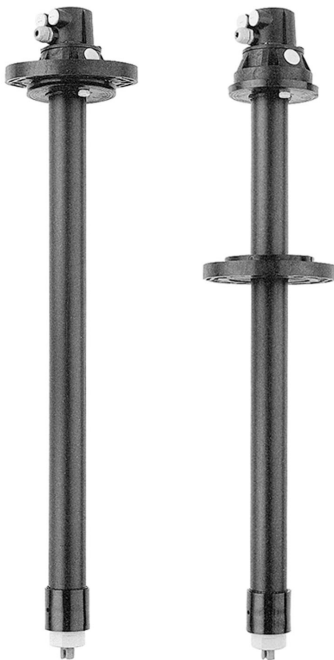




Technical Information

Dipfit CLA111

Immersion and installation assembly for open and closed vessels with DN 100 flange



Application

CLA111 is an immersion assembly for conductivity sensors intended for use in water and wastewater applications.

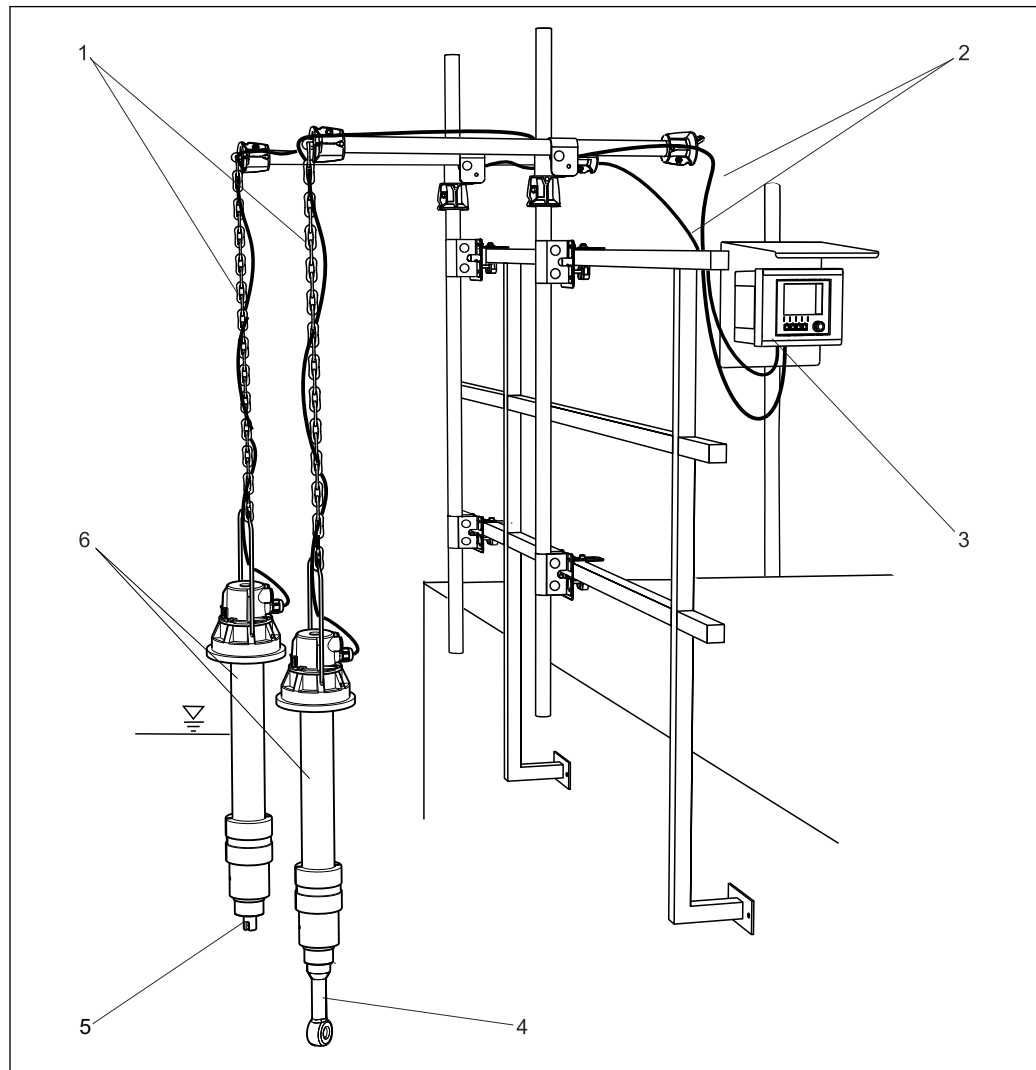
The adjustable flange means the assembly offers great flexibility and can be used universally.

