

## R/I transmitter

### 2202



- Input for Pt100, Ni100 or Ohm
- Sensor cable compensation
- Linearized analog output
- 24 VDC or universally supplied
- Individual 0 and 100% adjustment



#### Advanced features

- 0 and 100% adjustments on the front face can be adjusted individually without interacting.

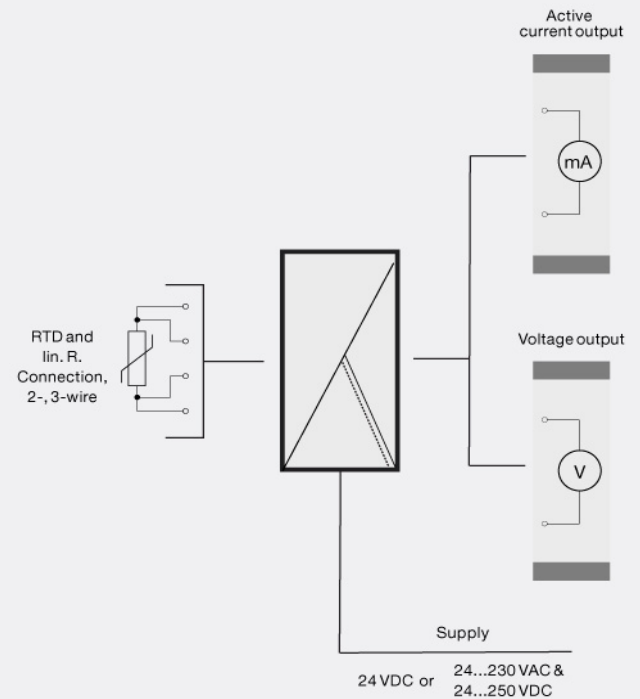
#### Application

- Linearized temperature measurement with Pt100 (to IEC 751) or Ni100 (to DIN 43760) sensors.
- Conversion of linear resistance change to standard analog current/voltage signal from for example valves or linear movements with attached potentiometer.
- Signal simulator via externally mounted 10-turn potentiometer, to aid with installation and commissioning plant.
- 3-wire connection cable compensation or 2-wire connection without cable compensation.
- Sensor error detection with Upscale, Downscale or custom set values.
- Reversible inputs with 0% set to maximum value of the desired input range and 100% set to the minimum value of the desired input range.

#### Technical characteristics

- Analog current and voltage output options include 0/4...20 mA, 0/2...10 VDC and special ranges.
- Galvanic isolation between supply and input / output ground.
- Mounting for a standard 11-pole socket which can be adapted for DIN rail or plate use with PR's 7023 adaptor and 7024 mounting keying.

#### Connections



## Order:

Type	Input	Output	Supply	Range
2202	Pt100 : L	Spec. : 0	24 VDC : D	Acc. to order
	Ni100 : N	0...20 mA : 1	24...230 VAC & : P	
	Lin. R : R	4...20 mA : 2	24...250 VDC	
	Spec. : X	0...5 mA : 3		
		0...1 V : 4		
		0.2...1 V : 5		
		0...10 V : 6		
	2...10 V : 7			

**Environmental Conditions**

Specifications range.....	-20°C to +60°C
Calibration temperature.....	20...28°C
Relative humidity.....	< 95% RH (non-cond.)
Protection degree.....	IP50

**Mechanical specifications**

Dimensions (HxWxD).....	80.5 x 35.5 x 84.5 mm (D is without pins)
Weight DC / universally supplied.....	100 g / 150 g

**Common specifications**

Supply voltage.....	19.2...28.8 VDC
Supply voltage, universal.....	21.6...253 VAC, 50...60 Hz or 19.2...300 VDC
Internal consumption.....	≤ 0.9 W (2202 __ D)
Internal consumption.....	≤ 1.4 W (2202 __ P)
Isolation voltage, test / working.....	3.75 kVAC / 250 VAC
Signal / noise ratio.....	Min. 60 dB
Signal dynamics, input.....	17 bit
Response time (0...90%, 100...10%).....	< 165 ms
Signal dynamics, output.....	16 bit
Temperature coefficient.....	±0.01°C/°Camb. (span < 100°C)
Temperature coefficient.....	±0.01% of span/°Camb. (span > 100°C)
Linearity error.....	< 0.1% of span
EMC immunity influence.....	< ±0.5%

**Input specifications**

Max. offset.....	50% of max. value
Adjustment acc. to order.....	±2.5...±25% of span
RTD input.....	Pt100, Ni100, lin. R
Cable resistance per wire (max.), RTD.....	10 Ω
Sensor current, RTD.....	> 0.2 mA, < 0.4 mA

**Output specifications**

Max. offset.....	50% of max. value
Current output: Signal range.....	0...20 mA
Min. signal range.....	5 mA
Load (max.).....	20 mA/600 Ω/12 VDC
Load stability, current output.....	≤0.01% of span/100 Ω
Sensor error indication, current output.....	Upscale / Downscale
Current limit.....	≤ 28 mA
Voltage output: signal range.....	0...10 VDC
Voltage output, min. signal range.....	250 mV
*of span.....	= of the presently selected range

**Approvals**

EMC.....	EN 61326-1
GOST R.....	Yes