

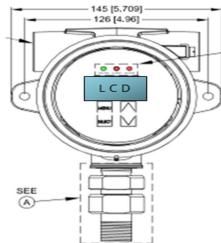
Measuring System SYNVA-TN

Measure an **interface level** – also with the case of **mixture plateaus, phase reversal + adhesion**.

That works exactly - with the Measuring System **SYNVA-TN** !

For an exact **interface level measurement** you should use only one. You should use the Measuring System **SYNVA-TN**; including a potential booster made of stainless steel - can be used up to 200°C and a maximum of up to 100bar.

The Measuring System **SYNVA-TN** integrates an RF impedance sensor technology (consisting of a rod probe including control electronics 02880) into one unit and can be used perfectly for interface level measurement - even in the event of a **phase reversal, organic adhesions** or **mixture plateaus**! As a metrological potential booster, the Measuring System **SYNVA-TN** controlled the measuring behavior of the integrated rod probe, strengthens.



OPTION
with viewing window

Features

RF-Impedance-Sensor Technology

in consisting of



Control Unit 02880; Technical Specifications

incl. Frequency transmitter

Operating -°C	-40 °C , max. 55 °C
Measur principal:	RF-Impedance (capazitive)
Resolution	0.04 pF up to 3.000 pF
Accuracy	0.2% full scale pF
Power Input	24 V -DC
Communication	RS-485 Modbus
Analog output	0/ 4 – 20mA - proportional

Sensor body; Technical Specifications

Rod Probe	Stainless steel 316SS; Teflon ¾"NPT thread min. -20°C, max. 200°C max. 100,0bar
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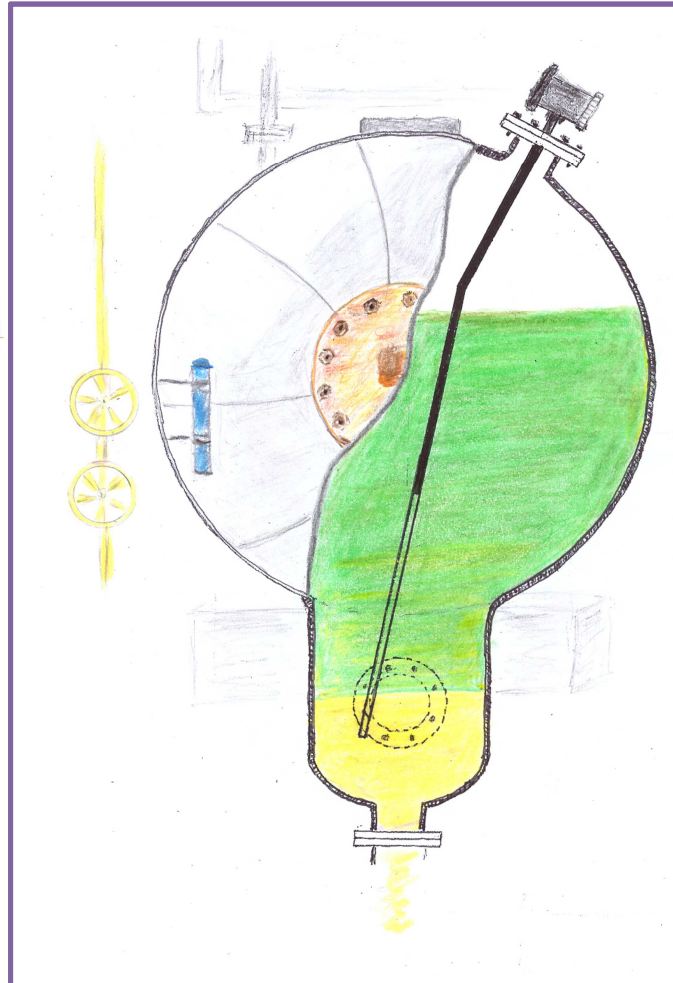
including

Probe housing Aluminium - IP66

Certificates - for the Control Unit and Rod Probe

UL/CSA/IEC 61010-1 ; CAN/CSA 22.2

IECEX / ATEX Class 1, Zone 1,2; Ex ib IIC T5 Gb



Process-Features SYNVA-TN

- **Potential-Booster with integral Rod probe**

Operating temperatures min. -40 °C , max. 200 °C

Operating pressure 0,0bar , max. 100,0bar

Process connection DN 25 bis DN 150

Flange according **EN 1092-1** **PN 10 bis PN 100**

or e.g. DIN EN 2401

Potential-Booster made in stainless steel 1.4404

in considering according to Machinery Directive 2006/42/EU

Prozess connection fully welded

in combination with

- inactive area; in a individual length with an additional seal (PTFE-plastic)

Length under the flange face max. 3.000mm

OPTIONS

- Concentric sheald in stainless steel
- Jacket made with Kynar (PVDF-pastic)
- Jacket made with borosilicate glas

Potential-Booster with an integral

rod probe

stainless steel 316SS; Teflon
¾"NPT thread

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Perfect!

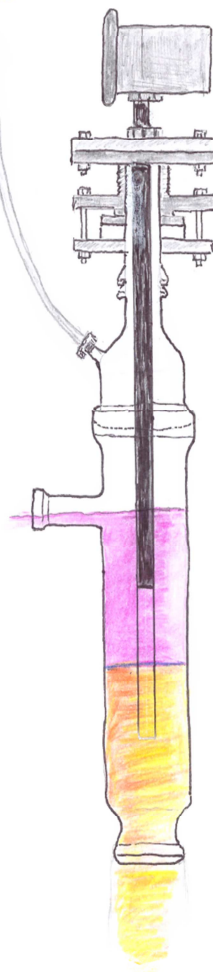
The combination of the Measuring System **SYNVA-TN** with the RF impedance sensor technology, monitors the capacitance around the active area of the probe. An inactive segment is made available via the measuring system. In accordance with the control range, the rod probe is actively completely immersed in both liquid phases.

Both phases usually have different dielectric constants. The changing interface level results in a proportional change in the 0/4-20 mA signal based on the stored calibration.

For a **two-point calibration**, only a defined change in the interface level of 10% needs to be brought about. Only the registered change of the measurement value has to be saved – done! A product change can also be easily managed! All relevant measurement data comes exclusively from the active area of the probe.

The total level above – no matter if it is air or foam - does not affect the interface level measurement!

Measuring System also to use **for** applications wich are built with borosilicate **glas**
 Process flange in a inner diameter of 40mm
 - in **special** also **GL25**
 • but only as Measuring System **SYNVA-TNplus**



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