# Measuring and Control Technology

# 2.8 Accessories for Measuring and Control Devices

# 2.8.1 Transmitter 4 ... 20 mA (Two-Wire System)

### Benefits:

- Reliable signal transmission, even over large distances
- Interference-resistant 4 ... 20 mA signal
- Simple installation directly on the sensor

### Typical applications:

Transmission of the measuring signal even over long distances and/or transmission of interferenceresistant measured signals (e.g. pH, ORP) in conjunction with controllers type D1C, D2C and DULCOMARIN® or direct connection to PCs and/or a PLC. If using a PLC, it has to have an electrically isolated input.

# pH measuring transducer 4 ... 20 mA type pH V1

Measuring range pH 0 ... 14

Measuring error < 0.1 pH (typical ±0.07 pH)

Socket SN6

Input resistance  $> 5 \times 10^{11} \Omega$ 

**Signal current output** 4 ... 20 mA ≈ -500 ... +500 mV ≈ pH 15.45 ... -1.45 not

calibrated, not electrically isolated

Power supply DC 18...24 V DC

Ambient temperature -5...50 °C, non-condensing

Enclosure rating IP 65

**Dimensions** 141 mm (length), 25 mm ( $\emptyset$ )

Order no.

pH measuring transducer 4 ... 20 mA type pH V1

809126

# pk\_5\_064

114

Ø 25

# ORP measuring transducer 4 ... 20 mA type RH V1

Measuring range 0 ... 1000 mV

**Measuring error**  $< \pm 5 \text{ mV (typical } \pm 3 \text{ mV)}$ 

Socket SN6

Input resistance  $> 5 \times 10^{11} \Omega$ 

**Signal current output**  $4 \dots 20 \text{ mA} \approx 0 \dots +1000 \text{ mV}$  not electrically isolated

Power supply DC 18...24 V DC

Ambient temperature -5...50 °C, non-condensing

Enclosure rating IP 65

**Dimensions** 141 mm (length), 25 mm ( $\emptyset$ )

Order no.

ORP measuring transducer 4 ... 20 mA type RH V1 809127

## Temperature measuring transducer 4 ... 20 mA type Pt100 V1

Measuring range 0 ... 100 °C

**Measuring error**  $< \pm 0.5$  °C (typical  $\pm 0.3$  °C)

 $\begin{array}{ll} {\rm Socket} & {\rm SN6} \\ {\rm Input \ resistance} & {\rm \sim 0 \ \Omega} \\ \end{array}$ 

**Signal current output**  $4 \dots 20 \text{ mA} \approx 0 \dots +100 \,^{\circ}\text{C}$  not electrically isolated

Power supply DC 18...24 V DC

**Ambient temperature** -5...50 °C, non-condensing

Enclosure rating IP 65

**Dimensions** 141 mm (length), 25 mm (Ø)

Order no.

Temperature measuring transducer 4 ... 20 mA type Pt 100 V1 809128