

Flow Assembly for pH and Redox Sensors *FlowFit P CPA 240*

pH flow assembly for demanding processes with high requirements. Sensor holder with three electrode mounting positions



The flow assembly CPA 240 is intended for the installation of pH, Redox and temperature sensors in pipes.

Areas of application

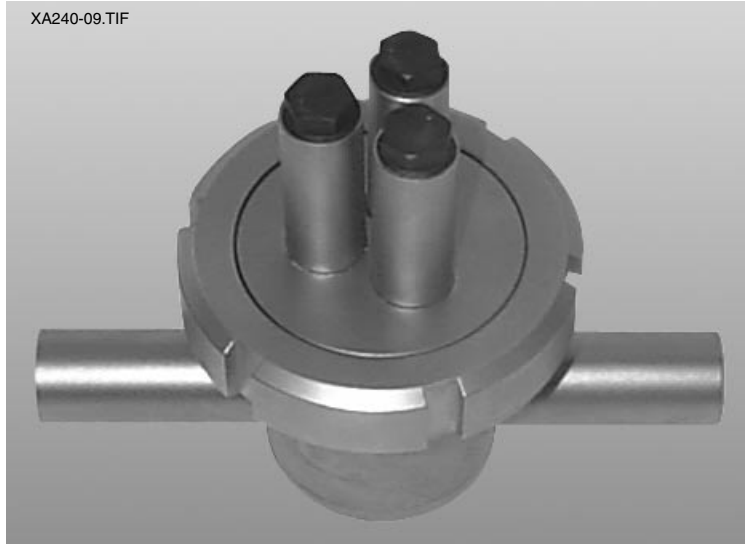
- pH/Redox measurements in
 - drinking water treatment plants
 - boiler feedwater and ultra-pure water plants
 - cooling-water circuits
 - fertiliser production
 - sugar production
 - gas scrubbers
 - petrochemical plants

Benefits at a glance

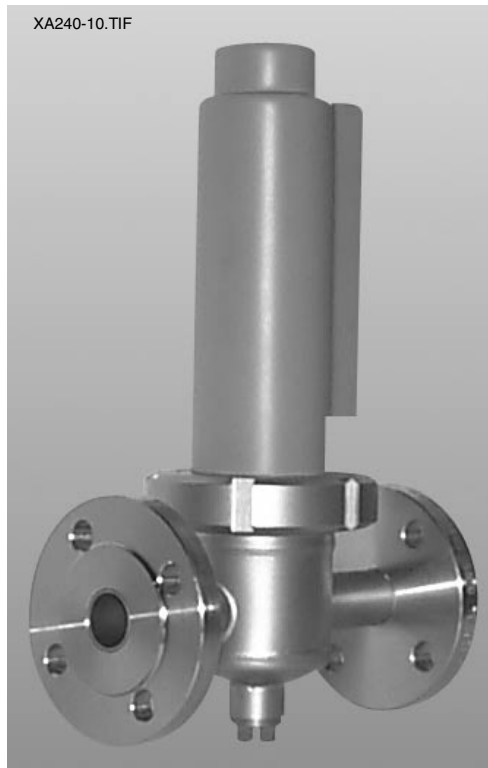
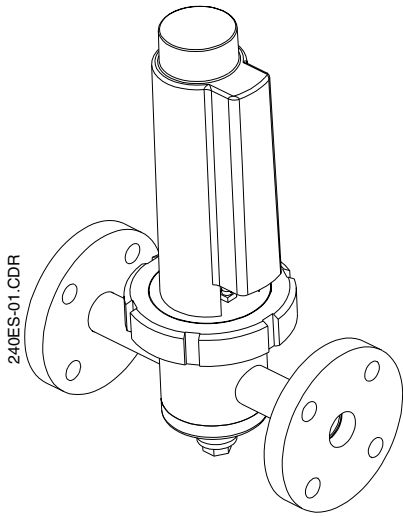
- Simple installation and removal of the electrode holder (e.g. for calibration)
- Three mounting positions for sensors and cleaning
- Integrated potential matching pin made of Hastelloy C4 or tantalum
- Flexible connection to the process by means of various connectors and installation versions
- Suitable for use at high pressures and temperatures (up to 10 bar and 150 °C)
- Integrated sampling connector
- Sensor terminals protected by a removable cover
- Spray and ultrasonic cleaning can be retrofitted easily



