# Installation Instructions **CA72TOC**

Couplings and fittings





#### Table of contents

| 1 | Intended use                                      | 3    |
|---|---|------|
| 2 | Personnel authorized to carry out conversion      | . 3  |
| 3 | Safety instructions                               | . 3  |
| 4 | Scope of delivery                                 | . 5  |
| 5 | Overview, use and localization                    | . 5  |
| 6 | Installation instructions for seals and couplings | . 10 |
| 7 | Final tasks                                       | . 39 |
| 8 | Disposal  | 39   |

#### 1 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!
- Use only original parts from Endress+Hauser.
- In the Device Viewer, check if the spare part is suitable for the device in question.

## 2 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.

## 3 Safety instructions

#### **A** WARNING

#### Risk of death from electrical 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.
- ▶ Follow the instructions in the Operating Instructions for the device.

#### **WARNING**

#### Risk of burns!

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

#### **A** 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<sub>3</sub>, 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.

#### **A** CAUTION

#### Risk of infection when working with wastewater!

- ▶ Wear protective gloves, protective goggles and protective clothing.
- ► Observe applicable workplace safety regulations.
- ► 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.

# 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 alkaline solutions
- Benzyl alcohol
- Methylene chloride
- High-pressure steam

# 4 Scope of delivery

#### 4.1 71101617 Kit CA72TOC couplings + fittings

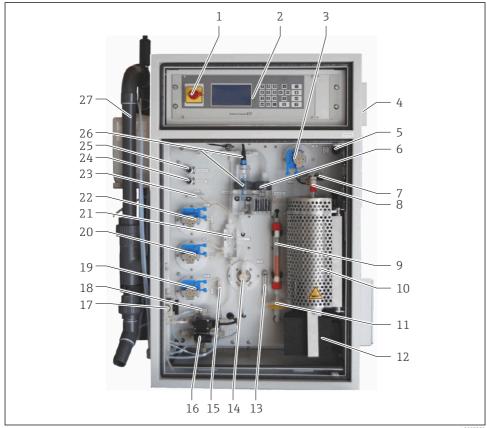
The kit contains the following parts:

| 5 x  | Sealing ring G¼" PVC                              | 5 x | Sealing ring G1/6" PVC                              |
|------|---|-----|---|
| 1 x  | Angled swivel connector, machined                 | 1 x | Coupling nut 11/2" PVC, machined                    |
| 1 x  | Coupling D $6/8 \times G^{1/4}$ " PVDF            | 1 x | Coupling D 4/6 $\times$ G3/8", machined             |
| 1 x  | Coupling D 4/6 × G3/8" PVDF                       | 1 x | Bulkhead coupling on one end, female thread         |
| 2 x  | Bulkhead coupling D 4/6 PP                        | 2 x | Coupling D 4/6 × G1/8" PP                           |
| 1 x  | T-coupling D 6/8 × 6/8 × 4/6 PVDF                 | 1 x | Coupling D 4/6 × G½" PVDF                           |
| 2 x  | Angled swivel connector D 4/6 $\times$ G½ PP      | 1 x | Coupling D 4/6 × G1/4" PP                           |
| 2 x  | Angled coupling D 4/6 $\times$ G $^{1}$ /4" PP    | 1 x | Angled coupling D 4/6 $\times$ G1/8" PP             |
| 1 x  | Plug G1/8" PP                                     | 2 x | Coupling with short thread 1/8" $\times$ 28UNF ETFE |
| 10 x | Cone for coupling 1/8" $\times$ 28UNF ETFE        | 2 x | Coupling with nozzle 1/4" $\times$ 28 D 1.55 ETFE   |
| 2 x  | Coupling with nozzle 1/4" $\times$ 28 D 3.20 ETFE | 1 x | Coupling D 4/6 $\times$ G¼" $\times$ 4/6 PP         |
| 3 x  | Long coupling 1/8" / 1/4" $\times$ 28UNF ETFE     | 1 x | Coupling D 3.2 × GL 14 PVDF                         |
| 2 x  | Coupling D 4/6 × GL 14 PP                         | 1 x | Kit instructions                                    |

# 5 Overview, use and localization

#### 5.1 CA72TOC overview

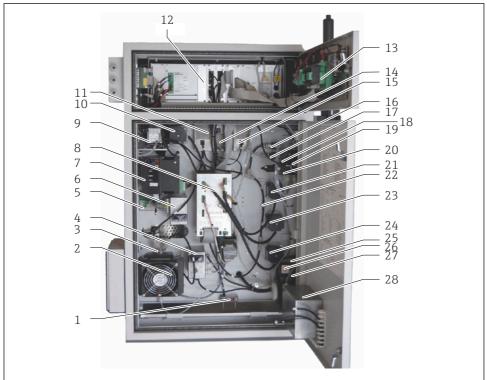
The following illustrations provide an overview of the CA72TOC.



