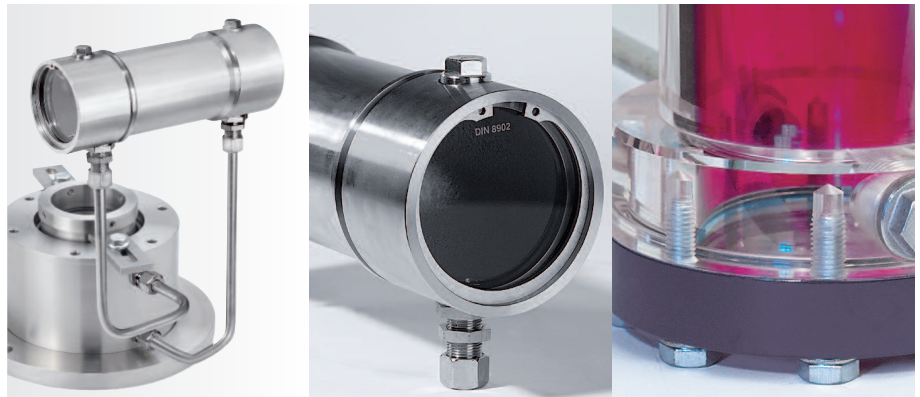


**Design Series V G , V G S , V G L / Seal Liquid Storage Vessels**



**Product Information**

**Technical Data**

- ESD seal liquid storage vessels

## Quality

ESD mechanical seals are designed on criteria ensuring minimum leakage rates involving usage of FEA. In contrast to other principles they therefore only require small reserves of lubricant. The result are both safe and low-cost solutions.

## Function

A suitable liquid is required to lubricate the seal faces. Even though the consumption of this seal liquid may be extremely small at a sealing gap of  $< 1 \mu\text{m}$  in height, a certain amount needs to be kept available in order to ensure significantly long periods of no-maintenance. If this lubricant is kept in an enclosed space (seal chamber), then pressurization of this space to values that lie above the vessel pressure can avoid the product from penetrating into the seal chamber and from escaping via the atmospheric seal side.

Differently designed seal liquid storage vessels, modifications to hydraulic installations, accessories and instruments as well as design variations of the seal chamber itself offer individual advantages with respect to operational safety, service life and automation.

VG vessels in various applications





Storage vessel VGL with a volume of 6 l,  
with level gauge, level indicator switch  
and pressure gauge as well as a safety valve.  
The buffer fluid can be cooled by an  
internal cooling coil.



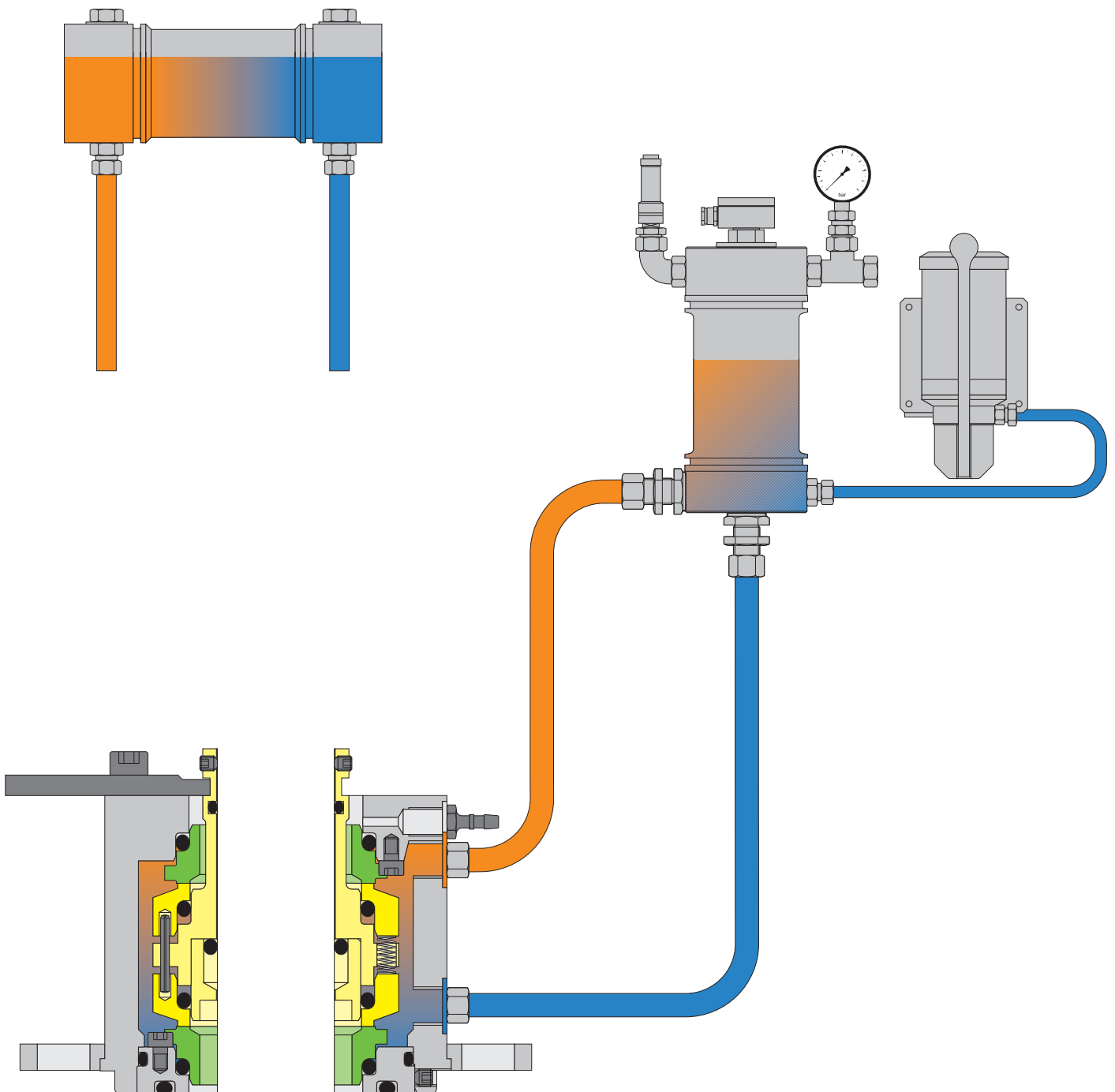
Storage vessel VGS with a volume of 1,5 l,  
with level gauge, level indicator switch  
as well as a level limit switch for a redundant  
monitoring of the buffer fluid (e.g. for  
hazardous areas). As an option there is the  
opportunity to attach a cooling jacket.



