

# K3608

Calibration unit for  
measuring systems  
with S/G transducers

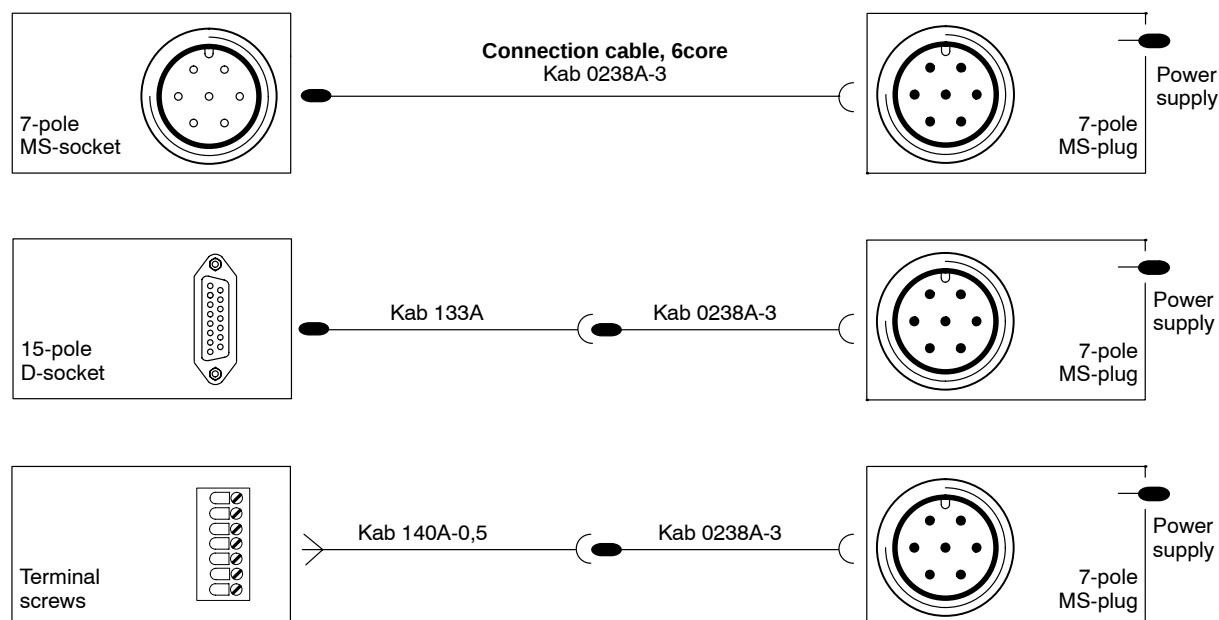
## Special features

- Simulation of mechanical quantities influencing strain gauge transducers
- Transducer imitation for 350  $\Omega$  and 1000  $\Omega$  bridge resistance
- Calibration values adjustable in 5x11 steps from  $\pm 0.1$  to  $\pm 100$  mV/V
- Permissible frequency range for the external bridge excitation voltage: 0...5 kHz
- Accuracy class 0.0025 (see Technical data)