Stainless steel version

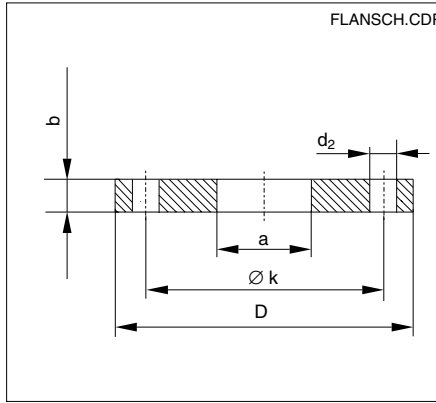


Assembly with welding adapter for connection to DN 25 pipes (without protection cover and electrodes)



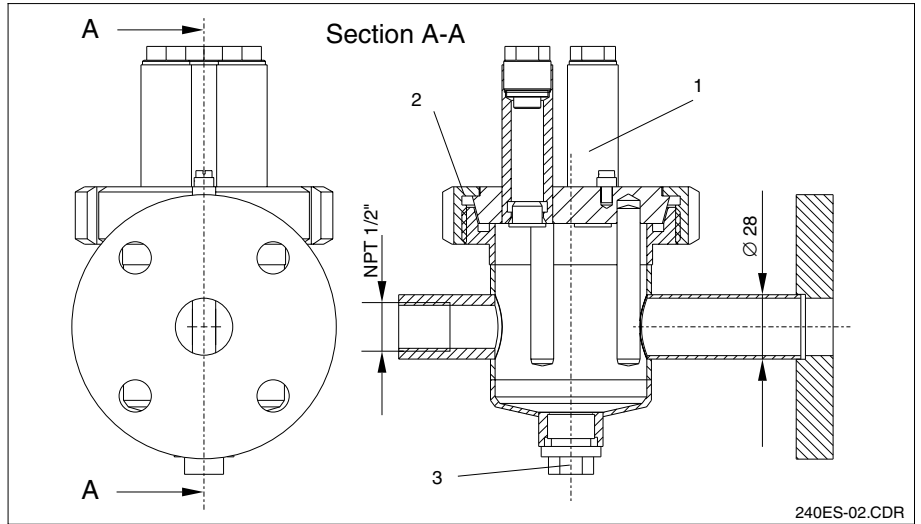
Assembly with horizontal flow vessel and DN 25 flanges

