

# Immersion assembly for conductivity measuring cells *DipFit P CLA 140*

**Immersion assembly with flange connection for  
processes with exacting requirements,  
with bayonet-type measuring cell holder**



## **Areas of application**

- Waste water
- Paper industry
- Chemical industry
- Process industry

## **Benefits at a glance**

- Simple installation and removal of the measuring cell holder due to bayonet lock
- Safe sealing even in media containing solids
- Suitable for use at high pressures and temperatures (up to 10 bar and 150 °C)
- Immersion depth from 500 ... 2500 mm
- Reduced condensation due to an active-breathing Goretex® filter
- Flexible process adaptation with various flange types (DIN, ANSI, JIS)

Quality made by  
Endress+Hauser



ISO 9001

# Endress+Hauser

Nothing beats know-how



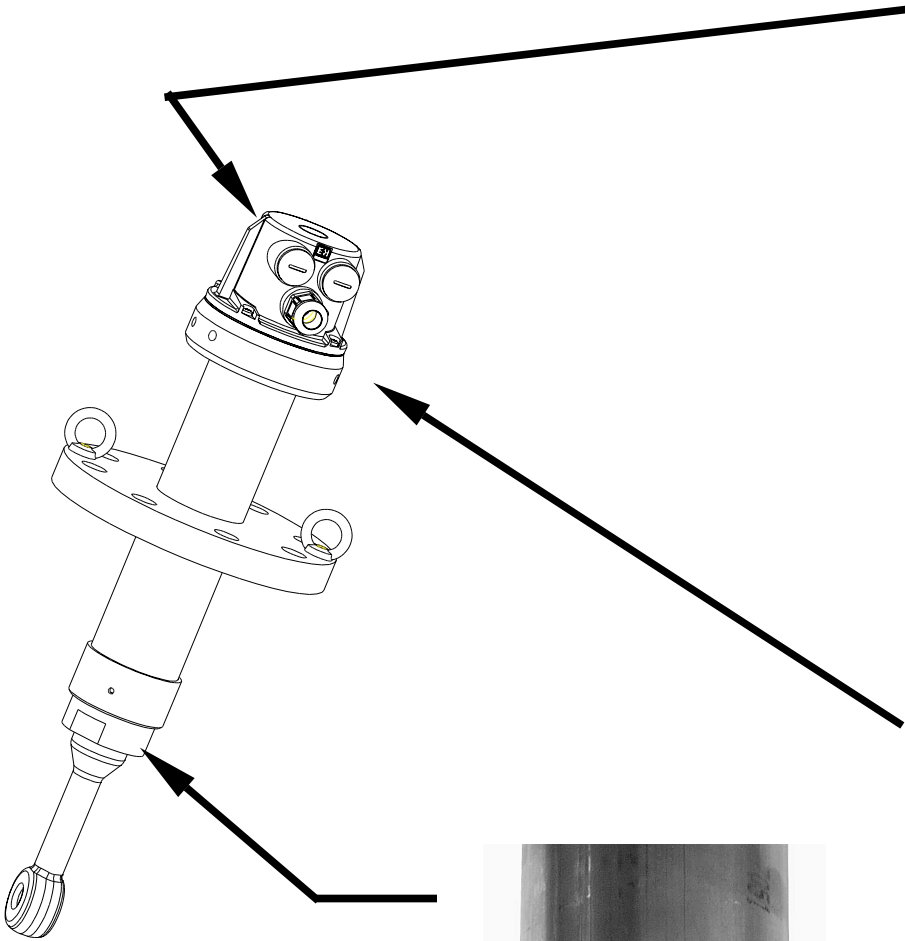
Stainless steel version



Rear view with nameplate and Goretex® filter



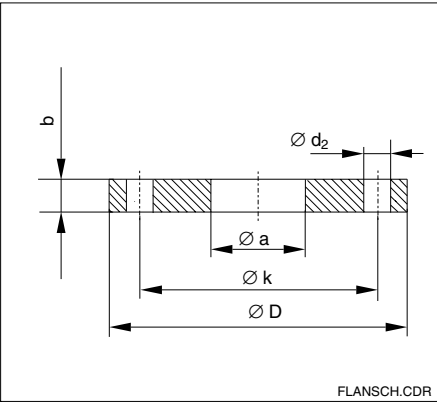
Upper part of assembly; view of flange and assembly head with Pg 13.5 cable gland and Pg 16 plugs