# ESD Seal Liquid Storage Vessels

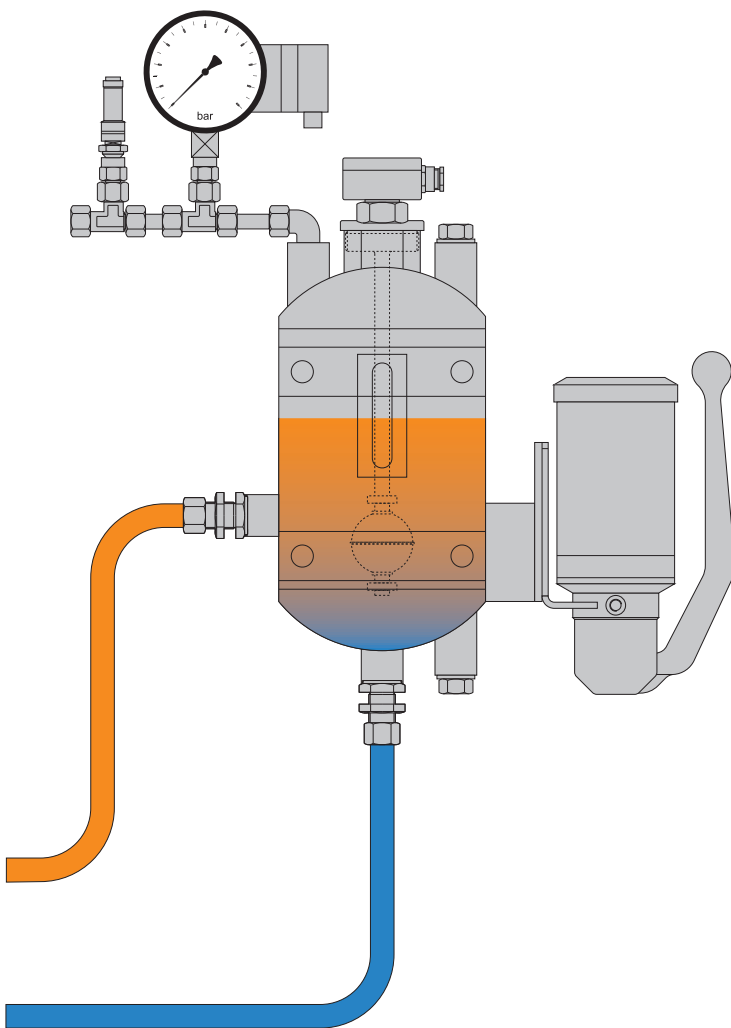
VG

Design Details ESD34NJ + VGS 1.5L





## VGL 6L



The seal liquid storage vessel type VG can be applied with or without a pressure overlay. On both ends the storage vessel is fitted with sight glasses allowing the filling level to be monitored.

Seal liquid circulation takes place by means of thermosiphon effect; if necessary additional cooling of the storage vessel by means of a cooling water jacket can be carried out.

The seal liquid storage vessel type VGS is based on the storage vessel type VG and can also be fitted with a cooling water jacket. This type is in addition fitted with a magnetic float switch allowing the liquid level to be monitored from a remote location.

### Hazardous area

All ESD mechanical seals and accessories are suitable for applications in hazardous areas and are TÜV certified in accordance with ATEX standard 94/9/EG.

Application Data	VG	VGS	VGL
<b>Area of application</b>	for all liquid lubricated mechanical seals		
<b>Volume</b>	1.5 l	1.5 l	≥ 6 l
<b>Working pressure</b>	up to 10 bar	up to 16 bar	up to 40 bar
<b>Cooling water flow rates for optional cooling water jacket:</b>			
Shaft diameter	from 40 to 100 mm	$Q_{\min} \geq 50$ l/h	
	above 100 mm	$Q_{\min} \geq 70$ l/h	

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**EKATO ESD**