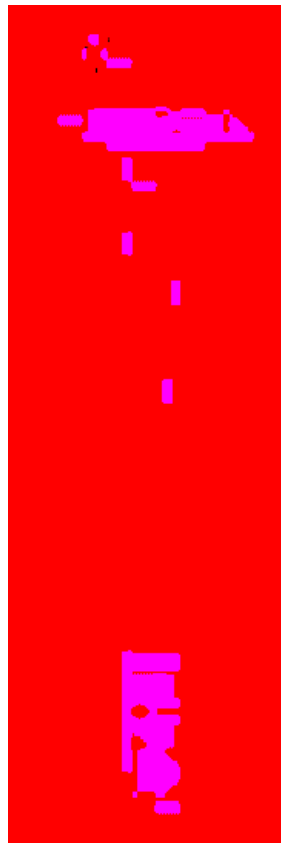
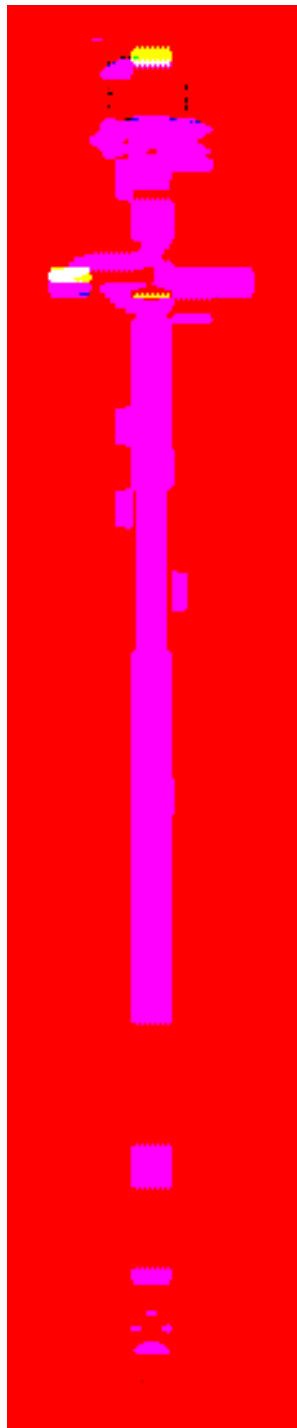


# Immersion Assembly for pH and Redox Sensors *DipFit P CPA 140*

**Immersion assembly with flange connection for  
demanding processes.  
Sensor holder with bayonet lock**



## Areas of application

- pH/Redox measurements in the chemical industry, for example for
  - production of synthetic materials and dyes,
  - production of pesticides and fertilisers;
- pH/Redox measurements in the petrochemical industry, for example for
  - separation of oil and waste water,
  - treatment of condensates;
- pH measurements in the pharmaceutical and cosmetic industries, for example for
  - production of soap,
  - production of proteins,
  - lipolysis;
- pH/Redox measurements in power plants and waste incinerating plants, for example for
  - monitoring of cooling water,
  - scrubbing of exhaust gases;
- pH/Redox measurements in extractive metallurgy and metal processing

## Benefits at a glance

- Simple installation and removal of the electrode holder due to the bayonet mounting method
- Good sealing, even in media containing solid particles, due to the bayonet mounting method
- Suitable for use at high pressures and temperatures (up to 10 bar and max. 150 °C)
- Immersion length from 500 to 2500 mm
- Integrated potential matching pin made of Hastelloy C4 or tantalum
- Reduced condensation due to an active-breathing Goretex® filter
- Three mounting positions for pH, Redox and temperature sensors plus a cleaning head
- Spray and ultrasonic cleaning can be retrofitted easily
- Flexible connection to the process by means of various flanges (DIN, ANSI, JIS)

