



CONNECTION SYSTEMS FOR DURAN LABORATORY BOTTLES

All systems facilitate the safe transfer of liquid media within an enclosed sterile system. Ideal for chemical and biotechnological laboratories.

The new connection system is based on screw caps with a GL 45 thread and two or three connection ports. Tube connections can be used to feed liquid media into or extract them from the bottle. A universal GL 14 tube adapter and various inserts permit the use of four different tube outer diameters. An additional membrane filter with 0.2 μm pore size permits sterile pressure equalization at one of the ports.

The flexible modular system means that you can put together the various components individually depending on requirements and application. The components are mutually compatible and are used together with the original DURAN GL 45 laboratory bottles. **To increase safety in the laboratory, it is advisable to use the pressure-resistant DURAN pressure plus laboratory bottle.**

Advantages

- The system is highly versatile in use, because the screw cap is based on the standardized GL 45 thread
- Four different tube outer diameters can be used – 1.6mm; 3.0mm; 3.2mm and 6mm.
- The components for the 2 and 3 port system are identical and interchangeable.
- Ports not in use can be sealed with a dummy cap.
- The caps and all individual components are made of PTFE and PP and can be completely autoclaved together with the bottle, so that they can be reused repeatedly. It is not necessary to take the system apart first.
- Working in the enclosed system retains toxic gases in the bottle. Similarly, the evaporation of expensive substances can also be reduced.

Examples of Applications

- Use in Titration systems
- Use in Biotechnological processes, e.g. for pumping additives (culture media etc.) from storage containers into reaction containers.
- Use in automated closed processes for transferring pure, sterile media
- Transfer of harmful, toxic substances in the enclosed system to reduce out-gassing.
- HPLC Laboratory Bottle with Connection System can be used for feeding solvents to HPLC machines, disposal of waste media and also for sterile transfer of culture media under pressure e.g. fermenter.



Connection Systems - DURAN HPLC Bottle GL 45, 4 ports, 1000 ml Complete (incl. screw caps and seals)

Cat No.	Components	Qty. Per Pack Pcs
11298 20	HPLC Bottles Pressure plus, 1000ml <ul style="list-style-type: none">• 1 x Screw Cap GL 45, 4 Ports• 4 x Silicone Sealing Rings 1.6mm• 4 x Silicone Sealing Rings 3.2mm• 4 x Silicone Seals• 4 x Screw Caps M8, for port	2

DURAN CONNECTION SYSTEMS



Pressure Plus Bottle with
2 Port Connection



Pressure Plus Bottle with
3 Port Connection



Pressure Plus Bottle with
4 Port Connection



Screw Cap GL 80 PP Cap - 4 Port GL 18



Screw Cap GL 45 PP - 4 Port M8 and Components



Screw Cap GL 45 PP - 2 Port GL 14



Screw Cap GL 45 PP - 2/3 Port GL 14 and Components



Connection Systems - DURAN HPLC Bottle GL 45, 4 ports, 500 ml Complete (incl. screw caps and seals)

Cat No.	Components	Qty. Per Pack Pcs
11298 21	HPLC Bottles Pressure plus, 500ml <ul style="list-style-type: none"> • 1 x Screw Cap GL 45, 4 Ports • 4 x Silicone Sealing Rings 1.6mm • 4 x Silicone Sealing Rings 3.2mm • 4 x Silicone Seals • 4 x Screw Caps M8, for port 	2

Spare Parts for 1129820/1129821 Screw Cap HPLC

Cat No.	Components	Qty. Per Pack Pcs
11298 12	GL 45, 4 ports complete comprising <ul style="list-style-type: none"> • 1 x Screw Cap GL 45, 4 ports • 4 x Silicone Sealing Rings 1.6mm I.D. • 4 x Silicone Sealing Rings 3.2mm I.D. • 4 x Silicone Seals • 4 x Screw Caps M8, for port 	2
11298 13	GL 45, 4 ports comprising <ul style="list-style-type: none"> • 4 x Silicone Sealing Rings 1.6mm • 4 x Silicone Sealing Rings 3.2mm • 4 x Silicone Seals • 4 x Screw Caps M8, for port 	1
11378 01	Pressure Equalization set for 4 port cap (0.2µm including membrane filter)	1
11298 19	Spare Membrane PTFE GL 14 for sterile pressure compensation, 0.2µm	1
21810 54	Spare Bottle DURAN pressure plus GL 45, 1000ml	10
10922 35	Spare Bottle DURAN pressure plus GL 45, 500ml	10

Connection Systems - If you want to fit two bottles with a three port connection system and if you want to work with two different tube diameters (1.6mm & 3mm) and pressure equalization, you will need the following individual components.

