

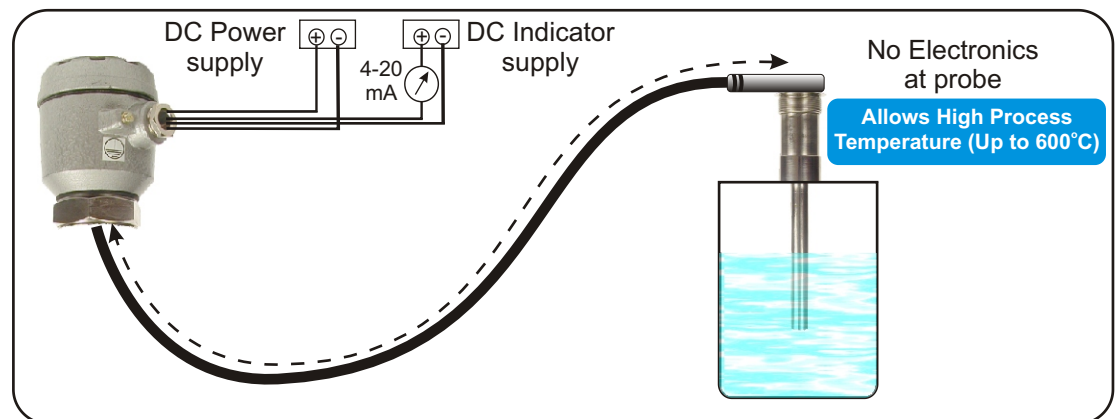
# INTELLIGENT CAPACITANCE SPLIT LEVEL TRANSMITTER

## TRANS~lite



### APPLICATIONS

Suitable for continuous level measurement in conductive or non-conductive liquids, powdered or granular material of homogeneous composition that have stable dielectric constant. Successfully used for monitoring and controlling the level in vessels containing water, oil, chemicals and foodstuff in processing plants.

