

AQUALITY Vortex Flow Control

(Item No. G72100)

Regulates stormwater flow before it discharges into managed water courses or sewer networks.



Typical applications:

- Commercial and retail development
- Hard landscaping
- Public and private parking
- Residential development
- Distribution yard
- Industrial estates

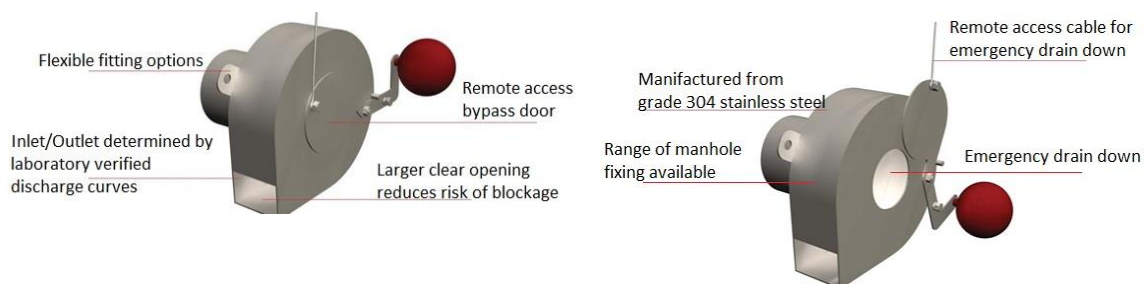
Features:

- Addressed planning and connection requirement of Floods and Water Management Act
- Tailored performance provides optimum hydraulic efficiency
- Reduces the need for on-site storage, lowering installation costs
- Available with a curved back for ease of installation
- Simplifies access and maintenance
- Removes the need for direct man access to sewer manholes
- Proven performance and reliability
- Approved by Severn Trent, Anglian and Scottish Water, and others
- Simple to install

Benefits:

- Regulates stormwater flows from 1-100l/s
- Individually configured
- Self-activated system
- Larger clear opening, reduces risk of blockages
- Remote access for emergency drain down
- Inlet/outlet determined by laboratory verified curves
- Flexible fitting options to suit profile of manhole chamber

Functioning principles:



Vortex flow control is designed to regulate stormwater flow before it discharges into watercourses or sewer networks. Unlike more conventional methods e.g. orifice plates or sized pipework, Vortex

flow control is less prone to blockage and permits higher flow at a lower head of water, as a vortex flow control allows an outlet orifice 4-6 times larger in cross-sectional area to be used. The design of a vortex flow control is based on the fluid mechanics principle of the forced vortex, which permits flow regulation without any moving parts.

Vortex flow control utilises the upstream head and discharge to generate a 'vortex' within the structure of the unit. Vortex flow control is fitted with an integral bypass door which in the event of a blockage can be opened so the unit can be drained of water. A stainless steel wire is attached to the bypass door and runs to cover level, providing control of the bypass door. Once the water level within the manhole subsides the unit can be cleared. Manufactured from grade 304 stainless steel, each Vortex flow control is individually configured to suit specific performance criteria.

All seams are continuously welded in accordance with BS 4872 for maximum strength. Each system is individually configured to suit specific performance criteria and can be made to fit a choice of manhole designs.

Specification Clause:

The Vortex Flow control device shall be Vortex Flow Control by Aquality Ltd, 6 Wadsworth Rd, Perivale, London. UB6 7JJ. All materials and components within the scope within the scope of this system shall be obtained from this manufacturer. All units shall be manufactured from grade 304 stainless steel incorporating rear mounted remote access bypass and emergency drain down door complete with stainless steel cable and fixing. The Vortex Flow control device is design to suit a design head of xxx mm and the design flow of xxx litres per second.

NBS Specification:

The Vortex Flow control device should be specified in NBS section R12. Assistance in completing this clause can be found in the Aquality Trading and Consulting Ltd, entry in NBS Plus or a model specification can be downloaded from www.aqua-lity.co.uk. For further assistance, please contact the Aquality Engineering Team.