

# Passive Converter

AD-TW 401 ST

## Description

The converter serves to isolate the potential of the impressed currents. It does not require any auxiliary power; the for the operation required energy is taken from the test signal.

The response ratio is 1:1.

## Application

The multiple applications of these transducers include the economical detachment for the computer input, the apply as guard circuit before the high sensitive measuring instruments an the galvanical isolation in complex measuring systems. In order tho provide the bottom with input- and output-terminals we have designed the plug in module AD-TW 401 ST.



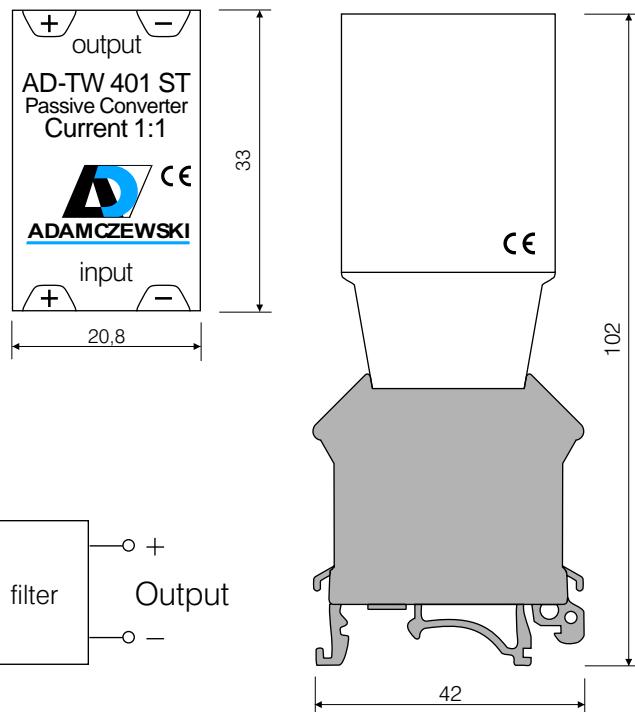
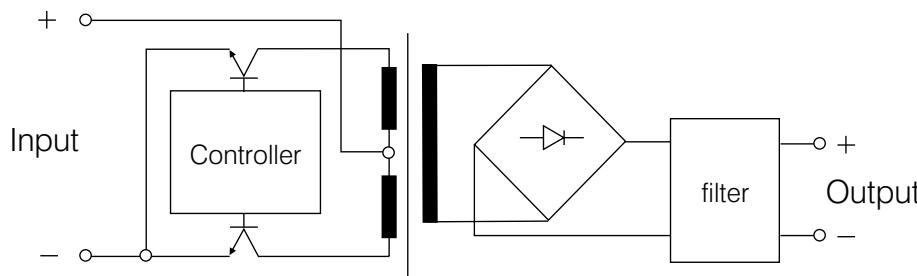
## Technical data

Input:	impressed direct current 0(4)-20 mA, max. 50 mA
Voltage drop of the converter:	$U_w < 1,5 \text{ V}$ at $I_E = 20 \text{ mA}$
Input impedance:	$R = R_a + U_w/I_E$ $I_E = \text{Input current}$ $R_a = \text{burden}$
Critical frequency:	5 kHz (-3dB) at 500 Ohm load and Input 20 mA
Output:	output = input (1:1)
max. load:	800 Ohm at 20 mA Input
Ripple frequency:	<0,5 % (at 20 mA Input and 800 Ohm load)
Linearity:	<0,03% / 100 Ohm
Preoscillation current:	30 $\mu\text{A}$
Reaction time:	150 $\mu\text{s}$ (Input jump 0 to 20 mA, load = 800 Ohm, the signal increases from 10% to 90 %)
Isolation voltage:	input-output 500 V
Protective system:	Input: Overvoltage limited to 24 V protection of confusing the poles Output: Overvoltage limited to 24 V
Ambient temperature:	0 to +50 C
Difference in temperature:	ca. 15 ppm/ $^{\circ}\text{K}$

## Connection and dimension: AD-TW 401 ST

weight: ca. 100 g  
protection: IP 20  
manner of fastening:  
DIN rail 35mm (EN50022)

connection data:  
fine-wire: 2,5 mm<sup>2</sup>  
single-wire: 4,0 mm<sup>2</sup>  
max. voltage: 250 V~



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