**■** 1 Assembly overview of the CA72TOC, front view, with front doors open

- Main switch 1
- Computer 2
- Pump P2 (sample) 3
- 4 Mains junction box
- 5 Compressor switch
- Separation chamber
- Dosing valve 7
- Injection unit 8
- Acid filter
- 10 Tube furnace
- 11 Combination filter
- 12 Salt trap (optional)
- 13 Flowmeter
- 14 Dilution pump P5

- 15 Acid pump adapter
- 16 Solenoid valve MV4
- 17 Sample channel switching
- 18 Solenoid valve MV1
- 19 Pump P3 (acid)
- 20 Pump P4 (optional)
- 21 Mixing chamber (opt.)
- 22 Pump P1 (condensate)
- 23 Condensate adapter
- 24 Stripping gas valve
- 25 Carrier gas valve
- 26 Stripping chamber with pH electrode
- 27 Sample conditioning



#### ■ 2 Assembly overview of the CA72TOC, rear view, with rear doors open

- 1 Leak detection contact
- 2 Peltier cooler
- 3 Radiator glass insert
- 4 Heating regulator
- 5 Temp. amplifier
- 6 Controller for furnace heating
- 7 Controller f. Peltier cooler
- 8 Motor controller P1-6
- 9 Compressor
- 10 Motor P2 (sample)
- 11 Pressure-amplifier
- 12 Computer unit
- 13 Power distribution
- 14 Magnetic stirrer control

- 15 pH amplifier
- 16 Carrier gas valve
- 17 Stripping gas valve
- 18 Valve MV7
- 19 Valve MV3
- 20 Gas connection block
- 21 Motor P1 (sample)
- 22 Check valve
- 23 Motor P4 (sample)
- 24 Motor P3 (acid)
- 25 Valve MV2
- 26 Valve MV5
- 27 Water connection block
- 28 IR detector

# 5.2 Usage and localization

| Designation   | Use  | Localization   | Description                      |
|---|--|--|----------------------------------|
| Sealing ring G1/4" PVC  | Gas generator<br>Standby circuit PA-3<br>Standby circuit PA-2<br>Solenoid valve 3/2-way  | → ■ 5, ➡ 12<br>→ ■ 1, ➡ 6, item 27<br>→ ■ 1, ➡ 6, item 27<br>→ ■ 1, ➡ 6, item 16   | Section 6.2,<br>→ 🖺 11           |
| Sealing ring G 1/8"PVC  | Gas generator<br>Water connection, base assembly<br>Gas connection, base assembly  | → ■ 5, ➡ 12<br>(→ ■ 2, ➡ 7, item 27)<br>(→ ■ 2, ➡ 7, item 27)  | Section 6.3,<br>→ 🖺 14           |
| Angled swivel connector, machined                                 | Solenoid valve, 3/2-way, all versions  | (→ <b>1</b> , <b>6</b> , item 16)  | Section 6.4,<br>→ 🖺 15           |
| Coupling nut 1½" PVC, machined                                    | Separation chamber type II<br>Stripping chamber type II  | (→ ■ 1, ■ 6, item 6)<br>(→ ■ 1, ■ 6, item 26)  | Section 6.5,<br>→ 🖺 16           |
| Coupling D 6/8 × G1/4" PVDF                                       | Gas generator<br>Separation chamber type II  | → <b>②</b> 4, <b>③</b> 12 (→ <b>③</b> 1, <b>⑤</b> 6, item 6)   | Section 6.6,<br>→ 🖺 16           |
| Coupling D $4/6 \times G3/8$ ", machined                          | Stripping chamber type II  | → <b>1</b> , <b>1</b> 6, item 26   | Section 6.7,<br>→ 🖺 17           |
| Coupling D 4/6 × G3/8" PVDF                                       | Gas connection, base assembly  | → 🖸 2, 🖺 7, item 20  | Section 6.8,<br>→ <b>1</b> 8     |
| Bulkhead coupling on one end<br>Female thread                     | Sample outlet  | → • 18, • 18   | Section 6.9,<br>→ 🖺 18           |
| Bulkhead coupling D 4/6 PP  | Standard furnace, connection without heating filter Gas discharge  | → ■ 1, ■ 6, behind item 10<br>→ ■ 20, ■ 19   | Section<br>6.10,<br>→ 🖺 19       |
| Coupling D 4/6 × G1/6" PP   | Sample pump adapter Water connection with dilution Gas type I connection Water connection, base assembly Mixing chamber Heating filter | → ■ 1, △ 6, instead of item 21 → ■ 2, △ 7, item 27 → ■ 2, △ 7, item 20 → ■ 2, △ 7, item 27 → ■ 1, △ 6, item 21 → ■ 1, △ 6, item 12 | Section 6.11, → 🖺 20             |
| T-coupling D 6/8 × 6/8 × 4/6<br>PVDF                              | Mounting plate TOC II with dilution  | → <b>1</b> , <b>6</b> , above item 26  | Section<br>6.12,<br>→ 🖺 23       |
| Coupling D 4/6 × G½" PVDF   | Mixing chamber   | → <b>1</b> , <b>6</b> , item 21  | Section<br>6.13,<br>→ 🖺 23       |
| Angled swivel conn. D 4/6 $\times$ G $^{1}$ 4" PP                 | Solenoid valve, 3/2-way, all versions<br>Sample conditioning PA-3 / PA-2   | → ■ 1, ■ 6, item 16<br>→ ■ 1, ■ 6, item 27   | Section<br>6.14,<br>→ 🖺 24       |
| Coupling D 4/6 × G <sup>1</sup> / <sub>4</sub> " PP               | Sample channel switching   | → <b>1</b> , <b>6</b> , item 17  | Section<br>6.15,<br>→ 🖺 25       |
| Angled coupling D 4/6 $\times$ G <sup>1</sup> / <sub>4</sub> " PP | Stripping chamber type II<br>Sample channel switching  | → ■ 1, 🖺 6, item 26<br>→ ■ 1, 🖺 6, item 17   | Section<br>6.16,<br>→ <b>2</b> 6 |
|   |  |  |                                  |

