

Wir begleiten  
Ihre erfolgreiche  
Getränkeherstellung

Fruchtsaft- und  
Weintechnologie

**SCHLISSMANN  
SCHWÄBISCH HALL**



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## Fermentation locks

- made from glass and perspex -

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### Technical informations and use instructions

#### General information:

Like our beaker-shaped "DUPLEX airlock", fermentation locks, filled with a suitable sealing fluid, have the purpose of protecting fermenting and fermented drinks and mashes against air ingress and thus the detrimental influence of atmospheric oxygen, micro-organisms which need oxygen, and dust and fruit flies, while at the same time allowing the carbon dioxide from fermentation to escape. Fermentation locks thus also allow for easy monitoring of the fermentation process.

#### Information about selection and use:

- Container sizes  
The larger the fermentation or storage container, the larger the fermentation lock should be.
- Intended application  
Violent fermentation and storage containers with plenty of headroom require larger compensation vessels (perspex fermentation locks) or multiple bowls (glass fermentation locks) in order to prevent the sealing fluid from spurting out or being sucked in.
- Appropriate bungs with a hole  
Fermentation locks with a pulled out or angled shaft are intended for low clearance, e.g. low ceiling heights or groups of fermentation and storage containers stacked on top of each other.
- Glass or perspex?  
Glass has the advantage of being resistant to all components of the fermentation gases and every sealing fluid. It is also more hygienic than perspex because it can be spotlessly cleaned as well as steam sterilised and chemically sterilised. Fermentation locks made from perspex (polymethylacrylate), although they comply with the requirements for consumer goods, have only limited resistance to high alcohol concentrations and temperatures. They discolour slightly over time and become brittle. The most significant benefit of perspex, of course, is its mechanical stability / resistance to breaking and the related work safety.

- Appropriate bungs with a hole  
Our range includes bungs of all dimensions made from rubber (grey), consumer goods requirements compliant thermoplastic elastomer (red "DUPLEX" bungs) and silicone. A bung sits well when the average between the top and bottom diameter roughly corresponds to the clear width of the bunghole. When choosing the hole for attaching the fermentation lock, please be aware that the diameter of the hole must be 1 mm less than the diameter of the fermentation lock.

- Sealing fluid  
Water or a mix of equal parts water and glycerine - due to the lower evaporation rate - are suitable for use as the sealing fluid which the fermentation lock is filled to roughly 1/3 with for brewing and fermentation. Towards the end of fermentation and for the storage of fermented mashes and wines, the sealing fluid should have oxygen binding and disinfectant properties. Sulphuric acid or an aqueous solution of the double salts I + II (our information sheet "Cask conservation and drink preservation with SO<sub>2</sub>") ensure this. The fermentation lock should be filled to about half way for this.

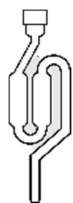
#### Information about other products:

- DUPLEX airlock
- DUPLEX OPTIMA air filter for fruit juice storage tanks

The full information contained in this leaflet is based on our current experiences and knowledge. Schliessmann Kellerei-Chemie does neither guarantee that the products, as described above, can be used without prior intensive testing, nor that by their use no patent rights of third parties are being injured.

