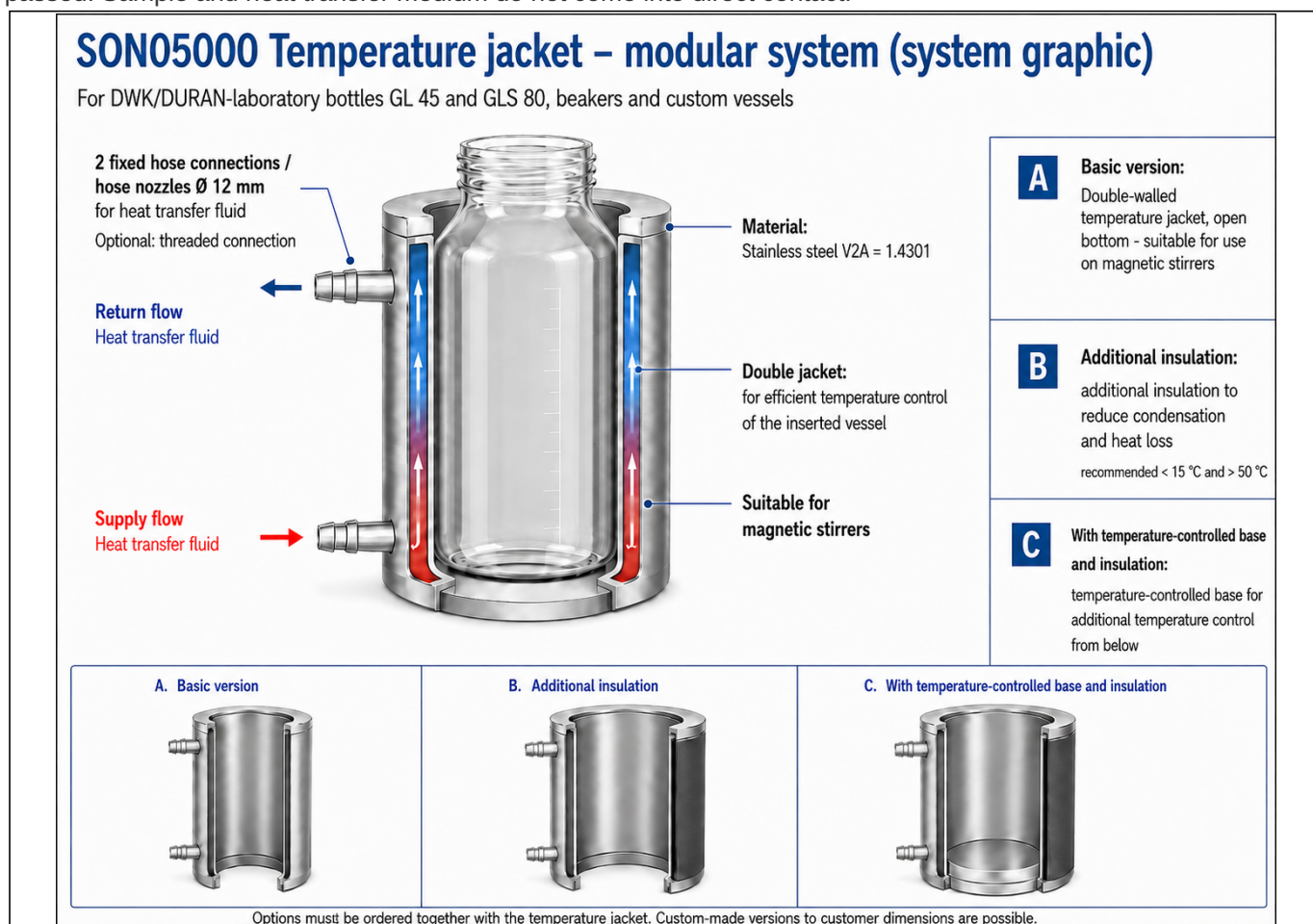


## SON05000 Temperature Jackets in Stainless Steel

### Modular temperature control system for laboratory bottles, beakers and custom vessels

The SON05000 temperature jackets allow controlled temperature control of laboratory bottles, beakers and custom vessels in the range from -20 to +200 °C. The inserted vessel remains exchangeable and is enclosed by a double-walled stainless-steel jacket through which the heat transfer fluid of an external recirculating thermostat is passed. Sample and heat transfer medium do not come into direct contact.



Standard versions are available to fit defined DWK/DURAN laboratory bottles GL 45 and GLS 80 as well as beakers. In addition, HLL manufactures temperature jackets to customer-specific vessel dimensions. Depending on the version, the vessels can also be used on a magnetic stirrer; with suitable external temperature control equipment, temperature cycles can also be realised. Standard and custom versions are available for vessels from 50 ml to 50 litres.

-20 to +200 °C

Temperature control +  
stirring

Exchangeable vessels

Standard + custom  
dimensions

## Design and variants

The temperature jacket is made of stainless steel V2A, material 1.4301. The heat transfer fluid is guided through the double jacket via two fixed hose connections / hose nozzles Ø 12 mm. Threaded connections are available as an option.



### A. Basic version

**Double-walled temperature jacket, open bottom - suitable for use on magnetic stirrers.**

The vessel stands directly on the magnetic stirrer. Continuous stirring supports a more uniform temperature distribution.

### B. Additional insulation

Three-shell version to reduce heat exchange and condensation.

**Recommended: < 15 °C and > 50 °C**



### C. Temperature-controlled base

For additional temperature control of the vessel from below, the temperature jacket can be supplied with a temperature-controlled base.