Your benefits

- Environmentally compatible materials (polypropylene)
- Can be used up to 5 bar (72 psi) absolute
- One sensor mounting position suitable for sensors CLS21D, CLS21, CLS50D and CLS50
- Flexible configuration of the immersion depth thanks to adjustable flange (optional)
- Simple installation and removal of sensor holder thanks to bayonet lock

Function and system design

Measuring system



A0026966

1 Example of a measuring system

1 Assembly holder CYH112 (with chain)

2 Sensor cable CYK10 (CLS21D) or fixed cable (CLS50D)

3 Transmitter CM442 with weather protection cover

4 Sensor CLS50D

5 Sensor CLS21D

6 Assembly CLA111-D (with suspension bracket)

Environment

Ambient temperature -10 to +80 °C (+10 to +180 °F)

Process

Process temperature -10 to +80 °C (+10 to +180 °F)

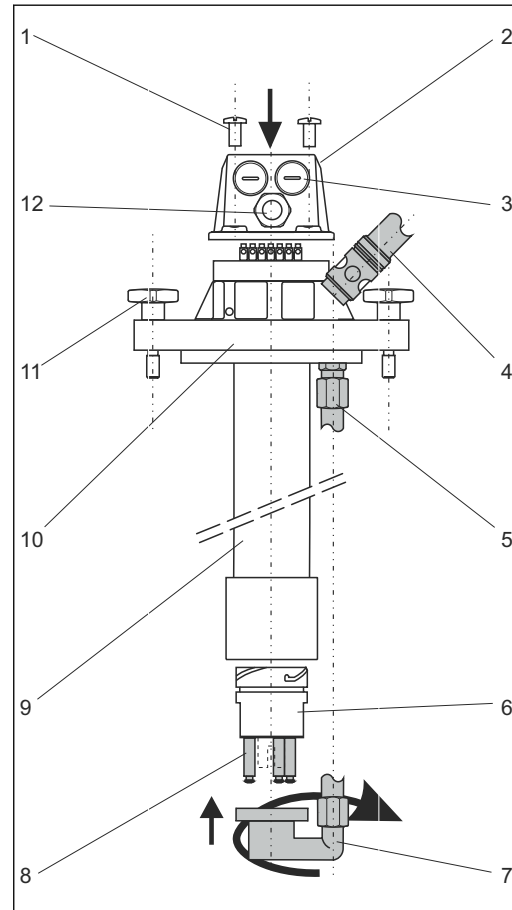
Process pressure

CLA111-A/B/D
CLA111-C

Unpressurized

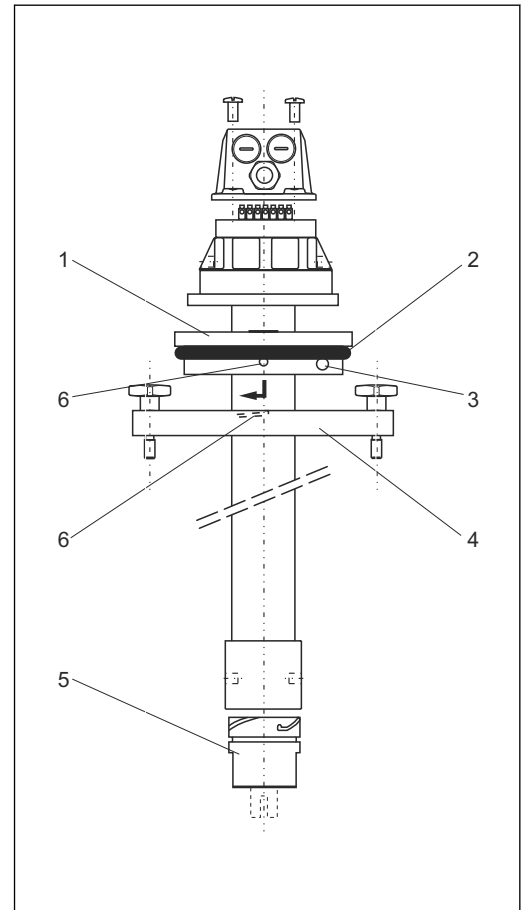
Max. 5 bar (72 psi) abs. at 20 °C (68 °F), unpressurized up to 80 °C (176 °F)