| Designation   | Use  | Localization   | Description                       |
|---|--|--|-----------------------------------|
| Angled coupling D 4/6 × G1/8"<br>PP                       | Water connection, base assembly  | → <b>2</b> , <b>1</b> 7, item 27   | Section<br>6.17,<br>→ <b>≅</b> 29 |
| Plug G1/8" PP   | Water connection without dilution  | → <b>2</b> , <b>1</b> 7, item 27   | Section<br>6.18,<br>→ <b>2</b> 9  |
| Coupling with short thread 1/8" × 28UNF ETFE              | Adapter for condensate d. Acid<br>supply<br>Acid pump adapter<br>Mixing chamber  | → • 40, • 31<br>→ • 1, • 6, item 15<br>→ • 1, • 6, item 21   | Section<br>6.19,<br>→ 🖺 30        |
| Cone for coupling 1/4" × 28UNF<br>ETFE                    | Adapter for condensate drain, acid s. Acid pump adapter Mixing chamber Condensate pump adapter Stripping chamber type II | → • 41, □ 32<br>→ • 1, □ 6, item 15<br>→ • 1, □ 6, item 21<br>→ • 1, □ 6, item 23<br>→ • 1, □ 6, item 26 | Section 6.20, → 🖺 31              |
| Coupling with nozzle 1/4" × 28 D<br>1.55 ETFE             | Acid pump adapter<br>Condensate pump adapter   | → ■ 1, ■ 6, item 15<br>→ ■ 1, ■ 6, item 23   | Section<br>6.21,<br>→ 🖺 34        |
| Coupling with nozzle ¼" × 28 D<br>3.20 ETFE               | Sample pump adapter<br>Stripping chamber type II<br>Mixing chamber   | → 1, 6 6, instead of item 21<br>→ 1, 6 6, item 26<br>→ 1, 6 6, item 21                                   | Section<br>6.22,<br>→ <b>1</b> 34 |
| Coupling D 4/6 × G <sup>1</sup> / <sub>4</sub> " × 4/6 PP | Solenoid valve, 3/2-way, all versions  | → <b>1</b> , <b>6</b> , item 16  | Section 6.23, → 🗎 36              |
| Long coupling 1/6" / 1/4" ×<br>28UNF ETFE                 | Adapter for condensate drain, acid<br>s.<br>Acid pump adapter<br>Condensate pump adapter<br>Stripping chamber type II    | → • 40, □ 31<br>→ • 1, □ 6, item 15<br>→ • 1, □ 6, item 23<br>→ • 1, □ 6, item 26                        | Section<br>6.24,<br>→ 🖺 37        |
| Coupling D 3.2 × GL 14 PVDF                               | Cooler, glass insert below   | → <b>2</b> , <b>1</b> 7, item 3  | Section<br>6.25,<br>→ 🖺 38        |
| Coupling D 4/6 × GL 14 PP                                 | Cooler, gas insert above   | → <b>2</b> , <b>1</b> 7, item 3  | Section<br>6.26,<br>→ <b>1</b> 38 |

## 6 Installation instructions for seals and couplings

#### 6.1 Preparation

#### **A** WARNING

Risk of death due to electric shock!

► **First switch off the main switch!** Then open the front and rear lower doors using the special key provided.

#### **A** WARNING

Contact with hot components in the vicinity of the combustion furnace may cause injuries.

▶ Allow the furnace to cool down or wear heat-resistant gloves.

#### **WARNING**

Risk of injury from leaking media!

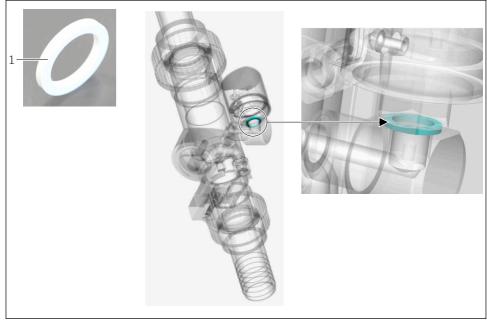
► Shut off the supply of all media (water, gas, acid, sample supply) and drain the hoses. Observe the warnings in Chapter 3.



The  $(\blacktriangleright)$  arrow indicates the assembly in which the spare part described is used.

# 6.2 Sealing ring G<sup>1</sup>/<sub>4</sub>" PVC

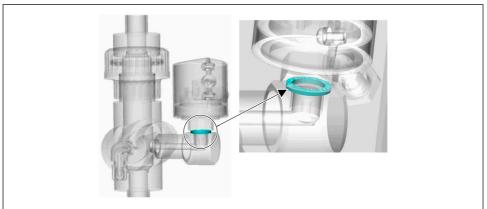
| ► Standby circuit for PA-2                 | → ■ 3, 🖺 11 |
|--|-------------|
| ► Standby circuit for PA-3                 | → • 4, 12   |
| ► Gas generator                            | → ■ 5, 🖺 12 |
| ► Solenoid valve 3/2-way with backflushing | → • 6, 12   |
| ► Solenoid valve 3/2-way                   | → • 7, 13   |
| ► Solenoid valve, 3/2, aggressive medium   | → • 8, 13   |