A magnetic stirrer can also be used with this version. Without an inserted vessel, the version with base can also be used as a compact temperature bath.

#### Ordering note

Insulation and the temperature-controlled base must be ordered together with the temperature jacket; retrofitting is not possible.

## Standard vessels and custom solutions

### DWK/DURAN laboratory bottles

Suitable standard versions are available for defined DWK/DURAN laboratory bottles GL 45 and GLS 80. Known vessel dimensions and tolerances are taken into account during design.

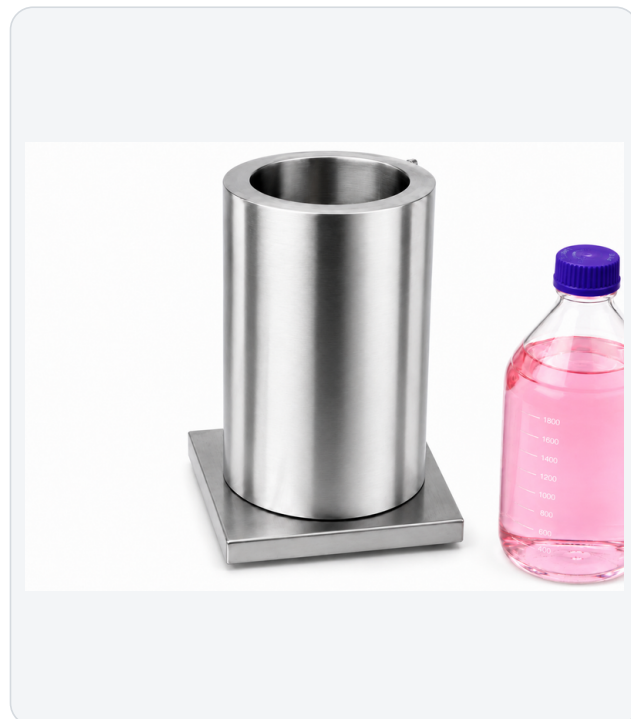
### Beakers

Standard versions are also available for various beaker sizes. The beaker remains removable and can be exchanged independently of the temperature jacket.

### Custom vessels

In addition to the standard sizes, HLL manufactures temperature jackets to individual vessel dimensions.

- existing laboratory vessels
- special reaction vessels
- non-standard diameters or vessel heights



### For laboratory and production applications

The SON05000 temperature jackets are suitable for applications in which samples are to be temperature-controlled in the range from -20 to +200 °C, maintained at a defined temperature or subjected to temperature profiles.

### Clean, passive stainless-steel design

No electrical components are integrated in the temperature jacket. The design is easy to clean and can be sterilised.

Due to the closed stainless-steel design without integrated electrical components, the system is well suited for near-cleanroom and cleanroom-sensitive applications.



### Typical applications

Temperature control of laboratory bottles · Temperature control of beakers · Temperature control of reaction vessels · Jacket temperature control · External temperature control

## Configuration and ordering

In the HLL shop, the base jacket, additional insulation and temperature-controlled base are offered as separate line items. The selected components together form the required configuration and total price.

### Temperature jackets for DWK/DURAN laboratory bottles

| Article No. | Vessel volume | Internal diameter approx. |
|-------------|---------------|---------------------------|
| SON0500011  | 100 ml        | 57 mm                     |
| SON0500012  | 250 ml        | 71 mm                     |
| SON0500014  | 500 ml        | 87 mm                     |
| SON0500015  | 1,000 ml      | 103 mm                    |
| SON0500016  | 2,000 ml      | 138 mm                    |
| SON0500017  | 3,500 ml      | 162 mm                    |
| SON0500018  | 5,000 ml      | 191 mm                    |

### Temperature jackets for beakers

| Article No. | Vessel volume | Internal diameter approx. |
|-------------|---------------|---------------------------|
| SON0500020  | 50 ml         | 39 mm                     |
| SON0500021  | 150 ml        | 55 mm                     |
| SON0500022  | 250 ml        | 61 mm                     |
| SON0500023  | 400 ml        | 71 mm                     |
| SON0500024  | 600 ml        | 81 mm                     |
| SON0500025  | 800 ml        | 91 mm                     |
| SON0500026  | 1,000 ml      | 97 mm                     |

#### Note on dimensions

The dimensions stated are guide values. Dimensional tolerances of the beakers and laboratory bottles used are taken into account during design. The final fit is checked in the order process on the basis of the intended vessel or the current vessel drawing.

### Options - order numbers

#### Temperature-controlled base

| Article No. | Size range     |
|-------------|----------------|
| SON05000B1  | 50-400 ml      |
| SON05000B2  | 500-1,000 ml   |
| SON05000B3  | 2,000-3,500 ml |
| SON05000B4  | from 5,000 ml  |

#### Additional insulation

| Article No. | Size range     |
|-------------|----------------|
| SON05000I1  | 50-400 ml      |
| SON05000I2  | 500-1,000 ml   |
| SON05000I3  | 2,000-3,500 ml |
| SON05000I4  | from 5,000 ml  |

#### Options

- Additional insulation
- Temperature-controlled base
- Threaded connection instead of hose nozzles

#### Configuration examples

- SON0500012I - with insulation
- SON0500014IB - with insulation and temperature-controlled base

#### Required for operation

- suitable laboratory vessel
- external recirculating thermostat
- suitable hose set

#### Standard or custom

In addition to the listed standard versions, HLL manufactures SON05000 temperature jackets for customer-specific vessel dimensions. Standard and custom versions are available for vessels from 50 ml to 50 litres.