**Novelty 2021**

Laborglasinstrumente

# Lenz® Reaction Vessels with new security valve


The Lenz reaction vessel programme stands for "Made in Germany" quality and for the very highest precision and reliability.

As of 1 January 2021, all Lenz® reaction vessels will be supplied with an optimized bottom outlet valve. This robust valve has a spring-loaded valve spindle, which guarantees an even pressure on the valve seat, regardless of temperature changes and thus prevents dangerous tension from being created.

**Advantages of the new bottom outlet valve**

- Easy assembly
- No dead volume
- Spring-loaded valve spindle
- Exceptionally high chemical resistance
- Media only have contact to borosilicate glass 3.3 and PTFE
- Durable materials ensure a high degree of reliability and a long product life
- The valve spindle is also available as a spare part

**Order information**

Our current article numbers for complete reactors remain unchanged.
Additional components and special equipment versions are available on request.

**Spare valve spindle** (new)
Valve opening: 10 mm
Valve spindle: PTFE
Valve body: PA 66
Nominal operating temperature: -30 to +200 °C,
with restrictions also down to -100 °C (reduced tightness)
Store dry at temperatures of -20 to +40 °C

Pack quantity: 1 piece
**Article number: 6061312**

**Lenz Laborglas GmbH & Co. KG**
Am Ried 8 | 97877 Wertheim | Germany | Telefon: +49 (0) 93 42-96 09-0 | Fax: +49 (0) 93 42-96 09-30 | info@lenz-laborglas.de | www.lenz-laborglas.de

# Instruction for assembly, handling and disassembly of bottom drain valves of LENZ® reaction vessels (from 2021)

Reaction vessels are sometimes subject to high temperature fluctuations. Due to the large difference in the expansion coefficients of borosilicate glass and the PTFE spindle of the bottom drain valve, usage faults can induce dangerous stress. This may cause the reaction vessel to break, which of course implies the danger of injuries and economic losses.

In order to prevent this from happening, Lenz® reaction vessels are equipped with safety valves. The valve spindle is spring-loaded so that no additional mechanical stress occurs when the temperature changes. Please follow these instructions carefully to ensure that the safety feature works.

## Installation of the valve

1. Make sure, that there is no visible damage to the valve.
2. Remove adjusting screw completely and then screw it in again ~5 mm.
3. Place the connecting nut on the valve's glass part so that the bore on the side points to the reaction vessel.
4. Push the spacer ring and conical seal onto the valve spindle.
5. Insert the valve spindle into the glass part. Please note, that the top of the conical seal is angled. This angle must be flush with the sidearm when inserted into the glass part. If valve spindles are difficult to assemble: Insert the spindle using gentle circular movements.
6. Turn the valve body so that its locking pin fits into the notch in the glass part.
7. Screw the connection nut halfway in, insert the locking spring and tighten the connection nut (use only a slight force to tighten the components).

## Handling of the valve

- To close the valve, screw the adjusting screw in, until the spindle hits the valve seat.
- Screw on carefully to the limit point. You will need increased torque, because now the spring of the valve spindle is tightened.
- After reaching the final point, turn the adjusting screw at least half a turn back, to give the spring some expansion space.

## Dismantling

1. Release the connection nut.
2. Remove the locking spring.
3. Pull out the valve with gentle circular movements.
4. Remove the conical seal and spacer ring at the same time.
5. If the conical seal sticks to the valve, reinsert the spindle and remove it with circular movements.

This QR code links to a video of the assembly instructions which shows the handling in motion.

**Lenz Laborglas GmbH & Co. KG**
Am Ried 8 | 97877 Wertheim | Germany | Telefon: +49 (0) 93 42-96 09-0 | Fax: +49 (0) 93 42-96 09-30 | info@lenz-laborglas.de | www.lenz-laborglas.de