

# Summing Amplifier for Resistance Strain Gauges

in robust field case  
for all weighing applications

## Characteristics

- 4 inputs for resistance strain gauge full-bridges
- Addition of single measure values
- 1 output for connection to every measuring amplifier with input for resistance strain gauge bridges
- Cascading of several summing amplifiers is possible
- No external power supply necessary\*



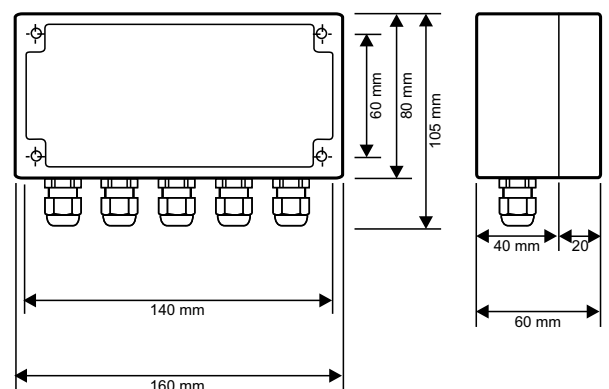
\*if the measuring amplifier's sensor supply is powerful enough

## Description

Numerous measuring devices in weigh technics require the evaluation of more than one measuring point (i.e. containers with three or four feet, weighing plates etc.).

For generating the desired summing signal from these single signals that can be lead to a measuring amplifier, the 4-input summing amplifier for resistance strain gauges can be used.

2 to 4 measuring bridges can be connected. The output delivers the summing signal which behaves like a single resistance strain gauge bridge and can be evaluated with every measuring amplifier with resistance strain gauge-input like DLM-HD, ALM, ALM-HD etc. When the internal bridge supply of the measuring amplifier is used, you have to take into account the maximum load because the current consumptions of every single bridge are added. If necessary, an external power supply can be used. When the summing signal is built by more than four sensors, the summing amplifiers can be cascaded to an unlimited number.



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## Technical Data

### Input

Sensor input:	4 x resistance strain gauge full-bridge
Adjustment:	not requisite

### Outputs

Sensor output:	1 x resistance strain gauge full-bridge
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### Power Supply

Supply voltage:	none external power supply unit for bridge supply can be connected on demand
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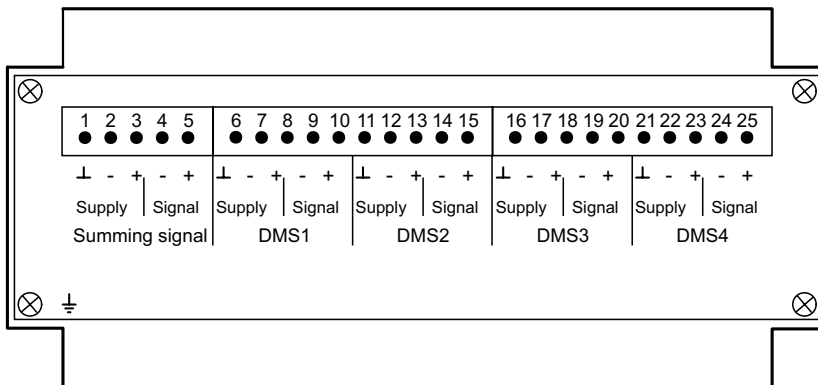
### Ambient Conditions

Operating temperature range:	-20°C ... 60°C
Storage temperature range:	-20°C ... 70°C

### Dimensions

Case:	160 x 80 x 60 mm
Fixing:	inner mounting holes in screw channels
Material of case:	aluminium pressure diecasting
Colour:	Bottom part: RAL 7035 light grey Lid: RAL 7040 window grey
Degree of protection:	IP 65
Weight:	approx. 0,75 kg
Terminals:	plug-in screw terminals in the case for wires up to 2,5 mm <sup>2</sup> through 5 x Pg9 screwing, MS nickel plated

## Operating, adjustment instructions



### Installation, connections

1. Connect the 5-terminal block to the measuring amplifier.  
The amplifier evaluates the summing signal.
2. The supply voltage is connected to the "supply"-terminals (2(-), 3(+)) when all provided sensors are supplied parallel. The measuring amplifier must have a powerful sensor supply. Otherwise, an external power supply unit has to be used.
3. The terminals "Signal" (4(-), 5(+)) are connected to the input of the measuring amplifier. If a shielded cable is used, the shield can be connected to the terminal "Ground symbol".
4. Two 10-terminal blocks are provided for the connection of two resistance strain gauge sensors each.
5. The sensor supply wires are connected to the terminals "Supply".
6. The sensor output signals are connected to the terminals "Signal".
7. Existing shields can be connected to the terminal "Ground Symbol".

## Ordering key

**D** **V** **X** **X** **X** **X** **X** **X** **XXX**

No.	Sensor Input	Sensor Output	Connection				Measuring range
0	4 x resistance strain gauge full-bridge	1 x resistance strain gauge full-bridge	Pg9-screwing				none