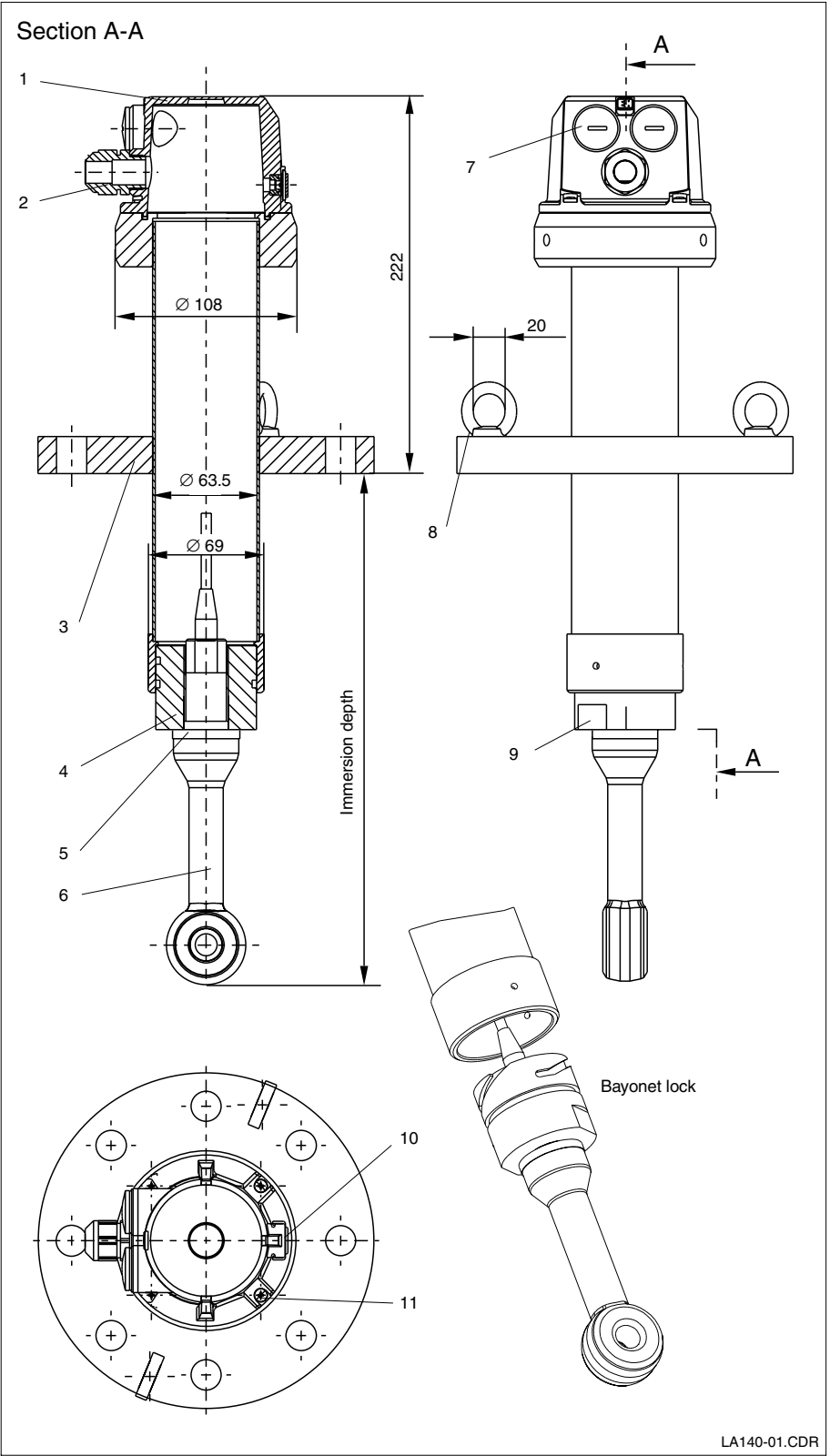
Measuring cell holder with bayonet lock

Stainless steel variant

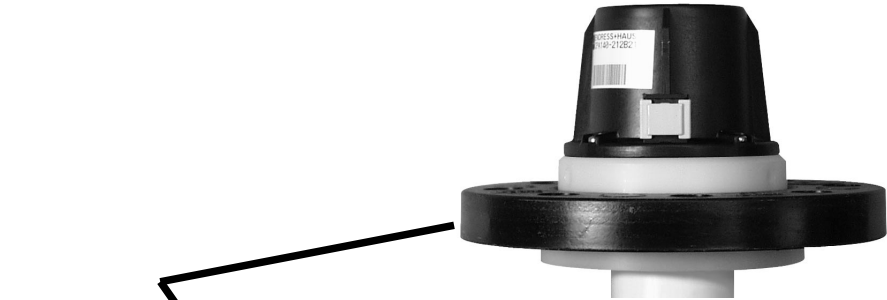
Fixed flange dimensions



