

# Elimko

## E-KC-101 SERIES ISOLATED HEAD-MOUNTED TYPE TEMPERATURE CONVERTER



### ■ DESCRIPTION

The E-KC-101 is a head mount type isolated two wire temperature transmitter. The transmitter converts the measured values to a 4 to 20 mA DC signal for transmission. Thermocouples (TC) and resistance thermometers (RTD) can be used as a temperature sensor. The transmitter also accepts resistance and DC mV as an input signal.

The transmitter is configurable via by PC using proprietary software available from Elimko.

### ■ TECHNICAL SPECIFICATIONS

Power Supply	9.0 – 36 V DC
Voltage Drop	9.0 V
Isolation Voltage	1,0 kV AC
Operating Environment Temperature	-20°C to +60°C
Storage Temperature	-25°C ... 65°C
Operating Environment Moisture	< 95% RH (Non-condensing)
Protection Class	IP00
Calibration Temperature	25°C ± 3°C
Dimensions	Ø 44.0 mm x 22.0 mm
Connection Cables	Max. 1.5 mm <sup>2</sup> (AWG 16)
Output	4-20 veya 20-4 mA
Sensors	Thermocouple: B, E, J, K, N, R, S, T, L, U Resistance Thermometer: Pt-50, Pt- 100, Pt-500, Pt-1000, Ni-50, Ni100, Ni-120, Ni-200, Ni-500, Ni-1000 Milivolt: -200 ile 1000 mV Resistance: 0 ile 5000 ohm
Load Resistance	< ((Vs-9) / 0.021) Ω
Fault Warning	3.8 mA or 21.0 mA
Reading Rate	2 reading/second
CJC Fault (Thermocouple Input)	< ±1.0°C
EMC Immunity	< ± 0,5% Full Scale
Heating Period Approximately	5 Minutes
Damping Setting	0 - 60 seconds
Weight	40 gr.

CE

• This converter complies with the EMC Directive 2004/108/EC by the application of EMC standard TS EN 61326.

## STANDARD WORKING LIMITS

Sensor	Standard	Lower Limit	Top Limit	Minimum Scale	Accuracy			
					A/D	D/A		
RTD	Pt-50	IEC 60751	-200°C	840°C	25°C	±0.50°C	±0.1% Full scale	
	Pt-100		-200°C	840°C	25°C	±0.25°C		
	Pt-500		-200°C	840°C	25°C	±0.25°C		
	Pt-1000		-200°C	840°C	25°C	±0.25°C		
	Ni-50		DIN 43760	-60°C	240°C	25°C		±0.50°C
	Ni-100			-60°C	240°C	25°C		±0.25°C
	Ni-120			-60°C	240°C	25°C		±0.25°C
	Ni-200			-60°C	240°C	25°C		±0.25°C
	Ni-500			-60°C	240°C	25°C		±0.25°C
	Ni-1000			-60°C	240°C	25°C		±0.25°C
T/C	B	IEC 60584	100°C	1800°C	100°C	±2.00°C		
	E		-200°C	1000°C	50°C	±0.50°C		
	J		-200°C	1120°C	50°C	±0.50°C		
	K		-200°C	1360°C	50°C	±0.50°C		
	N		-200°C	1300°C	50°C	±0.50°C		
	R		-200°C	1760°C	100°C	±1.00°C		
	S		-200°C	1760°C	100°C	±1.00°C		
	T		-200°C	400°C	50°C	±0.50°C		
	L		DIN 43710	-200°C	900°C	50°C	±0.50°C	
	U			-200°C	600°C	50°C	±0.50°C	
mV	-	-200mV	1000mV	25mV	±0.075mV			
ohm	-	0Ω	5000Ω	50Ω	±0.50Ω			

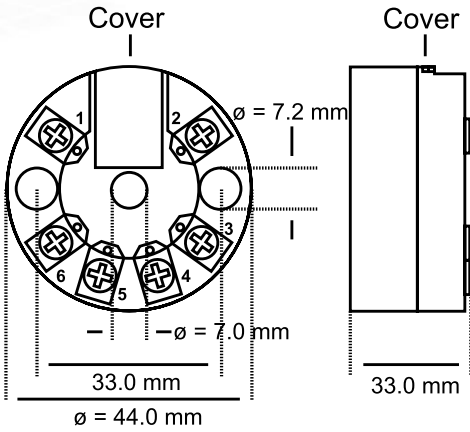
\* When you want to program the inputs and outputs of E-KC-101 Series Isolated Head-Mounted Type Temperature Converter units, PK-700-12 PC programming kit is required.

## APPLICATION SAMPLE

E-KC-101 Series Isolated Head-Mounted Type Temperature Converter

E-KC-101

## DIMENSIONS



## CONNECTION

