

# Assembly for pH/Redox Measurement *FlowFit W CPA 250*

## Flow Assembly for pH or Redox Electrodes



### Areas of application

The assemblies of the CPA 250 family allow mounting of pH or redox electrodes, temperature sensors or of the compact electrode system CPA 320. They are designed for installation in pipelines »bypass« or »online«.

Inlet and outlet of the fluid lie on one axis. Due to especially designed internal fluid deviation and siphon, the electrodes are kept wet even when the flow is interrupted.

### Benefits at a glance

- Mounting places for max. three sensors Pg 13.5 (pH, redox, temperature) or CPA 320
- A threaded sealing cap ensures easy access to the electrodes in the flow compartment and allows calibration and cleaning without sensor removal
- The sensor connection compartment is protected by a removable cover
- Potential matching pin built in as standard (material: stainless steel SS 316Ti or titanium)
- The electrolyte reservoir CPY 7 or the cleaning system Chemoclean can be retrofitted.

Endress + Hauser

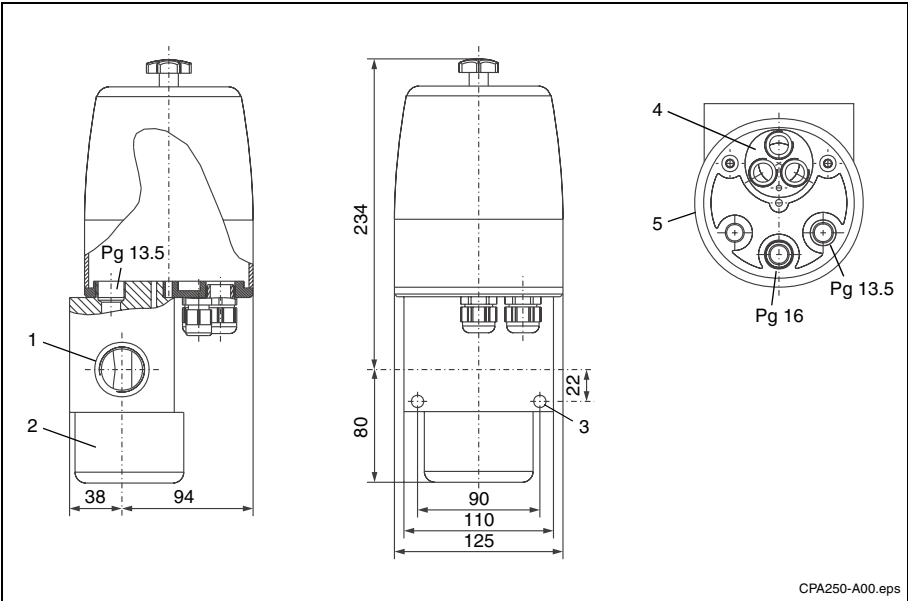
The Power of Know How



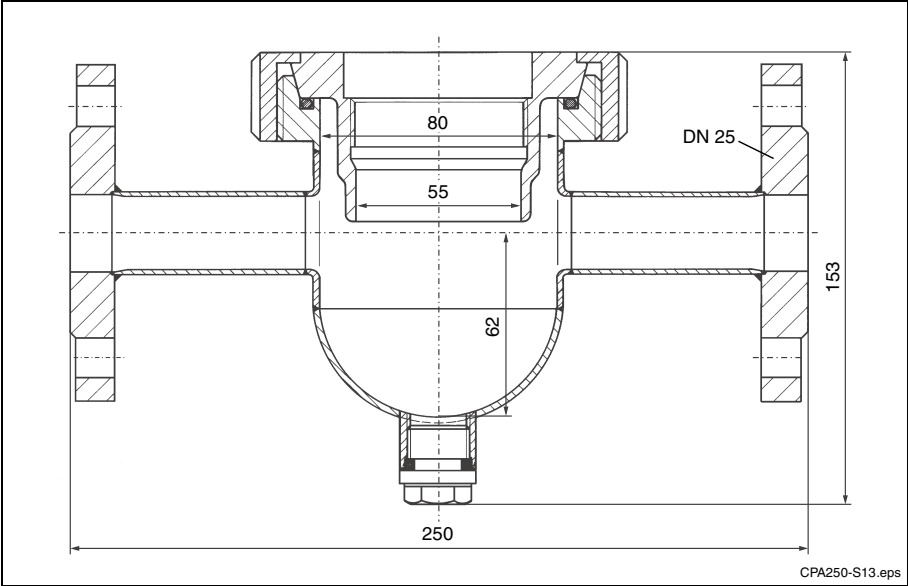
# Mounting and dimensions

CPA 250-A00/01 with three electrode mounting places, material PP, with connection thread G 1

