

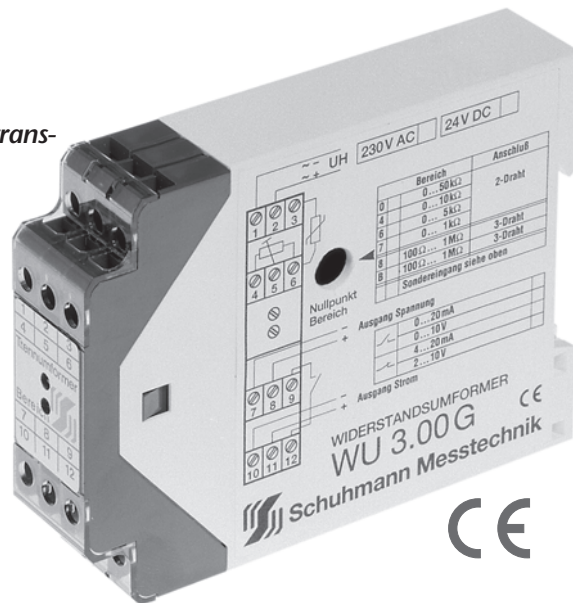
# Resistance Measuring Transducer

## WU 3.00



### Features:

- top hat rail housing*
- easy connection of all resistance transmitters*
- simplified starting up due to pre-determined standard signals*
- galvanic isolation between input, output and supply circuits*
- auxiliary power 230 V AC or 24 V DC possible*
- 2-channel simultaneous output, current and voltage output*
- good value transducer*



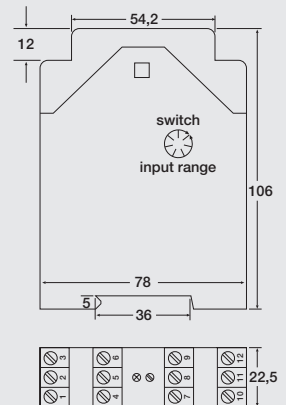
### Application:

The WU 3.00 G is constructed for converting the value of resistance into a linear current and voltage signal. The output resistance can be compensated by a zero-trimmer/range trimmer. The device is universally applied. At the input side a potentiometer in 3-wire technique or a resistance transmitter in 2-wire technique can be connected. Due to its multiple input and output signals this device has a large range of application. The desired adjustments can be chosen from the table. Due to the 2-channel output and the galvanic isolation of input and output

circuit, it is possible to connect simultaneously an indicating instrument and a PLC input to the WU 3.00 G.

The transducer is used for different applications: analysis of teletransmitters, position-, level- or rotation angle meters, manometers, filling-level meters, valves, measurement of lengths as well as rotation angle measurements.

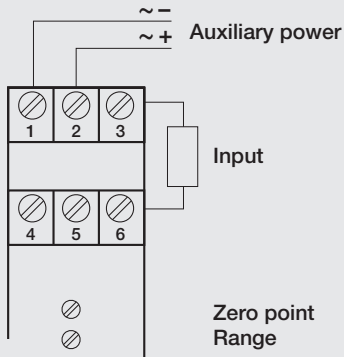
The transducer is mainly used in water management, telecontrol engineering, mechanical engineering and process technology.



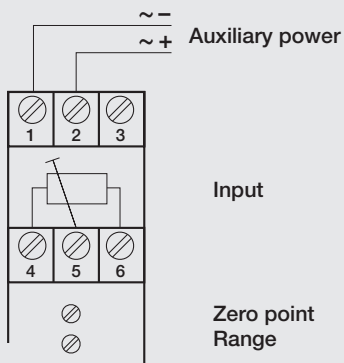


# WU 3.00

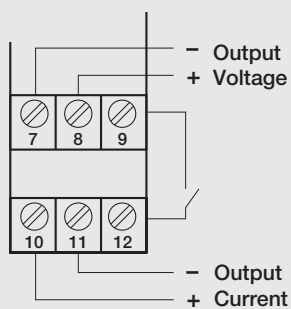
## 2-wire connection



## 3-wire connection



## Output U/I







Input		
Switch	Type	Range
0	2-wire connection	0...50 k $\Omega$
3	2-wire connection	0...40 k $\Omega$
4	2-wire connection	0...10 k $\Omega$
5	2-wire connection	0...6 k $\Omega$
6	2-wire connection	0...5 k $\Omega$
7	2-wire connection	0...1 k $\Omega$
8	3-wire connection	100 $\Omega$ ...1 M $\Omega$ at 0...100%
B	3-wire connection	100 $\Omega$ ...1 M $\Omega$ at 0...80%
C	3-wire connection	100 $\Omega$ ...1 M $\Omega$ at 0...20%
Series resistance with 3-wire connection 100 $\Omega$ ...1 M $\Omega$ . If the potentiometer is used only partly, maybe a special input is possible. Please contact us accordingly.		

Range of adjustment  $\pm$  15%  
Nullification  $\pm$  30%

## Output:

D.C. voltage:  
0...10V permissible load  $\geq$  1 k $\Omega$   
non-reactive 5 k $\Omega$   
amplification

D.C. current:  
0...20mA permissible load 580  $\Omega$   
4...20mA switchable (clamp 9/12)

Output voltage/current			
	0 ... 20 mA		4 ... 20 mA
	0 ... 10 V		2 ... 10 V

## Electromagnetic compatibility law

Germany in accordance with  
EMC Directive: 2004/18/EG\*  
Low-Voltage Directive: 2006/95/EG

## Additional function output U/I:

When operating with bridge between clamp 9 and 12, the offset at the output is lifted to 4mA/2V (live-zero signal)

## Mounting details:

### Housing for top hat rail

Type of protection: IP 20 housing/IP 10 clamps  
Width: 22,5 mm  
Rail-mounting fixed according to  
EN 50022-35 x 7,5mm  
Weight: 190 g

For safety reasons, we recommend to mount the top hat rail housing with a distance of approx. 5 mm to each other.

## Auxiliary power:

AC voltage: 230V (200...250V) AC (50...60Hz)  
consumption approx. 10mA

DC voltage: 24V DC (20...30V)  
consumption approx. 50mA

Influence of auxiliary power: < 0,05%

## Environmental conditions:

Storage temperature: -40...+70°C  
Operating temperature: 0...50°C  
Isolation voltage: > 4kV input-output  
> 4kV auxiliary voltage AC  
> 2kV auxiliary voltage DC  
optional > 4kV auxiliary voltage DC

## Ordering information:

Type:

**WU 3.00 G** housing for top hat rail  
**WU 3.00 G 12 V DC** with auxiliary power 12 V DC, at approx. 100 mA power consumption  
**WU 3.00 G DC** with auxiliary power 24 V DC  
**WU 3.00 G W** with wide range power 20...253 V AC/DC

\* minimum deviations possible during HF-radiation influence