

# Analogue cable amplifier For strain gauge resistance thermometry bridges Model EZE09

WIKA data sheet AC 50.03

## Applications

- Machine building and plant construction
- Manufacturing automation
- Industrial weighing technology

## Special features

- High accuracy
- Input signal: strain gauge resistance thermometry bridge; output signal 0/4 ... 20 mA or DC 0 ... 10 V
- Cable length between amplifier and read-out unit: up to 100 m are possible
- Compact design
- Ingress protection IP67

**Analogue cable amplifier, model EZE09**

## Description

The model EZE09 analogue cable amplifier is used to adapt the output signal of strain gauge force transducers to indicators or to a downstream controller.

Through the practical form of its case, it can be fastened almost anywhere with a simple screw clamp. The case corresponds to IP67 ingress protection and is thus suitable for use in harsh environments.

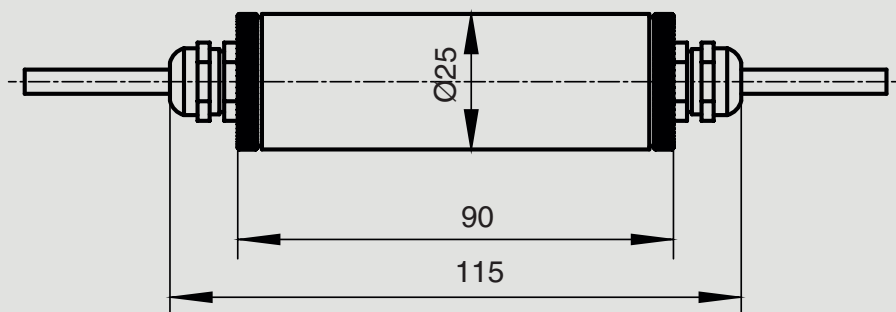
All strain gauge force transducers that can be operated with a DC voltage can be connected. With the combination of the cable amplifier with a force transducer, this measuring unit can be adjusted in line with customer wishes.

The supply voltage of DC 12 ... 28 V ensures a direct connection to a PLC. These usually feature a 24-volt supply voltage. The analogue output enables the direct signal processing in the PLC.

## Specifications

Model EZE09	4 ... 20 mA version	DC 0 ... 10 V version
<b>Input signal</b>	Resistance thermometry bridge, 4- or 6-wire	
Sensitivity	0.35 ... 3.5 mV/V	
Input resistance	> 10 <sup>9</sup> Ω	
<b>Linearity</b>	< 0.02 %	
<b>Output signal</b>	0/4 ... 20 mA, 3-wire	DC ±5 V / ±10 V, 3-wire
Residual ripple	< 10 mV at 400 Ω	< 10 mV
Max. load	Load < 400 Ω	≤ 2 mA
Output resistance	-	< 1 Ω
<b>Sensor supply</b>	DC 5 V short-circuit-proof (max. 20 mA)	
<b>Temperature effect on the supply voltage</b>	< 25 ppm / K	
<b>Temperature effect on the characteristic value TK<sub>c</sub></b>	< 0.02 % / 10 K	< 0.015 % / 10 K
<b>Temperature effect on the zero signal TK<sub>0</sub></b>	< 0.02 % / 10 K	< 0.015 % / 10 K
<b>Rated temperature range</b>	10 ... 50 °C	
<b>Service temperature range</b>	0 ... 60 °C	
<b>Storage temperature range</b>	-10 ... +70 °C	
<b>Supply voltage</b>	DC 12 ... 28 V	
Residual ripple	< 10 %	
Current supply	max. 70 mA	
<b>Limit frequency</b>	1 kHz -3 dB others on request	
<b>Ingress protection</b>	IP67	
<b>Electromagnetic compatibility</b>	EN 61326-1:2013 EN 61000-6-2:2005 EN 61000-6-3:2007 EN 55011:2016	
<b>Dimensions (Ø x L)</b>	25 x 115 mm (incl. threaded connection)	
<b>Cable length</b>		
Sensor side	1 m (max. 3 m)	
Output side	3 m (max. 100 m)	3 m (max. 10 m)
<b>Weight</b>	approx. 100 g	

## Dimensions in mm



## Electrical connection

### Amplifier output, flying leads, unfinished