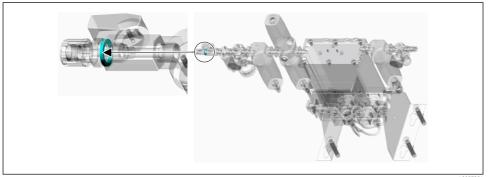
A005735

■ 3 Sealing ring  $G\frac{1}{4}$ " PVC in standby circuit for PA-2

1 Sealing ring G¼"PVC

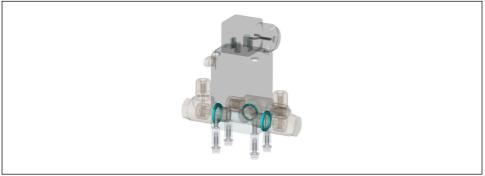


■ 4 Sealing ring  $G^{1/4}$ " PVC in standby circuit for PA-3



A0057354

#### $\blacksquare$ 5 Sealing ring G¼" PVC in the gas generator

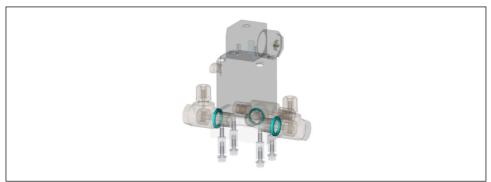


A0057355

 $\blacksquare$  6 Sealing rings G¼" PVC in solenoid valve 3/2-way with backflushing



■ 7 Sealing rings G¼" PVC in solenoid valve, 3/2-way

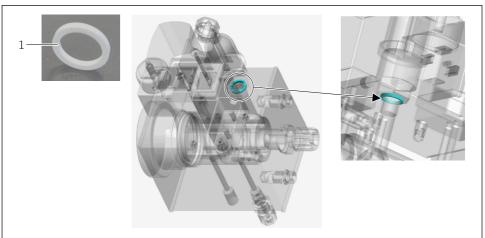


A0057357

■ 8 Sealing rings G¼" PVC in solenoid valve, 3/2-way for aggressive media

## 6.3 Sealing ring G1/8" PVC

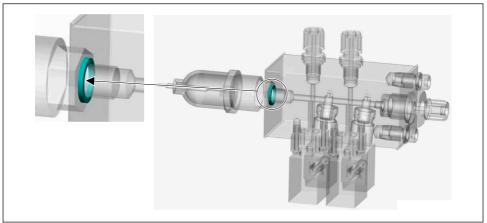
| ▶ Water connection block | → 💀 9, 🖺 14  |
|--------------------------|--------------|
| ► Gas connection block   | → 10, 14     |
| ► Gas generator          | → ■ 11, 🖺 15 |



Δ0057358

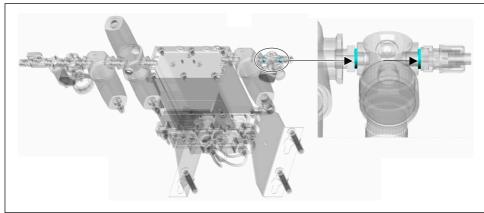
■ 9 Sealing ring G½" PVC in water connection block

#### 1 Sealing ring G⅓" PVC



A0057350

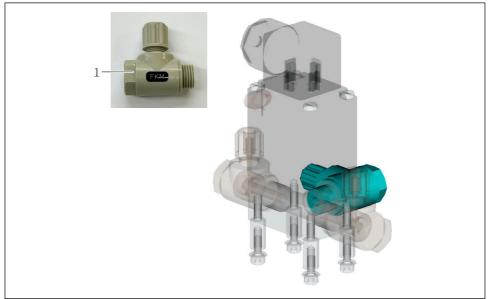
■ 10 Sealing ring G1/8" PVC in gas connection block



■ 11 Sealing rings G½" PVC in gas generator

# 6.4 Angled swivel connector, machined

► Solenoid valve 3/2-way ⇒ 📵 12, 🖺 15



A0057361

 $\blacksquare$  12 Angled swivel connectors on the 3/2-way solenoid valve

#### 1 Angled swivel connector, machined

## 6.5 Coupling nut 1½" PVC, machined

| ► Separation chamber type II | → • 13, • 16 |
|------------------------------|--------------|
| ► Stripping chamber type II  | → 🔁 13, 🖺 16 |



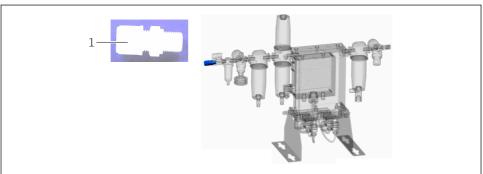
A0057362

 $\blacksquare$  13 Coupling nut 1½" for separation chamber and stripping chamber

1 Coupling nut 1½"

## 6.6 Coupling D $6/8 \times G\frac{1}{4}$ " PVDF

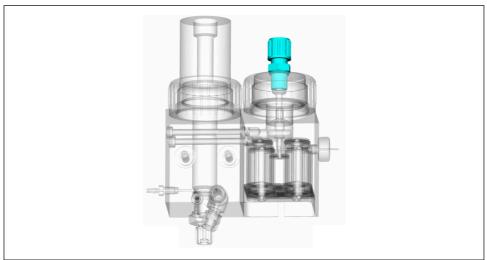
| ► Gas generator              | → ■ 14, ■ 16 |
|------------------------------|--------------|
| ► Separation chamber type II | → 🗗 15, 🖺 17 |



