

## 1 Intended use

The SEWERIN refilling connection is used to fill SEWERIN gas bottles (0.1 l or 0.4 l) with certain test or fuel gases (see section 4) from large supply bottles.

The refilling connection must not be used as a permanent bottle connection or for mixing different types of gas. It must only be used with a maximum pressure of 200 bar from the supply bottle.

## 2 Safety information

- Please observe all the applicable safety and accident prevention regulations.
- Ensure that the work environment is well ventilated.

### Gases

- Gas filling must not be carried out close to naked flames or fire.

### Gas bottles

- Always secure gas bottles to prevent them from toppling over.
- Only certified SEWERIN gas bottles may be filled. Check the date of the next inspection on the gas bottle before filling. If this has already passed, you must not fill the bottle.
- Regularly check that the gas bottles are leak-tight. As soon as you notice leakages in a gas bottle, the remaining gas must be released outdoors and the gas bottle must be returned to the manufacturer for assessment.
- Gas bottles must only be filled with the specified gas in the concentration stated on the bottle.
- Open and close gas bottles by hand. Never use tools to open or close bottles.

### Refilling connection

- Ensure that the refilling connection is not exposed to dirt.

## 3 Filling

- Check that the supply bottle, the gas bottle to be filled (working bottle) and the refilling connection are not damaged. In particular check that the seals are in good condition. Do not fill the bottle if there are any visible signs of damage.
- Close all valves.
- Connect the refilling connection to the supply bottle.
- Connect the working bottle.
- **Slowly** open the valve on the supply bottle approx. 180°.
- Watch the manometer on the refilling connection. Wait until the displayed maximum pressure of the supply bottles stabilizes.
- **Slowly** open the valve on the working bottle approx. 180°. The working bottle will start filling up. The pressure on the manometer will fall.
- Close the valve on the supply bottle as soon as the manometer shows the maximum pressure of the supply bottle again.
- Close the valve on the working bottle.
- Release the residual pressure from the refilling connection by undoing the connection of the gas bottle and the refilling connection.  
Note: If the refilling connection features an outlet valve the residual pressure can be released through this valve.
- Secure the supply and working bottle with the valve covers.

## Cascade filling

PORTAFID **fuel gases** can also be filled by the cascade process. This method enables better utilisation of the supply bottles.

**Two** supply bottles are required. The supply bottle with the lower pressure is used first for filling. The filled bottle is then filled from the supply bottle with the higher pressure. The whole filling process is repeated.

## 4 Technical information

Permitted operating pressure: max. 200 bar

Art. no.	Only to be used for	Width across flat [mm]	Connection no. (DIN 477)
FZ01-10000	Non-flammable test gases: <ul style="list-style-type: none"><li>● Synthetic air</li><li>● Methane 10 ppm</li><li>● Methane 1 % Vol.</li><li>● Methane 2.2 % Vol.</li></ul>	27	14
FZ01-10200	Flammable gases: <ul style="list-style-type: none"><li>● PORTAFID fuel gases</li><li>● Methane 100 % Vol.</li></ul>	30	1
FZ01-10300	Flammable gases: <ul style="list-style-type: none"><li>● PORTAFID fuel gases</li><li>● Methane 100 % Vol.</li></ul>	30	1