



 **DURAN GROUP**
magic of precision

DURAN GROUP DISPENSER &
DURAN GROUP DISPENSER PRO

A safe and precise dispensing system

REMOVAL OF LIQUID MEDIA MADE EASY

DURAN® laboratory glassware ensures outstanding safety and precision when working in the laboratory. We place the system concept at the heart of our work to further develop our products. This includes the high quality DURAN Group Dispenser and the new DURAN Group Dispenser PRO, which make it even easier and safer to dispense liquids directly from DURAN® laboratory glass bottles. They offer the highest levels of precision in line with DIN EN ISO 8655 and ensure optimum reproducibility. The return valve on the DURAN Group Dispenser PRO also allows priming to take place without any loss of media.

Exact dispensing in no time at all

Both DURAN Group Dispensers can be screwed directly onto the bottle thread. The required volume is set on the dispenser and dispensed through the movement of the high precision piston. The easy action cylinder can be operated with just one hand, allowing effortless serial dispensing. Owing to the simple yet accurate volume settings, the DURAN Group Dispenser has a variety of applications and the amount dispensed can be quickly adjusted to suit any requirement.

DURAN GROUP DISPENSER PRO

DURAN GROUP DISPENSER

A reliable seal that provides permanent resistance

The threads of the DURAN Group Dispenser and DURAN Group Dispenser PRO are perfectly matched to the GL 45 thread on DURAN® laboratory glass bottles, guaranteeing the best possible seal and reducing media loss. Additional benefits include safe storage of the content and protection against escaping vapours. The discharge tubes can be sealed with a cap. The threads of DURAN® laboratory glass bottles and the DURAN Group Dispenser are perfectly compatible with one another, which is why we recommend that they be used as a complete system. The dispensers are compatible with other thread sizes using the adapters (GL 28, GL 32, GL 38, S 40) supplied.

In addition to borosilicate glass 3.3, the media only comes into contact with high quality plastics such as PTFE, PFA, ETFE, FEP and a platinum iridium compound. The DURAN Group Dispenser is therefore resistant to the majority of acids, bases and solvents, which combined with its virtually wear free properties makes it a universal solution. The PFA sealing lip around the cylinder wall prevents crystallisation in the media, even media that crystallises very easily, thus preventing the piston from becoming stuck. An overview of the chemical resistance of the DURAN Group Dispenser is available at www.duran-group.com.



THE DURAN GROUP DISPENSER AT A GLANCE

Shared components of the DURAN Group Dispenser



- ① Easy handling thanks to the directly pushed piston complete with PFA sealing lip
→ prevents sticking due to the crystal formation
- ② Fast, easy and precise volume setting
- ③ Very precise glass cylinder protected by a plastic cover
- ④ Dispenser fitted on the bottle rotates freely through 360°
- ⑤ GL 45 thread, precisely matched to original DURAN® laboratory glass bottles
→ leak proof
- ⑥ No dripping once discharge tube closure cap is in place
- ⑦ Only high quality materials used for the inner surfaces
→ good chemical resistance
→ universal use
- ⑧ Adjustable telescopic tube
→ can be matched to the bottle size



Additional components of the DURAN Group Dispenser PRO

- ⑨ Adjusting mechanism
→ enables precise volume setting
- ⑩ Valve switch
→ to adjust the recirculation valve

DURAN Group Dispenser



Discharge valve

DURAN Group Dispenser PRO



- ⑪ Discharge valve including recirculation valve
→ prevents loss of reagents when priming
- ⑫ Recirculation tube
→ channels the liquid back into the bottle,
if required

THE DURAN GROUP DISPENSER PRO – ADDITIONAL FUNCTIONS & BENEFITS

Valve switch

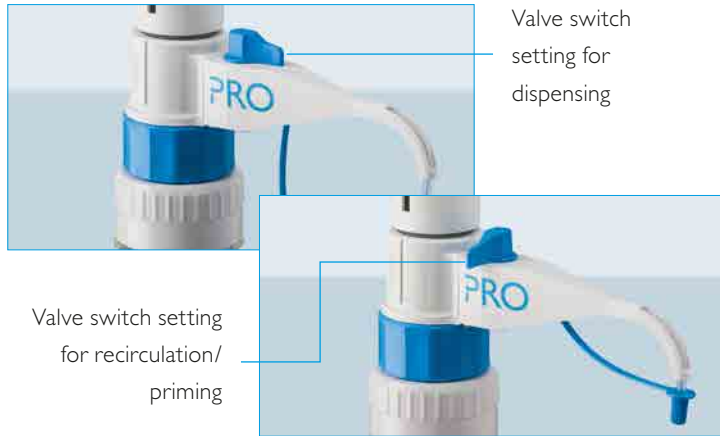
The valve switch is used to adjust the recirculation valve. If the switch is pointing to the front, the liquid is dispensed from the bottle into a container. If the valve switch is pointing to the side, the liquid is channeled back into the bottle. The adjustable recirculation valve prevents reagent loss during priming.

