

Installation Instructions **High-temperature TOC analyzer CA72TOC**

Gas restrictors





Table of contents

1	Overview	3
2	Intended use	3
3	Personnel authorized to carry out modifications	3
4	Safety requirements	4
5	Scope of delivery	5
6	Replacing the components	6
7	Recommissioning	9
8	Additional documentation	9
9	Disposal	9

1 Overview

1.1 Spare parts kits

These installation instructions apply to the following spare parts kits:


Order code	Designation	Page
71414588	CA72TOC carrier gas restrictor	→  5
71414589	CA72TOC stripping gas restrictor	→  5

2 Intended use

- The parts of the kits are to be used exclusively as spare parts for the CA72TOC analyzers . Any other use is not permitted!
- Only use original parts from Endress+Hauser.
- In the Device Viewer, check if the spare part is suitable for the device in question.

3 Personnel authorized to carry out modifications

- Installation, commissioning, operation and maintenance of the measuring system may be carried out only by specially trained technical personnel.
- The technical personnel must be authorized by the plant operator to perform the stated tasks.
- The electrical connection may only be established by an electrical technician.
- The technical personnel must have read and understood these Installation Instructions and must follow the instructions they contain.
- Measuring point faults may be repaired only by authorized and specially trained personnel.
- In the case of Ex-certified devices, the technical staff must also be trained in explosion protection.

 Repairs not described in the Operating Instructions provided must only be carried out directly at the manufacturer's site or by the service organization.

4 Safety requirements

WARNING

Risk of death due to electric shock!

- ▶ Perform work on the device with the utmost caution, especially when the device remains fully or partially powered on during maintenance tasks.
- ▶ Follow the instructions in the relevant chapters of this manual, as the procedure for electrical safety depends on the service kits used.
- ▶ All work must be carried out according to applicable safety standards.
- ▶ Note the instructions in the Operating Instructions for the analyzer.

WARNING

Risk of burns!

- ▶ Contact with hot components in the vicinity of the combustion furnace may cause injuries. Where necessary, wear heat-resistant gloves.

CAUTION

Risk to health due to contact with reagents, chemicals or process solutions!

- ▶ Wear protective gloves, protective goggles and protective clothing.
- ▶ Immediately rinse splashes with plenty of water and a 1% sodium bicarbonate solution (NaHCO_3 , baking soda).
- ▶ In case of eye contact, rinse the affected area with plenty of water and then seek medical advice. Show the relevant safety data sheet to the physician.
- ▶ Note the nationally applicable workplace safety regulations for the work area when handling toxic or corrosive chemicals.



Potential impact on the process

Before decommissioning an active device, the potential impact on the overall process must be taken into account! This applies in particular when using the switching contacts, the analog signal outputs or the communication interface of the associated measuring instrument to control process variables. Coordinate service tasks with the operator!

The following must never be used for cleaning:

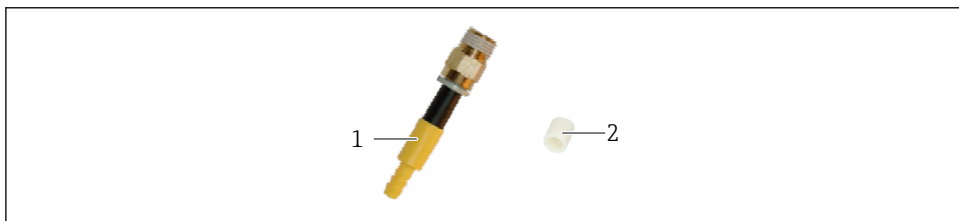
- Concentrated mineral acids or bases
- Benzyl alcohol
- Methylene chloride
- High-pressure steam

5 Scope of delivery


5.1 71414588 Kit CA72TOC restrictor, carrier gas

The kit contains the following parts →  1,  5:

- | | | | | |
|---|-----|---------------------------------|-----|------------------|
| 1 | 1 x | Restrictor cpl. for carrier gas | 1 x | Kit instructions |
| 2 | 1 x | Retaining ring | | |



