providing a constant discharge. Throttling controls are required in basins, reservoirs, spillways, wastewater treatment plants and separation plants. These regulating devices are required to provide precise discharge control throughout the regulating range.

The Solution

The orifice cross section is adjusted to maintain a constant discharge by a vertically operating shutter plate. The shutter plate is connected to a float arm which relates the water level to a control cam. The precision of the control cam design enables the flow to be regulated to an accuracy of $\pm 5\%$ from design point. All **HydroSlide® Flow Regulators** are commonly supplied without a 'First Flush' function (see technical documentation); however, a first flush function can be provided for use in foul sewers permitting the initial debris to pass downstream prior to regulating. In such cases, the **HydroSlide® Automatic Flow Regulator Type GM** can be adapted to any required setting. When a blockage occurs, the regulator will open fully to allow the debris to pass through before returning to its regulating function. The unit is fitted with a 'T' handle to enable manual opening of the unit if desired. When manually opened, the **HydroSlide® Automatic Flow Regulator Type GM** opens the whole orifice to enable debris to pass through. All regulators are provided with a benching profiling guide.

The Advantages

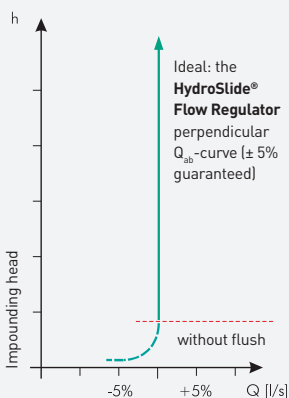
- automatic opening for blockage clearance
- simple, robust construction
- pull cable for manual opening from above ground (up to and incl. DR 250)
- control mechanism protected by housing
- no sole jump
- without initial flush
- wet installation avoids separate shaft
- favourable discharge cross-section during regulating
- adaptable for other discharge parameters by exchanging disc cam

HydroSlide® Automatic Regulator Type GM (model Giehlmatic)

The mechanical regulator operates without the need for electrical power. The control shutter plate moves vertically, adjusting the orifice opening to provide a constant discharge throughout the operating head. If a blockage occurs, the unit will automatically fully open the orifice to permit the debris to pass through the regulator. A 'T' Handle allows the manual opening of the regulator from ground level if required.



Characteristic curve



Selection

Discharge volume (l/s)	Nominal size (DR)
5 - 25	150
5 - 25	200/150
25 - 35	200
35 - 60	250
others on request	