Discharge valve including recirculation valve

The adjustable discharge valve including recirculation valve channels the liquid back into the bottle if required (during priming) or into the container into which the liquid is to be dispensed.

Recirculation tube

If the valve switch is set to „recirculation“, the liquid is channeled back into the bottle through the recirculation tube. This function helps to prevent media being wasted when priming.



Adjusting mechanism

The DURAN Group Dispenser PRO features a calibration mechanism, which enables adjustment after prolonged use or for specific applications by turning the slot of the mechanism with a coin.

- Turning in the direction of the arrow decreases the volume
- Turning in the opposite direction of the arrow increases the volume
- Then check the volume again to ensure the accuracy of the measurements.





DURAN Group Dispenser PRO setting for dispensing

If no air bubbles are visible in the piston ①, set the valve switch to the discharge setting (pointing to the front) ② to allow the fluid to be dispensed into a container ③.

① No air bubbles
in piston

② Valve switch points
to the front

③ Liquid flows
into beaker

DURAN Group Dispenser PRO setting for recirculation

If air bubbles are visible in the piston ①, set the valve switch to the recirculation setting (to the side) ② to allow the liquid to flow back into the bottle ③. To prime the dispenser, gently pull up the piston and then push it down quickly. Repeat this motion in the lower filling area of the piston until the air bubbles have disappeared.



① Air bubbles
in piston

② Valve switch points
to the side

③ Liquid flows
back into bottle
(recirculation)



THE DISPENSING SYSTEM WITH A RAFT OF BENEFITS

- Original accessories for DURAN® laboratory glass bottles, perfectly matched to the GL 45 thread
 - Therefore provides an excellent seal and protects against vapours
- Maximum precision when dispensing
- Reliable reproducibility
- Easy to operate, even with just one hand
- PFA sealing lip prevents crystallisation and thus stops the piston from becoming stuck
- Universal applications
- Easy to dismantle and clean thanks to modular design

A
121 °C

DIN ISO
8655

Made
in
Germany

D
G

DURAN GROUP DISPENSER + CERTIFICATE + DURAN® LABORATORY GLASS BOTTLES – THE COMPLETE SOLUTION FROM A SINGLE SOURCE

Service is of paramount importance to us, which is why we include a batch certificate with every DURAN Group Dispenser. It includes the individual serial number, which allows the product to be traced, and confirms the error limits in accordance with DIN EN ISO 8655.





Serial number

Certificate ensures quality:

- Serial number ensures traceability
- Device type
- Confirmation of error limits in accordance with DIN EN ISO 8655
- Specification of the testing instruments used

Error limits in accordance with DIN EN ISO 8655

Nominal volume: 2.5 ml 5.0 to 100.0 ml

Accuracy: $\leq \pm 0.6\%$ $\leq \pm 0.5\%$

Coefficient of variation: $\leq 0.1\%$ $\leq 0.1\%$

- The accuracy (A) indicates how close the mean value comes to the set point and corresponds to the systematic error.
- The coefficient of variation (CV) indicates how close the individual measured values are to each other and corresponds to the random error.

OVERVIEW OF DURAN GROUP DISPENSERS

DURAN Group Dispenser

| Order no. | Designation | Volumetric range | DIN GL thread | Dispensing steps | Packaging unit | Adapter |
|--------------|-------------------------------------|------------------|---------------|------------------|----------------|-----------------|
| 29 115 03 08 | DURAN Group Dispenser 0.25–2.5 ml | 0.25–2.5 ml | 32 | 0.05 | 1 | GL28, GL45, S40 |
| 29 115 06 08 | DURAN Group Dispenser 0.5–5.0 ml | 0.5–5.0 ml | 32 | 0.10 | 1 | GL28, GL45, S40 |
| 29 115 09 08 | DURAN Group Dispenser 1.0–10.0 ml | 1.0–10.0 ml | 32 | 0.20 | 1 | GL28, GL45, S40 |
| 29 115 14 07 | DURAN Group Dispenser 2.5–25.0 ml | 2.5–25.0 ml | 45 | 0.50 | 1 | GL32, GL38, S40 |
| 29 115 17 07 | DURAN Group Dispenser 5.0–50.0 ml | 5.0–50.0 ml | 45 | 1.00 | 1 | GL32, GL38, S40 |
| 29 115 24 03 | DURAN Group Dispenser 10.0–100.0 ml | 10.0–100.0 ml | 45 | 2.00 | 1 | GL32, GL38, S40 |