Cat No.	Components	Qty. to be Ordered Pcs	Qty. Per Pack Pcs
11297 51	Screw Cap GL 45 PP 3 Port GL14	1	2
11298 14	Screw Cap GL 14 for hose connection	2	2
11298 15	Insert for Screw Cap GL 14 1.6mm	2	1
11298 16	Insert for Screw Cap GL 14 3.0 mm	2	1
11377 99	Pressure equalization set (complete) (size GL 45)	2	1
11298 17	Insert for Screw Cap GL 14 3.2mm - optional	2	1
11298 18	Insert for Screw Cap GL 14 6.0mm - optional	2	1



Other Connection System Options

Cat No.	Components	Qty. Per Pack Pcs
11297 50	Screw Cap GL 45 PP 2 Port GL 14	2
11562 92	Plastic Screw Cap Red, Closed, GL 14	2

Pouring Ring, Blue, GLS 80

Cat No.	Components	Qty. Per Pack Pcs
11601 66	GLS 80	10

Membrane Screw Cap, GLS 80, PP Blue

Cat No.	Components	Qty. Per Pack Pcs
29118 91	GLS 80	2

If you want to fit two DURAN GLS 80 bottles with a 4 port system and want to work with two different tube diameters (3.2mm and 10mm) and pressure equalisation with the redundant fourth port fitted with a screw cap, then you will need the following individual components

Cat No.	Components	Thread	Qty. to be Ordered Pcs	Qty. Per Pack Pcs
11601 67	Pressure Compensation set for 4 Port Screw Cap	GL 18	2	2
11601 69	Insert for Screw, 3.2mm	GL 18	2	1
11601 72	Insert for Screw Cap, 10.0mm	GL 18	2	1
11601 74	Screw Cap for Tube Connection, Blue	GL 18	2	2
29310 91	Screw Cap GLS 80 PP 4 Port GL 18	GLS 80	1	2
11706 82	Screw Cap, Red	GL 18	1	2
(Optional)				
11601 70	Insert for Screw Cap, 6.0mm	GL 18	2	1
11601 71	Insert for Screw Cap, 8.0mm	GL 18	2	1
11601 73	Insert for Screw Cap, 12.0mm	GL 18	2	1
11601 75	Screw Cap 4 Port + NS 29/32, GLS 80, PP	GLS 80	1	2

EXPANSION OF THE CONNECTION SYSTEMS FOR DURAN LABORATORY GLASS BOTTLES: GL 45 SCREW CAP WITH 2 HOSE CONNECTIONS



The new connection system with hose connections has been specially developed for the connection of soft elastic tubing, which, for example, is used in biotechnology when transferring media with the aid of peristaltic pumps.

The curved hose connections prevent kinking of the tubing. The grey PP core moves freely and allows the vessel to be changed without twisting of the firmly attached tubing.

Properties/application:

- Safe, sterile transfer of liquid media within a closed system.
- Highly versatile because the screw cap is based on the standard GL 45 thread.
- Ideal for use with elastic, soft tubing ID 6 - 9 mm (Viton®, Tygon®, silicone)
- 2 PP hose connections, curved hose connections on the top side, straight connections on the lower side.
- Optional filter top part for sterile pressure equalisation available.
- Temperature resistant up to +140°C
- Autoclavable/dishwasher proof

Cat No.	Components	Qty. Per Pack Pcs
29310 28	GL 45 screw cap with 2 hose connectons	2
11298 25	Filter top part for pressure equalization	2