



Description VG U

The universal tester and pressuriser unit is used for checking, charging and emptying the most commonly used accumulators. It is screwed onto the shock absorber gas valve and connected to a nitrogen source and its pressure reduced by means of a high pressure charging hose. If only the pre-charge pressure needs to be checked, the connection of the charging hose is not necessary.

The VG U unit is delivered in a case comprising:

- Universal tester and pressuriser unit with a threaded connector M 28 x 1,5.
- A manometer
- An adaptor to connect the unit to the gas intake valve (G 1/4", 7/8", 9/8", 8V1, M 28 x 1,5).
- A high pressure charging hose of 2,5 m to connect the unit to a nitrogen source.
- An Allen key 6
- Spare seals
- Manuals in English, French and German.

The following items can be ordered optionally:

- Manometers with different scale graduations: ø 63 with glycerin filling, G 1/4" connection and direct connection for Minimes. Graduations: 0 to 6, 0 to 10, 0 to 25, 0 to 60, 0 to 100, 0 to 160, 0 to 250, 0 to 400 (accuracy = 1,6 %).
- High pressure charging hoses of various lengths with adaptors for connection to gas cylinders of various countries (please indicate the country).

Maximum permitted operating pressure:

Limited to the maximum operating pressure of the connected components. **Maximum 400 bar.**

For higher charging pressures up to 550 bar use type TS6 charging hoses.



Type code

| | | | | |
|------------------------|---|-------------------------------------|---|---|
| <u>VG U</u> | - | <u>250</u> | - | <u>TS 3</u> |
| Type | | Manometer | | Charging hose |
| Tester and pressuriser | | 6, 10, 25, 60, 100, 250, 400 bar | | TS 3: for CH, D, N, S, A, FL, NL, DK, GUS |
| | | | | Connector |
| | | | | W 24,32 x 1 1/14" 400 bar |
| | | | | (for other countries see pos. 40 on the rear page) |

Handling VG U

Preparation

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

Accumulator with gas valve:

- Turn the star knob (pos. 6) anti-clockwise until the stop.
- Remove the protective and/or seating cap of the gas valve.
- Screw the tester and pressuriser unit onto the gas valve using the adapters pos. 25, 30 or 48 (+ connector pos. 36 when using Schreder valves).
- Move the manometer into a convenient position for reading and tighten spigot nut (pos. 5) by hand.
- Check that the relief valve is closed (turn centre-grooved dowel pin pos. 20 clockwise).

Accumulator with screw valve:

- Turn the star knob (pos. 6) clockwise until the stop.
- Remove plastic cover of screw valve.
- Loosen the screw valve with Allen screw width A/F 6.
- Screw the tester and pressuriser unit without adapter on the screw valve.
- Move the manometer into a convenient position for reading and tighten the spigot nut (pos. 5) by hand.
- Check that the relief valve is closed (turn centre-grooved dowel pin pos. 20 clockwise).

Checking the pre-charge pressure

- Turn the star knob (pos. 6) anti-clockwise to open the gas valve or the Allen screw to read the pressure on the manometer.

Reducing the pre-charge pressure

- Turn centre-grooved dowel pin (pos. 20) of the relief valve slowly anti-clockwise to exhaust nitrogen.

Pressurizing / Raising the pre-charge pressure

- Attach the charging hose to the non-return valve (pos. 7) and to the nitrogen cylinder.
- Open the stop valve on the nitrogen cylinder carefully. Let the nitrogen flow slowly into the accumulator, until the desired pre-charge pressure is reached.
- Close the stop valve on the nitrogen cylinder. After 5 to 10 minutes (temperature compensation), check the pre-charge pressure again and correct, if necessary as indicated in the following paragraph.

For pre-charge pressures higher than the existing nitrogen cylinder pressure the nitrogen charging unit SLG 1.1 (up to 400 bar) can be used - see data sheet OSP 761.

Removing

- Turn the star knob (pos. 6) anti-clockwise.
- Turn centre-grooved dowel pin (pos. 20) anti-clockwise.
- Remove the unit.
- Tighten the screw valve with Allen screw width A/F 6.
- Check the gas valve or the screw valve for leaks using a leak detection foam.
- Replace the protective and/or seating cap of the gas valve by hand.

Caution:

- **Never use** oxygen to prefill the shock absorber.
- Where the nitrogen cylinder pressure is higher than the permitted accumulator working pressure, a pressure reducing valve must be used in between!

