

Intended use

The service kit is designed to check the individual pressure zones of system separators ½" – DN 250. Likewise, the system separator integrated in the filling group can be checked as well. By means of the pressure zone inspection (upstream, intermediate and downstream pressure), a defect or wear and tear of the non-return valve can be determined. The pressure zones must have the specified differential pressure to maintain the safety of the system.

Differential pressure (Δp)



The differential pressure (Δp) must at least have the values below:

Δp upstream/intermediate pressure zone
> 0.2 bar

Δp intermediate/downstream pressure zone
> 0.1 bar

In case the differential pressure is undershot:

- ▶ Replace worn or defective non-return valves on the **inlet** and **outlet** side or install new seals.

Spare parts – Refer to spare parts catalogue at www.gruenbeck.de/Service/Ersatzteilkatalog.
Order the non-return valve kit or the entire seal kit.



Document all inspections, maintenance or repairs in the operation log of the product.

How to proceed

1. Close the shut-off valves at the inlet and outlet of the system separator.
2. Loosen the closing plugs (refer to items 4, 5, 6) and open the shut-off valves – the existing pressure is relieved.
3. Install the quick couplings using the adapters (included in the test case).

If no shut-off valves are available on the test connections (e.g. in case of filling group thermaliQ:SB13):

- ▶ Install the enclosed shut-off valves on the test connections beforehand.

Converting the connection for the downstream pressure zone (pressure gauge) of filling group **thermaliQ:SB13** or filling section **thermaliQ:FB2/FB13i**:

- a Remove the retaining clip at the connection and pull out the pressure gauge.
 - b Insert the test adapter into the connection bore and fix the test adaptor with the retaining clip.
 - c Install the test connection on the test adaptor – do not damage the O-ring.
4. Put the system separator into operation.
 5. Vent the system separator by loosening the quick couplings.
 6. Install the test pressure gauges on the quick couplings.

Measurement I

In static condition (no water withdrawal), the actual differential pressure between the pressure zones is difficult to read (distorted values).

- ▶ Read the differential pressure – refer to Δp .

Measurement II

1. Shut off the system separator on the outlet and inlet side.
2. Open the draining valve on the inlet side. If no draining valve is installed: Loosen the screw connection on the inlet side.

» The upstream pressure is being relieved.

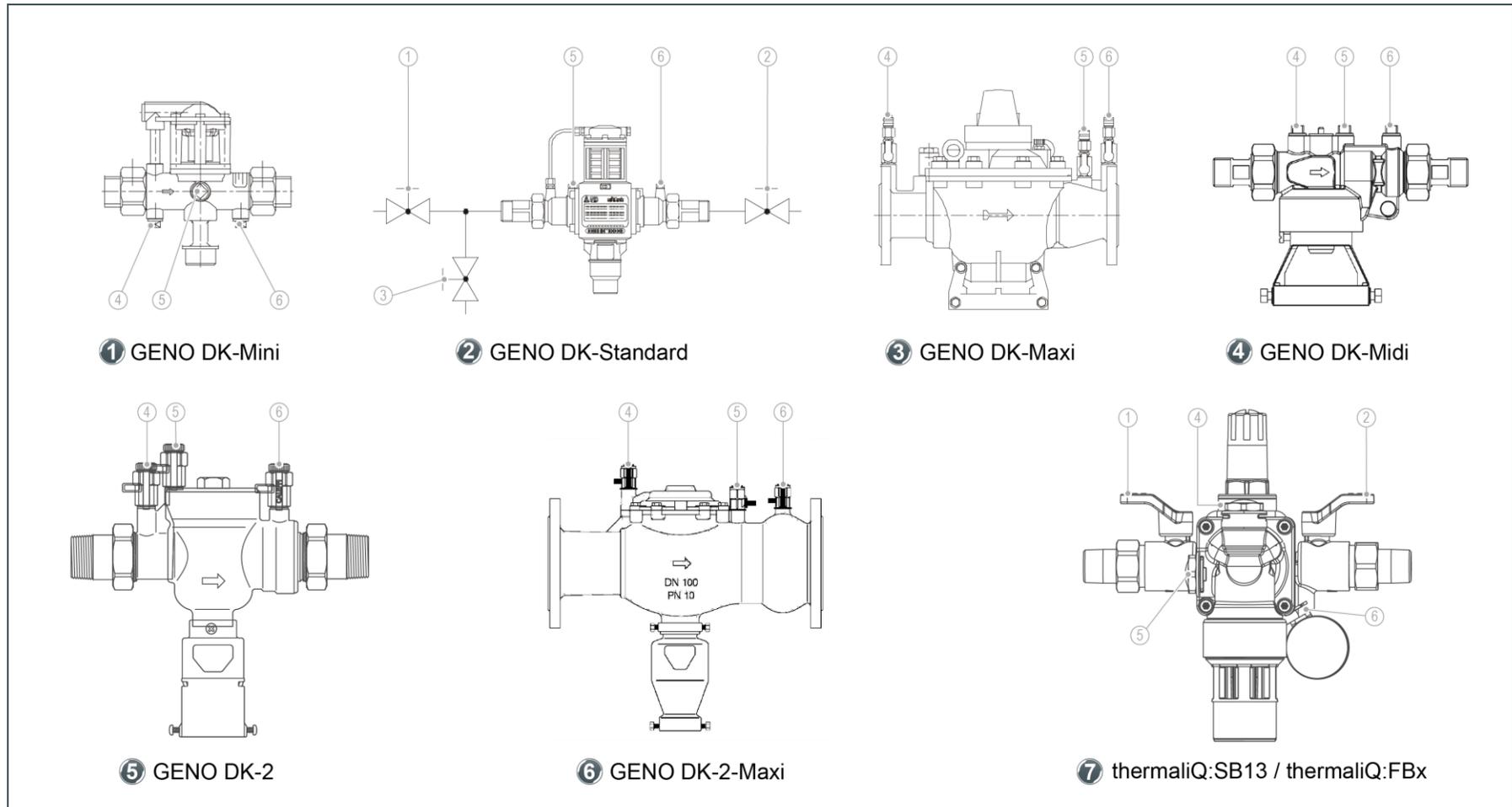
The system separator completely aerates the intermediate pressure zone (upstream and intermediate pressure zone must be non-pressurised). The system separator switches to the separating position – water flows to the drain via the outlet funnel.

The “locked-in pressure” in the downstream pressure zone must remain constant for a period of approx. **2 minutes**.

3. If the pressure is relieved, both non-return valves must be replaced or new seals must be installed.
- ▶ After the measurements have been completed, remove the test components.
 - When loosening the test adapters, hold the test connection stationary using an open-ended spanner to avoid loosening the test connection as well.
 - ▶ Install and secure all standard components of the system separators.
 - ▶ Check the loosened screw connections for leaks and retighten them, if necessary.

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Test connections of system separator



Item	Designation	Item	Designation
1	Shut-off valve on inlet side	2	Shut-off valve on outlet side
3	Draining valve on inlet side	4	Test connection of upstream pressure zone
5	Test connection of intermediate pressure zone	6	Test connection of downstream pressure zone

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