

eQ-pipe water meter



Features

It has been developed for Irrigation Communities with distribution systems by ditches or low pressure pipes. Its design allows to measure in unfiltered water because it has no component that could be blocked or affected by suspended elements usually present in the water from surface sources

It makes a direct reading of the circulating flow in liters per second as the Electronic Differential Pressure Gauge (MDE 2010-C) has in its software, incorporated the equation relating the differential pressure to the flow, for each model of eQ-pipe .

The MDE 2010-C also allows the reading of the cumulative volume directly. Volume recording is saved in the permanent memory of the MDE 2010 C, where it remains safely, preventing the loss of information, even if power supply is completely disrupted.

The MDE 2010-C is completely autonomous, thus it has a small solar panel that keeps its battery loaded . The efficiency in its circuit's energy consumption has been optimized, resulting in a very low consumption which allows the MDE 2010-C to operate for several days without any feeding from the solar panel.

The case of MDE 2010-C is made of iron sheet lined with epoxy paint, that make it very strong and weatherproof (IP65) as well as vandalism proof. The solar panel is protected inside the box and under a 6mm glass.

Its large diameter and the *low head losses* , make eQ-pipe especially suitable for measurements in gravity systems. The body of the eQ-pipe is constituted by a venturi classic, built according to standard ISO 5167 which, together with the differential pressure transducer of high sensitivity ensures the measurement accuracy.

Series 300

The eQ-pipe 300 has a simple and robust design, requiring no maintenance. Available in three sizes throat to cover a wide range of flows:

Model	eQ-pipe 300/125	eQ-pipe 300/160	eQ-pipe 300/200
Inlet diameter	300 mm	300 mm	300 mm
Throat diameter	125 mm	152 mm	200 mm
Length	1360 mm	1276 mm	1035 mm
Minimum Q	8 l/s	12 l/s	22 l/s
Nominal Q	27 l/s	37 l/s	77 l/s
Maximum Q	45 l/s	68 l/s	128 l/s

Series 500

It has similar characteristics to the eQ-pipe 300, in its different sizes

Model	eQ-pipe 500/200	eQ-pipe 500/250	eQ-pipe 500/350
Inlet Diameter	500 mm	500 mm	500 mm
Throat Diameter	200 mm	250 mm	350 mm
Length	2304 mm	2087 mm	1866 mm
Minimum Q	20 l/s	31 l/s	68 l/s
Nominal Q	69 l/s	111 l/s	241 l/s
Maximum Q	116 l/s	185 l/s	403 l/s

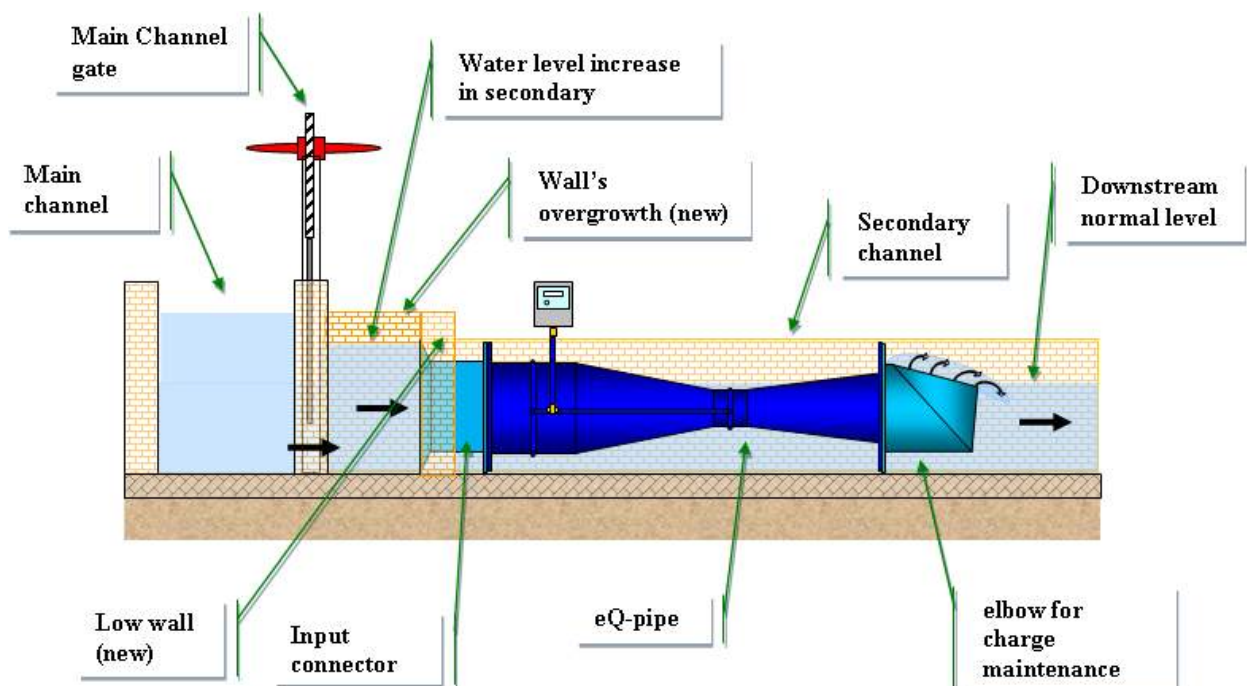
eQ-pipe's installation

The eQ-pipe must work all the time full of water ("in charge"). Its installation must ensure this condition, so it is necessary to ensure that water was always over the top of the inlet and outlet level at any flow.

Keeping this condition, the eQ-pipe can be installed in several ways: between two chests, in a ditch with enough free edge, or after a waterfall; in a diversion from primary to secondary ditch, etc.

Example of installation in derivation from primary to secondary channel or ditch

The eQ-pipe is installed on a low wall built into the secondary channel, immediately after the gate by a splayed entrance connector. At the output side, an elbow is installed, ensuring the eQ-pipe remains in charge, in case the level in the ditch decreases.



Example of installation in a standard tubular gate



The eQ-pipe 300/125 can be installed in a standardized gate of a prebuilt channel, similar to the Q-pipe 300/125 (discontinued model) shown in the picture, with a gate adapter and 300 mm elbow with reduction (160 mm or 200 mm) where the irrigation hose is connected.

The eQ-pipe is equipped with flanges for its installation, by means of screws and rubber gaskets, or without flanges, to be installed by means of Gibault joints.