Δ0057363

■ 14 Coupling D 6/8 ×  $G^{1/4}$ " PVDF on gas generator

1 Coupling D 6/8 ×  $G^{1/4}$ " PVDF

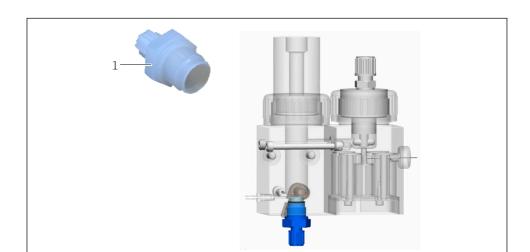


■ 15 Coupling D  $6/8 \times G^{1/4}$ " PVDF on the separation chamber type II

A0057364

## 6.7 Coupling D 4/6 × G3/8", machined

► Stripping chamber type II



→ 🛭 16, 🖺 17

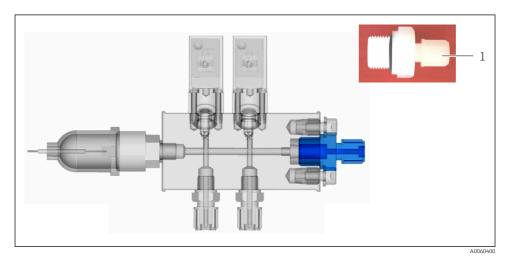
A0060419

 $\blacksquare$  16 Coupling D 4/6 × G3/8", machined in stripping chamber type II

1 Coupling D  $4/6 \times G3/8$ ", machined

## 6.8 Coupling D 4/6 × G3/8" PVDF

► Gas connection base assembly → © 17, □ 18



■ 17 Coupling D 4/6 × G3/8" PVDF in gas connection type I

## 6.9 Bulkhead coupling on one end, female thread

► Sample outlet  $\rightarrow$  18, 18



■ 18 Installation position of the bulkhead coupling

Bulkhead coupling with female thread

## 6.10 Bulkhead coupling D 4/6 PP

| ► Standard furnace, connection without heating filter (salt trap) | → ■ 19, ■ 19 |
|---|--------------|
| ► Gas discharge   | → ■ 20, ■ 19 |



AUU5/3/

- 19 Bulkhead coupling D 4/6 PP for standard furnace, connection without heating filter (salt trap)
- 1 Bulkhead coupling D 4/6 PP

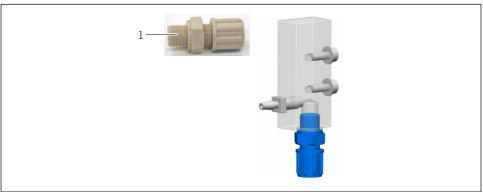


A0057371

■ 20 Bulkhead coupling D 4/6 PP for gas discharge

## 6.11 Coupling D $4/6 \times G\%$ PP

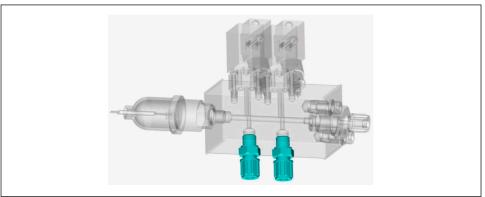
| ► Sample pump adapter               | → 21, 20 |
|-------------------------------------|----------|
| ► Gas connection type I             | → 22, 20 |
| ▶ Water connection with dilution    | → 23, 21 |
| ► Water connection without dilution | → 24, 21 |
| ► Heating filter                    | → 25, 22 |
| ► Mixing chamber                    | → 26, 22 |



A0057372

#### ■ 21 Coupling D 4/6 × G % PP on sample pump adapter

#### 1 Coupling D 4/6 × G1/8" PP

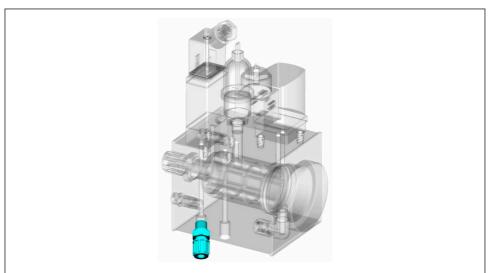


A0057373

■ 22 Coupling D  $4/6 \times G$  /%" PP on gas connection type I

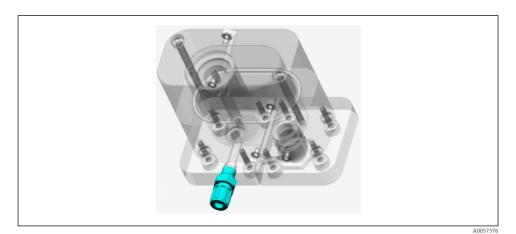


#### ■ 23 Coupling D $4/6 \times G$ % PP on water connection with dilution

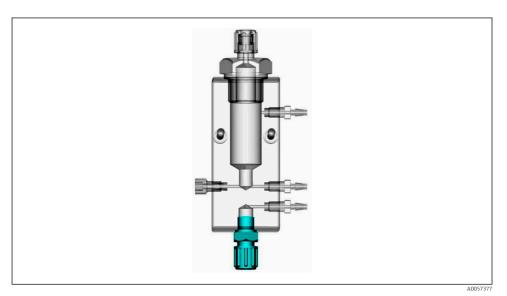


A0057375

■ 24 Coupling D  $4/6 \times G$ %" PP on water connection without dilution



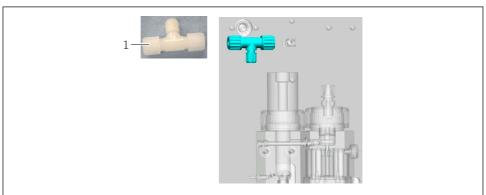
■ 25 Coupling D  $4/6 \times G$  % PP on heating filter



■ 26 Coupling D 4/6 × G  $^{\prime\prime}$  PP on the mixing chamber

## 6.12 T-coupling D 6/8 × 6/8 × 4/6 PVDF

► TOCII mounting plate with dilution → 🖻 27, 🖺 23

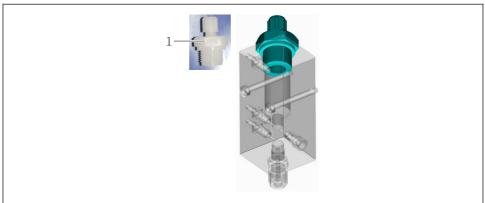


A0057378

- 27 T-coupling D 6/8×6/8×4/6 PVDF on TOCII mounting plate with dilution
- 1 T-coupling D 6/8  $\times$  6/8  $\times$  4/6

