

Temperature transmitter is an integral element of temperature sensor, available also as a separate component. It converts temperature sensor signal to analogue 4÷20mA, voltage 0÷10V or different signal. Transmitter can be placed directly in connection head or on TS-35mm rail.

Specification

Characteristic

- universal transmitter
- head mounted
- configurable range
- standard Flex Top 2211-0001
- communication with HART protocol, HCF, Rev5 Flex Top 2221-0001
- communication with Profibus protocol PA ver 3,0 DPVI Flex Top 2231-0001
- intrinsically safe Flex Top 2211-0002 Ex Flex Top 2221-0002 Ex ATEX II 1G Ex ia IIC T5 / T6

Input

RTD: Pt25...1000 2-, 3-, 4-wire
TC: B, E, J, K, L, N, R, S, T, U, C, D
resistance: 0÷2200Ω or 0÷390Ω
voltage: -10÷70 mV or -0,1÷1,1V

Output

4÷20 mA, 20÷4 mA for Flex Top 2211 and 2221
11 mA ± mA signal acc. to IEC 1158-2 for Flex Top 2231

Measuring range

200÷850°C for RTD min. 10°C
acc. to operating range for TC min. 50/100°C
acc. to operating range for resistance input min. 5/25Ω
acc. to operating range for voltage input 2/20 mV

Zero point adjustment

in full range

Accuracy

Pt100 0,1°C, TC 1÷2°C

Response time

Pt100 – 1,0 s; TC – 1,6 s

Galvanic isolation

3,75 kV AC Flex Top 2211; Flex Top 2221
2,0 kV AC Flex Top 2231

Max. loop resistance

$R_{l\ max} = (U_{supply} - 6,5) / 0,023 \ [Ω]$ – for 2211
 $R_{l\ max} = (U_{supply} - 8) / 0,023 \ [Ω]$ – for 2221
 $R_{l\ max} = (U_{supply} - 9) / 0,023 \ [Ω]$ – for 2231

Lead wire connection

< 2,5 mm²

Power supply

6,5÷35V DC – 2211,
6,5÷30V DC – 2211 Ex,
8÷35V DC – 2221,
8÷30V DC – 2221 Ex,
9÷32V DC – 2231,
9÷17V DC – 2231 Ex

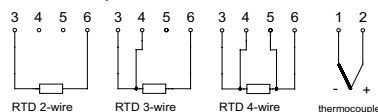
Operating conditions

temperature: -40÷85°C
humidity: up to 98% RH non-condensing

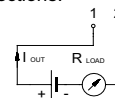


CONNECTION SCHEMES

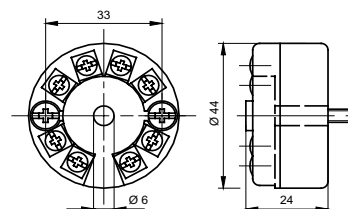
Input connections:



Output connections:



Dimensions:



Product code

		Transmitters version	
		2211-0001	standard
		2221-0001 Ex; 0002 Ex	standard Ex
		2221-0001; 0002 Ex	with HART
		2221-0001 Ex	with HART Ex
		2231-0001	with Profibus
1	<input type="text"/>	2231-0002 Ex	with Profibus Ex
		Temperature range	
		(0÷100)°C	(0÷100)°C
2	<input type="text"/>		other parameters acc. to requirements
		Input type	
		Pt100	Pt100
		J	J
		K	K
		L	L
		N	N
		T	T
3	<input type="text"/>		other parameters acc. to requirements
		RTD connection	
		2	2 - wire
		3	3 - wire
4	<input type="text"/>	4	4 - wire
		Equipment	
5	<input type="text"/>	A	with adapter for 35 mm rail mounting

1 2 3 4 5

FLEX TOP - - - -

Ordering example:

Transmitters FLEX TOP 2211-(0÷100)°C-K