pH Control

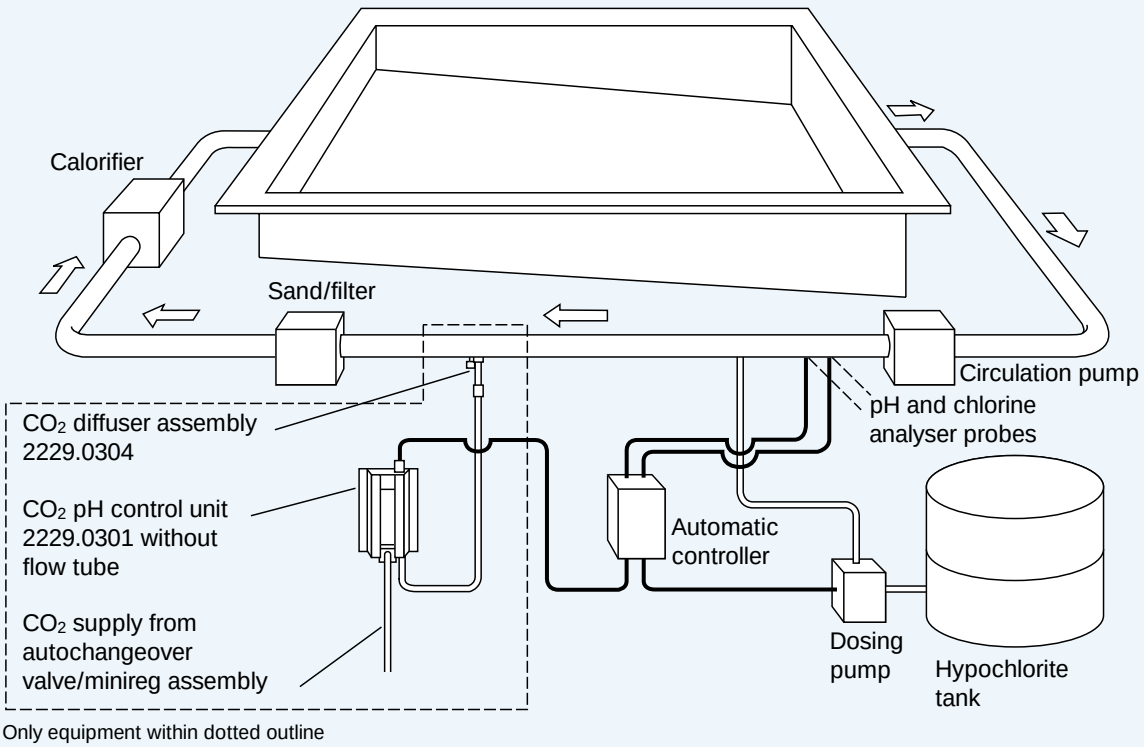
Swimming Pool pH Control Equipment

Carbon dioxide – The most practicable environmentally friendly option for pH Control

How CO_2 pH Control Works

Low pressure CO_2 gas is added to the water via the water circulation system in exactly the same way as a mineral acid except that a diffuser is used to disperse the gas uniformly in the water. CO_2 dosing is regulated automatically by a control unit containing a solenoid valve which meters CO_2 into the water, working in conjunction with the pool's automatic control system.

Schematic diagram of a typical CO_2/hypochlorite installation



Only equipment within dotted outline available from Air Liquide UK Limited

www.uk.airliquide.com

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The CO_2 Installation

A CO_2 installation for swimming pool pH Control consists of three basic units:

- CO_2 Supply Equipment - Consisting of CO_2 cylinders, reducing valve and hoses.
- CO_2 Control Unit

  The unit is essentially a flowmeter, needle valve and solenoid valve housed in a pressed steel wall mounted enclosure.

  The control unit is designed to be compatible with most automatic controllers of which there are various types obtainable from several suppliers. The flow tube is sized depending on pool size.