Stainless steel version



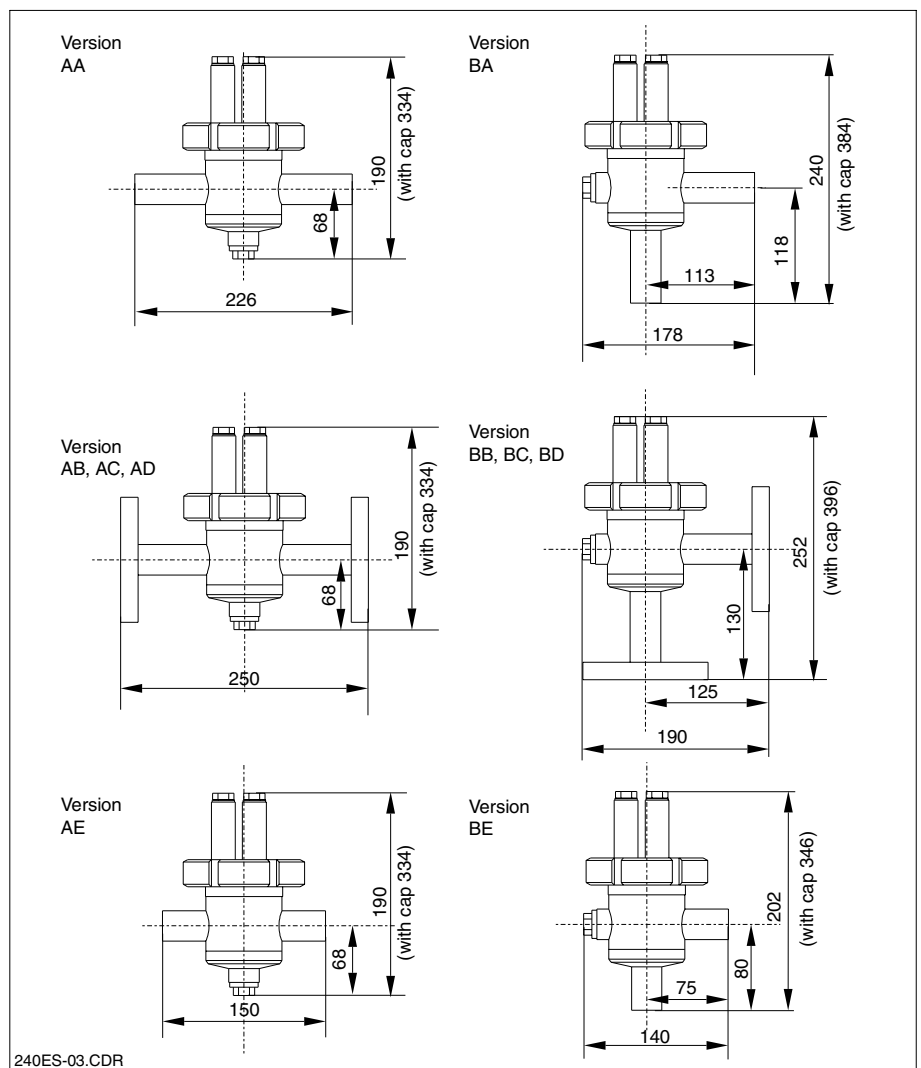
	Flange		
	DN 25 PN 16	ANSI 1" 150 lbs	JIS 10K 25A
D	115	108	125
Ø k	85	79	90
d ₂	14	16	19
b	14	14	14
a	-	-	-
Screws	M 12	M 12	M 16

Flange dimensions



Construction of the stainless steel assembly (two different versions):
- with NPT 1/2" on the left
- with DN 25 flange on the right

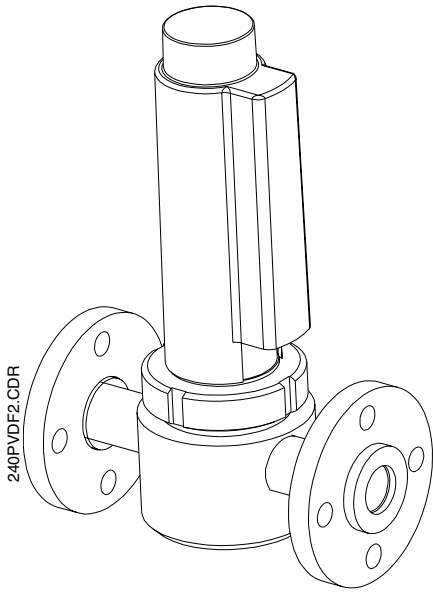
- 1 Electrode holder
- 2 Union nut
- 3 Drain screw



Versions of stainless steel assembly CPA 240:

The protection cover supplied with the assembly is not shown. Required mounting clearance above protection cover: 120 mm.