Quality made by  
Endress+Hauser



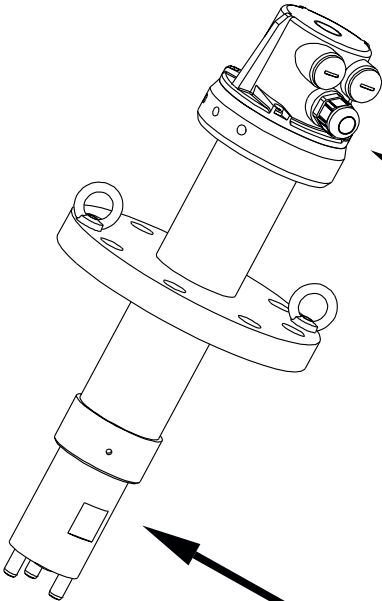
ISO 9001

# Endress + Hauser

Nothing beats know-how

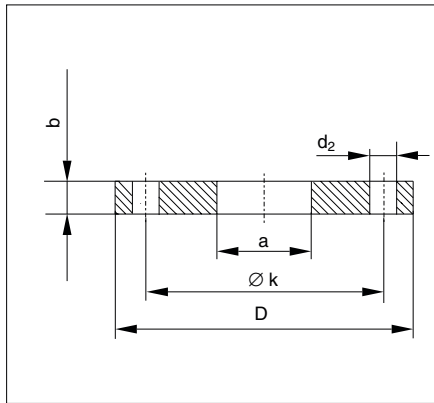


**Stainless steel version**



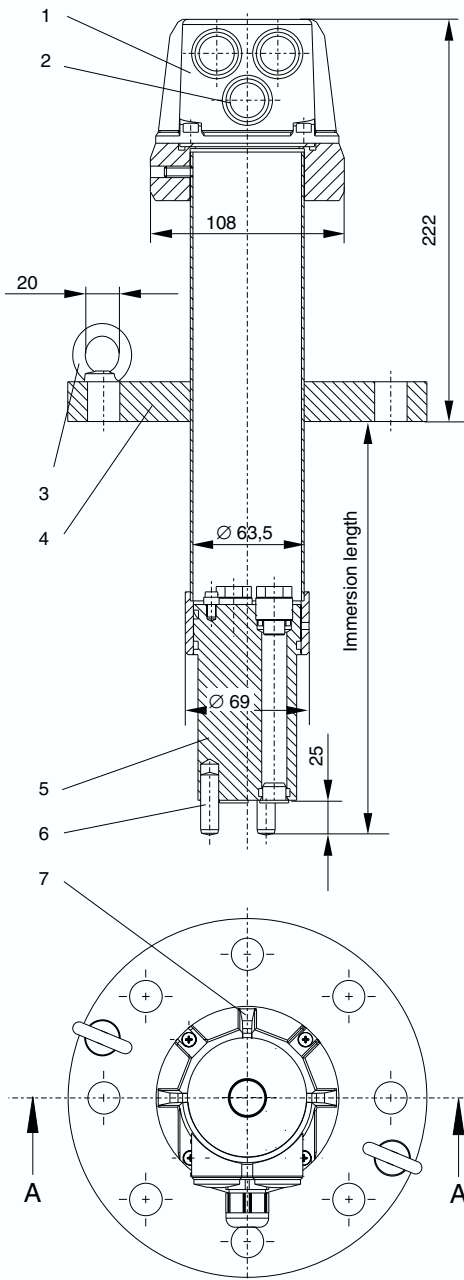
# Stainless steel version

Dimensions of fixed flange

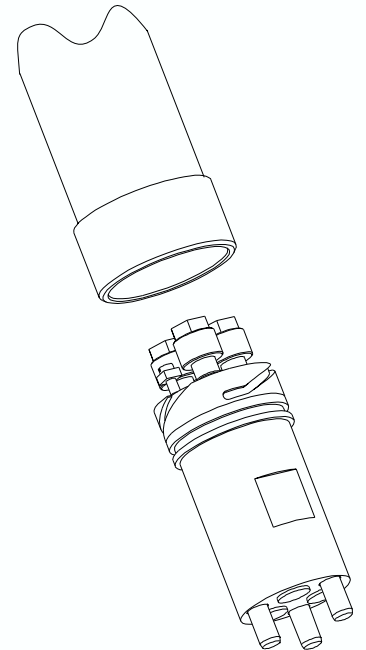


	Flange		
	DN 80 PN 16	ANSI 3" 150 lbs	JIS 10K 80A
D	200	190,5	185
Ø k	160	152,4	150
d <sub>2</sub>	18	19	19
b	20	23,8	18
a	63,5	63,5	63,5
Screws	M 16	M 16	M 16