## 6.13 Coupling D $4/6 \times G\frac{1}{2}$ " PVDF



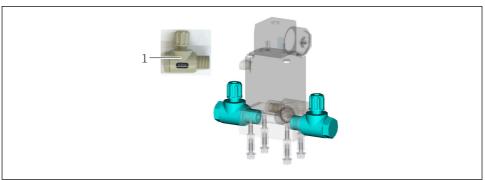


A0057379

- 28 Coupling D 4/6 ×  $G\frac{1}{2}$ " PVDF on the mixing chamber
- 1 Coupling D 4/6 × G½" PVDF

## 6.14 Angled swivel connector D 4/6 $\times$ G $^{1}$ /4" PP

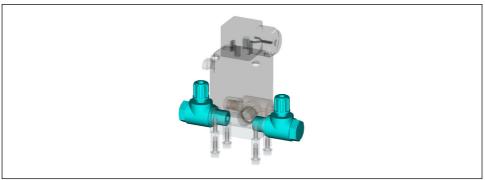
| ► Solenoid valve, 3/2, aggressive medium     | → ■ 29, ■ 24 |
|--|--------------|
| ► Solenoid valve, 3/2-way, with backflushing | → ■ 30, ■ 24 |
| ► Solenoid valve, 3/2-way, standard          | → 🖸 31, 🖺 25 |



A0057380

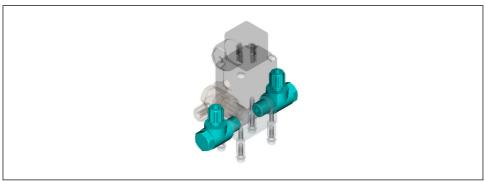
 $\blacksquare$  29 Angled swivel conn. D 4/6  $\times$  G<sup>1</sup>/<sub>4</sub>" PP on solenoid valve, 3/2 for aggressive medium

1 Angled swivel connector D  $4/6 \times G\frac{1}{4}$ " PP



A00E7201

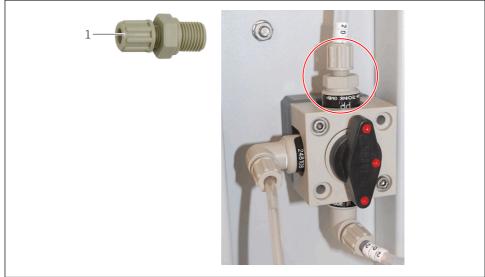
 $\blacksquare$  30 Angled swivel conn. D 4/6 × G¼" PP on solenoid valve, 3/2-way with backflushing



 $\blacksquare$  31 Angled swivel conn. D 4/6 × G¼" PP on solenoid valve, 3/2-way, standard

## 6.15 Coupling D 4/6 x G<sup>1</sup>/<sub>4</sub>" PP

► Sample channel switching → 📵 32, 🗎 25



A0060402

 $\blacksquare$  32 Coupling D 4/6 x G½" PP on the sample switching unit

#### 1 Coupling D 4/6 x G<sup>1</sup>/<sub>4</sub>" PP

## 6.16 Angled coupling D $4/6 \times G\frac{1}{4}$ " PP

| ► Sample channel switching                  | → 🖸 33, 🖺 26 |
|---|--------------|
| ► Stripping vessel type II                  | → 🖸 34, 🖺 27 |
| ► Sample conditioning PA-2 (without screen) | → 🖸 35, 🖺 28 |
| ► Sample conditioning PA-3 (without screen) | → 🗷 35, 🖺 28 |



A0060401

 $\blacksquare$  33 Angled coupling D 4/6 × G<sup>1</sup>/<sub>4</sub>" PP on the sample channel switching

1 Angled coupling D 4/6 ×  $G\frac{1}{4}$ " PP



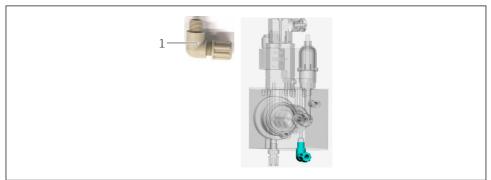
■ 34 Angled coupling D  $4/6 \times G\frac{1}{4}$ " PP on stripping vessel type II



 $\blacksquare$  35 Angled swivel coupling D 4/6  $\times$  G½" PP on sample conditioning system PA-2 / PA-3 (illustrative depiction of sample conditioning system PA-2)

## 6.17 Angled coupling D 4/6 × G1/8" PP

► Water connection without dilution → 🖻 36, 🖺 29

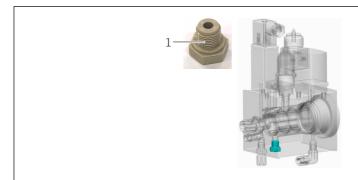


A0057386

- $\blacksquare$  36 Angled coupling D 4/6 × G1/8" AG PP on water connection without dilution
- 1 Angled coupling D 4/6 × G 1/8" PP

