

# P17 TRANSDUCER SUPPLIED FROM A CURRENT LOOP 4-20mA

## FEATURES:



- Thin-walled casing - 6.2 mm.
- Standardized d.c. current output signal 4-20 mA.
- Supply from a current loop.

## INPUTS:



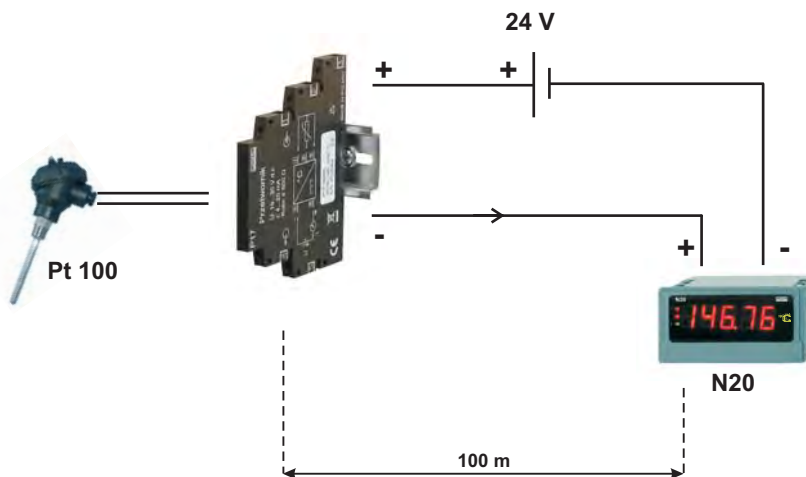
## OUTPUTS:

4...20 mA

## GALVANIC ISOLATION:



## EXAMPLE OF APPLICATION



Remote temperature measurement.

## INPUTS

Input type	Range	Overload	Error
Voltage	0 .. 10 V 0 .. 60 mV	<b>short duration (3s):</b> 30 V (sensor and voltage inputs)  <b>sustained:</b> 1% (thermocouple, resistance thermometers), 20% (voltage and resistance)	<b>Basic error:</b> +/- 0.5 % of range  <b>Additional error</b> (from ambient temperature changes): +/- (0.25 % of range/ 10 K)
Thermocouple J	-100 .. 1200°C		
Thermocouple K	-100 .. 1370°C		
Thermocouple N	-100 .. 1300°C		
Thermocouple E	-100 .. 900°C		
Resistance thermometer Pt 100	-50 .. 100 °C -50 .. 400°C		
Resistance	0 .. 150 Ω 0 .. 250 Ω		

## OUTPUTS

Output type	Admissible load resistance	Output resolution
4 .. 20 mA	$R_{load} < 500 \Omega$	0.005 mA

## EXTERNAL FEATURES

Overall dimensions	76.9 x 99.1 x 6.2 mm	
Weight	80 g	
Protection grade	ensured by casing: IP50	from terminal side: IP20
Fixing	on a 35 mm DIN rail	acc. to EN 60715

## RATED OPERATING CONDITIONS

Supply voltage	19 .. 30 V d.c.	power input < 0.7 VA
Temperature	ambient: -20...23...55°C	storage: -25...85°C
Relative humidity	< 95%	inadmissible condensation
Operating position	any	
Preheating time	15 min	

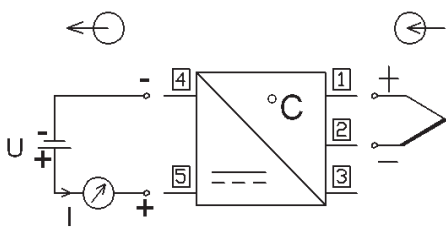
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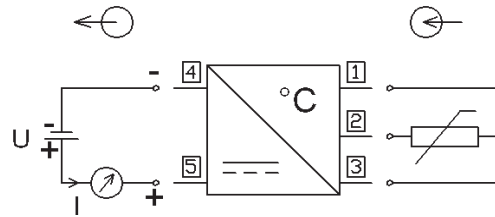
**SAFETY AND COMPATIBILITY REQUIREMENTS**

Electromagnetic compatibility	noise immunity	acc. to EN 61000-6-2
	noise emissions	acc. to EN 61000-6-4
Isolation between circuits	basic	acc. to EN 61010-1
Pollution degree	2	
Installation category	III	
Maximal phase-to-earth operating voltage	50 V	

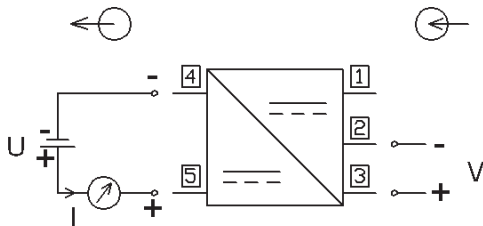
**CONNECTION DIAGRAM**



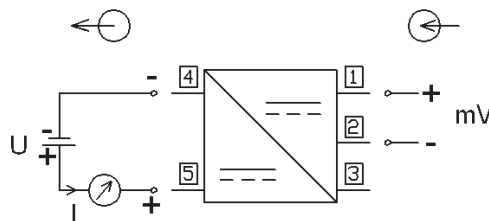
Thermocouple



Resistance thermometer in a 3-wire system



Voltage 0 .. 10 mV



Voltage 0 .. 60 mV

**Fig.1. Connection of external signals.**

**ORDERING**

	P17	XX	XX	X
<b>Input type and range:</b>				
voltage	(0 .. 10) V	00		
thermocouple J (Fe-CuNi)	(-100 .. 1200)°C	01		
thermocouple K (NiCr-NiAl)	(-100 .. 1370)°C	02		
thermocouple N (NiCrSi-NiSi)	(-100 .. 1300)°C	03		
thermocouple E (NiCr-CuNi)	(-100 .. 900)°C	04		
resistance thermometer Pt100	(-50 .. 100)°C	05		
resistance thermometer Pt100	(-50 .. 400)°C	06		
voltage	(0 .. 60) mV	09		
<b>Version:</b>				
standard			00	
custom-made*			XX	
<b>Acceptance tests:</b>				
without extra quality inspection requirements				8
with an extra quality inspection certificate				7
acc. to customer's agreements*				X

\* - after agreement with the manufacturer

**Order example:**

The code: **P17- 05-00-8** means:

- P17** - transducer of P17 type supplied from a current loop
- 05** - input signal: resistance thermometer Pt100, range: -50 .. 100°C
- 00** - standard version
- 8** - without extra quality inspection requirements.

SEE ALSO:



Feeder module - SM9.



Meter of current, d.c. voltage and temperature - N20.



KD7 recorder.



Programmable transducer of temperature and standard signals- P20.



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