HBM amplifiers with different  
transducer connection

K 3608 Calibration unit



## Technical Data

| Type                                                                                                           |           | K 3608                                           |               |
|----------------------------------------------------------------------------------------------------------------|-----------|--------------------------------------------------|---------------|
| Accuracy class <sup>1)</sup>                                                                                   |           | 0.0025                                           | 0.01          |
| Permissible frequency range for the external excitation voltage                                                | Hz        | 225...600                                        | DC, 1000 5000 |
| Substitute for strain gauge full bridges, switchable                                                           | $\Omega$  | 350 or 1000                                      |               |
| Nominal value of the excitation voltage                                                                        | V         | 5                                                |               |
| Maximum permissible excitation voltage                                                                         | V         | 10                                               |               |
| Calibration steps                                                                                              | mV/V<br>% | 1, 2; 5; 10; 100                                 |               |
| 5 ranges                                                                                                       |           | 0; 10; 20; ...100                                |               |
| 11 steps within the ranges                                                                                     |           | Positive <sup>2)</sup> or negative output signal |               |
| Polarity switch                                                                                                |           |                                                  |               |
| Absolute calibration of the range span<br>for the range of 2 mV/V at 23 °C [73 °F]                             | %         | <±0.0025                                         | <±0.01        |
| Grading errors for the ranges<br>related to the respective range full-scale-value                              | %         | <±0.0025                                         | <±0.01        |
| Grading errors for the percent steps (Linearity deviation)<br>related to the respective range full-scale-value | %         | <±0.0025                                         |               |
| Temperature effect on the absolute calibration per 10K<br>in the nominal temperature range                     | %         | <0.0025                                          |               |
| Nominal temperature range                                                                                      | °C [°F]   | +10...+40 [+50...+120]                           |               |
| Service temperature range                                                                                      | °C [°F]   | 0...+60 [+32...+140]                             |               |
| Storage temperature range                                                                                      | °C [°F]   | -25...+70 [-13...+160]                           |               |
| Supply voltage <sup>4)</sup>                                                                                   | V         | ±19                                              |               |
| Dimensions (h x w x d)                                                                                         |           |                                                  |               |
| K 3608 calibration unit                                                                                        | mm        | 110 x 190 x 120                                  |               |
| Power supply                                                                                                   | mm        | 50 x 95 x 57                                     |               |
| Weight, approx.                                                                                                |           |                                                  |               |
| K 3608 calibration unit                                                                                        | kg        | 1                                                |               |
| Power supply                                                                                                   | kg        | 0.5                                              |               |

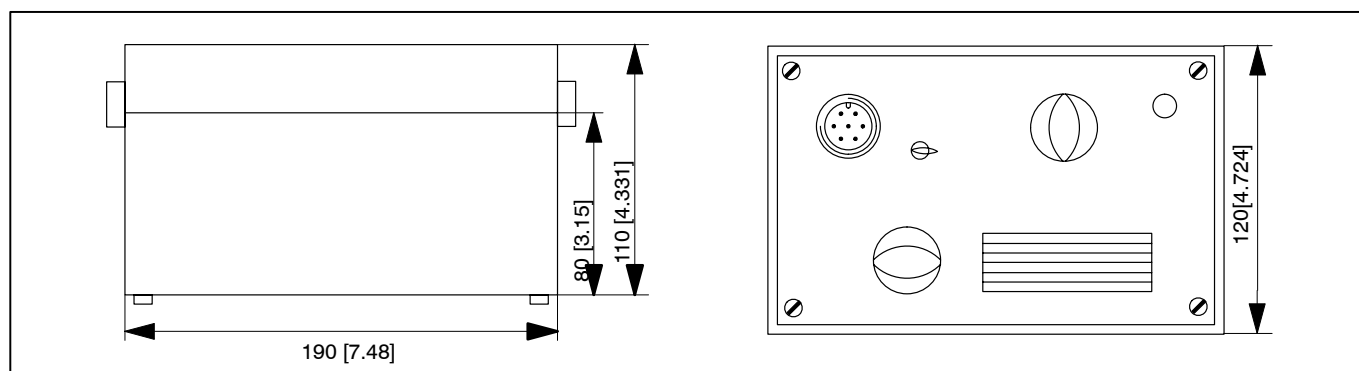
<sup>1)</sup> Only for connection using the 6-wire technique

<sup>2)</sup> Positive means: Measurement Node 1 changes its potential in the direction of Supply Node 2 (1 ≙ A, 2 ≙ B, 3 ≙ C and 4 ≙ D on the Amphenol connector) during unbalance

<sup>3)</sup> The signals for the 0 % steps may deviate by up to 0.025 % of the corresponding full range value. However, in strain-gauge technology this is not relevant and can be eliminated by zero balancing the measurement instrument.

<sup>4)</sup> Supplied by the mains unit (included in scope of delivery, please see below)

## Dimensions [1mm = 0.03937 inches]



## Accessories, included in scope of delivery:

Kab0238A-3, connection cable, 3 m long, 6 cores, with MS plug and socket

Power supply unit, mains voltage 230 V±10 %, 45...60 Hz

Modifications reserved.

All details describe our products in general form only. They are not to be understood as express warranty and do not constitute any liability whatsoever.

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