## 6.18 Plug G1/8" PP

► Water connection without dilution ⇒ 📵 37, 🖺 29

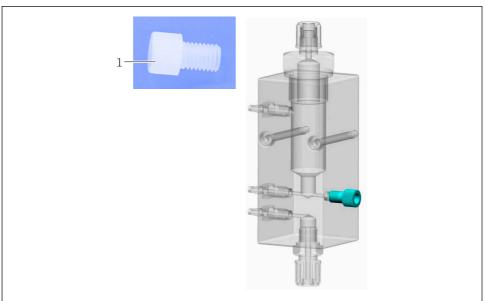


A0057387

- 37 Plug G<sup>1</sup>/<sub>8</sub>" PP in water connection without dilution
- 1 Plug G 1/8" PP

## 6.19 Coupling with short thread $\frac{1}{8}$ " × 28UNF ETFE

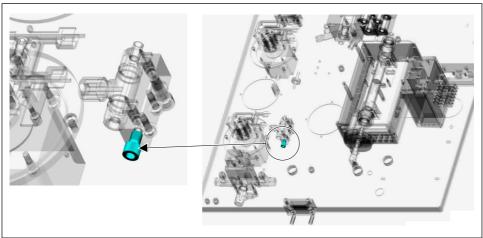
| ► Mixing chamber                            | → 🖸 38, 🖺 30 |
|---|--------------|
| ► Acid pump adapter                         | → 🖪 39, 🖺 31 |
| ► Adapter for condensate drain, acid supply | → 🛮 40, 🖺 31 |



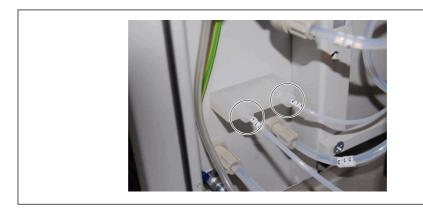
A0057388

 $\blacksquare$  38 Coupling with short thread %" × 28UNF ETFE on the mixing chamber

1 Coupling with short thread 1/8" × 28UNF ETFE



 $\blacksquare$  39 Coupling with short thread % × 28UNF ETFE on acid pump adapter



A0057390

 $\blacksquare$  40 Coupling with short thread %" × 28UNF ETFE on condensate drain adapter for acid supply

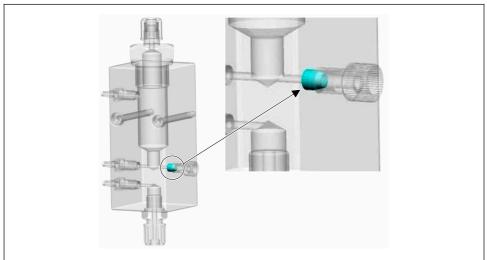
# 6.20 Cone for coupling $\frac{1}{8}$ " × 28UNF ETFE

| ► Adapter for condensate drain, acid supply | → 🖸 41, 🖺 32 |
|---|--------------|
| ► Mixing chamber                            | → • 42, • 32 |
| ► Stripping chamber type II                 | → 🖸 44, 🖺 33 |
| ► Acid pump adapter                         | → 🖸 43, 🖺 33 |
| ► Condensate pump adapter                   | → • 44, • 33 |



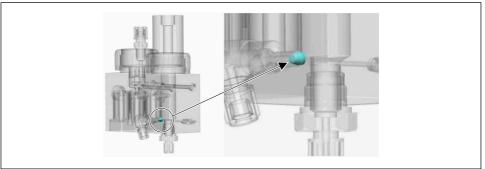
 $\blacksquare$  41 Cone for coupling  $\ensuremath{\ensuremath{\ensuremath{\mathcal{W}}}}" \times 28 \ensuremath{\ensuremath{\mathsf{UNF}}} \ensuremath{\ensuremath{\mathsf{ETFE}}}$  on condensate adapter for acid supply

1 Cone for coupling 1/8" × 28UNF ETFE

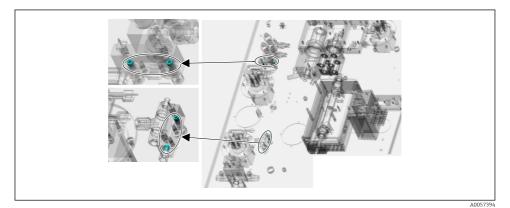


A0057392

 $\blacksquare$  42 Cone for coupling 1/8"  $\times$  28UNF ETFE in the mixing chamber



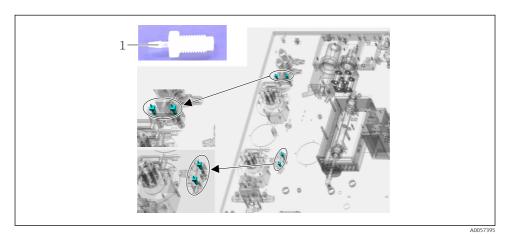
 $\blacksquare$  43 Cone for coupling % × 28UNF ETFE in the stripping chamber type II



■ 44 Cone for coupling 1/8" × 28UNF ETFE in the condensate pump adapter (above) and in the acid pump adapter (below)

## 6.21 Coupling with nozzle $\frac{1}{4}$ " × 28 D 1.55 ETFE

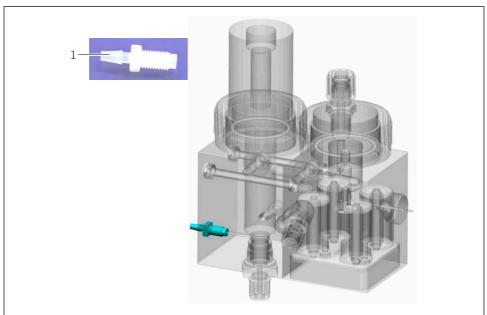
| ► Acid pump adapter       | → 🖸 45, 🖺 34 |
|---------------------------|--------------|
| ► Condensate pump adapter | → • 45, • 34 |