Mechanical construction

Design**Versions with flange**

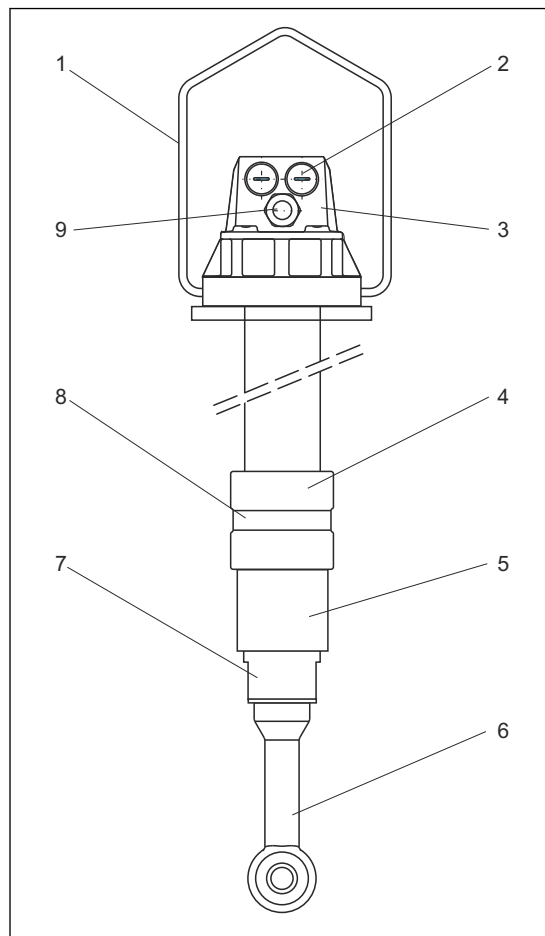
2 Version A and C with DN 100 flange

- 1 Phillips screw (4 pieces)
- 2 Assembly head
- 3 Dummy plug
- 4 Quick-release coupling for Chemoclean cleaning
- 5 Connecting pipe with pipe union for Chemoclean cleaning
- 6 Sensor holder
- 7 Spray head for Chemoclean cleaning
- 8 Sensor holder with securing bolts for Chemoclean spray head CLR30
- 9 Assembly pipe
- 10 DN 100 flange, A: Standard, C: Pressurized flange
- 11 Star handle screws (not for pressurized version)
- 12 Coupling Pg 13.5



3 Version B with adjustable DN 100 flange

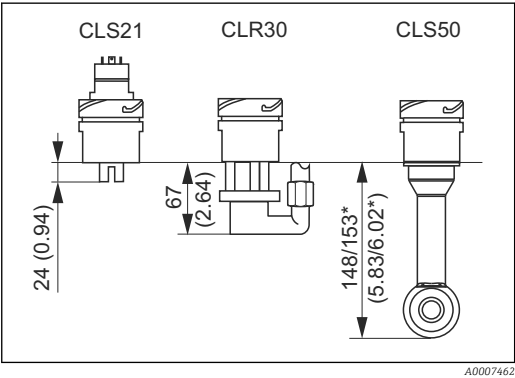
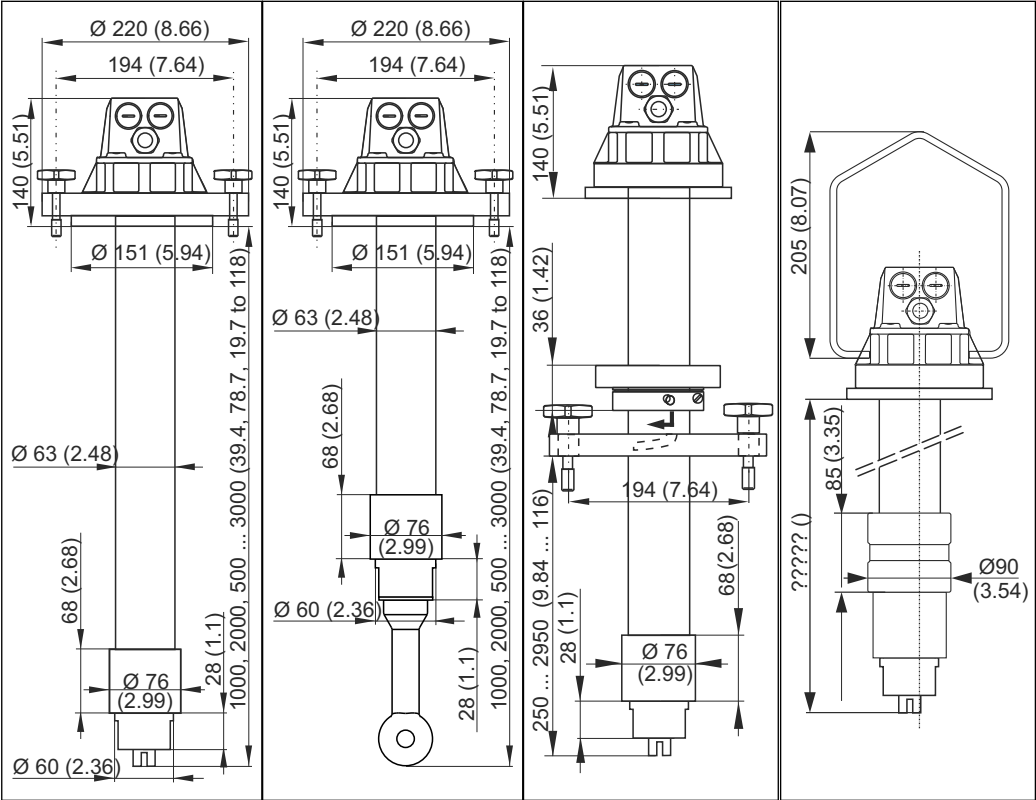
- 1 Adjustable flange adapter (2 half-shells)
- 2 O-ring for tolerance compensation
- 3 Clamping screw (2 pieces)
- 4 DN 100 flange
- 5 Sensor holder
- 6 Bayonet lock

