Technical Information
CUY52
Calibration set for turbidity sensor CUS52D

Application

Easy and safe validation, calibration and adjustment of the turbidity sensors CUS52D.
Field application or application preparation:
The calibration set CUY52 allows quick and safe validation of the sensors and facilitates adaption to the real measuring point by creating reproducible ambient conditions (vessels with very low backscattering, shadowing of interfering light sources, etc.)

Your benefits

- Easy, safe and quick validation of the CUS52D sensors with solid state reference.
- Easy, safe and reproducible comparison measurements with calibration vessels almost free of backscattering.

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Function and system design

Large calibration vessel

The large calibration vessel is recommended for measurements or calibrations in the lower turbidity range (<200 FNU / NTU). Design and material allow measurements without wall effects. Consequently, the calibration vessel can be used for calibration / adjustment of the sensor with ultrapure water.

Small calibration vessel

The small calibration vessel is recommended for measurements or calibrations in the upper turbidity range (200 ... 1000 FNU / NTU). Wall effects will result in wrong measurement values when used in the lower turbidity range.

Solid state reference

The solid state reference with approx. 4.0 FNU /NTU is used to check the function of any CUS52D sensor. The solid state reference is not assigned to a particular sensor. It produces measured values in the range of 4.0 FNU /NTU ±1.5 FNU / NTU with any CUS52D sensor.

Performance characteristics

Solid state reference approx. 4.0 ±1.5 FNU / NTU

Installation

Installation instructions Fix the sensor in a laboratory stand.

Recommendations for the laboratory stand:

Length of stand:	250 mm, 12 mm diameter
Plate of stand:	300 x 150 x 15 mm with bore hole on front face
Extension clamp:	Stainless steel, jaw width 0 to 80 mm

Use a magnetic stirrer to ensure the homogeneity of media with higher turbidity.

Recommendations for the magnetic stirrer:

Motor power rating:	9 W
RPM range:	0/50 to 150 rpm
Length of swizzle stick:	80 mm
Stirring capacity of H_2O:	max 20 liter

Environment

Storage temperature

0 to 60 °C (32 to 140 °F) in the original packaging

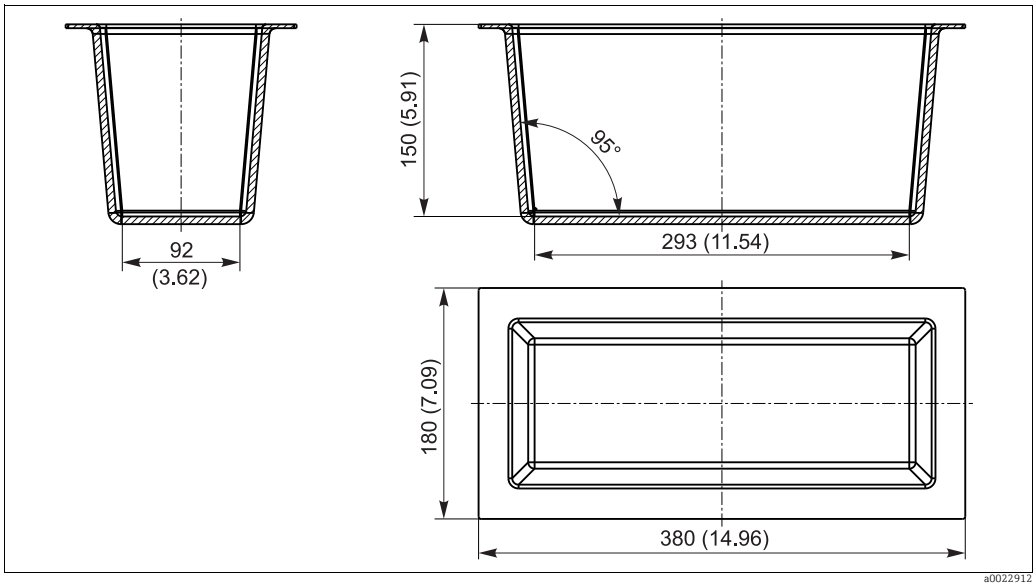
Process

Process temperature

0 to 50 °C (32 to 122 °F)

