

## Measuring Transducers

### Type DC-Transducer MA-G.1 (direct voltage) MV-G.1 (direct current)



The measuring transducers MA-G.1 and MV-G.1 are used for the transformation and galvanic isolation of a direct current or a direct voltage into an impressed direct current and direct voltage signal. The measurand is transmitted to the amplifier or impedance converter via an input protective circuit. The direct voltage generated there is galvanic isolated and transformed at the output into an impressed direct current and in an impressed direct voltage. Both outputs are no-load proof and short-circuit proof. Connecting the two outputs is not permissible. An auxiliary voltage is required.

#### Technical Data

##### Input Data

##### Input variable

direct voltage or direct current

##### Rated values

a value from 0-5 mV to 0-600 V,  $R_i = 100 \text{ kOhm/V}$ ,  
max. 2 MOhm

a value from 0-100  $\mu\text{A}$  to 0-5 A, voltage drop 60 mV

##### Option

•Transmission of both polarities

##### Overload permanent

current 2-fold, voltage 5-fold / max. 830 V

##### High surge load

current 20-fold, 1 sec.

##### Output Data

##### Outputs no Auxiliary

0-20 mA/0-500 Ohm load and 0-10 V max. 10 mA load as well as .

##### Voltage and Standard

4-20 mA/0-500 Ohm load and 2-10 V max. 10 mA load, switchable on front side, if both outputs are used simultaneously, the maximum load on the voltage output is 1 mA,  $I_{\text{max}} < 40 \text{ mA}$ ,  $U_{\text{max}} < 24 \text{ V}$

##### Options with Auxiliary

• bipolar output (e.g.  $-20 \text{ mA} - 0 - +20 \text{ mA} / -10 \text{ V} - 0 - +10 \text{ V}$ )

##### Voltage and custom-

• zero-point rise (e.g. 0-10-20 mA / 0-5-10 V)

##### built

• frequency module a value from 0-5 Hz to 0-10 kHz

○ „open-collector“ NPN, max. 30V, 100 mA load, impulse/break 50/50

% ○ square wave signal 5V, max. 10 mA load,

impulse/break 50/50 %

##### Load influence

No

##### Residual ripple

< 15 mVss

# Measuring Transducers

## Type DC-Transducer MA-G.1 (direct voltage) MV-G.1 (direct current)

### Auxiliary Voltage

<b>Default</b>	230 V AC $\pm 20\%$ , 45-65 Hz, 2,5 VA
<b>Options</b>	<ul style="list-style-type: none"> <li>• 110 V AC <math>\pm 20\%</math>, 45-65 Hz, 2,5 VA</li> <li>• 24 V DC, -15 % to +25 %, 2 W, (EMC EN 61326 class A)</li> <li>• 6-30 VAC+DC or 36-265 VAC+DC, 2 VA, (EMC EN 61326 class A)</li> </ul>

### General Data

<b>Accuracy</b>	$\pm 0,5\%$ full scale
<b>Response time</b>	< 300 ms (with frequency module < 400 ms) option: • < 200 $\mu$ s
<b>Operation temperature</b>	-15 to +20 to +30 to +55 °C
<b>Storage temperature</b>	-25 ... +85 °C
<b>Temperature influence</b>	< 0,1 % at 10 K

### Installation

snap on mounting on top hat rail 35 mm (EN 60715)  
The equipment is suitable for tight on tight assembly, however, with ambient temperatures of >45 °C a distance apart of 10 mm is recommended. The assembly location should if possible be free from vibration.

### Terminals

screw terminal max. 4 mm<sup>2</sup>, tightening torque 0,8 Nm

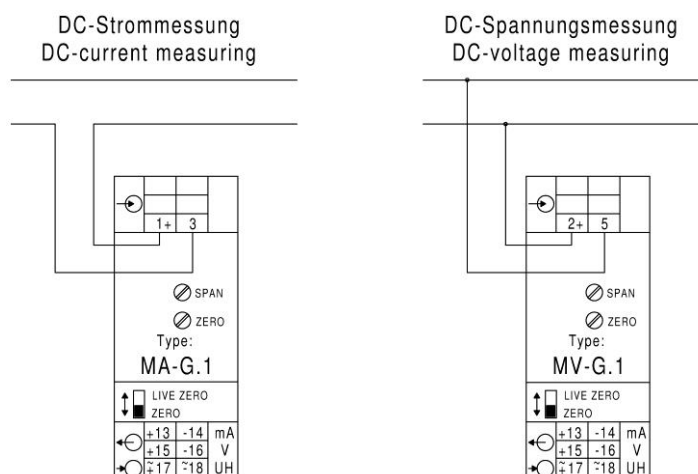
### Weight

170 g

### Observe instructions

The calibrated double outputs are switchable between 0-20 mA and 0-10 V or 4-20 mA and 2-10 V. Please refer to the manual.

### Connection



For devices with frequency output further outputs not available. Terminals +13 and -14 are the frequency output.