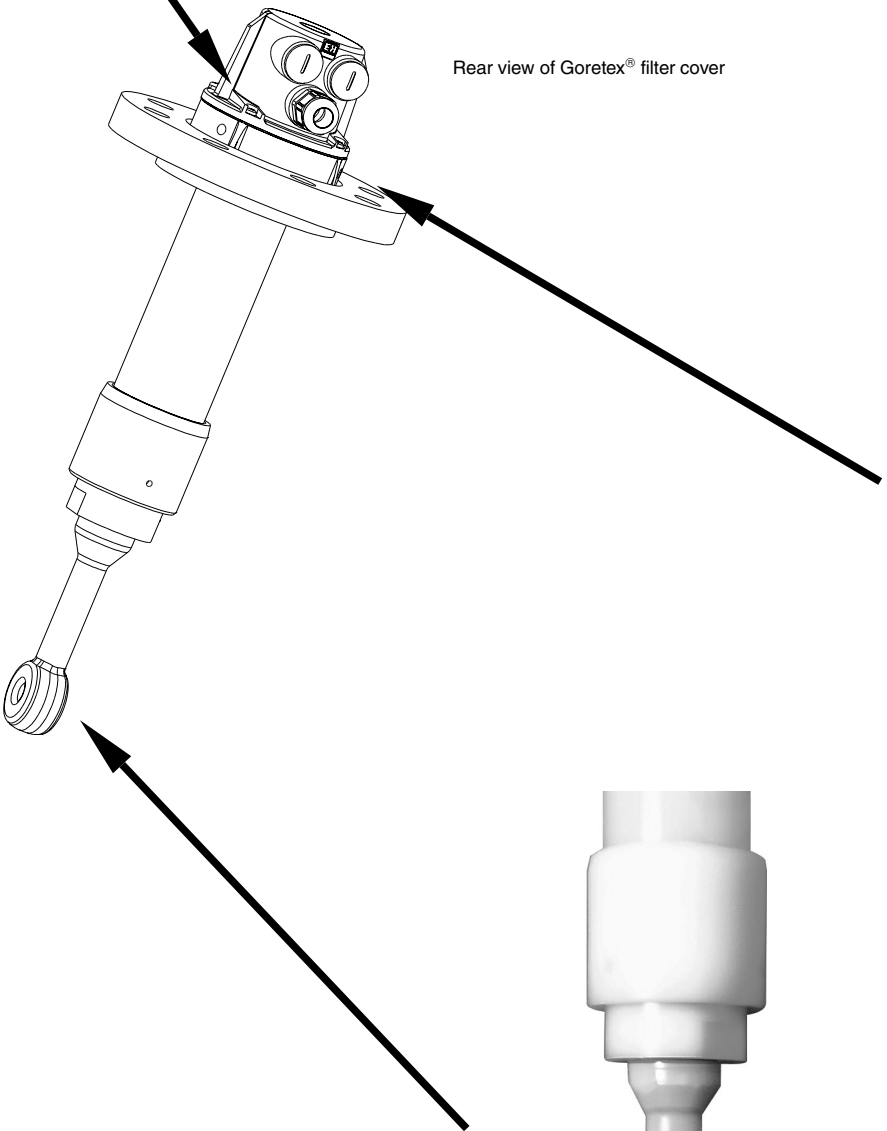
	Flange		
	DN 80 PN 16	ANSI 3" 150 lbs	JIS 10K 80A
Ø D	200	190.5	185
Ø k	160	152.4	150
Ø d <sub>2</sub>	18	19	19
b	20	23.8	18
Ø a	63.5	63.5	63.5
Screws	M 16	M 16	M 16