DURAN Group Dispenser PRO

| Order no. | Designation | Volumetric range | DIN GL thread | Dispensing steps | Packaging unit | Adapter |
|--------------|---|------------------|---------------|------------------|----------------|-----------------|
| 29 215 03 02 | DURAN Group Dispenser PRO 0.25–2.5 ml | 0.25–2.5 ml | 32 | 0.05 | 1 | GL28, GL45, S40 |
| 29 215 06 02 | DURAN Group Dispenser PRO 0.5–5.0 ml | 0.5–5.0 ml | 32 | 0.10 | 1 | GL28, GL45, S40 |
| 29 215 09 02 | DURAN Group Dispenser PRO 1.0–10.0 ml | 1.0–10.0 ml | 32 | 0.20 | 1 | GL28, GL45, S40 |
| 29 215 14 01 | DURAN Group Dispenser PRO 2.5–25.0 ml | 2.5–25.0 ml | 45 | 0.50 | 1 | GL32, GL38, S40 |
| 29 215 17 01 | DURAN Group Dispenser PRO 5.0–50.0 ml | 5.0–50.0 ml | 45 | 1.00 | 1 | GL32, GL38, S40 |
| 29 215 24 06 | DURAN Group Dispenser PRO 10.0–100.0 ml | 10.0–100.0 ml | 45 | 2.00 | 1 | GL32, GL38, S40 |

APPLICATION LIMITS

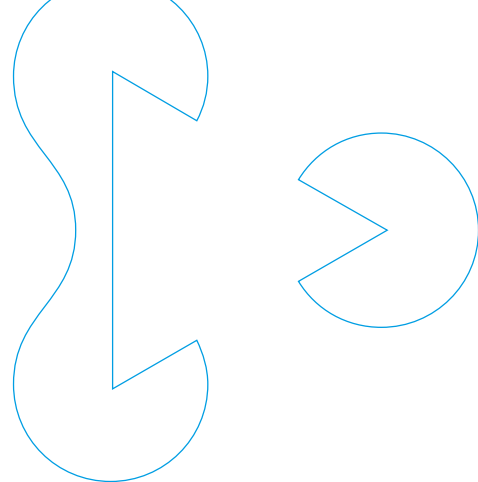
- Temperature: from +15°C to +40°C
- Vapour pressure: max. 0.5 bar
- Viscosity: max. 500 mm²/s
- Density: max. 2.2 g/cm³
- Details on the chemical resistance are available at www.duran-group.com.

INCLUDED IN DELIVERY

DURAN Group Dispenser

- DURAN Group Dispenser
- Three thread adapters made from polypropylene (PP), see table for sizes
- Telescopic intake tube (200 – 350 mm)
- Assembly tool
- Operating manual
- Quality certificate stating the test values.

An overview of spare parts can be found in the operating manual supplied with the product.



DURAN Group Dispenser PRO

- DURAN Group Dispenser PRO
- Three thread adapters made from polypropylene (PP), see table for sizes
- Telescopic intake tube (200 – 350 mm)
- Assembly tool
- Operating manual
- Quality certificate stating the test values.

An overview of spare parts can be found in the operating manual supplied with the product.

SILICONE BOTTLE HOLDER – GREATER STABILITY WHEN DISPENSING

The new silicone bottle holder features eight flexible support ribs and stabilises bottles and bottle systems when dispensing, pipetting or filtering, for example. The bottle holder centres the centre of gravity of a laboratory glass bottle or laboratory glass bottle system. The bottle is held securely in the non-slip holder, allowing staff to work conveniently and safely.

more information

| Order no. | Designation | d mm | Packaging unit |
|--------------|------------------------------|---------|----------------|
| 29 213 54 01 | Silicone bottle holder, grey | 165 | 1 |





DURAN Group GmbH

Hattenbergstrasse 10

D-55122 Mainz

Phone +49 (0)6131/1445-4131

Fax +49 (0)6131/1445-4016

info.duran@duran-group.com

www.duran-group.com