Version with suspension bracket

- 1 Suspension bracket
- 2 Dummy plug Pg 16
- 3 Assembly head
- 4 Weight (half-shells)
- 5 Sleeve
- 6 Sensor CLS50
- 7 Sensor holder
- 8 Cable clamp for securing the half-shells
- 9 Coupling Pg 13.5

4 Version with suspension bracket

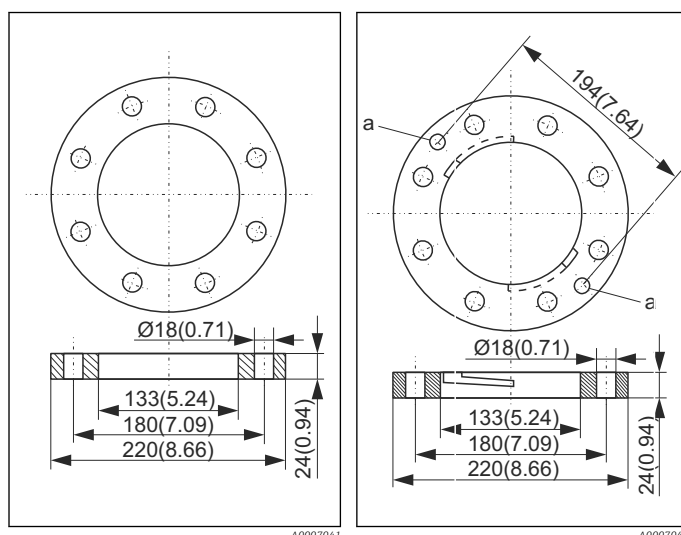
Dimensions



All dimensions in mm (inch)
* Illustrations with CLS21D/21

i Immersion length is the same when CLS50D/50 is installed. The length of the assembly pipe changes accordingly → 6.

- 9 Length below the sensor holder
- * PEEK version



10 Pressurized flange DN 100
for CLA111-C

All dimensions in mm (inch)

11 Flange DN 100 for
CLA111-A/B

a = bore holes for cross formed screws

Weight	Approx. 4.0 kg (8.8 lbs)	
Materials	Sensor holder Immersion tube O-ring <i>Only version CLA111-D:</i> Half-shells Cable clamp	PP-GF 20 PP VITON Cast iron, PVC-coated Stainless steel 1.4401 (AISI 316)
Cable entries	1 x Pg 13.5 and 2 x Pg 16	
Suitable sensors	CLS21D, CLS21, CLS50D, CLS50	
Immersion depth	Standard Other length	1000 mm (39.4 inch), 2000 mm (78.8 inch) 500 to 3000 mm (19.7 to 118 inch)
Process connections	CLA111-A CLA111-B CLA111-C CLA111-D	Flange DN 100, additionally with captive cross formed screws Adjustable flange DN 100 Pressurized flange DN 100 Stainless steel suspension bracket (1.4571 (AISI 316 Ti))

Ordering information

Product page	www.endress.com/cla111
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Product Configurator	The navigation area is located on the right of the product page. 1. Under "Device support" click "Configure your selected product". ↳ The Configurator opens in a separate window. 2. Select all the options to configure the device in line with your requirements. ↳ In this way, you receive a valid and complete order code for the device. 3. Export the order code as a PDF or Excel file. To do so, click the appropriate button at the top of the screen.
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Scope of delivery	The delivery comprises: ■ Assembly in the version ordered ■ Measuring cable with connector for two-electrode sensor CLS21 ■ O-ring for sensors CLS21 and CLS21D ■ Operating Instructions  If you have any questions, please contact your supplier or your local sales center.
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Accessories



The following are the most important accessories available at the time this documentation was issued. For accessories not listed here, please contact your service or sales office.

