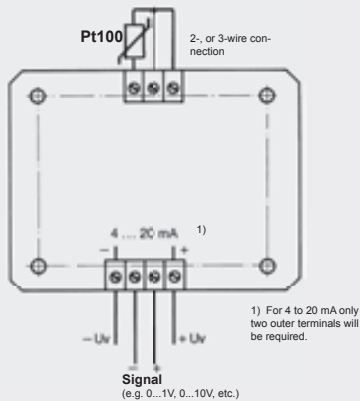


Temperature-measuring PCB for Pt100 or in snap-on housing



GTP PCB

GTP -SG snap-on housing

Design-type: PC board completely ready for operation (sensor not included) with any measuring range and any output. 3-pin connection terminal for Pt 100 in 2 or 3-wire technology. Connection terminal for output in 2-, 3-, or 4-wire technology - depending on type desired.

Specification :

Sensor element: for Pt 100 acc. to DIN IEC 751.
Suitable sensors available (prepared or unprepared) from stock - please refer to pages 130-131

Sensor connection: 2- or 3-wire connection.
Automatic line resistance compensation for 3-wire connection.

Measuring ranges: from -200 to +800 °C
Standard ranges: GTP 0100: 0 ... 100 °C
GTP 0200: 0 ... 200 °C
GTP 5050: -50 ... +50 °C
GTP 5015: -50 ... +150 °C

OPTION: any measuring range available against upcharge

Output signal: 4 - 20 mA (2-wire)
optionally 0-1 V, 0-2 V, 0-5 V, 0-10 V (3- or 4-wire)

Auxiliary energy: $V_s = 12 \dots 30$ V DC (at 0-10V: $V_s = 18 \dots 30$ V DC)

Reverse voltage protection: 50 V permanent

Permissible impedance (at 4-20mA): $R_A [\Omega] = (U_v [V] - 12V) / 0.02A$

Permissible load (at 0-__ Volt): $R_L [\Omega] > 3000 \Omega$

Operating temperature electronics: 0 ... +70 °C

Temperature coefficient: 0.01% / °C

Storage temperature: -20 ... +70 °C

Housing: ABS (IP65)

Relative atmospheric humidity: 0 ... 80 % r.h., non-condensing
Option: encapsulated PC board

PC board dimensions: approx. 56,5 x 73 x 20 mm (H x W x D)

Option snap-on housing: for top-hat rail (panel mounting),
Width of housing (pitch) 22,5 mm

Mounting: 4 holes, 3,5 mm Ø each

Mounting distance: 43,5 x 58 mm (W x H)

Miscellaneous: potentiometer for zero point and scale

Electric connection: screw-type terminals with wire protection and drill holes for testing pin, wire Ø max. 1,5 mm².
option: screw-type/plug-in terminal

Order codes (examples):

GTP0100 / LACK, SSK: PCB, 4-20 mA = 0 ... 100 °C, encapsulated PC board, screw-type/plug-in terminals

GTP -SG / AV010, MB: -50...+200 °C: snap-on housing, 0-10 V = -50...+200 °C

options - upcharges:

-AV010: option: output signal 0-10 V

-AV...: option: other output signal
(please state desired voltage)

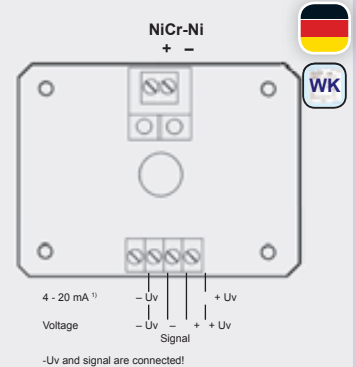
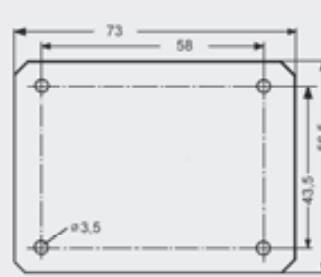
-MB: option: arbitrary measuring range
(please state desired measuring range)
No upcharge for option -AV..., -MB if more than 10 pcs. are ordered