Spare part list

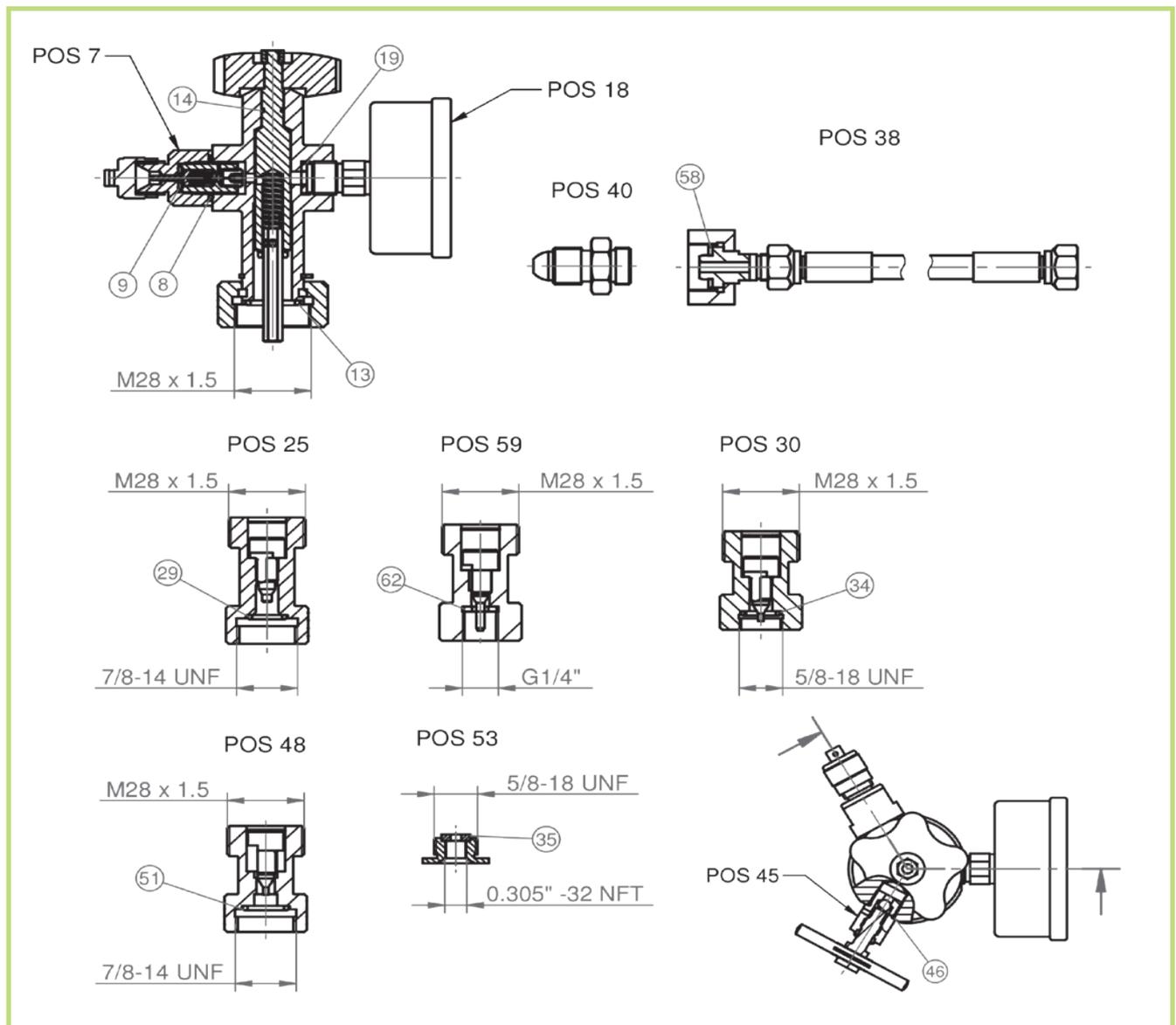
For VG U Tester and Pressuriser.

| Pos. | Designation |
|------|--|
| 7 | Non-return valve |
| 18 | Manometer |
| 25 | Adaptor SAE 7/8" - 14 UNF compl. |
| 30 | Adaptor SAE 5/8" - 18 UNF compl. |
| 37 | Gasket set |
| 38 | Charging hose TS3 |
| 40 | Connectors for foreign nitrogen cylinders |
| 45 | Relief valve |
| 48 | Adaptor SAE 7/8" - 14 UNF to accumulator 690 bar |
| 53 | Connector 0.305" - 32 NFT compl. |
| 59 | Adaptor G1/4" compl. |

Gaskets Pos. 37

Gaskets can only be ordered as a set.

| Pos. 37 | contains the following gaskets |
|---------|--------------------------------|
| 8 | O-Ring |
| 9 | Flat seal |
| 13 | O-Ring |
| 14 | O-Ring |
| 19 | Copper seal |
| 29 | O-Ring |
| 34 | O-Ring |
| 35 | Flat seal |
| 46 | O-Ring |
| 51 | O-Ring |
| 58 | Flat seal |
| 62 | Flat seal |



| Connection | Pos. / Reference | For accumulators |
|---------------|-----------------------------|--|
| M28 x 1,5 | incl. in VG U | Diaphragm accumulator with gas screw valve |
| 7/8"-14 UNF | Pos. 25 / Ref. 202127-00233 | Bladder accumulator including connection 7/8"-14 UNF and integrated Schrader valve |
| 5/8"-18 UNF | Pos. 30 / Ref. 202130-00223 | Bladder accumulator 0,2; 0,5; 1,6 litre / 10K at 50 litre / 100 to 530 litre |
| 7/8"-14 UNF | Pos. 48 / Ref. 202135-00223 | Bladder accumulator 1; 2,5; 4; 5; 6; 10 litre / 1 to 50 litre, 690 bar |
| 0,305"-32 NFT | Pos. 53/ Ref. 202140-00200 | Half-bladder accumulator ELG type membrane (with Schrader valve) |
| G1/4" | Pos. 59/ Ref. 202211-00220 | FCH Accumulator |

Used to determine the tester and pressuriser unit adaptor.