



Description

The precharge tester and pressurizer are used for the charging of bladder, piston and membrane accumulators with nitrogen, and for testing or changing the pre-charge pressure. The instrument is suitable for FCH accumulators with 3/8" and 1/2" stem valves, Schrader valves or screw plugs. It is screwed onto the gas valve of the accumulator and connected with the charging hose to a standard nitrogen cylinder. If only the pre-charge pressure needs to be checked, the connection of the charging hose is not necessary.

Each unit comprises of:

- Tester and pressurizer with manometer, return valve on the charging hose connection, built-in release valve, valve spindle for opening the gas valve or screwplug
- Charging hose, length 2,5 m
- Connections for the accumulator:
 - ◆ 7/8" - 14 UNF
 - ◆ 5/8" - 18 UNF
 - ◆ 0.302" - 32 UNF
 - ◆ M28 x 1.5
 - ◆ 1/4" BSP
- Plastic protective case

Maximum permitted operating pressure: depending on manometer, **max. 400 bar!** Tighten Allen screw on membrane accumulator with 20 Nm torque.

Handling and precharging procedure

PREPARATION

- Before any pre-charge checks and/or nitrogen pressurizing, the hydraulic fluid of the accumulator must be discharged.

Accumulator with gas valve:

- Turn star knob (no. 1) anti-clockwise till stop.
- Remove the protective and/or seating cap of the gas valve.
- Attach pressurizer with adaptor no. B or C
(+ connector no. D for Schrader valves) to the gas valve.

Move the manometer into a convenient position for reading and tighten spigot nut (no. 2) with hand.

- Check that the bleed valve is closed (turn star knob no. 3 clockwise).

Accumulator with screw valve:

- Turn star knob (no. 1) anti-clockwise till stop.
- Remove plastic cover of screw valve.
- Loosen screw valve with Allen screw width A/F 6.
- Attach pressurizer without adapter to the screw valve. Move the manometer into a convenient position for reading and tighten the spigot nut (no. 2) by hand.
- Check that the bleed valve is closed (turn star knob no. 3 clockwise)

Handling and precharging procedure continued..

CHECKING THE PRE-CHARGE PRESSURE

- Turn star knob (no.1) clockwise respectively anti-clockwise.
- The gas valve or Allen screw opens and pre-charge pressure will register on the manometer.

REDUCING THE PRE-CHARGE PRESSURE

- Turn star knob (no.3) of the bleed valve slowly anti-clockwise to exhaust the pre-charge pressure.

PRESSURIZING / RAISING THE PRE-CHARGE PRESSURE

- Attach charging hose to return valve (no.4) and to nitrogen bottle.
- Open the stop valve on the nitrogen cylinder carefully.
Let the nitrogen flow slowly in the accumulator, till the desired pre-charge pressure is reached.
- Close the stop valve on the nitrogen cylinder.
After 5-10 minutes (temperature compensation), check the pre-charge pressure again and correct, if necessary.

REMOVING

- Turn star knob (no.1) back.
- Turn star knob (no.3) anti-clockwise to exhaust the pressurizer and charging hose.
- Remove the pressurizer.
- Tighten screw valve with Allen screw width A/F 6.
- Test the gas valve for leaks using a leak detection spray.
- Replace the protective and/or seating cap with hand.

Caution:

- **NEVER use oxygen to prefill the accumulator.**

- Where the nitrogen cylinder pressure is higher than the permitted accumulator working pressure, a pressure-reducing valve must be used in between!