PVDF version



Assembly with protection cover

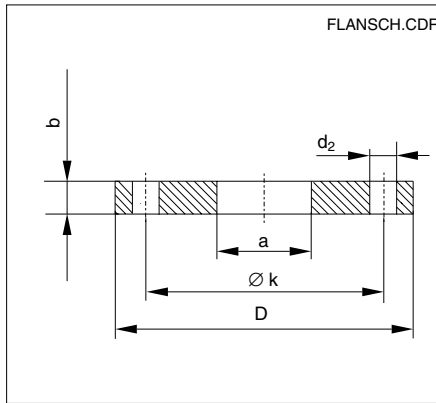


Electrode holder with one electrode and two dummy plugs



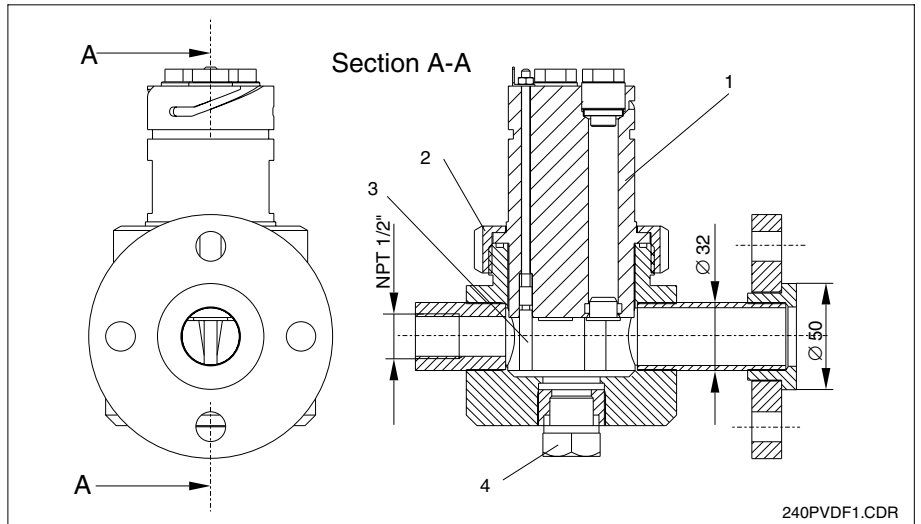
Electrode holder with installed electrode; flow vessel with flange

PVDF version



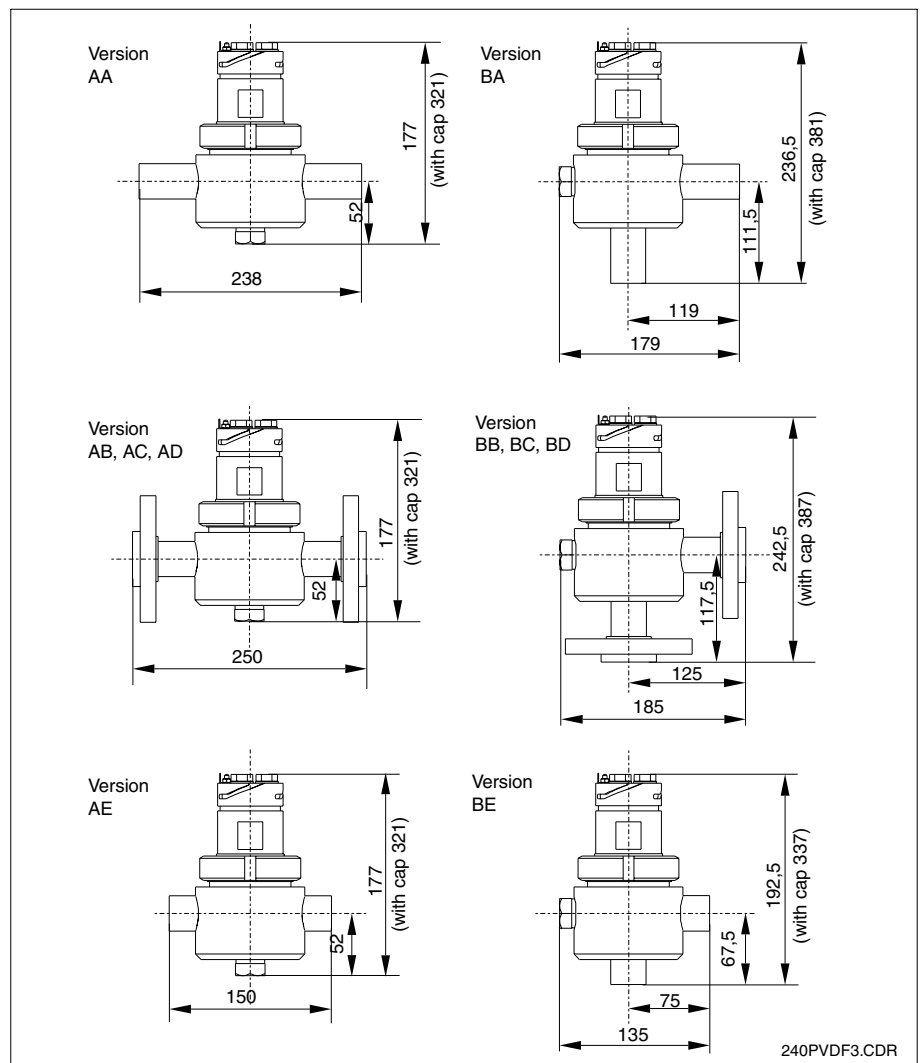
	Flange		
	DN 25 PN 16	ANSI 1" 150 lbs	JIS 10K 25A
D	115	115	125
Ø k	85	79	90
d ₂	14	16	19
b	14	14	14
a	42	42	42
Screws	M 12	M 12	M 16

