

Capacitive Level Probe



Registered No. 325327

NC 54

Application

The capacitive level probe type NC54 is used to detect level in metal and non metal vessels for

- > fresh water
- > waste water, sewage
- > Diesel fuel
- > fire extinguishing foam.

Levels between 400 - 2000 mm can be detected.

Usage

The capacitive level probe type NC54 with electrical output fits well into many measuring tasks seen in industries like:

- > process technique
- > production technique
- > environmental technique
- > automotive technique
- > marine technique

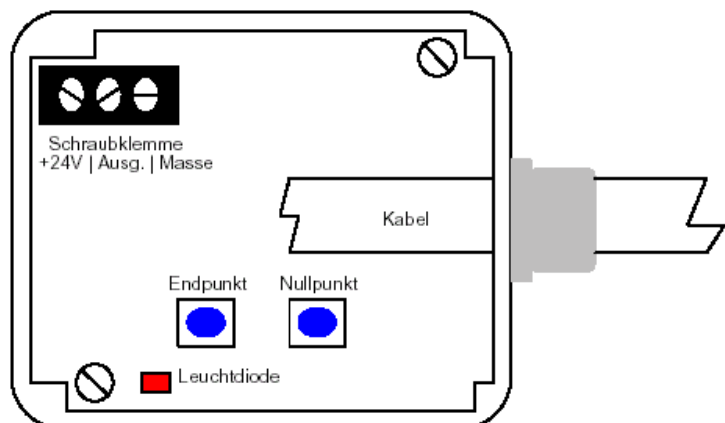
Features

- > rugged design and make
- > integrated electronics
- > no moving parts
- > simple calibration



Construction and Operation Connection diagram

Two metal probes lead in a well defined distance are connected to a high frequent voltage. Immersed into a liquid the probe forms a capacitor in an electric circuit. The capacity of the sensor vary's with the liquid level and depends of the liquids relative permittivity. The electronic mounted in the top housing of the sensor converts this information into standardized electrical signals 0 .. 20 mA / 4 .. 20 mA / 0 ...10 V DC.



Technical Data

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General

technique	capacitive measurement
tank height	400 - 2000 mm (special length on request)
operating pressure	max. 10 bar
number of probes	2 (for Diesel 3)
process connection	G 1 ¼ --- G 2 with protection tube

Electrical Data

electrical connection	srew terminals		
operating voltage	9 - 32 V DC	9 - 32 V DC	12 - 32 V DC
power consumption	appr. 30 mA	appr. 30 mA	appr. 30 mA
output signal	0 - 20 mA	4 - 20 mA	0 - 10 V DC
load	(Ub - 9 V) 20 mA	(Ub - 9 V) 20 mA	> 5 k Ohm

UB = operating voltage

Installation

The capacitive level probe NC 54 should be mounted vertically.

For proper installation a G 1¼ fitting shall be used. The mounting point is best chosen at the top most point in the tank top center.

With regard to possible settlement in tank bottom a minimum distance of 10 mm between tank bottom and lower probe end should be kept.

Probes for waste or sewage water and fire extinguishing foam are coated and must not be shortened by the user.

Probes for water and diesel fuel may be shortened by the user to any length required.

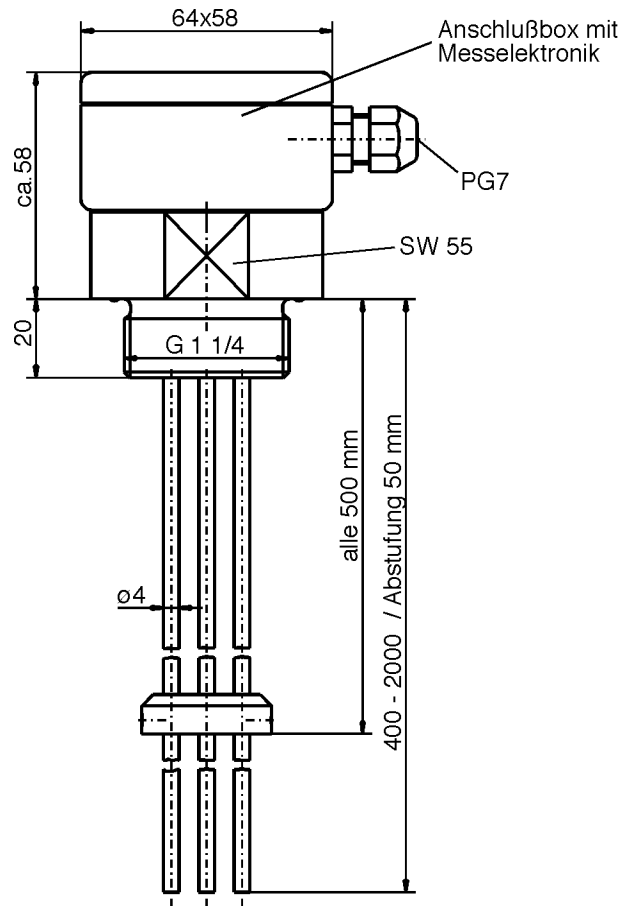
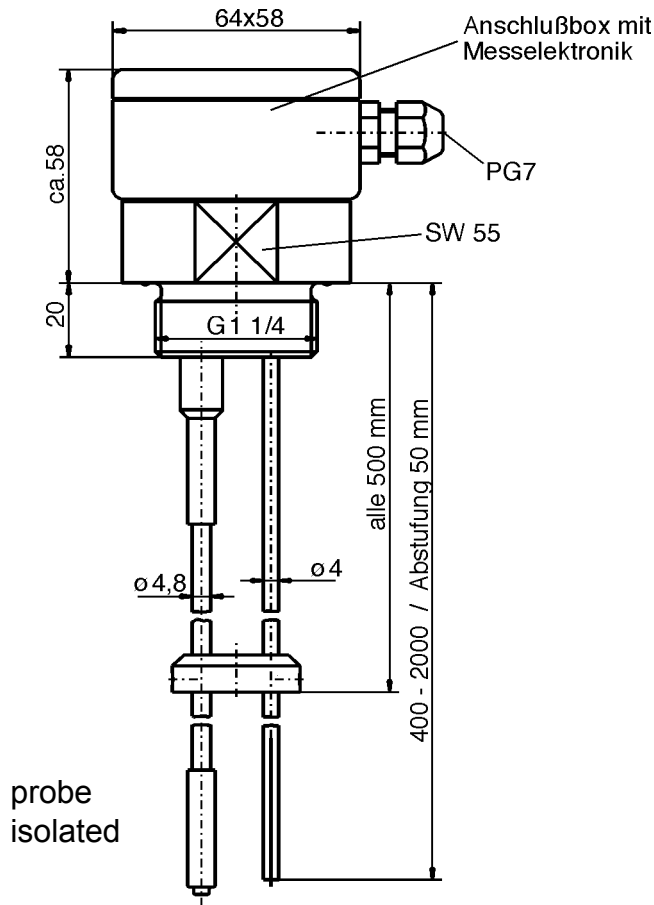
In case the NC54 sensors has to be shortened, it has to be made sure that all probes are cut down to exact the same length.

On NC54 water sensor the end of the isolated probe has to be sealed with the attached cover piece.

Accessories: mounting flange NZ 01 (plastics)
protection tube (plastics)

**Dimensions:
sensor for water**

sensor for diesel Registered No. 325327



sensor for waste water / fire extinguishing foam

protection tube

