

# TEMPERATURE TRANSMITTERS

accurate, microprocessor based, programmable



## Features:

- Microprocessor based
- RTD, t/c, m and Ohm input (depending on type)
- Galvanic isolated optional
- Good accuracy
- RFI immunity
- Ex optional (Ex ia IIC T4/T6)
- Linear possibility
- Programmable
- Foundation Fieldbus / Profibus

## Specifications:

Input signal	RTD	: Pt100, Pt500, Ni100
	t/c	: K, J, T, E, R, S, B, L, U, N
	mV	: 0 to 100 mVDC
	Ohm	: 0 to 5000 Ohm
Temperature ranges		: see table reverse side
Minimum span RTD		: 25 °C (45 °F) or 30Ω
Minimum span t/c		: 50 (200 °C for noble metals (90 °F std. t/c))
Output		: 4-20 mA or 20-4 mA DC
Linearization		: linear for all inputs, programmable
Response time		: 1-60 sec. programmable
Linearity error		: 0,1% FS
Cold junction compensation error		: $\leq \pm 1,0$ °C
Power supply		: 7-35 V DC (28 V Ex), polarity protected
Supply effect		: 0,005% FS/VDC
Excitation current RTD		: 0,2 mA nominal
Sensor lead resistance RTD		: 5 Ohm max. per lead
Sensor lead resistance t/c		: 1000 Ohm max.
Open circuit		: up scale or down scale, programmable, with min./max. levels
Load capability		: $(V_{bat}-13V)/20$ mA
Warm-up		: 5 minutes
RFI effect		: smaller than $\pm 0,5\%$ FS
Isolation		: 1500 V DC input/output (optional)
Humidity		: 0-90% RH (air)
Ambient operation temperature		: -40 to +85 °C (-40 to 185 °F)
Dimensions		: round 43 mm o.d. x 25 mm high
Weight		: approx. 50 grams

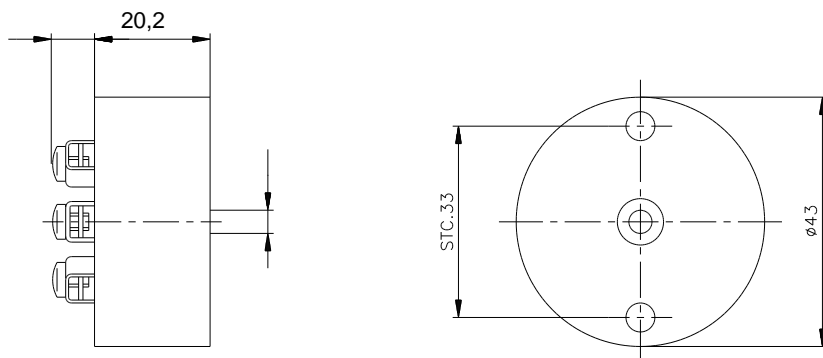
## Ordering code:

<b>5331A</b>	: Programmable, RTD,TC,Ohm or mV input	<b>5334D</b>	: Programmable, TC input CSA/FM/ATEX isolated
<b>5331D</b>	: Programmable, RTD,TC,Ohm or mV input CSA/FM/ATEX, Isolated	<b>5335A</b>	: Programmable, with Hart <sup>®</sup> protocol
<b>5333A</b>	: Programmable, RTD or Ohm input	<b>5335B</b>	: Programmable, with Hart <sup>®</sup> protocol, CSA/FM/ATEX
<b>5333D</b>	: Programmable.,RTD or Ohm input CSA/FM/ATEX	<b>5350A</b>	: Programmable, profibus <sup>®</sup> pa/foundation fieldbus
<b>5334A</b>	: Programmable, TC input,isolated	<b>5350B</b>	: Programmable, profibus <sup>®</sup> pa/foundation fieldbus CSA/FM/ATEX

**ACCESSORIES:** see reverse side or other specifications

# TEMPERATURE TRANSMITTERS

## Dimensions:



Max. wire size terminals: 1 x 1,5 mm<sup>2</sup>  
 Inner hole:  $\varnothing$  6mm

## Ranges:

Input range	°C	°F	Norm			
K	-100 to +1372	-148 to +2475	IEC584			
J	-100 to +1200	-148 to +2192	IEC584			
T	-200 to +400	-328 to +752	IEC584			
E	-100 to +1000	-148 to +1832	IEC584			
R	-50 to +1760	-58 to +3190	IEC584			
S	-50 to +1760	-58 to +3150	IEC584			
B	400 to +1820	752 to +3275	IEC584			
L	-100 to +900	-148 to +1652	DIN43710			
U	-200 to +600	-328 to +1112	DIN43710			
N	-180 to +1300	-292 to +2372	IEC584			
W3	0 to +2300	32 to +4172	ASTME988-90			
W5	0 to +2300	32 to +4172	ASTME988-90			
Pt100	-200 to +850	-328 to +1562	IEC751			
Ni100	-60 to +250	-76 to +482				
mV	-10 to +800 mV	---				
Ohm	0 to +1000 Ohm	---				

### Notes:

Pt100, 2-, 3- or 4-wire available Type 5333 is only available for a 2 and 3 wire system.

Type 5331A-3-A or **D** and 5331D-3-A **D** is including galvanic isolation.

Namur NE43 classification

5335A/B/C/D can be supplied with SIL 2 certification

EMC EN 500081, and 52082 classifications

## Accessories:

Vibration: IEC 68-2-6 test FC

TRM-93121

: special clip for rail mounting to DIN rail