## Section A-A



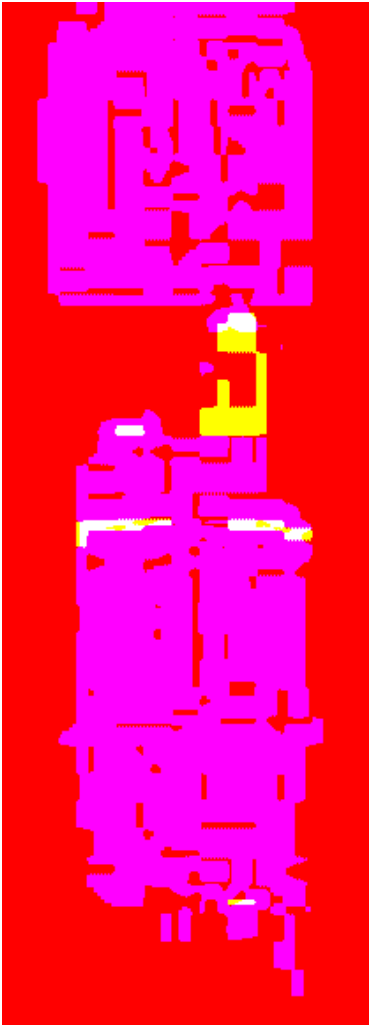
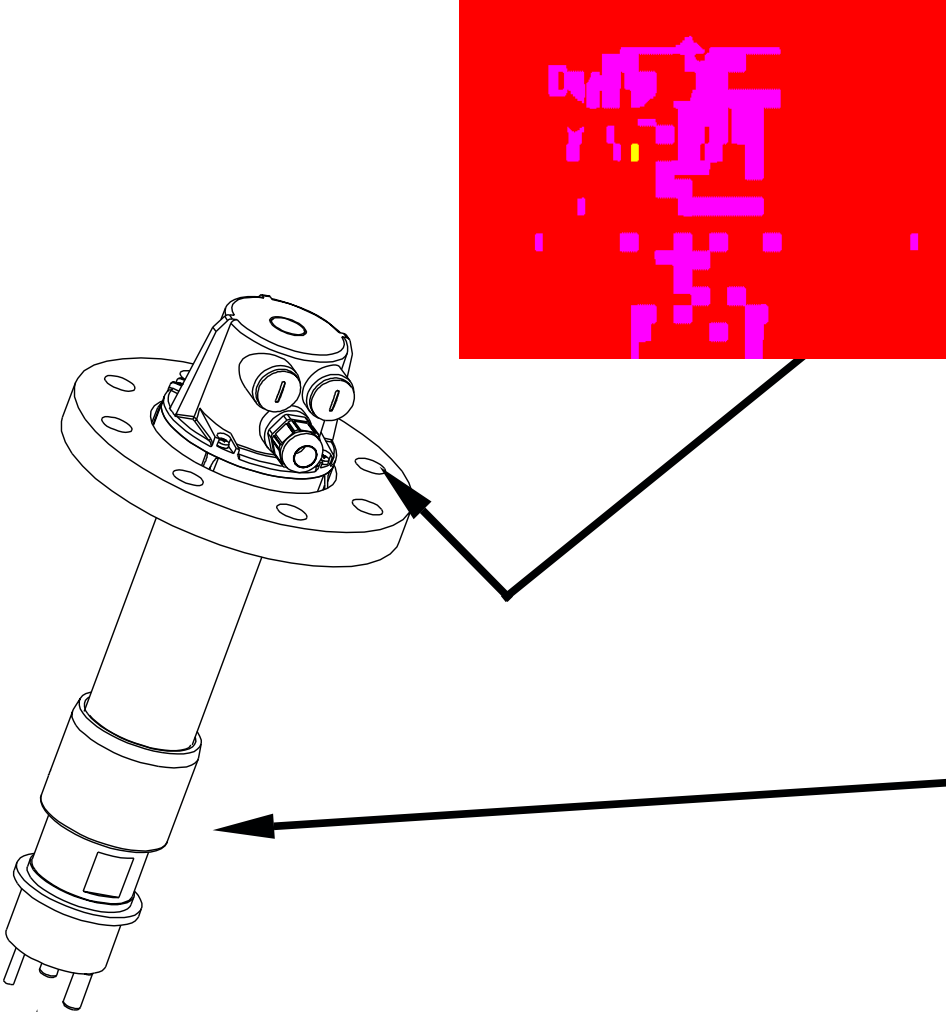
Bayonet mounting



