



MFCInternational

by RESPIREX

ENGINEERED INFLATABLE PRODUCT SOLUTIONS

Hose Inflation Kit

Product **Manual**



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WARNING: Carefully read this manual before operating the Inflation hose

NOTICE: The manufacturer takes no responsibility for the consequences of actions not complying with the instructions given in this manual.



This compact, robust kit can be rapidly deployed in conjunction with the required lengths of ordinary fire-hose.

Connect the required lengths of fire hose together, fit the couplings from the kit to the respective ends of the hose system and inflate.

The system can then be deployed in a number of ways, depending on the prevailing conditions. For example:-

- Line retrieval – The hose can be directed from a safe position towards the casualty, and can then be retrieved with the casualty in tow.
- Boom Rescue – Used on flowing water, the inflated hose can be positioned at an angle across the flow to provide a buoyant lifeline for water-borne casualties. The angled boom allows a safe, controlled route to safety.

The Hose inflation kit consists of :

- Cylinder Regulator
- Hand-held controller
- Delivery and Inflation Hoses.
- Inflation cap.
- End cap

The kit is contained in a robust easily stored carrying case.

The recommended operational temperature range is -20c to +55c.

The Operational instructions only refer to the component parts of the system.

The subsequent deployment of the inflated equipment in various rescue and recovery scenarios is not covered in this manual.

Handheld Controller

NOTE: Read carefully before use, manufacturer information to provide the user with all necessary information for correct working of the Handheld controller.

1. Technical Data

Connecting supply: 207/300bar BA Cylinder. Cleanliness is important to protect pneumatic parts.

Supply Pressure: Maximum supply pressure is identified on the controller.

Handheld Controller:- Max. input pressure: 4 bar / 60 psi

Working Temperature Range: max. operating temperature -20°C - +55°

WARNING: Do not supply controller with inflammable, corrosive, oxidizable, explosive or unstable gases or liquids. Maximum supply pressure must be within the borders of allowed pressure range. Exceeding allowed supply can damage controller and internal parts. Using controller outside allowed temperature range can damage its internal parts. Do not use controller in high corrosive areas as it can damage internal parts. Before any intervention ensure the controller is not under pressure.

2. Commissioning of Controller

Connect controller with a suitable supply pressure, inlet and outlet connections are marked by ring colour. Inlet coupling is marked with a yellow ring, outlet coupling marked with blue ring. Do not exceed the “max supply pressure” labelled on controller housing.

Connect the 60psi regulator to a 207/300bar compressed BA cylinder, there is a need to check the working of the controller, outlet couplings of controller must be properly closed. The regulator gauge readings will show the cylinder contents and the maximum regulated pressure (4bar/60psi).

Pressing the controller button (filling) lets the compressed air go through the controller to the outlet coupling. (Viewing the pressure gauge will show momentary pressure in controller) Releasing the button will stop supply.

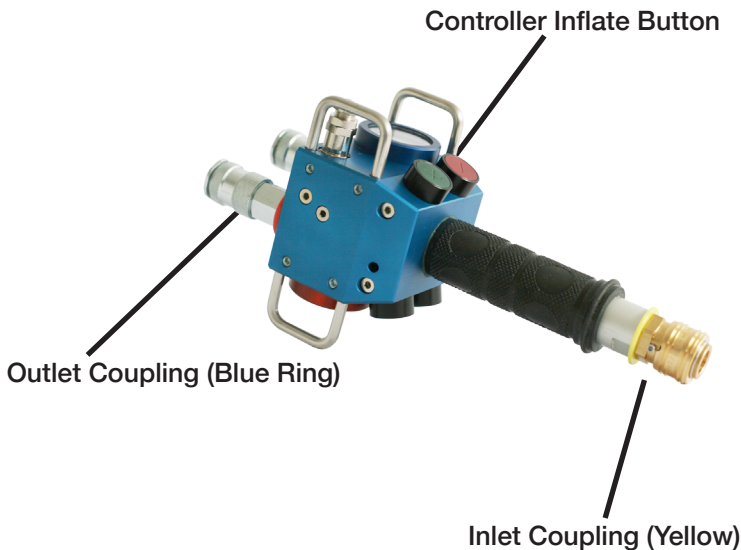
Turning the thumbscrew anticlockwise releases compressed air from the controller system. (viewing the pressure gauge will show fall in pressure). Once the check is complete the controller is ready for use.

If a fault is found with the controller or component parts then it is not suitable for use.

3. Use & Working

With instructed use, you will prolong the working life of the controller. Handle controller with care. Before connecting controller to inlet and outlet tubes ensure there is no debris (sand, dirt, dust, etc) in the tubes and couplings of controller. Clean controller after each use and store in the box provided.

Filling: Pressing the controller button allows the hose to inflate to the desired working pressure of the controller (4.0 bar). Releasing the button holds the inflation process while the hose remains under pressure. The pressure can be read on the pressure gauge.



