Technical Information
Ecofit CPA640

Universal compact assembly for the installation of 120 mm sensors for all areas of water management and industry

Application

Ecofit CPA640 is a universal process assembly for the permanent installation of 120 mm sensors (Pg 13.5) in water and process applications (utilities) in NPT process connections. The assembly is designed for installation in pipes in:
- wastewater treatment plants
- water treatment
- condensate treatment
- cooling water circuits

It can be used at pressures of up to 10 bar.
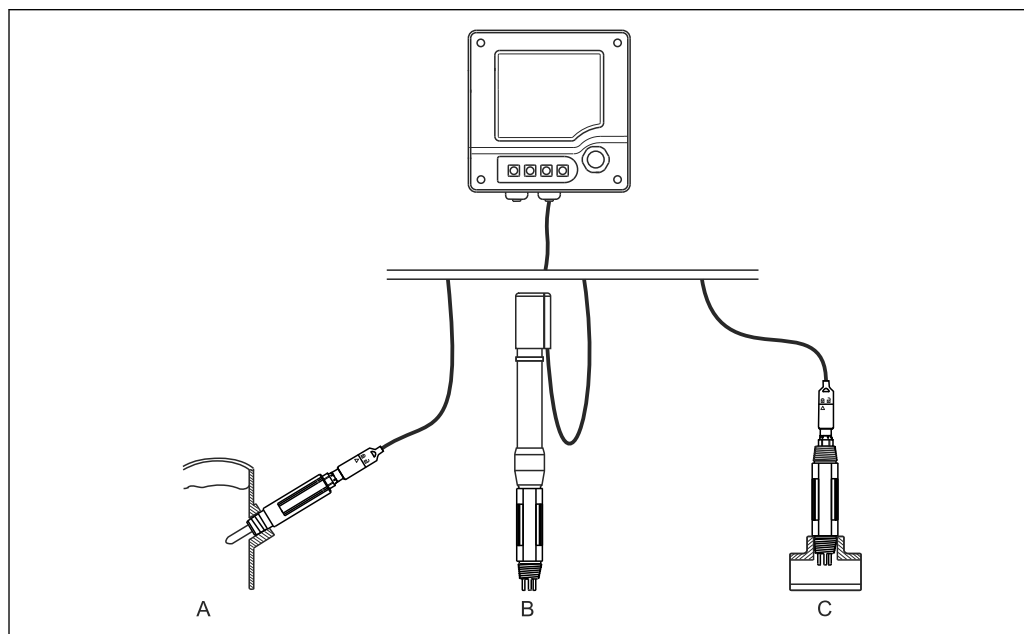
Your benefits

- Simple and flexible
  - Installation of standard sensors with Pg 13.5 and 120 mm (4.72 in) length into existing adapters or assemblies with NPT connections
  - Threaded connection for fast installation/removal
- Robust and reliable
  - PVDF or stainless steel 316L (1.4404/1.4435)
  - Version with basket protector available to protect glass electrodes
  - Process seal available in a variety of materials:
    VITON, EPDM, KALREZ, CHEMRAZ
- Cost-reducing
  - Enables the economical use of gel or KCl sensors with Memosens technology
  - For standard connections such as NPT ½" and NPT ¾"

Endress+Hauser

People for Process Automation

Function and system design

Measuring system

A complete measuring system comprises:
- Ecofit CPA640 installation adapter
- Sensor with Pg 13.5, length 120 mm, e.g. Orbisint CPS11D
- Transmitter, e.g. Liquiline CM42
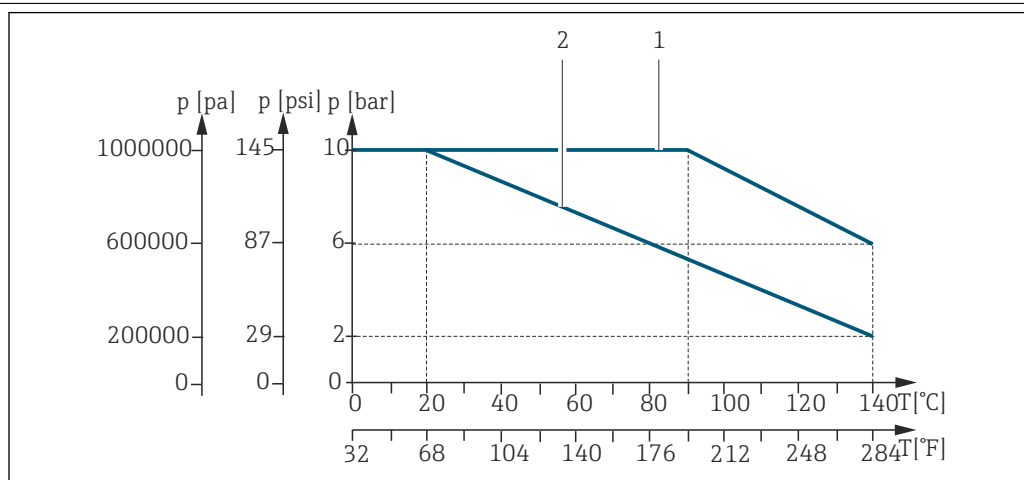- Measuring cable, e.g. CYK10

