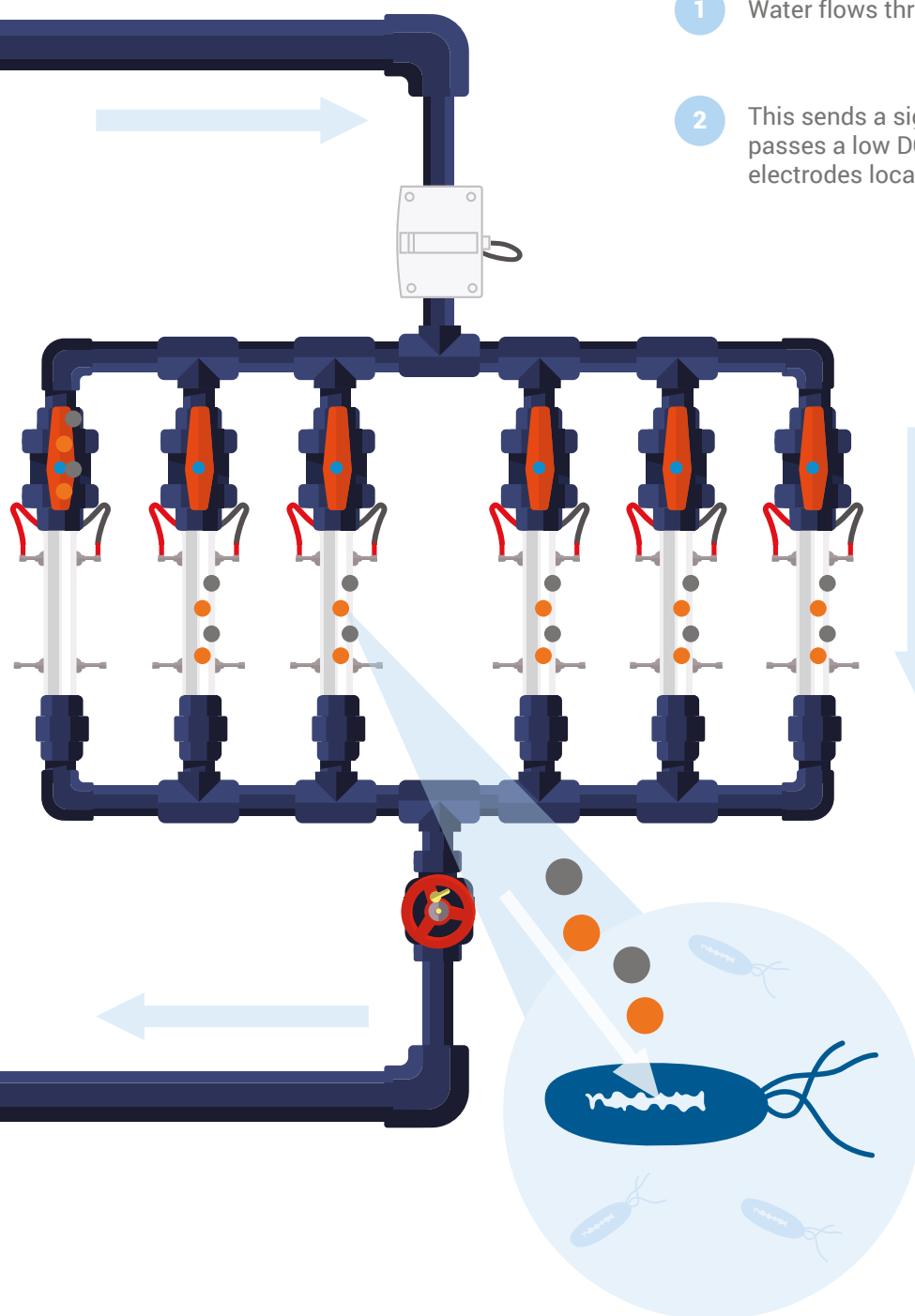


How the Orca System Works



- 1 Water flows through a flow sensor
- 2 This sends a signal to the Orca control unit, which then passes a low DC current between pairs of copper and silver electrodes located in the electrode chamber (the 'Pod').
- 3 The current causes the release of electrically charged copper and silver ions from the electrodes.
- 4 Copper and silver ions disperse throughout the water system.
- 5 The copper and silver ions gradually cause the breakdown of any biofilm (the breeding ground of waterborne bacteria) present in the system.
- 6 Copper ions react with negatively charged molecules on the surface of bacteria, weakening the cell wall and allowing silver ions to enter the cell.
- 7 Once inside the cell copper and silver ions react with biomolecules such as DNA and enzymes, killing the bacterium and leaving a clean bacteria free water system.