Dimensions of the stainless steel assembly  
DipFit P CPA 140

- 1 Assembly head
- 2 Cable gland Pg 13.5
- 3 Screw-in lifting eyes
- 4 Fixed flange
- 5 Electrode holder
- 6 Shock-protection studs (stainless steel 1.4401)
- 7 Goretex® filter

PVDF version



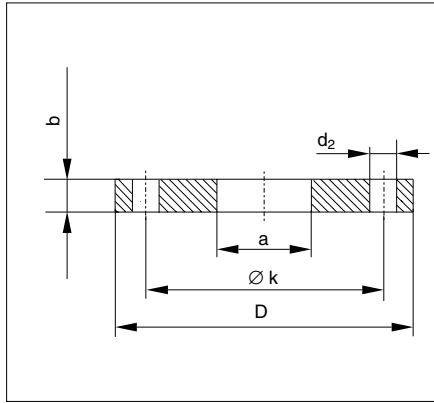
Bottom view of electrode holder with one electrode installed and potential matching pin



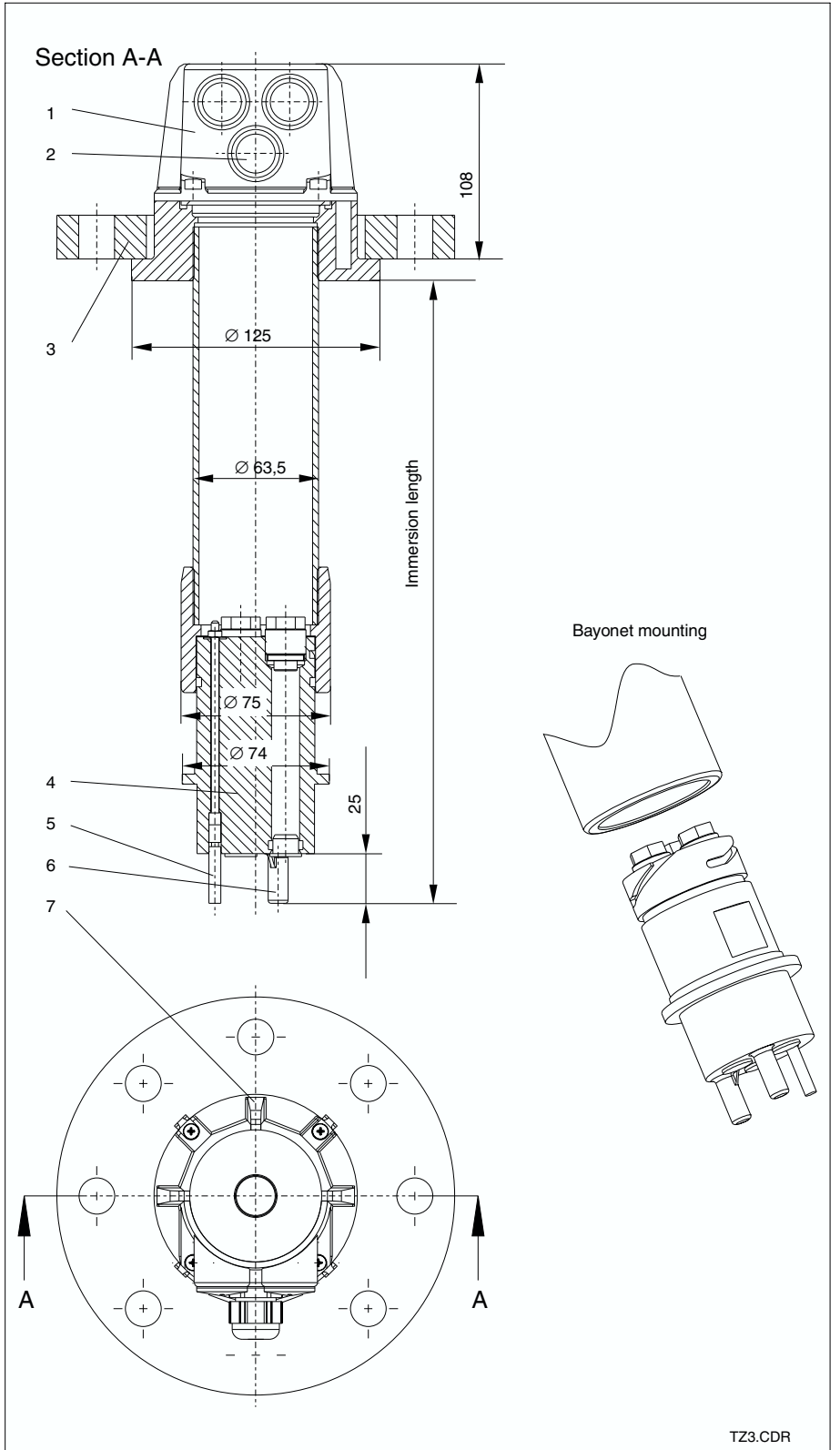
Top view of the electrode holder with one electrode installed