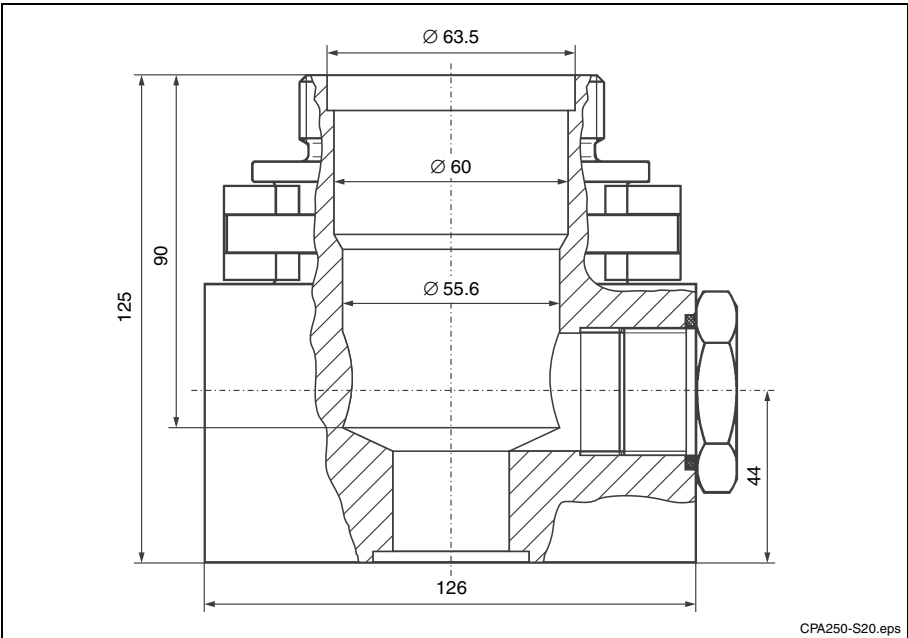
- 1 Connection thread G 1, nominal flow diameter DN 20
- 2 Cap (measuring chamber) for calibration and cleaning, unscrewable
- 3 Two mounting holes, Ø 9 mm
- 4 Three electrode mounting places
- 5 Electrode mounting plate (drawn without cover and seal)



CPA 250-S13 for compact electrode system CPA 320, material SS 316Ti, with flange DN 25



CPA 250-S20 for compact electrode system CPA 320, material PVDF, with connection thread G 1



# Accessories



left:  
Pressure electrolyte  
reservoir CPY 7 for  
wall mounting

right:  
Spray head  
Chemoclean CPR 3

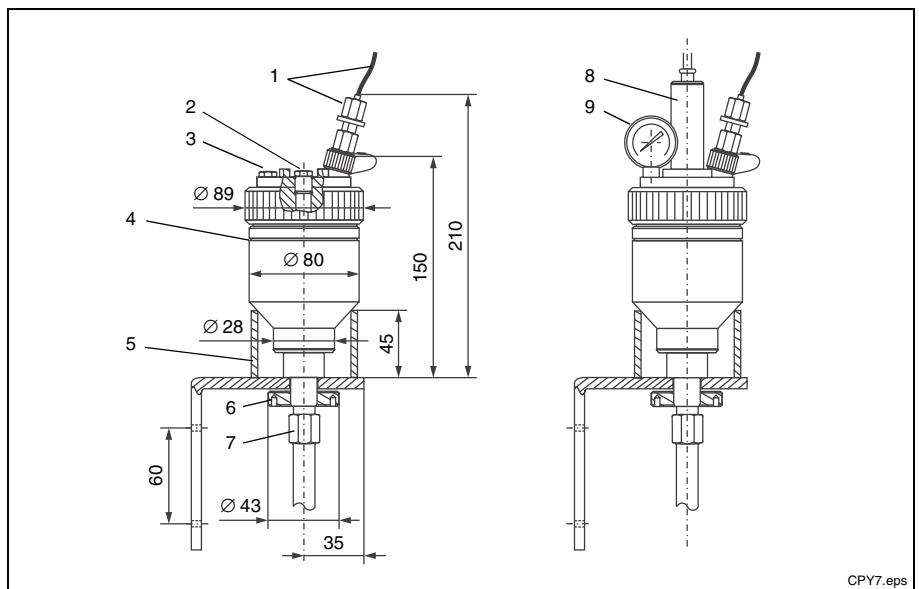
CPA250eh.tif

CPA250ch.tif

- Electrolyte reservoir CPY 7  
It is used to supply unpressurised or pressurised electrodes filled with liquid electrolyte. If a reference electrode is installed, the reservoir can be used as an electrolyte bridge device.  
The delivery includes:
  - Distance tube
  - Pg 9 gland with connecting hose
  - Pressure hose and hose couplings with check valve for pressurised applications
  - Wall mounting support (optional)
- Chemoclean CPR 31 / CPR 3,  
automatic spray cleaning systems for hydromechanical-chemical cleaning of the electrodes

