

Content

1. ERIKS operating companies
2. Product description
3. Requirements for maintenance staff
4. Transport and storage
5. Function
6. Application
7. Installation
8. Maintenance
9. Service and repair
10. Safety notes
11. Troubleshooting
12. Removal



1. ERIKS operating companies

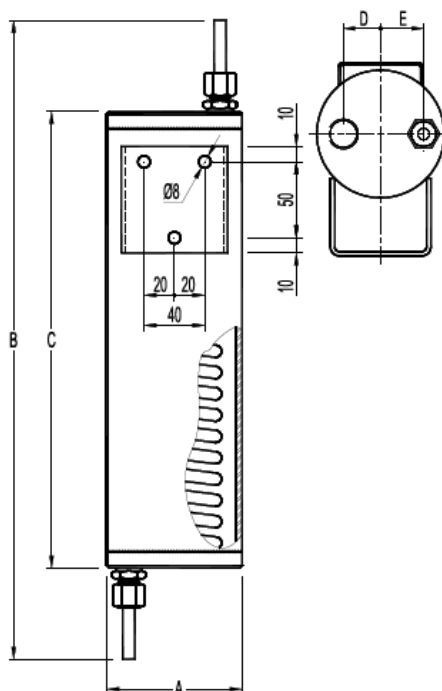
ECON Sample Coolers are being delivered by several ERIKS operating companies on a worldwide basis. In this manual these will be referred to as 'ERIKS', the individual terms of delivery of the ERIKS operating company having executed the order are applicable.

2. Product description

The ECON Sample Coolers are designed according the information on our website, www.eriks.com and should be used in accordance with the applicable pressure-temperature rating as stated on this website. Sample Coolers are provided with a nameplate. The marking makes the identification of the Sample Coolers easier and contains:

- Figure number
- Limiting pressure and temperature for the body and coil
- ECON

The dimensions of the ECON Sample Coolers are shown below.



A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Weight (kg)
90	420	300	26	30	3,9

3. **Requirements for maintenance staff**

The staff assigned to assembly, operating and maintenance tasks should be qualified to carry out such jobs and in any circumstance, ensure personal safety

4. **Transport and storage**

During transport and storage the Sample Coolers should be protected against external forces, influence and destruction of the painting layer as well. The purpose of the painting layer is to protect the Sample Coolers against rust, during transport and storage. The Sample Coolers should be stored in an unpolluted space and should also be protected against all atmospheric circumstances. The humidity and temperature in the room should be taken care of, in order to prevent condensate formation.

5. **Function**

ECON Sample Coolers are specially designed to cool samples of boiler water or steam for analysis. Sample Coolers prevent steam flashing-off from hot pressurised liquid samples, which can be dangerous and will result in an incorrect water sample.

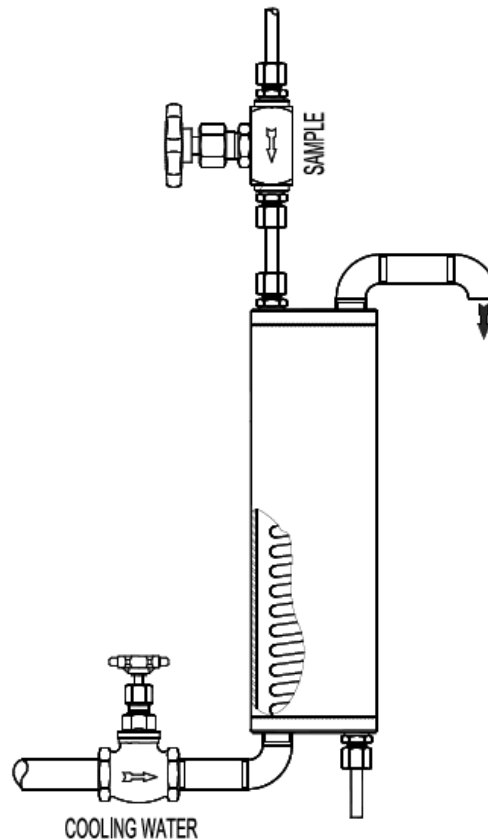
6. **Application**

The ECON Sample Coolers are for general purpose applications. For the use of extreme conditions e.g. aggressive or abrasive media, it is recommended to mention this at the ordering stage, to verify whether the Sample Coolers is suitable. The installation designer is responsible for the Sample Coolers selection, suitable for the working conditions. The Sample Coolers are unsuitable, without written permission of an ERIKS company, to apply for hazardous media as referred into Regulation (EC) No 1272/2008.

7. **Installation**

During the assembly of the Sample Coolers, the following rules should be observed:

- make sure, before assembly, that the Sample Coolers were not damaged during the transport or storage, are according request and are suitable for the job.
- make sure all plastic covers placed on the connection ends are removed before installing the ECON Sample Coolers.
- make sure that the thread on the pipe are from the same standard as the Sample Coolers and also free from pollution.
- the Sample Coolers are recommended to be fitted with the centre line of the cooler in a vertical position to ensure that the best results are obtained. For an example of how to install the Sample Cooler see the figure on the next page.
- stop valves are necessary on the cooling water and sample inlet.
- the outlet cooling water should be piped in to a drain, and be free of obstruction or isolation valves.
- be sure that the Sample Cooler is installed in the appropriate direction.
- the Sample Coolers must be stress-free to be mounted in the pipeline, supports need to be made in order to avoid tensions, which are caused by the weight of the Sample Coolers.
- the installation area should have easy access and provide enough space for maintenance and removing operations.



8. Operation

Be sure that the cooling water is in its maximum flow before opening or closing the sample inlet valve in order to avoid the risk of scalding.

The sample valve must also be closed before the cooling water valve

9. Maintenance

Before starting any service jobs, make sure that the medium supply to the pipeline is cut off, pressure was decreased to ambient pressure, the pipeline is completely cleaned and ventilated and the plant is cooled down. Always keep safety instructions in mind and take all personal safety precautions.

During maintenance, the following rules should be observed:

- always keep personal safety precautions in mind and always use appropriate protection e.g. clothing, masks, gloves etc.
- be alert that the temperature still can be very high or low and can cause burns.
- there are no internal components that require maintenance.
- check the Sample Coolers on all possible leaking possibilities.
- check if all bolts and nuts, are still fastened.
- we recommend that Sample Coolers are serviced as necessary. Sample Coolers should be checked periodically (at least yearly), to verify that they are operating correctly.

10. Service and repair

All service and repair jobs should be carried out by authorized staff, using suitable tools and user shall use genuine valve parts.

- welding repair and drilling of the Sample Coolers is forbidden.
- it is forbidden to replace the bolt, nut or packing when the Sample Coolers is under pressure.

There are no spare parts available for the ECON Sample Coolers.

11. Safety notes

Allow time for temperature to normalize after isolation to avoid danger of burns.

12. Troubleshooting

It is essential that the safety regulations are observed when identifying the fault.

13. Removal

Dismantled and rejected valves cannot be disposed with household waste. The Sample Coolers are made of materials which can be re-used and should be delivered to designated recycling centres.