PVDF version



Rear view of Goretex® filter cover



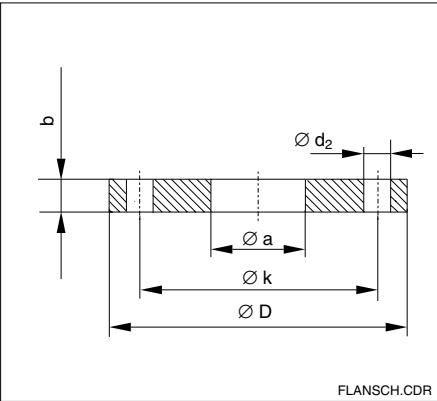
Upper part of assembly; view of flange and assembly head with Pg 13.5 cable gland and Pg 16 plugs



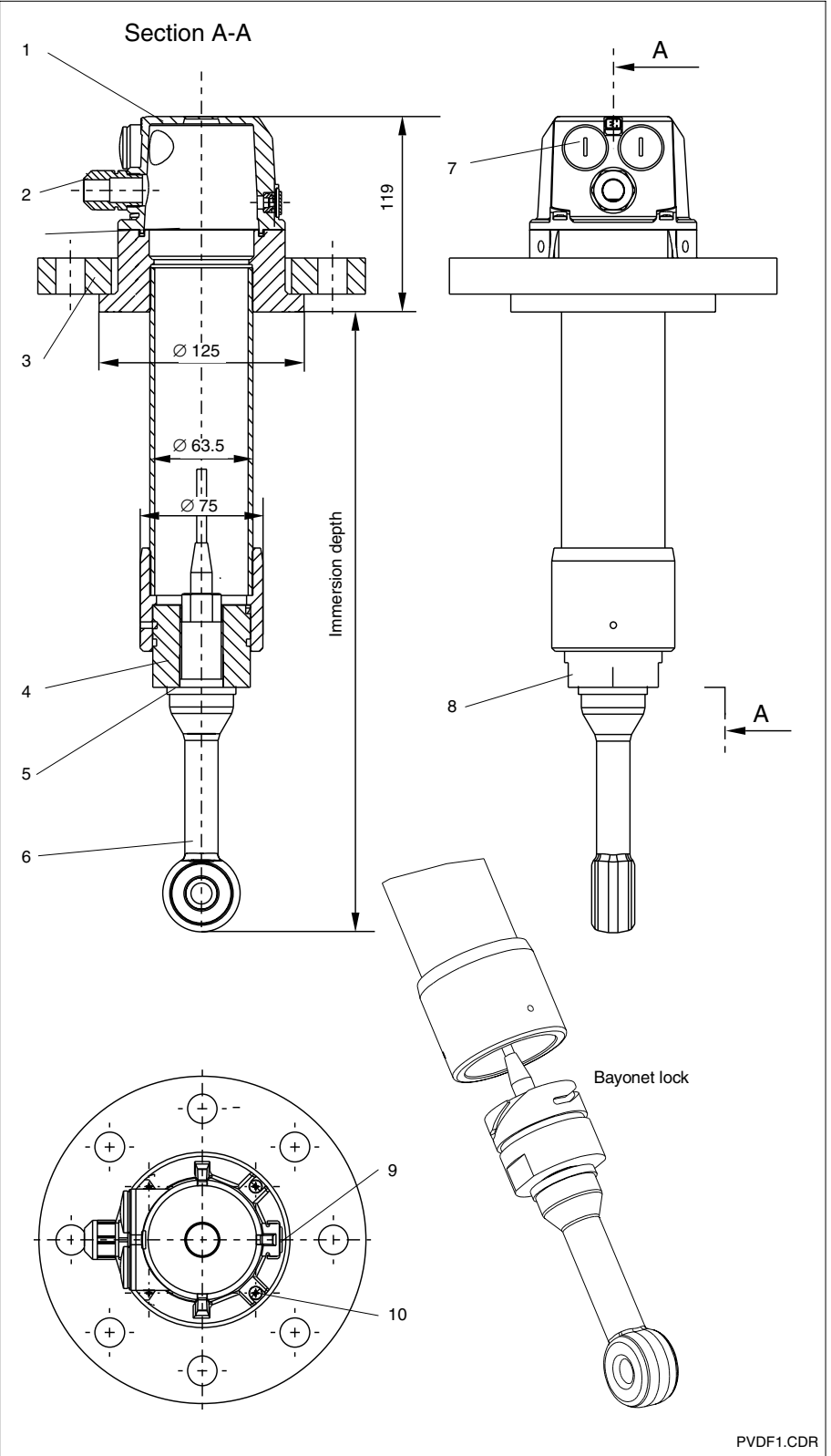
View of measuring cell holder; with conductivity measuring cell CLS 50 built in