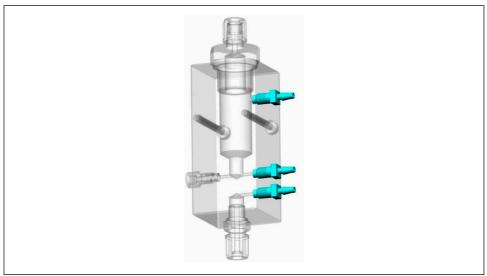
■ 45 Coupling with nozzle ¼" × 28 D 1.55 ETFE in the condensate pump adapter (above) and in the acid pump adapter (below)

#### 6.22 Coupling with nozzle $\frac{1}{4}$ " × 28 D 3.20 ETFE

| ► Stripping chamber type II | → • 46, • 35 |
|-----------------------------|--------------|
| ► Mixing chamber            | → 🖸 47, 🖺 35 |
| ► Sample pump adapter       | → 🖸 48, 🖺 36 |

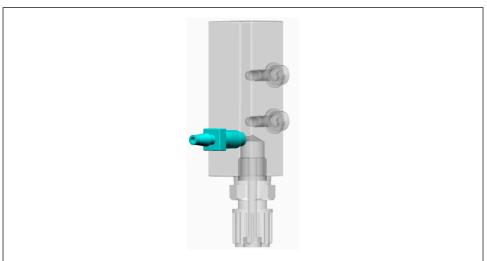


- $\blacksquare$  46 Coupling with nozzle  $\frac{1}{4}$ "  $\times$  28 D 3.2 ETFE in stripping chamber type II
- 1 Coupling with nozzle ¼" × 28 D 3.2 ETFE



A0057397

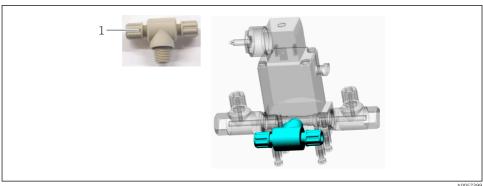
 $\blacksquare$  47 Coupling with nozzle  $\frac{1}{4}$ " × 28 D 3.2 ETFE on the mixing chamber



Coupling with nozzle  $\frac{1}{4}$ " × 28 D 3.2 ETFE on the sample pump adapter € 48

#### Coupling D $4/6 \times G\frac{1}{4}$ " $\times 4/6$ PP 6.23

| ► Solenoid valve, 3/2, aggressive medium     | → • 49, • 36 |
|--|--------------|
| ► Solenoid valve, 3/2-way, with backflushing | → ■ 49, ■ 36 |

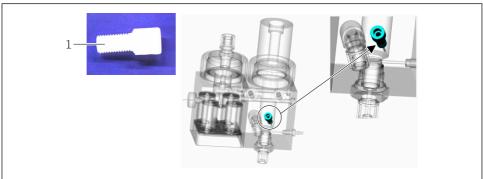


Coupling D  $4/6 \times G^{1/4}$ "  $\times$  4/6 PP with O-ring, FPM, on solenoid valve, 3/2-way € 49

Coupling D  $4/6 \times G\frac{1}{4}$ "  $\times$  4/6 PP with O-ring, FPM

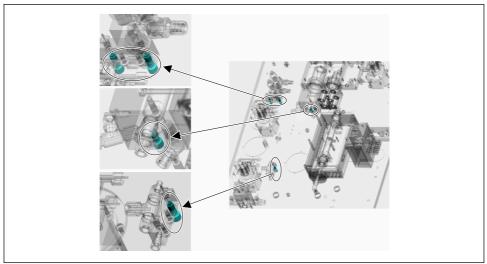
## 6.24 Long coupling $\frac{1}{8}$ " / $\frac{1}{4}$ " × 28UNF ETFE

| ► Stripping vessel type II                  | → 🖸 50, 🖺 37 |
|---|--------------|
| ► Condensate pump adapter                   | → 🖸 51, 🖺 37 |
| ► Adapter for condensate drain, acid supply | → 🖸 51, 🖺 37 |
| ► Acid pump adapter                         | → 🖸 51, 🖺 37 |



A0057400

- 50 Long coupling  $\frac{1}{8}$  /  $\frac{1}{4}$ " × 28UNF ETFE in stripping vessel type II
- 1 Long coupling 1/8" / 1/4" × 28UNF ETFE



A0057401

■ 51 Long couplings 1/8" / 1/4" × 28UNF ETFE

## 6.25 Coupling D 3.2 × GL 14 PVDF

► Cooler, glass insert below → © 52, 🗎 38



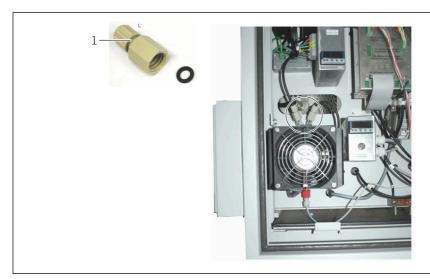
A0057402

 $\blacksquare$  52 Coupling D 3.2  $\times$  GL 14 PVDF on cooler, glass insert below

1 Coupling D 3.2 × GL 14 PVDF

## 6.26 Coupling D 4/6 × GL 14 PP

| ► Cooler, glass insert above | → 🖻 53, 🖺 39 |
|------------------------------|--------------|
|------------------------------|--------------|



Δ0057403

■ 53 Coupling D 4/6 × GL 14 PP on cooler, glass insert above

1 Coupling D 4/6 × GL 14

#### 7 Final tasks

- 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 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.



www.addresses.endress.com