A0007692

⊡ *1   Measuring system with CPA640, transmitter (CM42), sensor and cable*

A   Direct installation at NPT process connection
B   Installation in immersion assembly (CYA611)
C   Installation in flow assembly
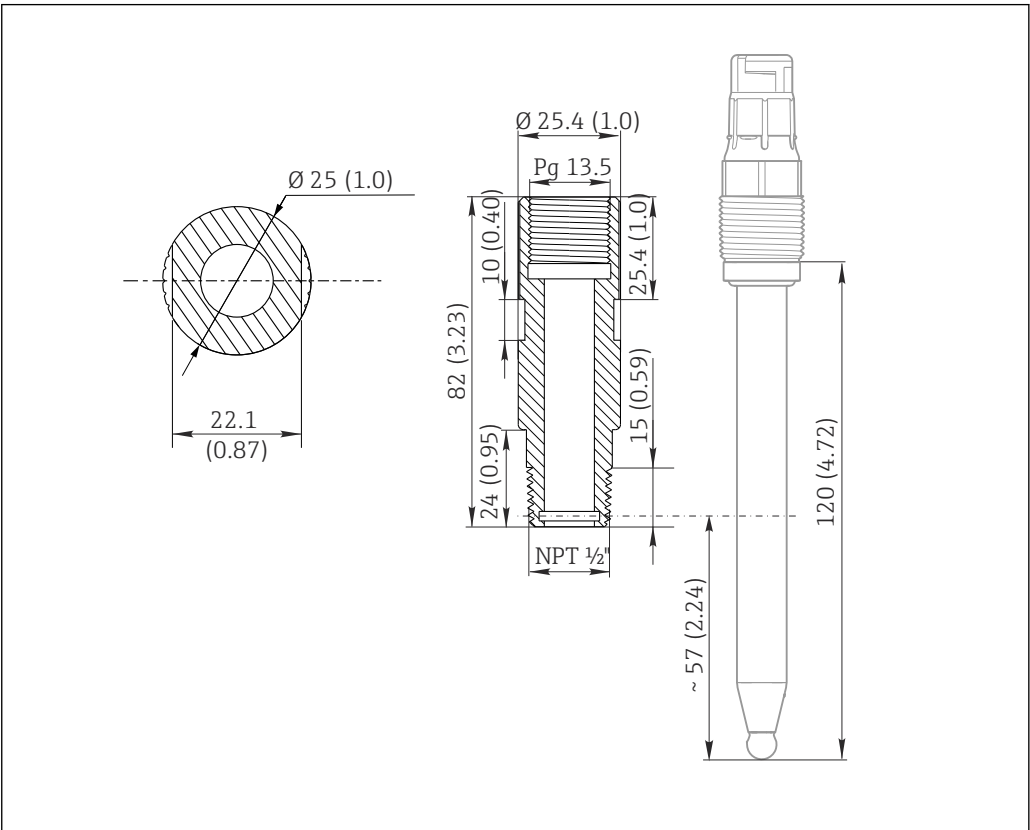
Process