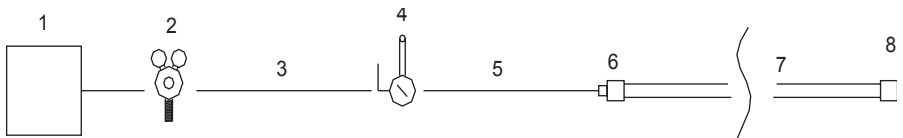
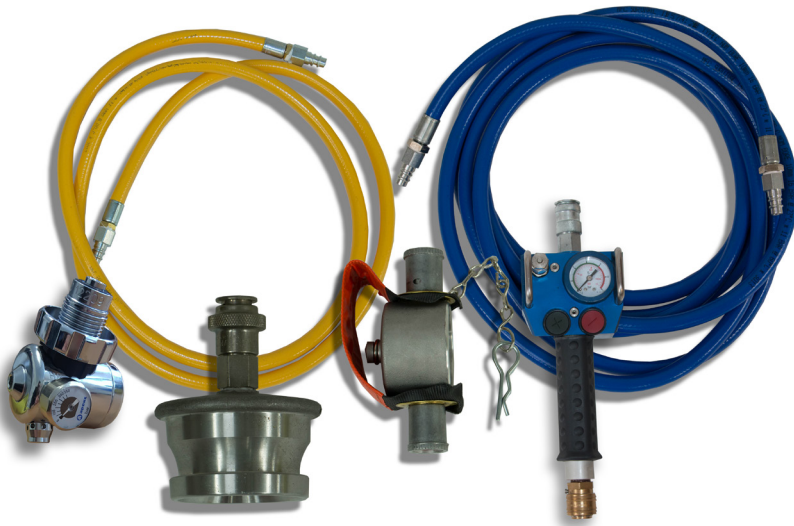
Inlet Pressure

Max. Supply Pressure: 4 bar

Release: Turning the thumbscrew anticlockwise releases compressed air from the controller system. (Viewing the pressure gauge will show fall in pressure). When the thumbscrew is tightened, the deflation stops and the hose remains under pressure. The pressure can be read on the pressure gauge.

Inflation Procedure

1. Unroll required lengths of fire hose and connect together.
2. Attach end cap.
3. Attach Inflation Cap (Item 6, page 7) to operator controlled end of fire hose assembly.
4. Fit Regulator (Item 2, page 7) to air supply; i.e. B.A. cylinder & tighten securely.
5. Ensure yellow delivery hose (Item 3, page 7) is securely connected between regulator and controller (item 4, page 7).
6. Securely connect red inflation hose from controller (item 4, page 7) to Inflation Cap (item 6, page 7).
7. Fully open air supply at source.
8. To inflate, press and hold the button on controller (see filling, page 7). Observe pressure on controller gauge.
9. Disconnect inflation hose.
10. Ensure that the inflated hose is safely secured by tying to any convenient strong point. This restraint should be attached to the inflation hose immediately behind the inflation cap (item 6).
11. The fire hose is now ready to be deployed towards casualty.
12. The positioning of hose can be assisted by the attached control line (if required) being manoeuvred from a convenient position on the bank/shore.
13. When the operational incident is finished, vent the pressure from the fire hose by turning the thumbscrew anticlockwise (viewing the pressure gauge will show fall in pressure).
14. Inlet/Outlet ports are clearly identified with colour coded bands: yellow – inlet, blue – outlet.



1. ENERGISING SOURCE, UNREGULATED (B.A. CYLINDER)
2. REGULATOR
3. DELIVERY HOSE (YELLOW)
4. HANDHELD CONTROLLER
5. INFLATION HOSE (BLUE)
6. INFLATION CAP
7. LAYFLAT HOSE
8. BLANK END-CAP

Maintenance

After operational use, the fire-hose inflation kit should be washed down, cleaned and dried before being replaced in their carrying box and stored. (check that all parts have been replaced).

- i) The replacement of any component part will not require any specialised equipment.
- ii) A detailed list of parts together with component costs is available on request.

2. Controller Maintenance and Storage

Clean the controller after each use, wiping away any debris or dust. Periodically check the function of controller. Store in Storage Box provided.

Testing

1. It is recommended that the whole system be tested as below by trained personnel.

1.1 After operational use, Inflate the system to 50% allowable pressure (1.5 bar), & check that all couplings are airtight by using a brush & soapy water. If any leaks are found, investigate and replace faulty parts as required.

1.2 Quarterly:-

- i) The Fire Hose system shall be inflated to operational pressure, ensuring audible operation of relief valve.
- ii) With the system charged, all fittings and quick-release connectors should be thoroughly examined for leakage using a brush & soapy water. (If any leaks are found, investigate and replace faulty parts as required).
- iii) After the fire-hose system has passed checks for leakage, the system should be allowed to stand at operational pressure (4 bar) for a period of time that would be comparable to a rescue situation e.g. 2 hours.
- iv) After this time, observe pressure gauge to assess the pressure-drop. The system should not lose more than 10% of its pressure; the pressure reading is 4 bar (60 psi), the final reading should be above 3.5bar (54 psi).



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