

## Type 2S10 Two Stage Cylinder 'Schrader' valve outlet Medical Regulator Operating Instructions

The model 2S10 is a 0 to 10 bar (0 to 1,000 kPa) adjustable regulator with inlet and outlet pressure gauges ( $\pm 2.5\%$  accuracy). It is designed to work from an inlet pressure rate of 21 to 200 bar (2,100 to 20,000 kPa) and delivers a standard discharge of  $42\text{m}^3/\text{h}$ . The inlet connector is a 5/8" BSP bullnose with an O-ring seal and handwheel. The outlet connector is a quick release 'Schrader' valve. This product should only be used by a suitably trained and competent person.

### FITTING TO CYLINDER

Before fitting the regulator, ensure that it is correctly labelled for the gas to be used and that the cylinder outlet valve and the regulator inlet are clean and free from contaminants including dirt, oil, grease & water and that the sealing surfaces are not damaged. Fully release the pressure adjusting knob on the front of the regulator by winding anti-clockwise. Fit to cylinder by tightening the hand wheel in a clockwise direction until fully wound in.

### REMOVING FROM CYLINDER

Close the cylinder outlet valve, exhaust the downstream gas into a safe area and if fitted, turn the regulator adjusting knob fully anti-clockwise to ensure that the regulator is fully discharged before removing the regulator from the cylinder.

### OPERATING

- Open cylinder valve slowly, this is a critical operation and must be done slowly to be safe.
- Use the pressure adjustment knob on the front of the regulator to set the required outlet pressure.  
**Note: it is the users responsibility to ensure that the set pressure is suitable for the intended use.**
- Test all joints for leaks using a proprietary leak spray. The presence of bubbles indicates a leak.
- At the end of each period of use, close the cylinder valve and turn the regulator adjusting knob fully anti-clockwise.

### SAFETY POINTS

- Ensure that the Regulator is used **only** for the gas shown.
- Carefully inspect the regulator for any trace of oil, grease or dirt or damaged parts.
- Oxygen vigorously supports combustion even of metal components. Ignition may be caused by contact with oil, grease, dirt or a pressure shock such as is caused by rapid opening of a cylinder valve.

#### Never

- Never use a regulator if oil, grease or damaged parts are detected.
- Never allow cylinders to become heated.
- Never use a pressure gauge that is damaged, not smooth in operation or not zeroing.
- Never remove or change any component part of a regulator.
- Never allow leads or cables carrying electric current to come into contact with the regulator or gas cylinder.
- Never obstruct or interfere with the safety relief valve.

#### Always

- Always check for damage and leaks every month and at every cylinder change.
- Always check that the 'use by' date has not expired, this is indicated as year and month underneath an 'egg timer' symbol.
- Always work to Health & Safety Recommendations.

### MAINTENANCE

Maintenance should only be carried out by a competent person. An annual inspection should be carried out as per British Compressed Gas Association guidelines.



Designed and manufactured in the UK by Gas-Arc Group Ltd. Vinces Road, Diss, Norfolk, IP22 4WW.  
Tel: 01379 652263 Fax: 01379 644235 This product complies with BS EN 738-1: 1997 and The Medical Devices Directive 93/42/EEC.