Pressure-temperature ratings

A0052613

⊡ *2   temperature/pressure ratings*

1   Stainless steel 1.4404/1.4435 (AISI 316L), MONEL
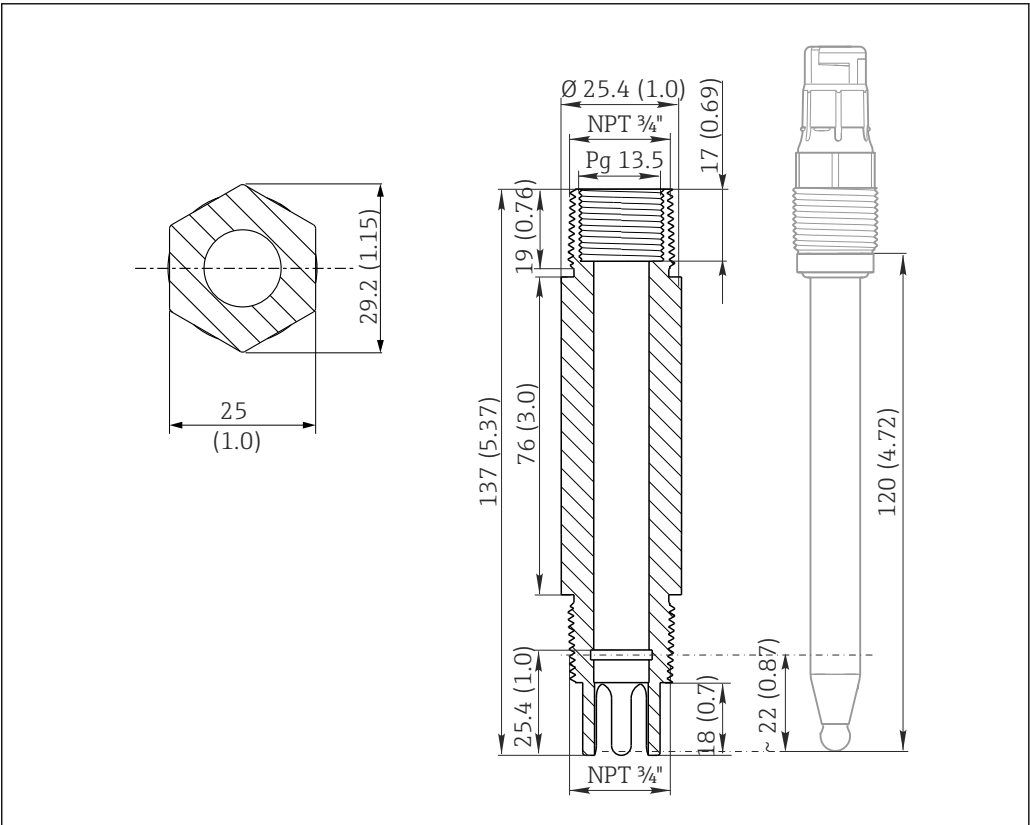*2   PVDF*

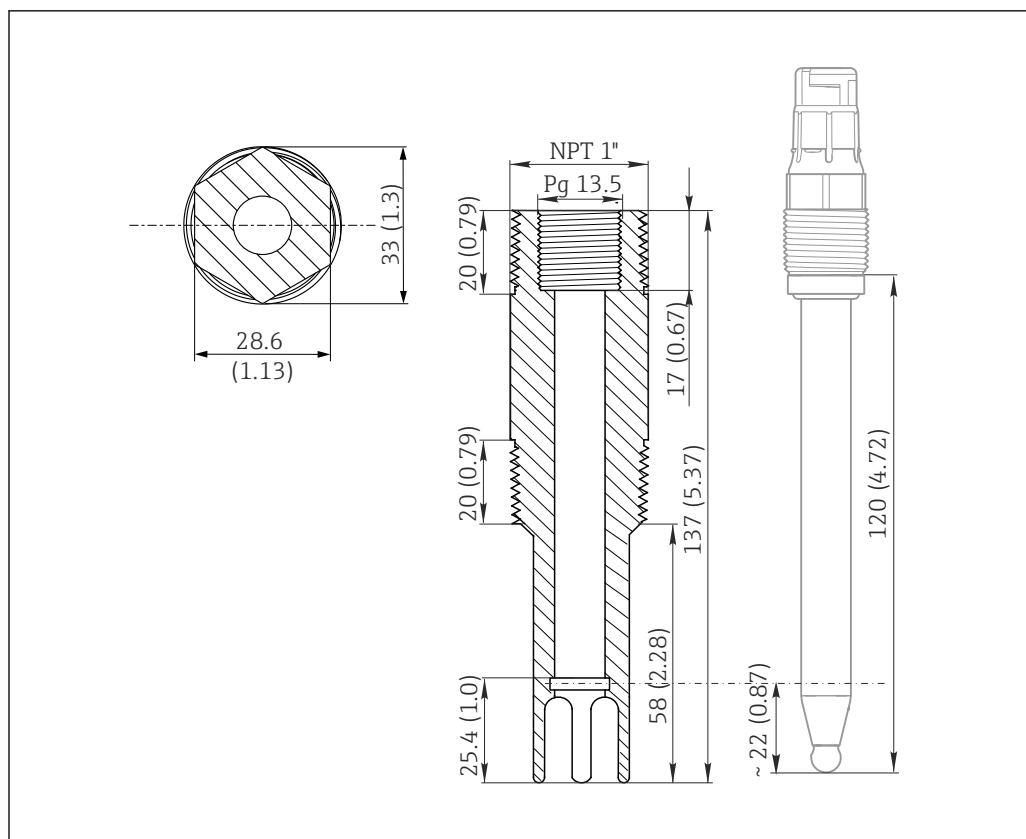# Mechanical construction

Design, dimensions

⊡ *3   CPA640-A/B***. Unit of measurement mm (in)*

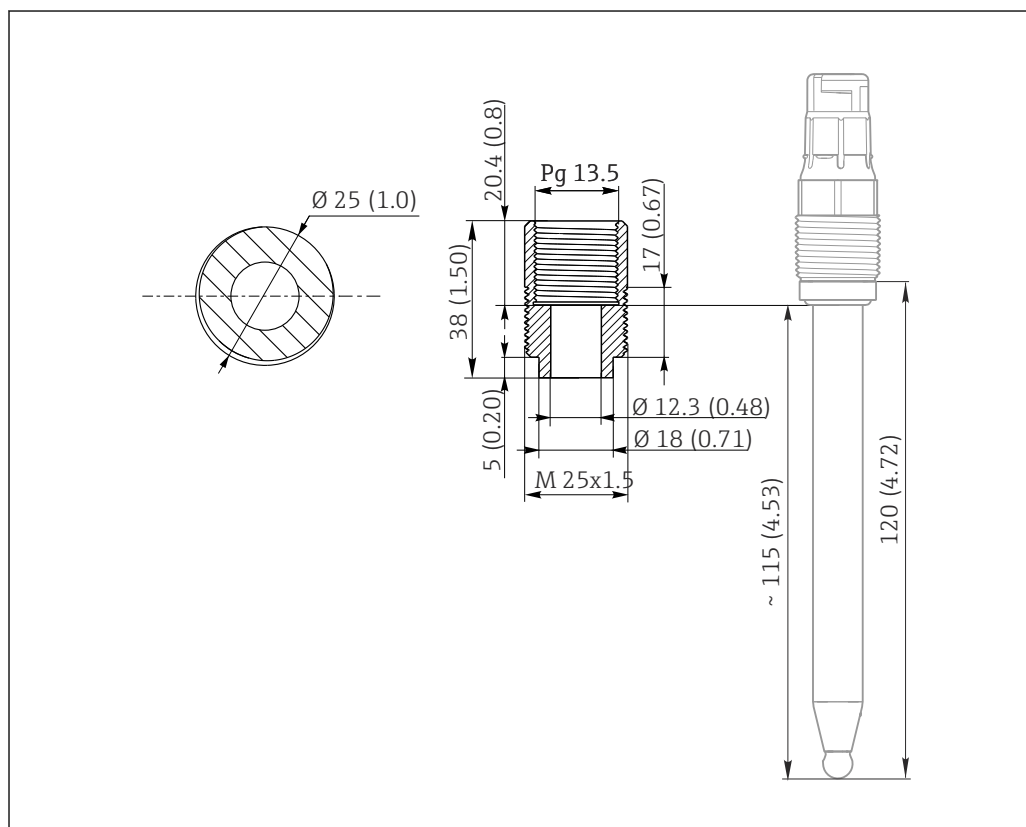⊡ *4   CPA640-C/D***. Unit of measurement mm (in)*

 5   *CPA640-E***. Unit of measurement mm (in)*

 6   *CPA640-G/I***. Unit of measurement mm (in)*

Weight   Approx. 0.1 to 0.3 kg (0.22 to 0.66 lbs) depending on the version

Materials	Adapter body	
	CPA640-A/C/E/G***	PVDF (polyvinylidenefluoride)
	CPA640-B/D***	Stainless steel 316L (1.4404/14435))
	CPA640-I***	MONEL
	Sealing ring	FDM (VITON), EPDM, CHEMRAZ, KALREZ

Endress+Hauser supplies DIN/EN process connections with stainless steel threaded connection in accordance with AISI 316L (DIN/EN material number 1.4404 or 14435).

