

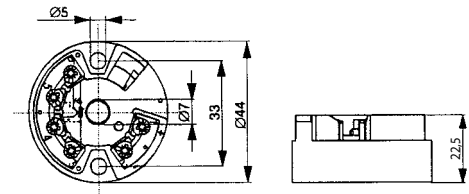
PROGRAMMABLE, ELECTRICALLY ISOLATED, 4 ... 20 MA UNIVERSAL TRANSMITTER GITT01



RESISTANCE THERMOMETERS / THERMOCOUPLES /
RESISTANCE SENSOR / VOLTAGE SENSOR

HIGHLIGHTS:

- electrically isolated
- output linear to temperatur
- high accuracy for the entire ambient temperature range (-40 ... +85 °C)
- also intrinsically safe, available with Ex-protection



GITT01

Electrically isolated, 4 ... 20 mA universal transmitter

GITT01-EX

Electrically isolated, 4 ... 20 mA universal transmitter
(Ex-protection: ATEX II 1G Ex ia IIC T6/T5/T4)

Specifications:

Input signal: can be universally programmed to

Resistance thermometer:		max. meas. range	min. meas. span
Pt100	acc. to IEC 751	-200 ... +850 °C	10 K
Pt500	acc. to IEC 751	-200 ... +250 °C	10 K
Pt1000	acc. to IEC 751	-200 ... +250 °C	10 K
Ni100	acc. to DIN 43760	-60 ... +250 °C	10 K
Ni500	acc. to DIN 43760	-60 ... +150 °C	10 K
Ni1000	acc. to DIN 43760	-60 ... +150 °C	10 K

Thermocouples:		max. meas. range	min. meas. span
Type B	PtRh30-PtRh6	0 ... +1820 °C	500 K
Type C	W5Re-W26Re (ASTME 988)	0 ... +2320 °C	500 K
Type D	W3Re-W25Re (ASTME 988)	0 ... +2495 °C	500 K
Type E	NiCr-CuNi	-270 ... +1000 °C	50 K
Type J	Fe-CuNi (acc. to IEC 584)	-210 ... +1200 °C	50 K
Type K	NiCr-Ni	-270 ... +1372 °C	50 K
Type L	Fe-CuNi (acc. to DIN 43710)	-200 ... + 900 °C	50 K
Type N	NiCrSi-NiSi	-270 ... +1300 °C	50 K
Type R	Pt13Rh-Pt	-50 ... +1768 °C	500 K
Type S	Pt10Rh-Pt	-50 ... +1768 °C	500 K
Type T	Cu-CuNi (acc. to IEC 584)	-270 ... + 400 °C	50 K
Type U	Cu-CuNi (acc. to DIN 43710)	-200 ... + 600 °C	50 K
	MoRe5-MoRe41	0 ... +2000 °C	500 K

Resistance-type sensor:		max. meas. range	min. meas. span
Resistance		10 ... 400 Ohm	10 Ohm
Resistance		10 ... 2000 Ohm	10 Ohm
Voltage sensor:		max. meas. range	min. meas. span
Voltage		-10 ... 100 mV	5 mV

Resistance thermometer:

Sensor connection:	2-, 3- or 4-wire connection
Meas. current:	<0.6 mA
Max. perm. line resistance:	11 Ohm / line
Accuracy:	
Pt100, Ni100:	±0.2 °C or ±0.08 % of measuring span
Pt500, Ni500:	±0.4 °C or ±0.16 % of measuring span
Pt1000, Ni1000:	±0.2 °C or ±0.08 % of measuring span
Temperature effect:	Td = ±(15 ppm/K * max. meas. range + 50ppm/K * meas. span)

Thermocouples:

Sensor connection:	2-wire connection
Sensor current:	<350 nA
Accuracy (typ.):	±0.5 K (Type: K, J, E, L, U), ±1.0 K (Type: N, C, D), ±2.0 K (Type: S, B, R, MoRe5-MoRe41)
CJC:	Pt100 internal or external (0 ... 80 °C)
CJC accuracy:	±1 °C
Temperature effect:	Td = ± (50 ppm/K * max. meas. range + 50 ppm/K * meas. span)
Output signal:	4 ... 20 mA or 20 ... 4 mA, 2-wire technology
Linearisation:	temperature linear, resistance linear or voltage linear
Auxiliary energy: U _b	8 ... 30 V DC (max. ripple factor: 5 V _{ss} for U _b >13 V)
Electr. isolation (E/O):	U _{eff} = 2 KV AC
Permitted load R _A :	R _A ≤ (U _b - 8 V) / 0.022 A [R _A in Ohm, U _b in V]
Supply effects:	≤ ±0.01 % / V deviation from 24 V
Load effect:	≤ ±0.02 % / 100 Ohm
Digital filter:	0 ... 60 s, configurable
Switch-on delay:	approx. 4 s
Response time:	1 s
Output limits:	3.8 ... 20.5 mA
Signal in case of sensor damage:	3.6 mA or ≥21.0 mA, configurable
Operating temperature:	-40 ... +85 °C
Climate class:	acc. to EN 60654-1, class C; condensation permissible
Vibration strength:	4 g / 2 ... 150 Hz acc. to IEC 60 068-2-6
Electric connection:	via terminals, cross section of connection terminals max. 1.75 mm ²
Housing:	PC-housing, suitable for installation in connection head acc. to DIN 43729 form B.
Dimensions:	Ø 44 mm x 22,5 mm
IP-rating:	Housing: IP54, connection terminals: IP00
Weight:	approx. 40 g
Ex-approved:	ATEX II 1G Ex ia IIC T6/T5/T4
Power supply set:	U _i ≤ 30 V DC, I _i ≤ 100 mA, P _i ≤ 750 mW C _i , L _i = negligibly small
Measuring circuit:	U _o ≤ 8.2 V DC, I _o ≤ 4.6 mA, P _o ≤ 9.35 mW
Max. connection values:	L _o = 4,5 mH (ia IIC), 8,5 mH (ia IIB) C _o = 974 nF (ia IIC), 1900 nF (ia IIB)

Accessories and spare parts:

Hutschienenadapter
Art. no. 603659
rail adapter for snap-on the GITT01 to top-hat rail

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