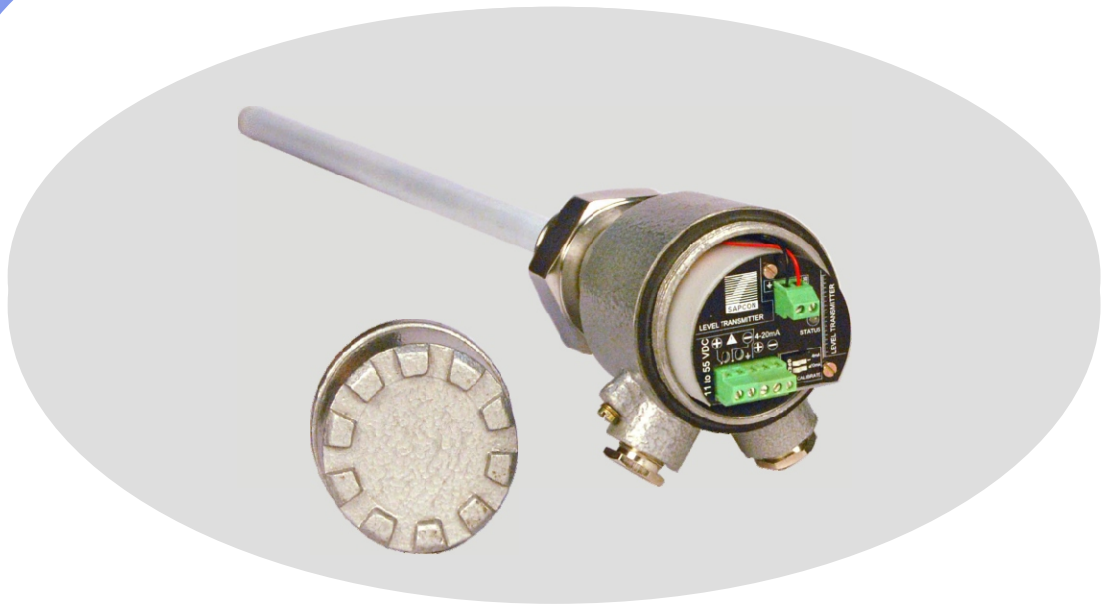


### SALIENT FEATURES

- ◆ TRANS~lite is a microcontroller based 3/4 Wire, capacitance type split level transmitter.
- ◆ Equipped with a fast RISC processor, it combines 'ease of use' within a convenient size.
- ◆ It allows electronics-less measurement of level up-to five meters distance between sense probe and electronics - It can be used in high material-temperature applications.
- ◆ Its key features include the ease of calibration not commonly found in this range of transmitters.
- ◆ Power supply within DC automation is available from 11 to 55 VDC, addressing the need for 12V, 24V and 48V industrial supply options.
- ◆ Power consumption @ 24 volts is less than 400 milliwatt when signal is 20 mA.
- ◆ 4-20mA Current Loop is galvanically isolated (4 Wire) and PLC, SCADA compatible.
- ◆ 4-20mA Current Loop can supply up-to 1000 Ohm series load with 24VDC supply.
- ◆ This means 4-20mA signal can be carried to longer distance
- ◆ Easiest Calibration: Just let it know the level for 4mA and 20mA, rest it will take care of.
- ◆ Supports complete measurement range of Sapcon's MPILC.

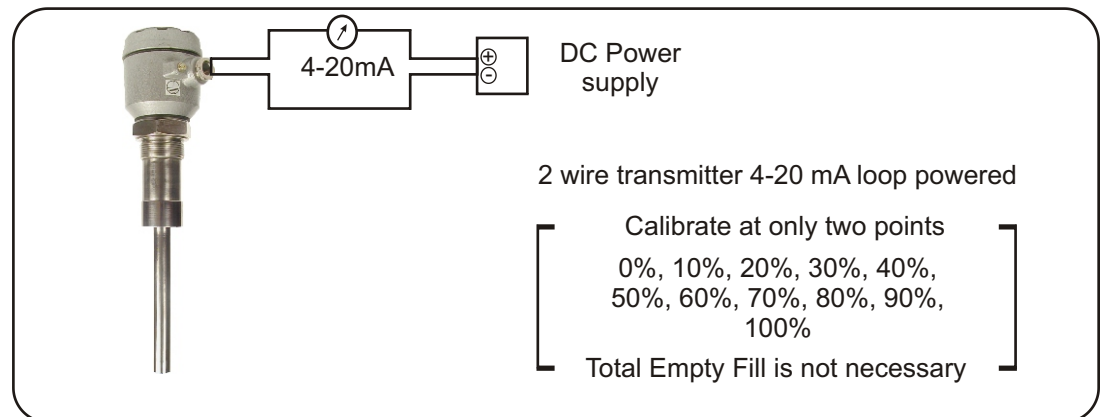
### PRINCIPLE OF OPERATION

TRANS~lite is composed of specially developed Capacitance Change Gauging circuit. It uses fast RISC based processor to perform all the complicated jobs of evaluating the level out of the capacitance. This capacitance is formed by the sense rod and the metallic container wall. Where containers are non-metallic or non-uniformly wide or have turbulent fluid, a metallic stilling well is provided. The amount of capacitance is proportional to the level of material between the sense rod and metallic wall of stilling tube or container.



### APPLICATION

Suitable for continuous level measurement in conductive or non-conductive liquids, powdered or granular material of homogeneous composition that have stable dielectric constant. Successfully used for monitoring and controlling the level in vessels containing water, oil, chemicals and foodstuff in processing plants.



### SYSTEM DESCRIPTION

Trans2lite is a 2-wire capacitance material level transmitter that allows material status friendly calibration. Using a combination of 4 DIP switches, calibration can be carried out in steps of 10% from 0 to 100%. This helps minimum empty-fill requirement at the time of commissioning. Two-wire operation saves third wire and thus reduces cost of installation. For generic application Trans2lite has remarkable stability and repeatability in 2 wire segment over the rest of the competition.

### SALIENT FEATURES

- ◆ TRANS2lite is a microcontroller based 2 Wire, capacitance type level transmitter.
- ◆ Equipped with a fast RISC processor, it combines 'ease of use' within a convenient size.
- ◆ Temperature compensated electronics provides stable output.
- ◆ It allows calibration in steps of 10% from 0 to 100% eliminating rigorous emptying filling needs for calibration.
- ◆ Power supply within DC automation is available from 11 to 55 VDC, addressing the need for 12V, 24V and 48V industrial supply options.
- ◆ 4-20mA Current Loop can supply up to 600 Ohm series load with 24VDC supply.
- ◆ Total power consumption @ 24V is less than 240 milliwatt when signal is 20 mA.
- ◆ This means 4-20mA signal can be carried to longer distance in terms of two wires
- ◆ Easiest Calibration: Just let it know the level for 0% to 100% in steps of 10%, rest it will take care of.
- ◆ Supports complete measurement range of Sapcon's MPILC.