Dimensions of loose flange



Construction of the stainless steel assembly (two different versions):
 - with NPT 1/2" on the left
 - with DN 25 flange on the right

- 1 Electrode holder
- 2 Union nut
- 3 Potential matching pin (PAL)
- 4 Drain screw



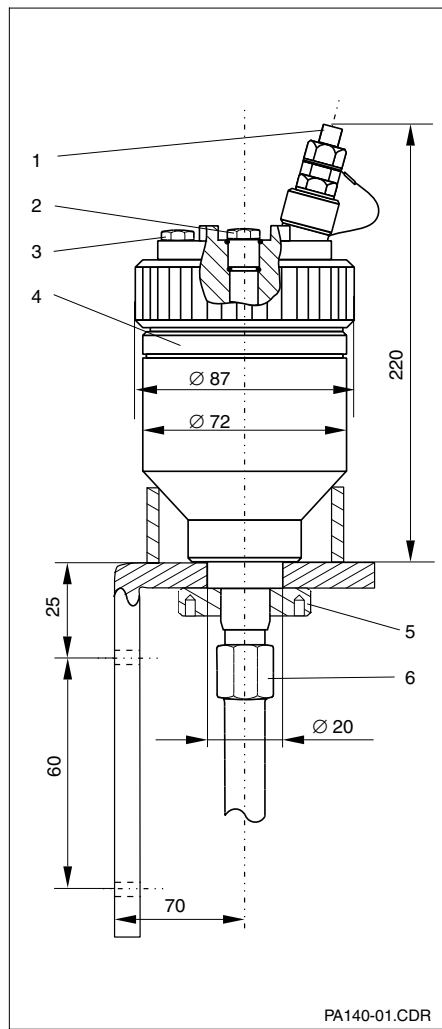
Versions of PVDF assembly CPA 240:

The protection cover supplied with the assembly is not shown. Required mounting clearance above protection cover: 120 mm.

Accessories

KCl reservoir CPY-7
(wall-mounted version):

- 1 Valve
- 2 Dummy plug; reference electrode position
- 3 Dummy plug; manometer position
- 4 Filling mark
- 5 Securing nut for electrolyte vessel
- 6 Hose coupling



KCl reservoir

- for supplying liquid filled pH electrodes with KCl electrolyte
- maximum effective volume 200 ml
- available with wall-mounting bracket

Assembly	PVDF	Stainless steel
Sealing material		
EPDM	50089408	50089412
Viton	50089409	50089413
Chemraz	50089410	50089414
Fluoraz	50089411	50089415

