

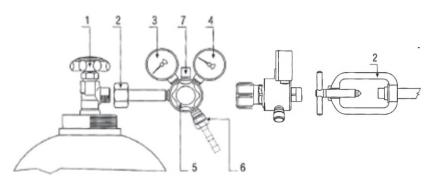
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# PRESSURE REGULATOR OPERATION MANUAL



#### Designations corresponding to ISO 2503

- 1. Cylinder valve
- 2 Inlet stem with screw or yoke
- 3. High pressure gauge
- 4. Low pressure gauge
- 5. Pressure adjusting knob6. Outlet nipple
  - 7. Pressure relief valve

# **Operating Instructions for Cylinder Pressure Regulators**

These instructions are produced in accordance with current regulations to ensure the safe operation of cylinder pressure regulators. Specific attention to these instructions will help avoid risks and loss of production as well as enhance the reliability and durability of these cylinder pressure regulators.

#### These instructions must be kept permanently at hand in the workshop

#### Operation

Cylinder pressure regulators are intended to be used with compressed gases, or with under pressure dissolved gases, in cylinders having a filling pressure of max. 300 bar and to reduce the respective cylinder pressure as well as to ensure a constant working pressure. Regulations to be adhered to: EN ISO 2503 Cylinder Pressure Regulator. Cylinder pressure regulators must not be used for gases in a liquid state and should not be used for corrosive gases such as ethylamine, dimethylamine, ammonia etc. Cylinder pressure regulators must not be operated under temperatures of -30°C or above +60°C.

### **Safety Instructions**

- All cylinder pressure regulators should comply with all current relevant technical regulations and meet all existing standards.
- Under no circumstances any changes or modifications are allowed without the written consent of the manufacturer.
- Intermediary connections between the cylinder valve and the cylinder pressure regulator are strictly prohibited.
- Incorrect use may endanger the operator and other personnel, damage the cylinder pressure regulator and installation, and may also result in fire and/or explosion.

# **Operating Instructions**

• Keep hands and tools clean. <u>Never allow oil and grease to come into contact with</u> <u>oxygen under pressure. This can result in explosions, fire, injury to personnel and</u> <u>damage to property.</u>

- The operator should be fully familiar with these operating instructions prior to the use of this equipment. All instructions should be adhered to when in use.
- Check that the cylinder pressure regulator is suitable for the gas to be used.
- Check that the cylinder valve connection is clean and undamaged: if not, *do not* connect the cylinder pressure regulator.
- Before connecting the cylinder pressure regulator, the cylinder valve (1) should be swiftly opened and closed to dislodge water or impurities from the valve/regulator inlet seating.
  Do not stand in front of the cylinder valve.

**Do not** hold your hand before the cylinder valve.

- Connect the cylinder pressure regulator to the cylinder valve (1) by means of the inlet stem with screw or yoke (2).
- Connect hose to the connection of the outlet nipple (6) and to the implement. Use hoses corresponding to EN 559 (ISO 3821) and hose connections according to EN 560; secure with appropriate hose clamps.
- **Operating the Cylinder Pressure Regulator**. Setting the pressure. Prior to releasing gas into the system, check the following:
  - 1. Connect the cylinder pressure regulator.
  - 2. All gauge pointers show zero.
  - 3. Pressure adjusting knob (5) fully screwed out (anti-clockwise).
  - 4. Downstream valves are closed.

Slowly open the cylinder valve, ensure that the cylinder pressure is shown on the high pressure gauge (3), open the downstream (blowpipe) valve, and with the pressure adjusting knob (5) rotate clockwise to set the required working pressure using the low pressure gauge (4).

# **Closing down the Cylinder Pressure Regulator**

• Prolonged interruption.

Close the cylinder valve (1), unwind (anti-clockwise) the pressure adjusting knob (5), vent the pressure in the system by opening the downstream (blowpipe) valves. Once the system has been purged, close the downstream valves.

## **Operation and Maintenance Instructions**

- Protect the cylinder pressure regulator from damage. Check visually for any signs of damage regularly.
- The pre-set adjustment of the pressure relief valve (7) must not be changed.
- Ensure that all gaskets, O-rings and mating surfaces are in satisfactory condition.
- If it is suspected that the cylinder pressure regulator is not functioning correctly, or is found to have any form of a leak, close the cylinder valve and remove from service immediately.

# Do not under any circumstances undertake or allow any repairs by unauthorized personnel.

### Repairs

- Repairs of cylinder pressure regulators shall be carried out by competent personnel at an authorized service or repair workshop. Only genuine spares may be used.
- Repairs or modifications carried out by the user or an unauthorized third party will entail loss or liability.