

## 98300 Pneumatic pump

Hydraulic test according to PED 97/23CE

### DESCRIPTION

It can test hydraulically one or more cylinders at a time, max 250 bar.

The cylinder is filled with water, the hydropneumatic pump compress the water inside it aspirating clean water contained in a bucket below pump head.

Max pressure of the pump is 250 bar.

No electricity is needed.

It use air to drive the pump from 0,1 up to max 8,5 bar and it multiplies the pressure with a ratio 1:30.

Fully in stainless steel and maintenance free.

A high precise pressure reducer allow to supply air at very small steps enabling to set desired hydraulic pressure.

It can be use also to make a burst a cylinder; normally dry powder cylinder blasts at range from 60 to 90 bar.

It can be used to test also flat fire hoses, rubber high pressure hoses, hose reels.

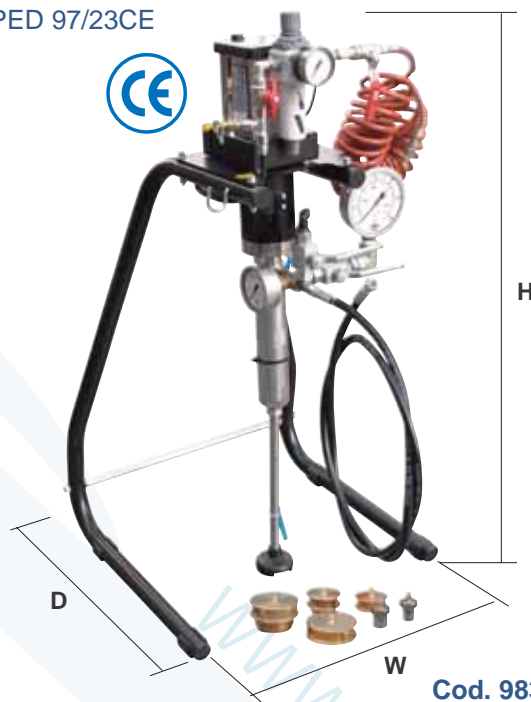
**On request 2 models: 480 bar and 750 bar.**

### TECHNICAL SPECIFICATION

- Max working pressure : 250 bar
- Pressure ratio : 38:1
- Motor bore : 80 mm
- Max delivery water : 1,5 lt/min
- No. of cycles per liter : 66
- Air : 0,6.5 bar
- Dimensions :
  - Width : 200 mm
  - Height : 600 mm
  - Depth : 150 mm
- Weight : 9 kgs



Water bucket



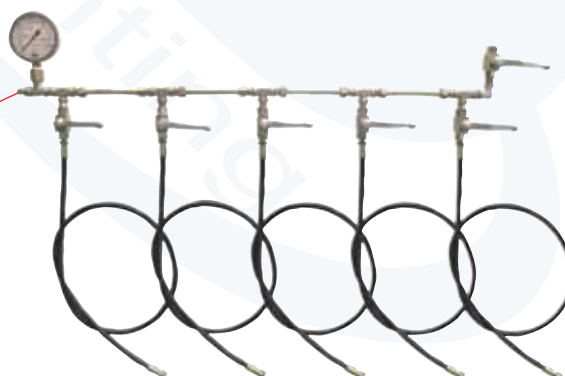
Cod. 98300

### STANDARD ACCESSORIES

- Cap DN 45 F x 1/4" M.
- Cap 70f x 1/4" M.
- Couplin H.P. 1/4" M sv x 3/4" npt.
- Couplin H.P. 1/4" M sv x M30x1,5.
- Couplin H.P. 1/4" M sv x 1" npt.
- Couplin H.P. 1/4" M sv x M25x2.
- Plug DN 45 M.
- Plug DN 70 M.

### OPTIONAL ACCESSORIES

- Manifold hydraulic testing enable simultaneously 5 cylinder up to 250 bar.



Cod. 98002

The manifold has 5 outlet (code 98002) to allow you a good productivity. It test about 5 cylinders in two minutes. One valve is for pressurizing the manifold and the cylinders. The other valve is for the vent of air or for releasing the pressure. It is provided with a glycerine manometer up to 315 bar. You can test powder, foam and CO2 cylinders, with fine tuning regulator from Ø up to 10 or bar. The machine is supplied with all the accessories hoses and coupling for standard powder, foam and CO2 cylinders. Manifold (code 98002) with hosts is optional .

## INSTRUCTION FOR USE

- A) Dose the valve (1).
- B) Connect the spiral pipe (2) fitting to the air compressor (max 8 bar).
- C) Fill the cylinder to be tested with water up to the top level.
- D) Check if the container (3) is full of water.
- E) Connect the outlet hose (4) to the cylinder to be tested and make sure that the neck, the cylinder and the connecting hose have the same thread.
- F) Be sure that the pressure regulator knob (5) is completely turned anti-clockwise (pressure 0 bar).
- G) Open the air cut-off valve (6).
- H) Open the re-cycle valve (7).
- I) If the pressure test is higher than 60 bar dose the valve (8) in order to protect the low pressure manometer (9). Otherwise open the valve.
- J) Open the valve (1).
- K) Turn the handwheel (5) on the pressure regulator clockwise until the pump starts.  
Adjust the air pressure at 0,4 bar (read on the gauge 10).
- L) Now the water mixed with air bubbles will flow from pipe (11).  
Continue tilt no any air bubbles will be present in the water: dose the re-cycle valve (7).
- M) Increase slowly the pressure, turning handwheel (5):

## Hydrostatic test cylinder:

When the hydrostatic test pressure has been reached check on manometer (12) or (9), close valve (6) and wait as long as you need.

In case of deformation of the container during the test the pump will continue working without increasing the pressure: in this case do not increase pressure but wait till the piston stops to running.

- N) When the required has been obtained, open slowly the re-cycle valve (7) to discharge the pressure from the cylinder, and proceed with a new cylinder to test.

## Cylinder bursting

- O) Use only manometer (12), then dose the valve.
- P) When the cylinder burst close valve (6) and note the last pressure value indicated on the manometer (12) and open the re-cycle valve (4) to release the pressure.
- Q) Proceed with a new cylinder.

## MAINTENANCE

Check periodically the lubricating oil level in the container and the correct oil design.

## Use the following

- Viscosity
- Anilime point : 98° , 105°
- Aciduty index : 0,2