# PVDF version

Dimensions of loose flange



	Flange		
	DN 80 PN 16	ANSI 3" 150 lbs	JIS 10K 80A
D	200	200	185
Ø k	160	152	150
d <sub>2</sub>	18	19	19
b	22	22	18
a	110	110	110
Screws	M 16	M 16	M 16



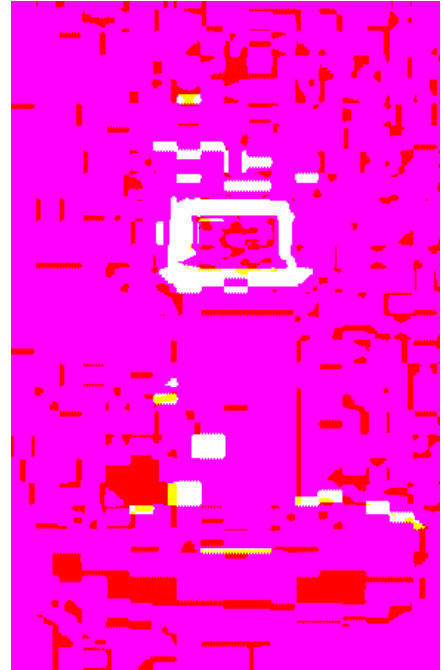
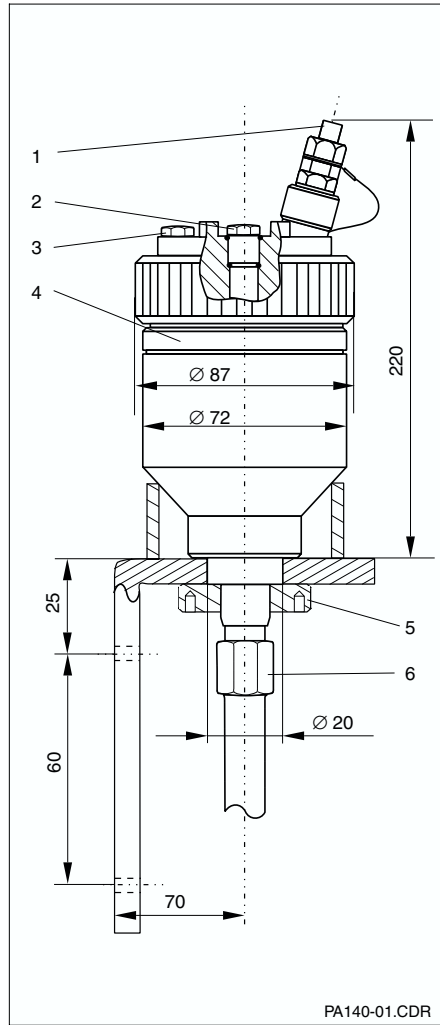
Dimensions of the PVDF assembly DipFit P CPA 140

- 1 Assembly head
- 2 Cable gland Pg 13.5
- 3 Loose flange
- 4 Electrode holder
- 6 Shock-protection studs
- 7 Goretex® filter

## Accessories

KCl reservoir CPY 7:

- 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 mounted on top of the assembly CPA 140

### KCl reservoir

- for supplying liquid filled pH electrodes with KCl electrolyte
- maximum effective volume 200 ml
- available with wall-mounting bracket or
- direct mounting on assembly without further securement

# Technical data

## General data

Manufacturer	Endress+Hauser
Designation	DipFit P CPA 140

## Installation

Immersion length	500 ... 2500 mm
Electrode length	120 mm
Number of mounting positions in sensor holder	3 cable glands Pg 13.5
Required installation cross-section	DN 80
Cable gland	2 cable gland Pg 16; 1 cable glands Pg 13.5

## Mounting

A	Without flange
B	Flange DN 80 PN 16
D	Flange ANSI 3", 150 lbs
E	Flange JIS 10K 80A

## Weight

PVDF (500 mm / 2500 mm)	Approx. 2.5 kg / approx. 3.0 kg
Stainless steel 1.4404 (500 mm / 2500 mm)	Approx. 8.0 kg / approx. 12.0 kg

## Materials in contact with medium

Immersion tube	PVDF / stainless steel 1.4404
O rings	EPDM / Viton / Chemraz / Fluoraz

### Sensor holder

Sensor holder	PVDF / stainless steel 1.4404
Potential matching pin	Hastelloy C4 / tantalum
Shock-protection studs	PVDF / 1.4401
Dummy plugs	PEEK

## Materials not in contact with medium

Protective cap	PP-GF 20
Protective cover for KCl reservoir	Stainless steel 1.4571
Screw-in lifting eyes	Stainless steel 1.4301

## Operating data

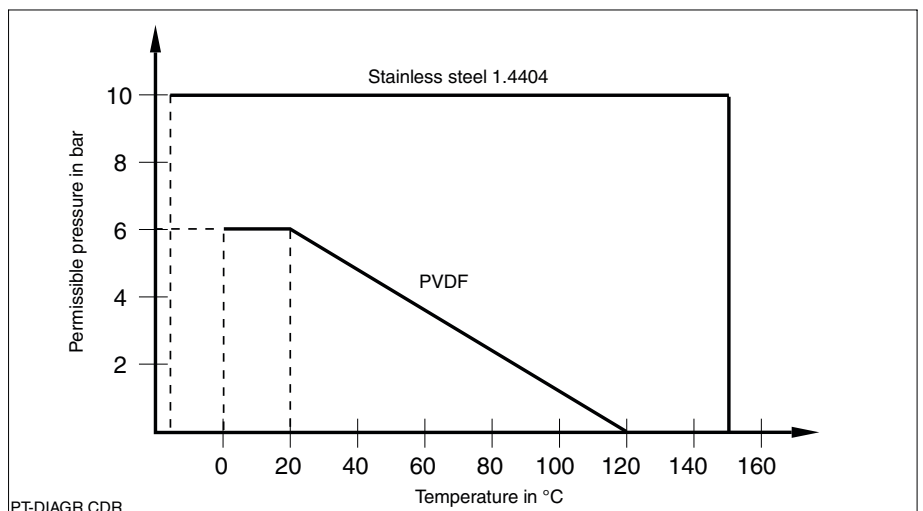
### Operating pressure

PVDF version	Max. 6 bar (at 20 °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.)!

Subject to modifications.

## How to order

### Immersion assembly DipFit P CPA 140

#### Assembly/PAL material

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

#### Immersion length

- 1 500 mm
- 2 1000 mm
- 3 1500 mm
- 4 2000 mm
- 5 2500 mm

#### Process connection

- A Without flange
- B Flange DN 80 PN 16
- D Flange ANSI 3"
- E Flange JIS 10K 80A

#### Gasket material

- 1 EPDM
- 2 Viton
- 3 Chemraz
- 4 Fluoraz

#### Features

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

CPA 140- [ ] [ ] [ ] [ ] [ ]

complete order code

## Accessories

### O-ring sets

- EPDM Order No. 50089296
- Viton Order No. 50089297
- Chemraz Order No. 50089298
- Fluoraz Order No. 50089299

**Endress+Hauser GmbH+Co.**  
**- Instruments International -**

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**Endress + Hauser**  
Nothing beats know-how

