

Datasheet Datasheet Datasheet

Signal converter ESU ESU-PI4, ESU-PI4-B

General description

The signal converter ESU-PI4 transforms the resistance change of a potentiometer into a resistance-proportional 4-20mA standard signal. Both the auxiliary power (voltage 10-36V DC) and the measuring signal (current) are transmitted via a two-wire loop. For the device version ESU-PI4-SV, a DC/DC converter is assembled to implement an galvanic isolation between the supply voltage and the output signal 4-20mA.

The start and end value can be adjusted in the range of approx. 30% of the potentiometer value.

The module ESU-PI4-B can be plugged directly into the connection head (type B) e.g. float switch with reed chain. The converter is assembled in a sealed cup and thus protected against external influences.

This results in advantages such as low installation costs, low wiring complexity and high immunity to interference.

The signal converter ESU-PI4 is specially designed for the level detection in conjunction with a PLC, but can generally be used for all applications where a potentiometer is used for signal conversion.

Features

- top head rail mounting or installation in connection head
- direct connection to a PLC
- start and end value adjustable
- resistance-linear 4-20mA signal
- high interference resistance

Technical data

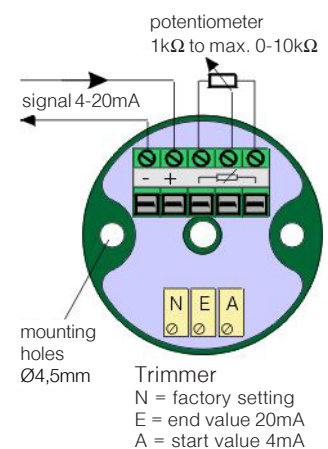
Enclosure	for connection head (type B): cup Ø44x21,5mm (plastic PA6GV30) for DIN-rail: module enclosure ME22,5 22,5 x 99 x 114,5 mm (W x H x D)
Mounting	cup: 2 screws M4, distance 33,0mm DIN-rail
Connection	screw terminals 1,5mm ²
Environment	operating temperature -20...+70°C storage temperature -40...+85°C
Input	potentiometer (three wire connection)
Range	0-1kΩ to 0-10kΩ
Start value	0-30% of potentiometer value
End value	70-100% of potentiometer value
Accuracy	<±0,2% of end value
Temperature drift	0,005%/K (-20...70°C)
Output	currentloop 4-20mA
Auxiliary voltage	10...36V DC, ripple ±5%
Option SV	12 or 24V with DC/DC-converter 230V AC with transformer



Signal converter ESU-PI4-SV and ESU-PI4



Signal converter ESU-PI4-B



connection plan ESU-PI4

Please ask for designs according to customer request!

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Technical changes, errors and misprints reserved

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