In terms of their stability-temperature property, the materials 1.4404 and 1.4435 are grouped in EN 1092-1 table 18 under 13E0. The chemical composition of the two materials can be identical.

Process connections
- The assembly can only be installed if the process is unpressurized and the container is empty.
- The assembly is designed for installation on containers or pipes.
- Appropriate process connections must be provided for the installation.
- Make sure the orientation is correct. Information can be found in the manual of the sensor used.

Process connections depend on the assembly version:

Assembly version	Process connection
CPA640-A/B***	NPT ½"
CPA640-C/D***	NPT ¾"
CPA640-E***	NPT 1"
CPA640-G/I***	M25x1.5

Ordering information

Product page   www.endress.com/cpa640

Product Configurator

1. **Configure**: Click this button on the product page.
2. Select **Extended selection**.
   ↳ The Configurator opens in a separate window.
3. Configure the device according to your requirements by selecting the desired option for each feature.
   ↳ In this way, you receive a valid and complete order code for the device.
4. **Apply**: Add the configured product to the shopping cart.

For many products, you also have the option of downloading CAD or 2D drawings of the selected product version.

5. **Show details**: Open this tab for the product in the shopping cart.
   ↳ The link to the CAD drawing is displayed. If selected, the 3D display format is displayed along with the option to download various formats.

Scope of delivery
The scope of delivery comprises:
- Ordered version of assembly
- Operating Instructions

Certificates and approvals

Current certificates and approvals for the product are available at www.endress.com on the relevant product page:

1. Select the product using the filters and search field.
2. Open the product page.
3. Select **Downloads**.

Accessories

The following are the most important accessories available at the time this documentation was issued.

Listed accessories are technically compatible with the product in the instructions.

1. Application-specific restrictions of the product combination are possible.

   Ensure conformity of the measuring point to the application. This is the responsibility of the operator of the measuring point.

2. Pay attention to the information in the instructions for all products, particularly the technical data.

3. For accessories not listed here, please contact your Service or Sales Center.

Sensors (selection)	**pH sensors**

Ceragel CPS71
- pH electrode with reference system including ion trap
- Product Configurator on the product page: www.endress.com/cps71

📖 Technical Information TI00245C

Memosens CPS71E
- pH sensor for chemical process applications
- Digital with Memosens 2.0 technology
- Product Configurator on the product page: www.endress.com/cps71e

📖 Technical Information TI01496C

Ceraliquid CPS41
- pH electrode with ceramic junction and KCl liquid electrolyte
- Product Configurator on the product page: www.endress.com/cps41

📖 Technical Information TI00079C

Memosens CPS41E
- pH sensor for process technology
- With ceramic junction and KCl liquid electrolyte
- Digital with Memosens 2.0 technology
- Product Configurator on the product page: www.endress.com/cps41e

📖 Technical Information TI01495C

Memosens CPS77E
- Sterilizable and autoclavable ISFET sensor for pH measurement
- Digital with Memosens 2.0 technology
- Product Configurator on the product page: www.endress.com/cps77e

📖 Technical Information TI01396

ORP sensors

Ceragel CPS72
- ORP electrode with reference system including ion trap
- Product Configurator on the product page: www.endress.com/cps72

📖 Technical Information TI00374C

Memosens CPS72E
- ORP sensor for chemical process applications
- Digital with Memosens 2.0 technology
- Product Configurator on the product page: www.endress.com/cps72e

📖 Technical Information TI01576C

Oxygen sensors

Oxymax COS22
- Sterilizable sensor for dissolved oxygen
- With Memosens technology or as an analog sensor
- Product Configurator on the product page: www.endress.com/cos22

Technical Information TI00446C

Memosens COS22E
- Hygienic amperometric oxygen sensor with maximum measurement stability over multiple sterilization cycles
- Digital with Memosens 2.0 technology
- Product Configurator on the product page: www.endress.com/cos22e

Technical Information TI01619C

71613975

www.addresses.endress.com

Endress+Hauser

People for Process Automation