HAEHNE

Product Description

Digital Measuring Amplifier DMA2

Special Features

- ❒ Integrated display of actual force and parameters
- ❒ Simple operation with control panel buttons
- ❒ Calibration and zero adjust by menu prompts
- ❒ 2 voltage outputs (direct / filtered)
- ❒ Percent or actual value display (3½ digits)
- ❒ Peak value storage
- ❒ Power supply and signal outputs galvanically isolated

Scope of Supply

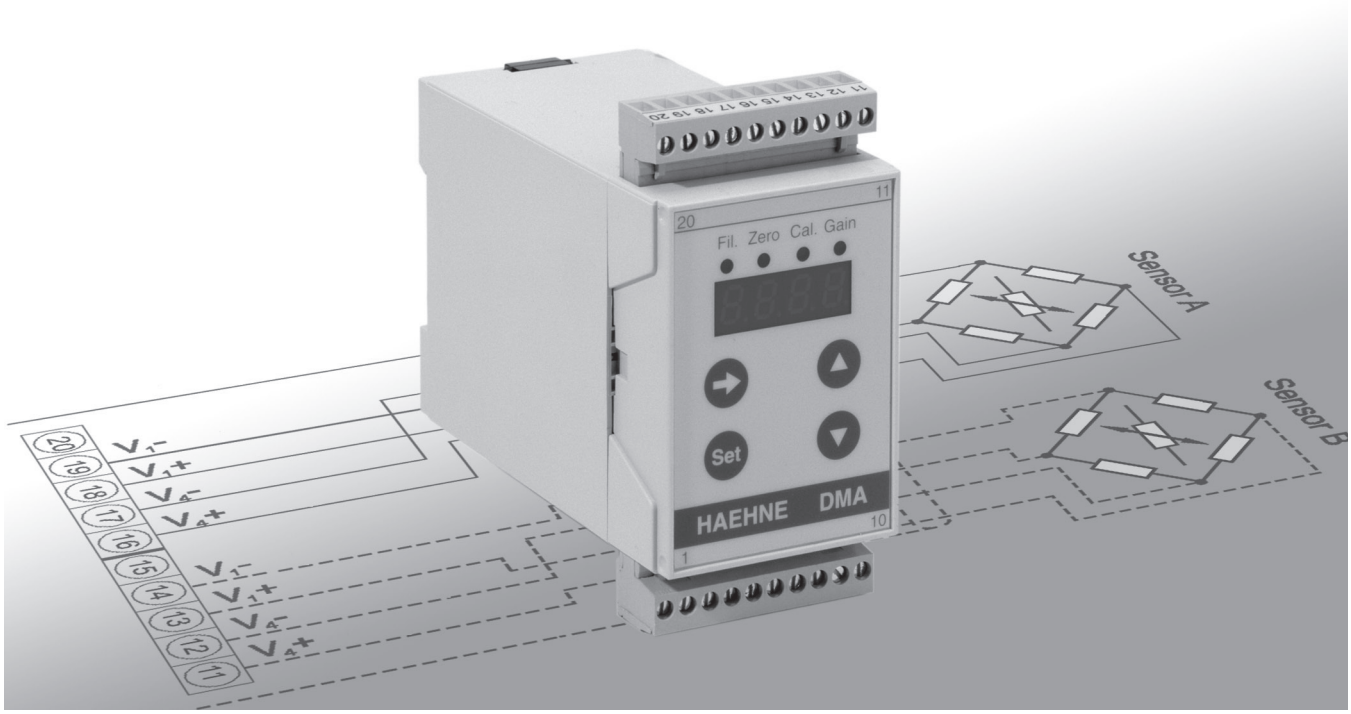
- **Amplifier in DIN Rail Mount Enclosure**
- **Standard** (Option U): 2 voltage outputs (direct / filtered), 10 V strain gauge supply voltage

Versions

- **Option C:** 1 current output 4…20 mA, 2 voltage outputs (direct / filtered)
- **Option N:** 1 current output 0…20 mA, 2 voltage outputs (direct / filtered)

Additional Accessories

- **Option E:** Enlarged excitation supply 160 mA
- **Option F** (potentially explosive atmospheres): Use with safety barriers-
- **Option J:** Strain gauge supply voltage 5 V



Application

The amplifier **DMA** is designed for full bridge load cells as well as special web tension sensors.