Pool Capacity	Flow Tube	Part No.
Up to 110,000 litres	0.2 - 2 litre/min	2229.0310
110,000 to 440,000 litres	0.6 - 5 litre/min	2229.0311
Over 440,000 litres	1 - 12 litre/min	2229.0312

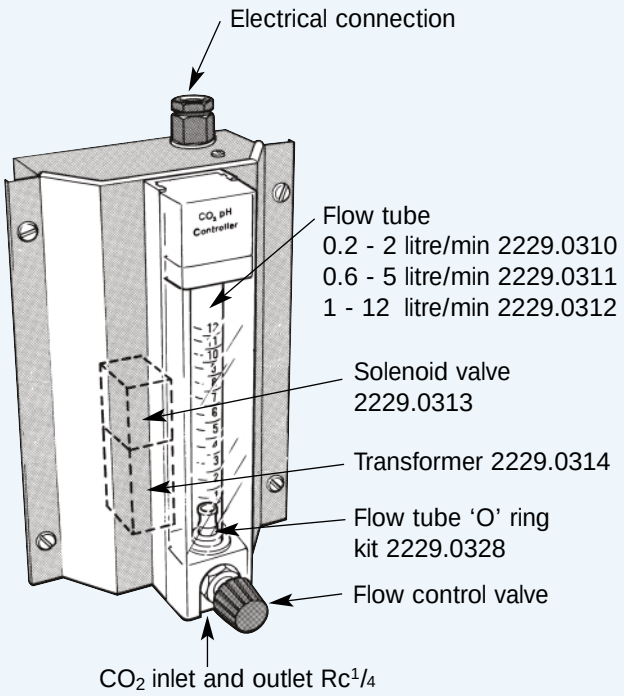
- CO_2 Diffuser Assembly

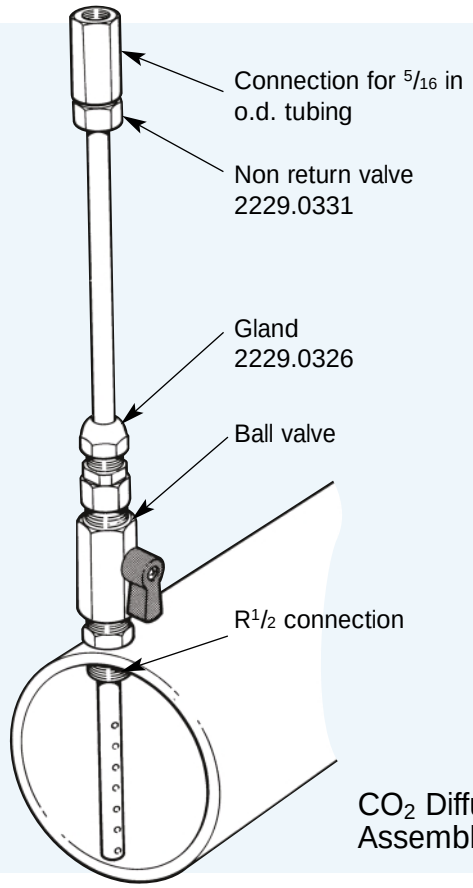
  This consists of a compact non-return valve attached to a stainless steel diffuser to distribute the CO_2 uniformly into the water stream.

  The connection from the autochangeover valve/minireg assembly to the control box and from the control box to the diffuser assembly is normally made using $^5/_{16}$ in o.d. nylon tube. We have a range of fittings suitable for this tube.

Description	Part No.
$^5/_{16}$ in o.d. nylon tube	2229.0315
Tube clips	2229.0316
$R^1/_4$ x $^5/_{16}$ in o.d. adaptor	2229.0318
$^5/_{16}$ in o.d. tee piece	2229.0319
$^5/_{16}$ in o.d. tube sleeve	2229.0320
$^5/_{16}$ in o.d. tubing nut	2229.0321
$^5/_{16}$ in o.d. 90° elbow	2229.0322
$^5/_{16}$ in o.d. equal connector	2229.0323

CO_2 Control Unit





CO_2 Diffuser Assembly

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