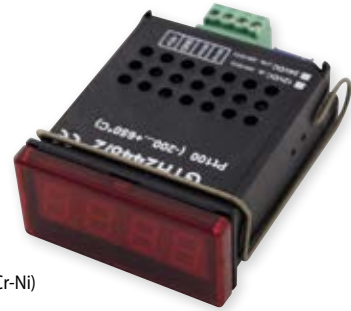
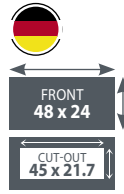
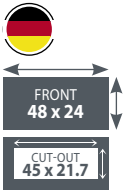


UNIVERSAL DISPLAY FOR STANDARD SIGNALS

UNIVERSAL DISPLAY FOR TEMPERATURE



GIA 2448

Art. no. 600090 (standard model)
Display for Standard Signals (for self-adjustment)

GIA 2448 WE 1)

Display for Standard Signals (settings and calibrations by our works)

1) Please specify as follows upon order: Input signal, scaling (lower and upper limits), decimal point and supply voltage. (Order to read e.g. GIA 2448 WE: 4-20 mA, 4 mA=-50.0, 20 mA = 100.0, 12 VDC)

Specifications:	
Measuring input:	0 ... 20 V, 0 ... 10 V, 0 ... 2 V, 0 ... 1 V, 0 ... 200 mV, 0 ... 20 mA and 4 ... 20 mA (select via soldering jumpers)
Display range:	-1999 ... +1999 digit (adjustable via soldering jumpers and potentiometer)
Decimal point:	any position by means of soldering jumpers (soldering jumpers accessible after removal of front panel)
Accuracy:	±0.2 % ±1 digit (at nominal temperature = 25 °C)
Scan rate:	approx. 3 measurements / s
Display:	3½-digit, red 10 mm high LED display
Working temperature:	0 ... 50 °C (permissible ambient temperature)
Relative humidity:	5 ... 95 % RH (non-condensing)
Storage temperature:	-20 ... +70 °C
Storage temperature:	8 ... 20 V DC or 18 ... 29 V DC (standard) (set via soldering jumper)
Current supply:	max. 20 mA
Panel mounting:	with VA-spring clamp. allowed panel thicknesses from 1 ... approx. 10 mm
Connection terminal:	4-pin screw-type/plug-in terminal for wire cross sections from 0.14 ... 1.5 mm ²
Protection rating:	front side IP54
Housing:	glass fibre reinforced Noryl, front panel PC
Dimensions:	48 x 24 mm (W x H) (front frame)
Mounting depth:	approx. 65 mm (incl. screw-type/plug-in terminal)
Panel cut-out:	45 ^{+0.5} x 21,7 ^{+0.5} mm (W x H).
Scope of supply:	Device, manual

Option:	
VAC	8 ... 20 V AC or 18 ... 27 V AC set via soldering jumper
G12	11 ... 13 V DC, electrically isolated
G24	22 ... 27 V DC, electrically isolated

Accessories and spare parts:	
GNG 220/2-12V	Art. no. 600305 power supply for GIA 2448 and GTH 2448 (Input: 230 VAC; output: 2 x 12 VDC regulated, 30 mA each)
GNG 12 / 24	Art. no. 600276 DC/DC-converter to electrically isolate 12 V DC-supply voltages
GNG 24 / 24	Art. no. 600277 DC/DC-converter to electrically isolate 24 V DC-supply voltages

for additional accessories, transmitter, probes p.r.t. chapters transmitter and temperature probe

GTH 2448/1

Art. no. 600083
Display for temperature (NiCr-Ni)

GTH 2448/2

Art. no. 600084
Display for temperature (Pt100)

GTH 2448/3

Art. no. 600085
Display for temperature (Pt100)

GTH 2448/4

Art. no. 600086
Display for temperature (Pt1000)

GTH 2448/5

Art. no. 600087
Display for temperature (Pt1000)

Specifications:	
Measuring input, Resolution:	
GTH 2448/1:	-50 ... +1150 °C (NiCr-Ni)
GTH 2448/2:	-200 ... +650 °C (Pt100, 2-wire), 1 °C
GTH 2448/3:	-60.0 ... +199.9 °C (Pt100, 2-wire), 0.1 °C
GTH 2448/4:	-200 ... +650 °C (Pt1000, 2-wire), 1 °C
GTH 2448/5:	-60.0 ... +199.9 °C (Pt1000, 2-wire), 0.1 °C
Accuracy: (at nominal temperature = 25 °C)	
NiCr-Ni:	±1 % ±1 digit (from -20 ...+550 °C and 920 ...1150 °C) ±1.5 % ±1 digit (from 550 ... 920 °C)
Pt100, Pt1000:	±0.5 °C ±1 digit or ±1 °C ±1 digit
Offset compensation: (only for Pt100 and Pt1000)	The zero point offset of the sensor (e.g. due to long cables) can be compensated for by means of the spindle trimmer on the backside of the device.
Display:	3½-digit, red 10 mm high LED display
Scan rate:	approx. 3 measurements / s
Working temperature:	0 ... 50 °C (permissible ambient temperature)
Relative humidity:	5 ... 95 % RH (non-condensing)
Storage temperature:	-20 ... +70 °C
Voltage supply:	8 ... 20 V DC or 18 ... 29 V DC (standard) (set via soldering jumper)
Current supply:	max. 20 mA
Panel mounting:	with VA-spring clamp. allowed panel thicknesses from 1 ... approx. 10 mm
Connection terminal:	4-pin screw-type/plug-in terminal for wire cross sections from 0.14 ... 1.5 mm ²
Protection rating:	front side IP54
Housing:	glass fibre reinforced Noryl, front panel PC
Dimensions:	48 x 24 mm (W x H) (front frame)
Mounting depth:	approx. 65 mm (incl. screw-type/plug-in terminal)
Panel cut-out:	45 ^{+0.5} x 21,7 ^{+0.5} mm (W x H)
Scope of supply:	Device, manual

System solution - complete packages:

KfZ 2000

Art. no. 603241
Exhaust gas temperature set for measurement of exhaust gas temperatures up to 1000 °C in motor vehicles (e.g. motorsports). The set consists of:

GTH 2448/1 12 V DC:

Art. no. 601017
NiCr-Ni thermometer with additional over-voltage protection

GTF 101-5-30-0150-L03-S:

Art. no. 601317
temperature probe with jacket material: Nimonic 75 (view p.r.t. page 207)
Cable length = 3 m, extended cable against upcharge available

GKV 4:

Art. no. 602891
clamping ring screw connection (p.r.t. page 219)

HANDHELD INSTRUMENT
DISPLAY / CONTROLLER
LOGGER- / BUS SYSTEMS
TRANSMITTER
TEMPERATURE PROBE
ALARM / PROTECTION, LEVEL