



## Temperature Measurement in Tanks on Utility Vehicles



### Application:

## Digital thermometer LILLY for the reliable temperature measurement of sensitive media

for manufacturers of utility vehicles



Road tankers and fuel tankers need to cover long distances on motorways or freeways. The content to be transported is highly sensitive to some extent (e.g. fuel, bitumen or dairy products). Phase transitions need to be avoided or the growth of harmful bacteria needs to be prevented. Furthermore, volumetric metering is necessary during filling or discharging the media. Thus, it is important to be able to read the temperature precisely and quickly.

### The problem:

During transport of sensitive media over long distances, the temperature measuring instruments have to meet increased requirements due to vibration, environmental influences (dirt, rain, sunlight) and washing facilities.

### Our solution:

A digital thermometer in rugged version, completely cast with PU (polyurethane). This version is vibration tested with an acceleration of 4 g.

### Whether firmly installed or dynamically on the road: TDSCh 100 or TDKCh 100

- ◆ Measuring range:  $-99.9\text{ °C}$  to  $+550.0\text{ °C}$ , resolution 0.1 K
- ◆ Accuracy:
  - ◆ Display:  $\pm 0.3\%$  FS  $\pm 1$  digit
  - ◆ Sensor: class B according to DIN 60 751 ( $\pm 0.3\text{ K}$  at  $0\text{ °C}$ )
- ◆ Display: 4-digit LC display, digit height 18 mm
- ◆ Battery: within the scope of delivery, replaceable by the customer, battery life approx. 5–7 years, depending on application
- ◆ Stem: stainless steel, operating pressure 25 bar
- ◆ Case: with bayonet ring, stainless steel 1.4301
- ◆ Stem position / process connection: various versions