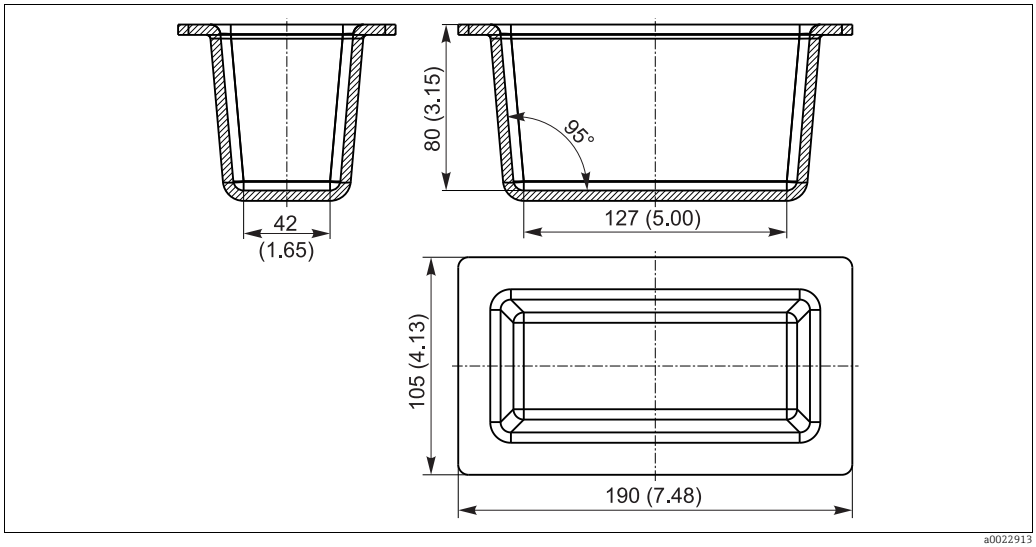
Mechanical construction

Dimensions of large calibration vessel



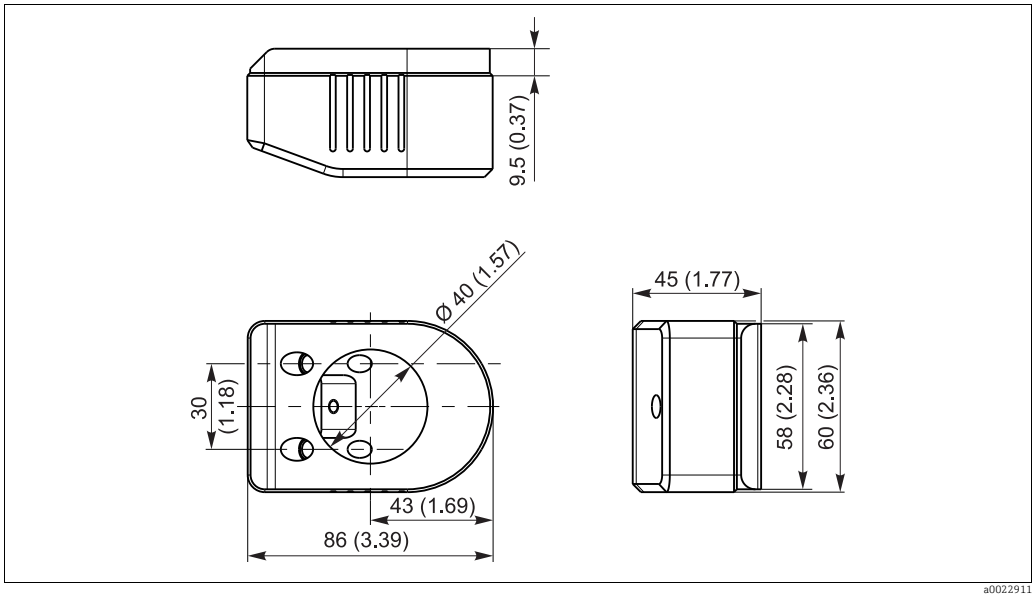
Dimensions in mm (inch)

Dimensions of small calibration vessel



Dimensions in mm (inch)

Dimensions of solid state reference



Dimensions in mm (inch)

Weight

Vessel, large:	approx. 512 g (18.1 oz)
Vessel, small:	approx. 136 g (4.8 oz)
Solid state reference:	approx. 232 g (8.2) oz)

Materials

Vessels:	ABS black
Solid state reference:	POM black

Ordering information

Order code

You can generate a valid and complete order code on the internet using the Configurator:
www.products.endress.com/cuy52

1. On the right-hand side of the product page you will find the following options:

Product page function
:: Add to product list
:: Price & order information
:: Compare this product
:: Configure this product

2. Click on "Configure this product".
3. The Configurator opens in a new window. You can now configure your device and will receive a valid and complete order code for it.
4. Now export the order code as a PDF or Excel file. To do this, click on the relevant button at the top of the page.

Scope of delivery

The scope of delivery comprises:
- Calibration set in the ordered version
- Operating Instructions BA01309C/07/EN

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