

# GL45 bottle reactors

A reasonable reactor alternative for small scale experiments

GL45 flask turns into bioreactor –  
inexpensive and uncomplicated solution

Headpiece and internals suitable for  
0.25 L to 10 L bottles

System is fully autoclavable

With PG13.5-port for standard-12 mm-probes  
e.g. pH, pO<sub>2</sub>, OD, bioPROBE

Taking sterile samples, gassing, feeding and  
pH regulation possible

Integrated sleeve for 6mm-temperature sensor, microsparger and four additional ports

Custom-made solutions for special components like harvesting tube, additional ports  
or other vessel types (GLS80, GL25, GL32, GL14)



Available in **two different standard** configurations:

without pH detection

- 1x temperature-sleeve
- 1x microsparger
- 1x sampling/harvest
- 4x tube olives for addition

with pH detection

- 1x temperature-sleeve
- 1x microsparger
- 1x PG13.5-port for pH probe
- 3x tube olives for addition

**Custom-made solutions for special components possible**