In a cabinet it can be DIN rail mounted or directly to a wall.

This space saving SMD components design combines the advantages of analog and digital electronics:

Analog — Fast signal processing without AD converter steps

Digital — The microprocessor automatically controls zero adjust and calculates the calibration value

The **DMA** offers especially OEM´s substantial simplification of commissioning and service:

- Pre-setting of amplification (to be selected in the MENU)
- Plug-in terminal blocks designed for pre-wiring
- Zero adjust and calibration by push buttons
- Display of actual force (as percent of nominal force or actual value)

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DMA2

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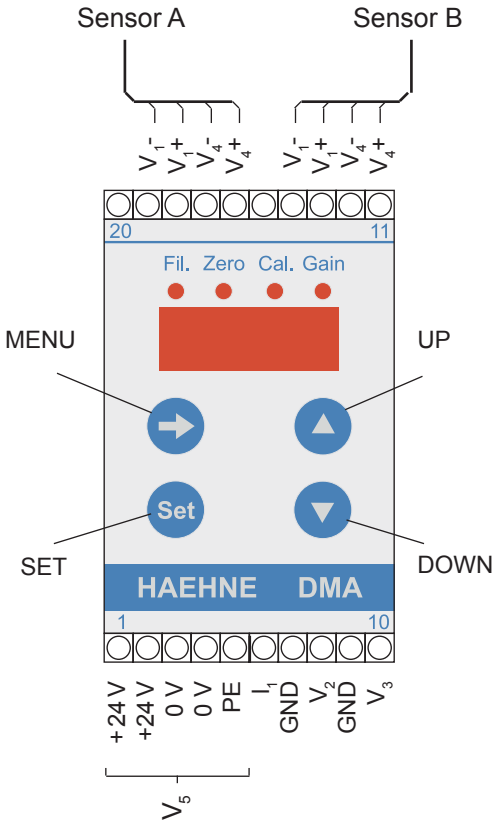
Technical Data		
Strain gauge excitation supply		
	Voltage (V_4)	10 V
	Option J	5 V
	Max. current	60 mA
	Option E / Option F	160 mA
Zero adjustment compensation voltage (relative to the voltage inputs)		
	-25…0…+25 mV	
Total amplification		
	Adjustment range	400…2800 V/V
	Factory adjustment at 1,5 mV/V at 1 mV/V at 0,75 mV/V	 667 V/V 1000 V/V 1333 V/V
Signal output		
	Voltage (V_2, V_3)	-10…0…+10 V
	min. load resistance	5 kΩ
	Signal rising time (10…90 %)	V_2 direct: 5 ms V_3 filtered: 2 s
	Current (I_1) Option C Option N	 4...20 mA 0...20 mA
	Max. load resistance	600 Ω
Supply voltage*		
	Voltage	24 V DC, ± 4 V
	Current consumption (Standard)	approx. 90 mA
Enclosure protection		IP20
Temperature range		0…60° C
Terminal cross- section		AWG 22-12

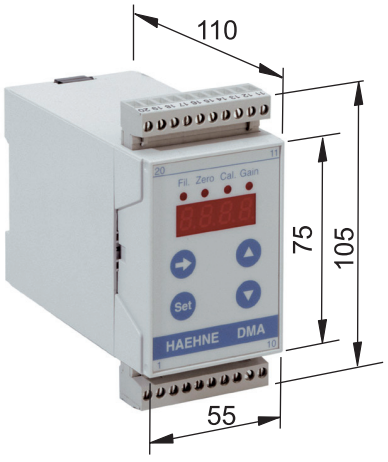
* The auxiliary power V_5 must be grounded. When using the power supply V_5 a maximum current of 10 Amps should not be exceeded.



V_1	Output signal of full bridge strain gauge
V_2	Direct voltage output
V_3	Filtered voltage output
V_4	Excitation voltage to the full bridge strain gauge in the sensors
V_5	Supply voltage 24 V DC
I_1	Current output (option C and N)

Enclosure

DIN rail mount enclosure with LED display (3½-digits)
Dimensions: 75 × 55 × 110 mm / 3 × 2.2 × 4.3 in
Four push buttons: MENU UP DOWN SET
Plug-in terminal blocks



Ordering Data

DMA2-U

Option
Type

Ordering data option F:
Indicate the total resistance from measuring chain for option F (e. g. 350 Ohm):

DMA2-UF350

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