Technical data

General data

Manufacturer	Endress+Hauser Conducta GmbH+Co.
Designation	Flow assembly FlowFit P CPA 240

Number of mounting positions in sensor holder	3 cable glands Pg 13.5
Thread on sampling connection	G 1/2"

Mounting

A	Welding adapter for DN 25 pipe connection (Ø 28 x1.5)
B	Flange DN 25 PN 16
C	Flange ANSI 1", 150 lbs
D	Flange JIS 10K 25A
E	Thread (F)NPT 1/2"

Weight

PVDF	approx. 2 kg
Stainless steel 1.4404	approx. 3-4.5 kg

Materials in contact with medium

Flow vessel	PVDF / stainless steel 1.4404
O rings	EPDM / Viton / Chemraz / Fluoraz
Potential matching pin	Hastelloy C4 / tantalum
Dummy plugs	PEEK

Materials not in contact with medium

Protective cap	PES
Union nut	Stainless steel 1.4301

Operating data

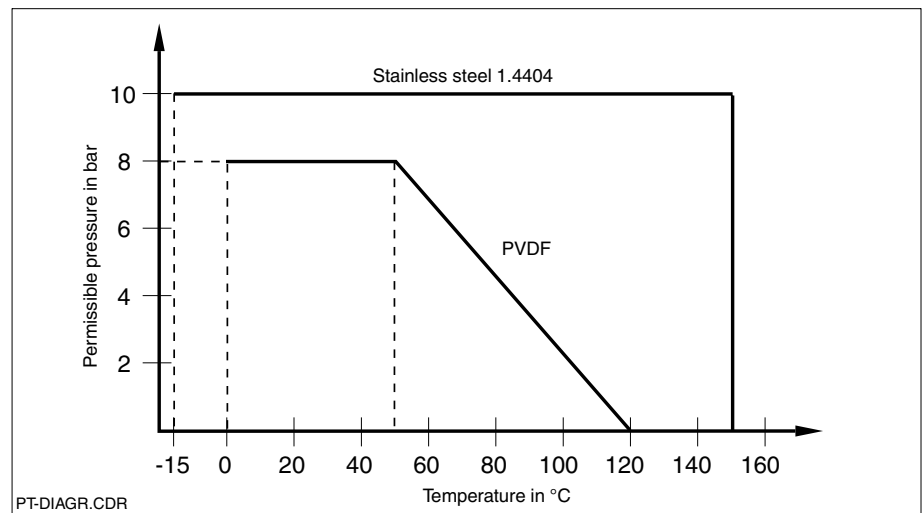
Operating pressure

PVDF version	max. 8 bar (at 50 °C)
Stainless steel 1.4404 version	max. 10 bar

Operating temperature

PVDF version	0 ... +120 °C
Stainless steel 1.4404 version	-15 ... +150 °C (EPDM 140 °C)

Pressure/temperature diagram



Note:

The operating limits of the entire system are determined by the operating limits of the individual components used (assembly, sensors, cables, accessories, etc.)!

How to order

Flow assembly FlowFit P CPA 240

Assembly/PAL material

- 21 PVDF / PAL: Hastelloy C4
- 22 PVDF / PAL: tantalum
- 30 Stainless steel 1.4404
- 99 Special version

Flow vessel

- A horizontal flow
- B with inlet at bottom
- Y Special version

Process connection

- A A Welding adapter for DN 25 pipe connection
- B Flange DN 25 PN 16
- C Flange ANSI 1" 150 lbs
- D Flange JIS 10K 25A
- E Thread (F)NPT 1/2"
- Y Special version

Sealing material

- 1 EPDM
- 2 Viton
- 3 Chemraz
- 4 Fluoraz
- 9 Special version

Features

- 10 Basic version
- 30 Test certificate to EN 10204-3.1B
- 99 Special version

CPA 240-

complete order code

Endress+Hauser GmbH+Co.
- Instruments International -

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Endress + Hauser
Nothing beats know-how