## Fermentation locks made from perspex

13 cm

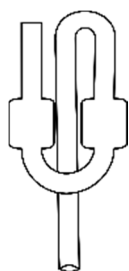


**Fermentation locks, small  
tube-Ø 10 mm**

No.: 7221

half full volume: appr. 10 ml

15 cm

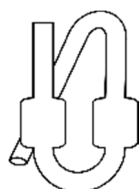


**Fermentation locks straight shaft  
tube-Ø 20 mm**

No.: 7233

half full volume: appr. 70 ml

15 cm

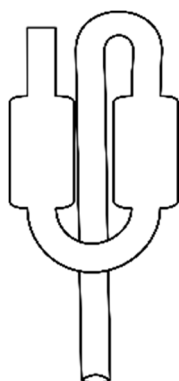


**Fermentation locks bevelled shaft  
tube-Ø 20 mm**

No.: 7234

half full volume: appr. 70 ml

22 cm

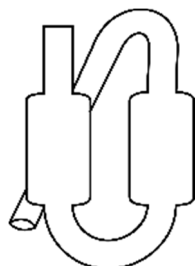


**Fermentation locks straight shaft  
tube-Ø 25 mm**

No.: 7235

half full volume: appr. 320 ml

22 cm



**Fermentation locks bevelled shaft  
tube-Ø 25 mm**

No.: 7236

half full volume: appr. 320 ml

## Fermentation locks made from glass

10 cm		<p><b>amateur model with 2 bowls</b>  <b>tube-Ø 10 mm</b>            (type 20/10 mm)            No.: 7220            half full volume: appr. 7 ml</p>		
15 cm		<p><b>type 20 with 2 bowls</b></p> <table border="0"> <tr> <td><b>tube-Ø 18 mm</b> (type 20/18 mm) No.: 7222</td> <td><b>tube-Ø 20 mm</b> (type 20/20 mm) No.: 7223</td> </tr> </table> <p>half full volume: appr. 50 ml      half full volume: appr. 70 ml</p>	<b>tube-Ø 18 mm</b> (type 20/18 mm) No.: 7222	<b>tube-Ø 20 mm</b> (type 20/20 mm) No.: 7223
<b>tube-Ø 18 mm</b> (type 20/18 mm) No.: 7222	<b>tube-Ø 20 mm</b> (type 20/20 mm) No.: 7223			
16 cm		<p><b>type 20a with 2 bowls and bevelled shaft (45°)</b>  <b>tube-Ø 18 mm</b>            (type 20a, 45°/18 mm)            No.: 7222/1            half full volume: appr. 50 ml</p>		
20 cm		<p><b>type 40 with 4 bowls</b></p> <table border="0"> <tr> <td><b>tube-Ø 18 mm</b> (type 40/18 mm) No.: 7227</td> <td><b>tube-Ø 20 mm</b> (type 40/20 mm) No.: 7228</td> </tr> </table> <p>half full volume: appr. 110 ml      half full volume: appr. 130 ml</p>	<b>tube-Ø 18 mm</b> (type 40/18 mm) No.: 7227	<b>tube-Ø 20 mm</b> (type 40/20 mm) No.: 7228
<b>tube-Ø 18 mm</b> (type 40/18 mm) No.: 7227	<b>tube-Ø 20 mm</b> (type 40/20 mm) No.: 7228			
21 cm		<p><b>type 40a with 4 bowls and bevelled shaft (45°)</b></p> <table border="0"> <tr> <td><b>tube-Ø 18 mm</b> (type 40a, 45°/18 mm) No.: 7229</td> <td><b>tube-Ø 20 mm</b> (type 40a, 45°/20 mm) No.: 7230</td> </tr> </table> <p>half full volume: appr. 110 ml      half full volume: appr. 130 ml</p>	<b>tube-Ø 18 mm</b> (type 40a, 45°/18 mm) No.: 7229	<b>tube-Ø 20 mm</b> (type 40a, 45°/20 mm) No.: 7230
<b>tube-Ø 18 mm</b> (type 40a, 45°/18 mm) No.: 7229	<b>tube-Ø 20 mm</b> (type 40a, 45°/20 mm) No.: 7230			
26 cm		<p><b>type 60 with 6 bowls</b></p> <table border="0"> <tr> <td><b>tube-Ø 18 mm</b> (type 60/18 mm) No.: 7231</td> <td><b>tube-Ø 20 mm</b> (type 60/20 mm) No.: 7232</td> </tr> </table> <p>half full volume: appr. 140 ml      half full volume: appr. 160 ml</p>	<b>tube-Ø 18 mm</b> (type 60/18 mm) No.: 7231	<b>tube-Ø 20 mm</b> (type 60/20 mm) No.: 7232
<b>tube-Ø 18 mm</b> (type 60/18 mm) No.: 7231	<b>tube-Ø 20 mm</b> (type 60/20 mm) No.: 7232			
15 cm		<p><b>type 25 with 2 bowls and long shaft</b></p> <table border="0"> <tr> <td><b>tube-Ø 18 mm</b> (type 25/18 mm) No.: 7224</td> <td><b>tube-Ø 20 mm</b> (type 25/20 mm) No.: 7225</td> </tr> </table> <p>half full volume: appr. 50 ml      half full volume: appr. 70 ml</p>	<b>tube-Ø 18 mm</b> (type 25/18 mm) No.: 7224	<b>tube-Ø 20 mm</b> (type 25/20 mm) No.: 7225
<b>tube-Ø 18 mm</b> (type 25/18 mm) No.: 7224	<b>tube-Ø 20 mm</b> (type 25/20 mm) No.: 7225			
22 cm		<p><b>type 45 with 4 bowls and long shaft</b>  <b>tube-Ø 18 mm</b>            (type 45/18 mm)            No.: 7226            half full volume: appr. 110 ml</p>		