

Installation Instructions

Liquiline System analyzer

CA80COD/TP

Maintenance kit CAV880



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1 Overview

1.1 Product structure

Parameter					
	CC	COD chromate method			
	FF	TP total phosphorus			
Measuring range					
		C1	0 to 5 000 mg/l O ₂		
		C2	0 to 20 000 mg/l O ₂		
		F1	0 to 10 mg/l Total phosphorus		
		F4	0 to 50 mg/l Total phosphorus		
Annual kit, number of years					
			1	1 year	
Enclosed accessories					
				R2	PTFE hose
				R3	Hose connector for low measuring range
				R4	Hose connector for high measuring range
				R5	COD reactor cuvette
				R6	TP reactor cuvette
				R7	COD dosing tube
				R8	TP dosing tube
				RA	O-rings for dosing unit
				RD	Foam rubber seal
CAV880-	xx	xx	1	Rx	Complete order code

1.2 Valve types and history

1.2.1 Valve types

Waste valve CA80COD:

Since February 2019 = SN **P2**....., the CA80COD analyzers have featured a new waste valve (type 2) and a thick-walled hose.

Waste valve CA80TP:

Since January 2022 = SN **T1**....., the CA80TP analyzers have also featured a new waste valve (type 2) and a thick-walled hose.

Dilution valves CA80COD and TP:

Type 2 with a thick-walled hose was also introduced for the dilution valve on the CA80COD and TP analyzers from mid 2024.


Valve	Comment	
<p>Type 1 (for thin and thin-walled hose = kit 71324153)</p>	<ul style="list-style-type: none"> ▪ Waste valve for COD until January 2019 = SN P1..... ▪ Waste valve for TP until December 2021 = SN SC..... ▪ Dilution valves COD + TP gradual phase-out from mid 2024 	 <p style="text-align: right;">A0058739</p>
<p>Type 1a (for thin and thin-walled hose = kit 71324153)</p>	<p>Waste valve for COD, only used temporarily, must be replaced with a type 2 valve.</p>	 <p style="text-align: right;">A0058740</p>
<p>Type 2 (for thick and thick-walled hose = kit 71431075)</p>	<ul style="list-style-type: none"> ▪ Waste valve for COD since February 2019 = SN P2..... ▪ Waste valve for TP since January 2022 = SN T1..... ▪ Dilution valves COD + TP introduced from mid 2024 	 <p style="text-align: right;">A0058741</p>

2 Intended use

- The parts of the kits must only be used as spare parts for CA80COD/TP analyzers. Any other use is not permitted!
- Use only 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 conversion

- 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 instructions

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.


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.

⚠ CAUTION**Electronic assemblies are sensitive to electrostatic discharges (ESD)!**

- ▶ Before removing an assembly from the antistatic packaging, it must be discharged, e.g. at a protective ground. Continuous grounding, e.g. with an ESD wristband, is recommended.

 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!


- ** Contact Endress+Hauser Service if you have questions: www.addresses.endress.com

5 Scope of delivery

The scope of delivery is stored in the Spare parts finder (SFT) as a Components Sheet. The QR code below provides access to the scope of delivery, including a device overview with item numbers for the maintenance parts.




A0061262

 1 *Link to Components Sheet, including scope of delivery and device overview*

6 Notes on maintenance work

6.1 Description of maintenance measures

 The maintenance measures are described in the operating instructions for analyzers **CA80COD** (BA01354C) or **CA80TP** (BA01593C). Please carry out the maintenance measures as specified in those operating instructions.

Handling of the **reactor cuvette** and the **dosing tube** is not described in these operating instructions. Detailed instructions for these procedures are provided in the Installation Instructions **EA01677C**.

The documents can be viewed on the product pages on the Internet (www.endress.com). More information is available here:

E+H Spare parts finder (SFT): <https://sft-p.cdn.endress.com/>

6.2 Maintenance intervals

The various maintenance intervals are also explained in the Operating Instructions.

Unauthorized extension of these intervals can lead to measurement errors and voiding of the warranty.

The maintenance intervals may need to be reduced under extreme measuring conditions (cold, heat, dirt, aggressive medium, etc.).

6.3 Documentation of maintenance

All maintenance and repair work must be documented.

A maintenance booklet is enclosed with each analyzer for this purpose. Please document all work carried out on the analyzer in this booklet.

A new maintenance booklet is available from the Endress+Hauser service organization. A download is also available. Please use the following link: https://portal.endress.com/picpool/sft/advicepdfs/71303421_ca80_maintenance.pdf

6.4 Handling the dispensers

WARNING

Failure to observe the following instructions may result in malfunctions.

- ▶ The linear drive dispenser (with black dispenser holder - see Components Sheet) must be lubricated. This dispenser is therefore supplied ready for installation, already cleaned and lubricated.
- ▶ For the dilution vessel on versions with a dilution module (C2/F4), a dispenser body without a plunger is used (see Components Sheet). This dispenser body must not be lubricated.
- ▶ Make sure you do not mix up the two dispensers.

7 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

8 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.



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