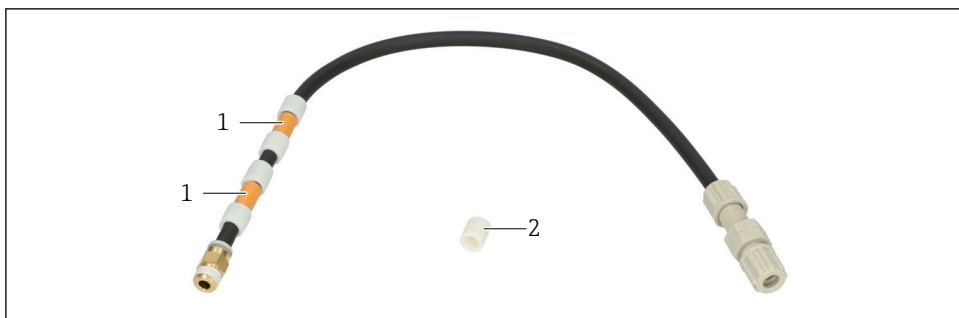
A0059888

-  1 *CA72TOC carrier gas restrictor*


5.2 71414589 Kit CA72TOC restrictor, stripping gas

The kit contains the following parts →  2,  5:

- | | | | | |
|---|-----|-----------------------------------|-----|------------------|
| 1 | 1 x | Restrictor cpl. for stripping gas | 1 x | Kit instructions |
| 2 | 1 x | Retaining ring (replacement) | | |



A0059887

-  2 *CA72TOC stripping gas restrictor*


6 Replacing the components

6.1 Preparation

WARNING




Risk of death due to electric shock!

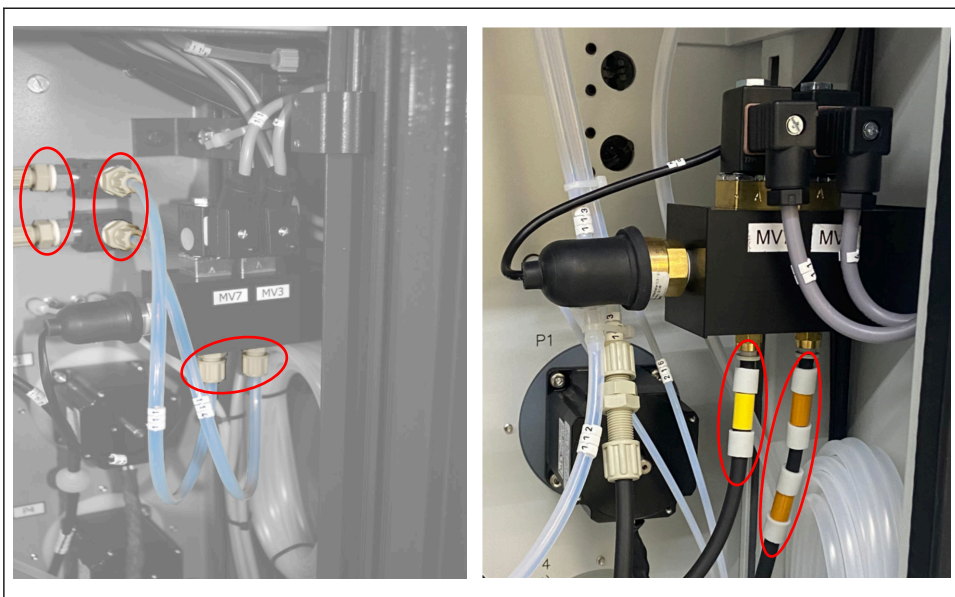
► **First switch off the main switch!**

 Before removing the gas connection block, make sure that the compressed air supply and oxygen supply have been shut down.


1. End the ongoing analysis and shut down the device.
2. Switch off the main switch of the device.
3. Disconnect the device from the power supply by unplugging the mains plug. Ensure that the analyzer remains disconnected from the power supply during repair and replacement work.
4. Open the rear door of the measuring system. Use the special key supplied for this purpose.
5. Disconnect the gas supply hose from the connection on the outside of the housing.