left:  
Electrolyte reservoir  
CPY 7 with wall  
mounting support  
1 Compressed-air  
supply with check  
valve (CPY 7-B only)  
2 Dummy plug for  
reference electrode  
3 Dummy plug for  
manometer  
(CPY 7-B only)  
4 Filling mark  
5 Distance tube  
6 Fastening nut M 20  
for electrolyte  
reservoir  
7 Coupling nut 14 AF

right:  
Electrolyte reservoir  
CPY 7 with wall  
mounting support,  
reference electrode  
and manometer  
8 Reference electrode  
9 Manometer



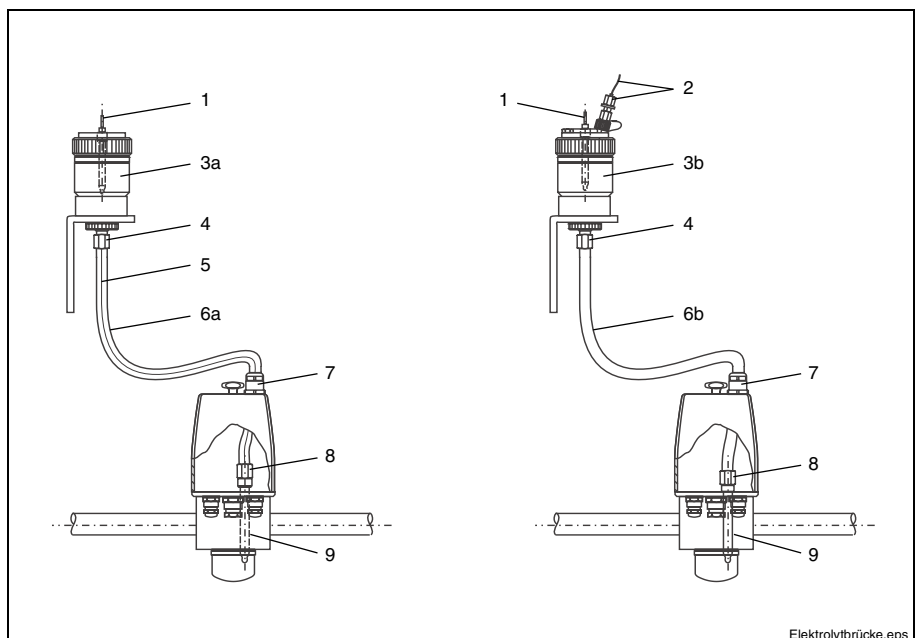
CPY7.eps

CPA 250 with electrolyte  
reservoir CPY 7 as an  
electrolyte bridge

left:  
Unpressurised  
application

right:  
Pressurised application

- 1 Reference electrode
- 2 Compressed-air  
supply with check  
valve
- 3a CPY 7-A0
- 3b CPY 7-B0
- 4 Coupling nut for hose  
connection of the  
electrolyte reservoir
- 5 Special wick
- 6a Silicon hose
- 6b PE pressure hose
- 7 Pg 9 gland
- 8 Coupling nut for hose  
connection of the  
diaphragm tube
- 9 Diaphragm tube



Elektrolytbrücke.eps

# Technical data

## General specifications

Manufacturer	Endress+Hauser
Product designation	FlowFit W CPA 250

## Mounting

PP and PVDF versions	screw socket G 1 DN 20
Stainless steel version	flange DN 25

## Materials in contact with medium

CPA 250-A0x	PP
CPA 250-S13	stainless steel SS 316Ti
CPA 250-S20	PVDF
O-rings	EPDM
Potential matching pin	stainless steel SS 316Ti, at CPA 250-A01 titanium

## Operating pressure and temperature

PP and PVDF versions	6 bar at 20 °C, unpressurised at 90 °C
Stainless steel version	6 bar at 115 °C

## Mechanical data

Cable entry	Pg 16, Pg 13.5
Electrode mounting places	max. 3
Usable spray heads	CPR 31, CPR 3
Measuring chamber cap for calibration and cleaning	unscrewable

Subject to modifications.

# Product structure

pH flow assembly FlowFit W CPA 250	
<div><div><div>Design</div><div>A With 3 electrode mounting places</div><div>S For compact electrode system CPA 320</div></div><div><div>Material / connection</div><div>00 PP, potential matching pin of SS 316Ti / thread G 1, design A</div><div>01 PP, potential matching pin of titanium / thread G 1, design A</div><div>13 SS 316Ti / flange DN 25, design S</div><div>20 PVDF / thread G 1, design S</div></div></div>	
<div>CPA 250-<div><div></div><div></div><div></div></div></div>	complete order code

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