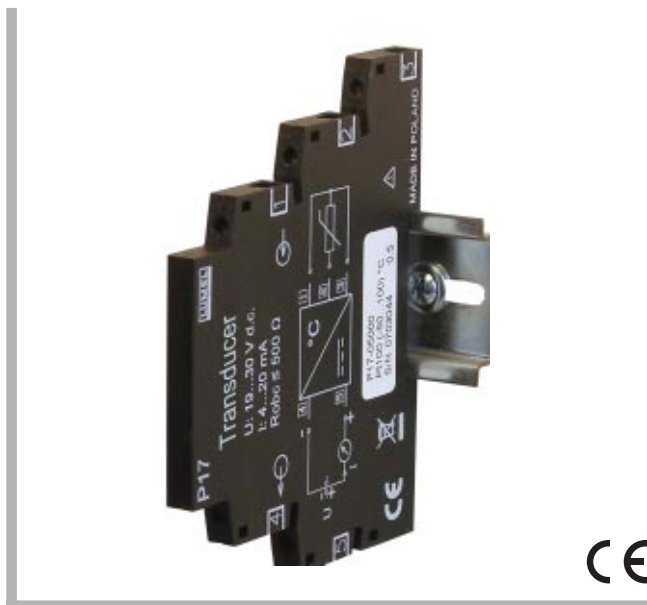


TRANSDUCER SUPPLIED FROM A CURRENT LOOP

P17 TYPE



- dimensions (A x B x C) 76.9 x 99.1 x 6.2 mm
 - weight 80 g
 - fixing on a rail acc. to EN 60715
- Inputs:**
- type and input range acc. to the version code
 - input resistance > 1 M Ω for P17-00XXX version
 - current flowing through RTD < 400 μ A
 - resistance of wires connecting the RTD with the transducer \leq 10 Ω / wire
 - characteristics of TC acc. to EN 60584-1
 - characteristics of RTD acc. to EN 60751+A2

- Outputs:**
- range of analog input 4...20 mA
 - output definition 0.005 mA
 - output load (Rload) < 500 Ω

- Electromagnetic compatibility:**
- noise immunity, acc. to EN 61000-6-2
 - noise emissions, acc. to EN 61000-6-4

- Safety requirements acc. to EN 61010-1**
- installation category III
 - pollution grade 2
 - phase-to-earth working voltage: 50 V

APPLICATION

The P17 transducer supplied from a current loop, converts the signal from temperature sensors or a standard voltage signal into a 4...20 mA current. Working in such a configuration, the transducer conducts itself as an active load, and consumed current by this load is proportional to the modification of the signal measured on the transducer input.

INSTALLATION

P17 transducers are designed to be installed on a 35 mm rail acc. to EN 60715 standard. The housing with dimensions: 6.5 x 99.1 x 76.9 mm is made of a self-extinguishing plastic. Terminal strips, with screw terminals, enable the connection of external wires of 2.5 mm² cross-section.

TECHNICAL DATA

Basic parameters:

- conversion error \pm 0.5% of the range
- additional error from ambient temperature changes \pm (0.25 % of range /10K)
- conversion time 1 s
- supply voltage (U) 19...30 V d.c.
(for Rload \leq 500 Ω)
- power consumption < 0.7 VA
- transducer preheating time 15 min
- ambient temperature -20...+23...+55°C
- storage temperature -25...+85°C
- relative air humidity <95% (inadmissible condensation)
- operating position any
- sustained overload capacity 1% (TC and RTD)
20% (voltage and resistance)
- momentary overload (3 s) 30 V (input of sensors and voltage)
- guaranteed protection grade IP50 (housing)
IP20 (electrical connections, terminals)

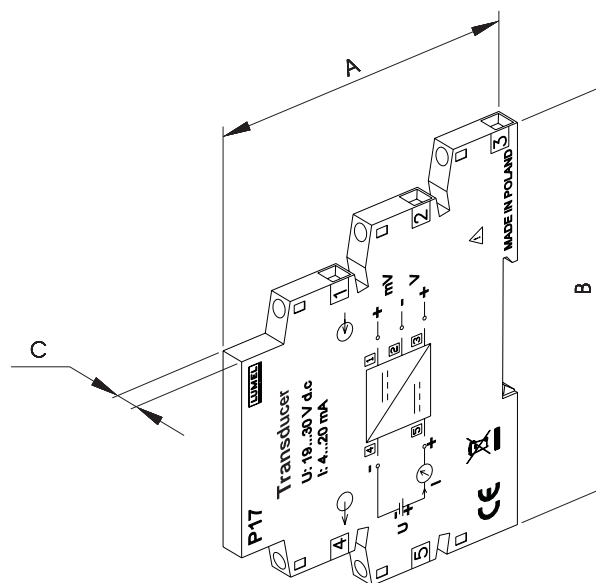


Fig.1. View of the P17 transducer.

EXTERNAL CONNECTIONS

Measured signal	Connection way
Thermocouple	
Resistance thermometer or resistance measurement in a three-wire system.	
Resistance thermometer or resistance measurement in a two-wire system.	
Voltage 0 ... 10 V	
Voltage 0 ... 60 V	

Fig.2. Connections of external signals.

ORDER CODES

Version codes of the P17 transducer

Transducer supplied from a current loop P17 -	XX	XX	X
Input signal:			
Voltage	(0 ... 10) V	.....	00
Thermocouple J	(-100 ... +1200) °C	.....	01
Thermocouple K	(-100 ... +1370) °C	.....	02
Thermocouple N	(-100 ... +1300) °C	.....	03
Thermocouple E	(-100 ... +900) °C	.....	04
Resistance thermometer Pt100	(-50 ... 100) °C	.....	05
Resistance thermometer Pt100	(-50 ... 400) °C	.....	06
Resistance	(0 ... 150) Ω	.....	07
Resistance	(0 ... 250) Ω	.....	08
Voltage	(0 ... 60) mV	.....	09
Kind of option:			
Standard	.....	.....	00
On order*	.....	.....	XX
Acceptance tests:			
Without additional requirements	.....	.....	8
With a quality inspection certificate	.....	.....	7
Acc. to customer's agreement*	.....	.....	X

* after agreement with the manufacturer

ORDERING EXAMPLE:

The code: **P17-05.00.8** means a transducer version supplied from a current loop,
05 - Input signal: Pt100 RTD, range: -50...100°C
00 - Standard option
8 - Without additional quality inspection requirements