6.2 Carrier gas modification

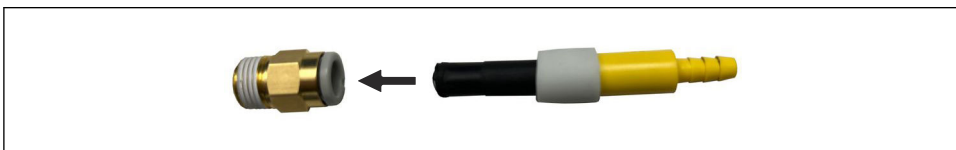
1. Carry out preparatory work as per section 6.1 →  6.
2. Disconnect hose **111** from the gas connection block and carrier valve and remove it →  3,  7.
3. Remove the screw-in connection from the gas connection block.
4. Disconnect hose **110** from the carrier valve.




A0059889


 3 Comparison of the old and new connections for carrier and stripping gas

5. Loosen the screw-in connection \varnothing 6 mm with $\frac{1}{8}$ " male thread from the new carrier gas connection.
6. Screw the screw-in connection into the gas connection block.
7. Then push the hose end on the new carrier gas restrictor into the screw-in connection. →  4,  7










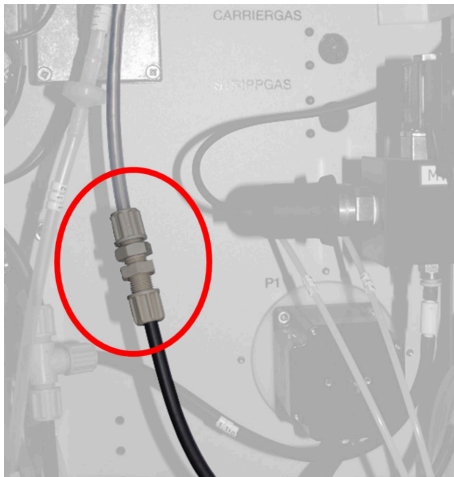
A0059889

 4 Carrier gas connection components before installation

8. Pull the retaining ring over hose no. 110.
9. Push hose 110 onto the hose nipple of the new carrier gas restrictor (yellow).
10. Pull the retaining ring over the connector for reinforcement.
11. Put the analyzer back into operation →  9.


6.3 Stripping gas modification: from solenoid valve to restrictor

1. Carry out preparatory work as per section 6.1 →  6.
2. Disconnect hose **114** from the gas connection block and stripping gas valve and remove it →  3,  7.
3. Remove the screw-in connection from the gas connection block.
4. Disconnect hose **113** from the stripping gas valve.
5. Loosen the screw-in connection \varnothing 6 mm with $\frac{1}{8}$ " male thread from the new stripping gas connection.
6. Screw the screw-in connection into the gas connection block.
7. Then push the hose end on the new stripping gas restrictor into the screw-in connection. →  4,  7
8. Connect the bulkhead coupling of the new stripping gas restrictor with hose **113** →  5,  8.



A0059893

-  5 *Bulkhead coupling between gas connection and hose 113*

9. Label the hose near the bulkhead coupling with no. **113**.
10. Put the analyzer back into operation →  9.

7 Recommissioning

1. Restore the supply of all media.
2. Switch on the analyzer at the main switch.
3. Check the seal of the liquid section as described in the Operating Instructions.
4. Check the seal of the gas section as described in the Operating Instructions.
5. Restart the analyzer as described in the Operating Instructions.
6. Close all doors of the analyzer.

8 Additional documentation

Detailed information on the devices can be found in the Operating Instructions for the analyzer and in the other documentation, available at:

- www.endress.com/device-viewer
- Smartphone/tablet: Endress+Hauser Operations app

9 Disposal



If required by the Directive 2012/19/EU on waste electrical and electronic equipment (WEEE), the product is marked with the depicted symbol in order to minimize the disposal of WEEE as unsorted municipal waste. Do not dispose of products bearing this marking as unsorted municipal waste. Instead, return them to the manufacturer for disposal under the applicable conditions.



71719632

www.addresses.endress.com