-LACK: option: encapsulated PC board
(for outdoor application, i.e. applications where condensation is possible)

-SSK: option: screw-type/plug-in terminals
(not possible for type snap-on housing)

PC board for measuring transducer mounted in water-proof surface-type housing (IP65) p.r.t. type GTMU design-type 5 (page 101)

Temperature-measuring PCB for NiCr-Ni or in snap-on housing



GNTP PCB

GNTP -SG snap-on housing

Design-type: PC board completely ready for operation (sensor not included) with any measuring range and any output. 2-pin connection terminal for NiCr-Ni-sensor or compensation line. Optionally available: PC board with DIN type flat-pin jack free from thermo voltage for direct plug-in of temperature sensors with DIN type flat-pin plug. Connection terminals for output 2- to 4-pin (depending on output in 2-, 3- or 4-wire technology).

Specification :

Sensor element: for NiCr-Ni (type K) acc. to DIN IEC 584
suitable sensor can be supplied custom-designed according to your specifications or in standard design from stock (p.r.t. pages 123-127)

Meas. range: from -200 to +1200 °C
Standard ranges: GNTP 0100: 0 ... 100 °C
GNTP 0600: 0 ... 600 °C
GNTP 01200: 0 ... 1200 °C
GNTP 5015: -50 ... +150 °C
GNTP 2030: -200 ... +300 °C

OPTION: any measuring range available against upcharge

Output signal: 4 - 20 mA (2-wire)
optionally 0-1 V, 0-2 V, 0-5 V, 0-10 V (3- or 4-wire)

Auxiliary energy: $V_s = 12 \dots 30$ V DC (at 0-5/10V: $V_s = 18 \dots 30$ V DC)

Reverse voltage protection: 50 V permanently

Permissible impedance (at 4-20 mA): $R_A [\Omega] = (U_v [V] - 12V) / 0.02A$

Permissible load (at 0-__ Volt): $R_L [\Omega] > 10 \text{ k}\Omega$

Operating temperature electronics: 0 ... +70 °C

Accuracy electronics: $\pm 0,2$ % FS $\pm 0,5$ °C

Temperature coefficient: 0.05% / °C

Storage temperature: -20 ... +70 °C

Relative atmospheric humidity: 0 ... 80 %RH, non-condensing
Option: encapsulated PC board

PC board dimensions: approx. 56,5 x 73 x 20 mm (H x W x D)

Option snap-on housing: for top-hat rail (panel mounting),
Width of housing (pitch) 22,5 mm

Mounting: 4 holes, 3,5 mm Ø each

Mounting distance: 43,5 x 58 mm (W x H)

Miscellaneous: potentiometer for zero point and scale

Electric connection: screw-type terminals with wire protection and drill holes for testing pin, wire Ø max. 1,5 mm².
option: screw-type/plug-in terminal

Order codes (examples):

GNTP / MB: 0...300 °C, LACK, SSK: PCB, 4-20 mA = 0 ... 300 °C,
encapsulated PC board, screw-type/plug-in terminals

GNTP5015-SG / AV: 0-1V: snap-on housing, 0-1 V = -50 ... +150 °C

options - upcharges:

-AV010: option: output signal 0-10V

-AV...: option: other output signal
(please state desired voltage)

-MB: option: arbitrary measuring range
(please state desired measuring range)
No upcharge for option -AV..., -MB if more than 10 pcs. are ordered

-LACK: option: encapsulated PC board
(for outdoor application, i.e. applications where condensation is possible)

-SSK: option: screw-type/plug-in terminals
(not possible for type snap-on housing)

-TSK: option: DIN type flat-pin jack free form thermo voltage
(not possible for type snap-on housing)

PC board for measuring transducer mounted in water-proof surface-type housing (IP65) p.r.t. type GTMU design-type 5 (page 101)