PVDF version

Loose flange  
dimensions



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



- Dimensions of  
PVDF assembly  
DipFit P CLA 140
- 1 Assembly head
  - 2 Cable gland  
Pg 13.5
  - 3 Loose flange
  - 4 Measuring cell holder
  - 5 Flat gasket  
(supplied with  
measuring cell)
  - 6 Conductivity measuring  
cell CLS 50  
(not included in delivery)
  - 7 Pg 16 plug
  - 8 Flats for size 55  
wrench
  - 9 Goretex® filter
  - 10 M4 screw

## Accessories

- **O-ring sets:**

- EPDM order no. 51500064
- Viton order no. 51500065
- Chemraz order no. 51500066
- Fluoraz order no. 51500067

- **Extension cable CLK 5**

Unprepared measuring cable  
(to be ordered by the metre)  
Order no. 50085473

- **Junction box VBM**

Junction box for extension of cable  
connection between measuring cell and  
measuring instrument; cast aluminium;  
dimensions: 125 x 80 x 35 (LxWxH);  
comes with 10 internal high-resistance  
terminal blocks; protection type IP 65

For non-Ex applications  
Order no. 50003987

For Ex applications (zone 1)  
Order no. 50003991

# Technical data

## General data

Manufacturer	Endress+Hauser
Equipment designation	DipFit P CLA 140

## Installation

Immersion depth	500 ... 2500 mm
Number of measuring cell mounting positions	1 x G ¾
Installation diameter required	DN 80
Cable entry	1 x Pg 13.5; 2 x Pg 16 plugs
Protection type	IP 65

## 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
Measuring cell holder	PVDF / stainless steel 1.4404

## Materials not in contact with medium

Protection cap	PP-GF 20
Loose flange	UP-GF (PVDF version)
Screw-in lifting eyes	stainless steel 1.4301

## Operating data

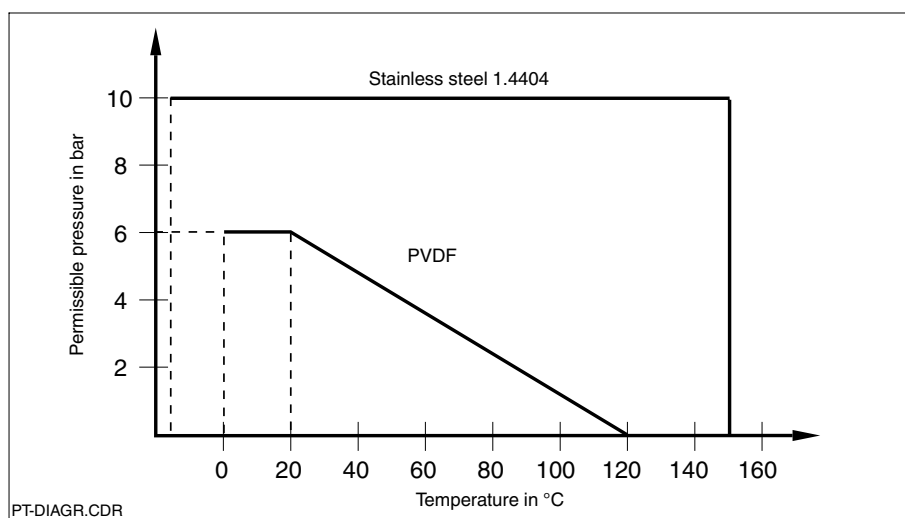
### Operating pressure

PVDF version	max. 6 bar (at 20 °C)
Stainless steel version 1.4404	max. 10 bar

### Operating temperature

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

## Pressure / temperature diagram



### Note:



The operating limits of the complete system are determined by the operating limits of the components involved (assembly, measuring cell, cable, accessories, etc.)!

Subject to modifications.

# How to order

Immersion assembly DipFit P CLA 140

Assembly material

2 PVDF

3 Stainless steel 1.4404 (316 L)

Sensor holder

A Thread connection G ¾ for CLS 50

Immersion depth (including sensor)

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", 150 lbs

E Flange JIS 10K 80A

Sealing material

1 EPDM

2 Viton

3 Chemraz

4 Fluoraz

Equipment

10 Standard equipment

20 Assembly desiliconized

30 Certificate acc. to EN 10204-3.1.B

CLA 140-

complete order code

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