Installation accessories

Flexdip CYH112

- Modular holder system for sensors and assemblies in open basins, channels and tanks
- For Flexdip CYA112 water and wastewater assemblies
- Can be affixed anywhere: on the ground, on the capstone, on the wall or directly onto railings.
- Stainless steel version
- Product Configurator on the product page: www.endress.com/cyh112

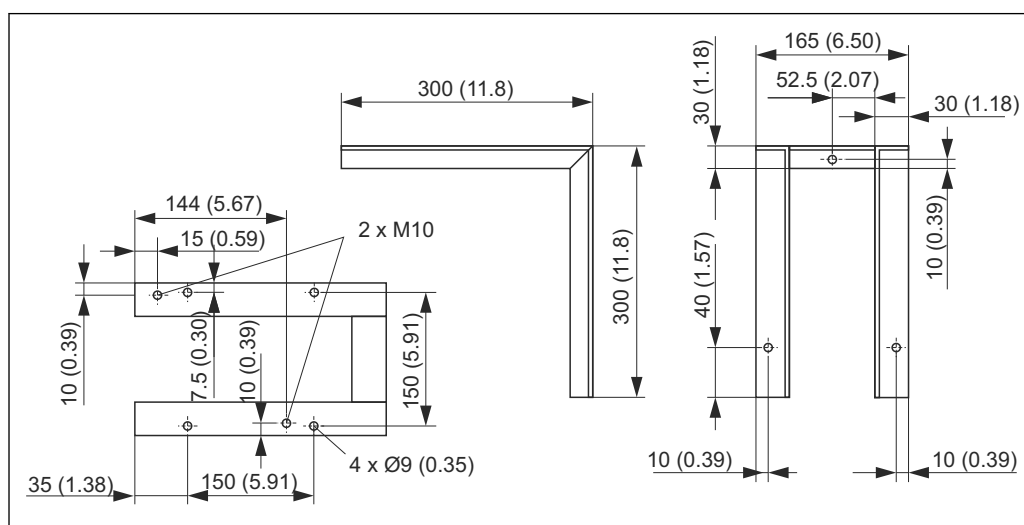


Technical Information TI00430C

Mounting frame

For CPA111, CPA510, CPA530 and CLA111

- Material: stainless steel 1.4301 (AISI 304)
- Order number: 50066561



A0007060

12 Mounting frame in mm (inch)

Adjustable flange adapter DN 100

- For CPA111 and CLA111 for variable immersion depths
- Order number: 50070514

Flange DN 100, unpressurized

- For CPA111 and CLA111 suitable for adjustable flange adapter
- Order number: 50066632

Sensors

Condumax CLS21D/ CLS21

Two-electrode sensor in plug-in head version and fixed cable version



Technical Information TI00085C

Indumax CLS50D/ CLS50

- High-durability inductive conductivity sensor
- For standard and hazardous area applications
- With Memosens technology (CLS50D)
- Product Configurator on the product page: www.endress.com/cls50d or www.endress.com/cls50



Technical Information TI00182C

Extension cable

Memosens data cable CYK11

- Extension cable for digital sensors with Memosens protocol
- Product Configurator on the product page: www.endress.com/cyk11



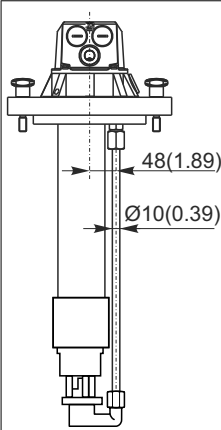
Technical Information TI00118C

Measuring cable CYK71

- Underterminated cable for connecting analog sensors and for extending sensor cables
- Sold by the meter, order numbers:
 - Non-Ex version, black: 50085333
 - Ex-version, blue: 50085673

Chemoclean

Chemoclean CLR30



Automatic spray cleaning system for cleaning the sensors CLS21/CLS21D
Order according to product structure

Materials in contact with the medium

Spray head	PP-GF20
O-rings	EPDM / VITON

Operating data

Process pressure	Max. 4 bar (58 psi) absolute, at 20 °C (68 °F)
Process temperature	Max. 80 °C (176 °F) at ambient pressure
Cleaner pressure	4 to 6 bar (58 to 87 psi) absolute, at 20 °C (68 °F)



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