

Measuring transducer for thermocouple → analog signal



Funktion:

The TC-analogous converter from **HERZ** is an analogue transducer for thermocouples acc. DIN EN 60584 or DIN 43713. The temperature compensation occurs in the measuring transducer itself. The measuring transducer is delivered customised balanced from the factory. The comparison occurs according to measuring area and type of thermocouple in such manner that the appearing temperature errors are minimised.

Type TC → mA: The thermal tension generated by the sensor is changes in a norm stream signal of 4... 20 mA.

Type TC → V: The thermal tension generated by the sensor is changed in a source signal of 0... 10 V.

Settings:

The regulators for setting the balance are on top of the measuring transducer. The position of the regulators is seen in the above picture. The regulators are protected against unintended adjustment. For marginal corrections the zero regulator can be adjusted. The voltage-regulator should not be used.

Article number

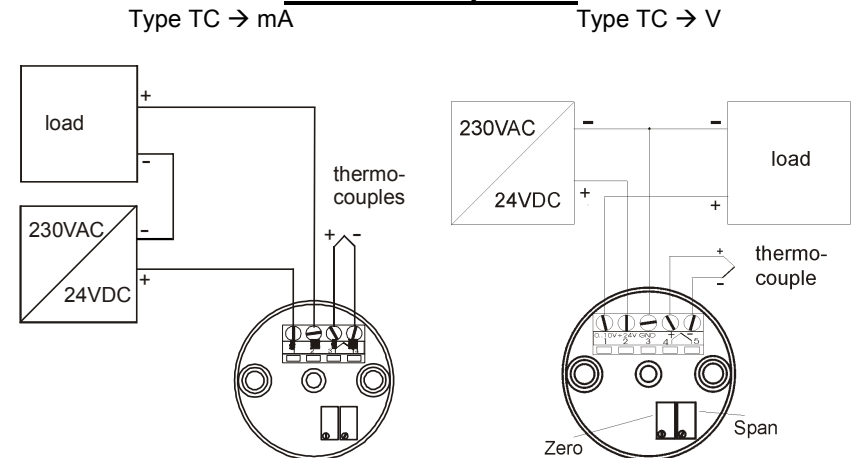
Type TC → mA
Type TC → V

Technical data

	Typ TC → mA	Typ TC → V
Input	Thermoelement Typ K, J	
Output	4-20mA	0-10V
Supply voltage	10-35VDC	15-35VDC
Max. current consumption		10mA
Sensor fracture	>20mA	>10V
Zero	>270°C*	
Range	>200°C*	
Linearity error	<1%FS*	
Mistake of the comparative place	<+/-0,5°C	
Permissible ripple	<10%	
Reaction time	>0,1s	
Temp. coefficient:	>100ppm/°C	
Operating temp. range	-25° - 85°C	
Weight	approx 100g	
Dimensions (LxWxH)	109x59x36mm	

* dependent upon thermocouple

Connection pattern



Colour marking for balance cable to EN 60584

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Element	Type	Coat colour	Plus	Minus
FE-CuNi	J	Black	Black	White
NiCr-Ni	K	Green	Green	White
Cu-CuNi	T	Brown	Brown	White

Colour marking for balance cable to EN 43713

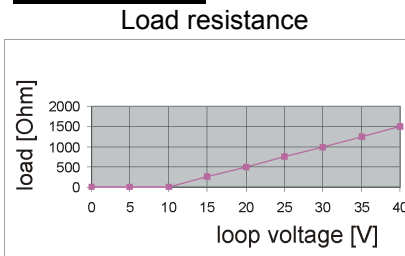
Element	Type	Coat colour	Plus	Minus
FE-CuNi	L	Blue	Red	Blue
Cu-CuNi	U	Brown	Red	Brown

Colour marking for balance cable to EN 43714

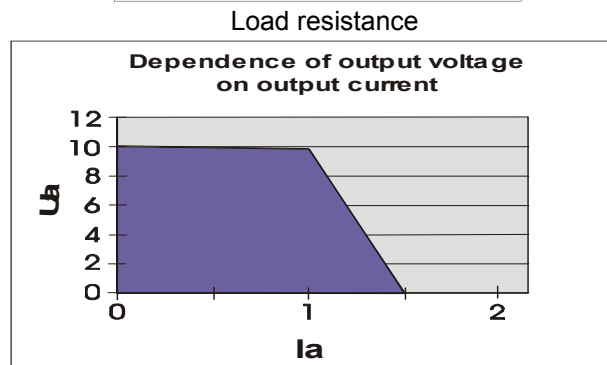
Element	Type	Coat colour	Plus	Minus
NiCr-Ni	K	Green	Red	Green

Diagrammes

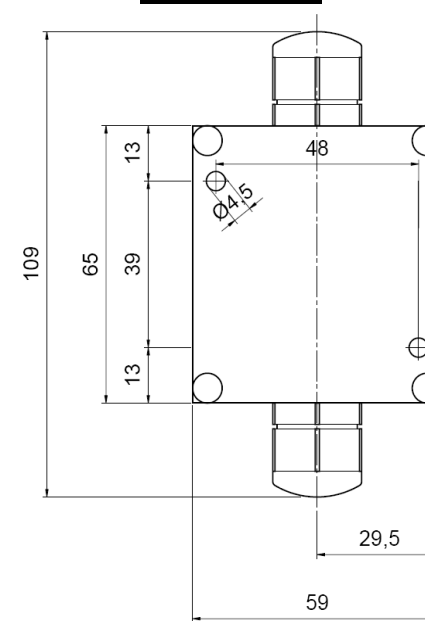
Type TC → mA



Type TC → V



Dimensions



EMV Emission: EN 61000-6-3:2001
 Disturbances: EN 61000-6-2:2001

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