Temperature Transmitter with Display

Application

- 4...20 mA transmitter with LCD for Pt100 temperature sensor
- For installation in temperature sensor (see table)
- Sensor monitoring

Features

- 4-digit display with green backlight
- Temperature measurement in °C and °F
- Easy range select by one button
- Direct connection to the PLC
- Lower costs for wiring because of 2-wire technology

Temperature Sensor with integrated displaytransmitter MPU-LCD

Technical data MPU-LCD

Display	4-digits LCD units	with backlight °C / °F
Dislplay resolution		0,2 °C bzw. 0,5 °F
Measurement resolution		ca. 0,1 K
Accuracy	range: 100 °C	max. ±0,25 %
Repeatability	range 100 °C	±0,1 %
Lowest current step		ca. 25 µA
Range of signal		4...20,5 mA
Temperature range	ambient	-40...+70 °C
Measurement ranges	selectable	-10...40 °C 0...50 / 100 / 150 / 200 °C 0...100 / 150 / 200 °F 30...230 °F / 0...300 °F
Power supply	short cut R_{shunt} = 500 Ω	15...30 V DC 22...36 V DC
Output if failure	sensor break sensor short cut	output >21 mA output <3,6 mA
Electrical connection		M12-plug 4-pins

Installation possibilities of MPU-LCD in temperature sensor TFP-...

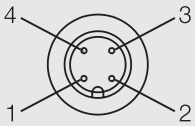
Process connection	Temperature sensor
M12x1,5 hygienic M12x1,5 hygienic	TFP-42 TFP-52
G1/2" hygienic G1/2" hygienic G1/2" hygienic	TFP-41 TFP-44 TFP-51
G1/2" standard G1/2" standard	TFP-40 TFP-50
without thread with fermenter coupling	TFP-49 TFP-90

Order code

MPU-LCD Please note that you can order the MPU-LCD with temperature sensor only!

Order example: TFP-41 / 100 / MPU-LCD

M12-plug



Configuration M12-plug

1: +supply
2: -supply 4...20 mA
3: not connected
4: not connected

Programming

By pushing the botton above the display, the actual measurement range will be shown (fig. 2). Pushing again the botton further ranges can be selected.
After approx. 3s "Stor" will be shown on the display (fig. 3). Press now again the bottom to save the selected range. Afterwards the actual temperature value will be shown again (fig. 1).

Fig. 1

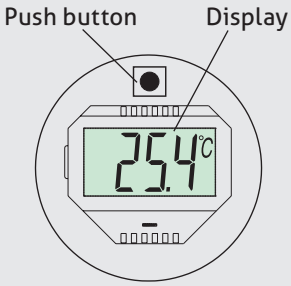


Fig. 2

Fig. 3