

Technical data - Measuring amplifier KMV 04

| | | |
|---|--|---|
| Designation | | KMV 04 |
| Design | | aluminium flanged housing |
| Accuracy class | | 0,1 |
| Sensors to be connected: - strain gauge, full bridge | Ω | admissible connection impedance 350 to 1000 |
| Bridge excitation voltage | V DC | 10 |
| Nominal gain G_{nom} | | 667 |
| Nominal measuring range U_{sig} | mV | ± 15 (accordant 1,5mV/V @ 10V excitation voltage) |
| Adjustment range calibration (CAL) | % F_N | 85 ... 100 ... 500 |
| Adjustment range zero (ZERO) | % F_N | ± 45 |
| Cut-off frequency f_c (-3 dB) | Hz | approx. 70 |
| Output - voltage output (standard) - current output 0-20 (optional) - current output 4-20 (optional) | V mA mA | 0 to ± 10 , max. 1 mA 0 to + 20, admissible load 100 to 300 Ω 4 to + 20, admissible load 100 to 300 Ω |
| Nominal temperature range | $^{\circ}C$ | 0 to + 50 |
| Operation temperature range | $^{\circ}C$ | 0 to + 50 |
| Storage temperature range | $^{\circ}C$ | - 30 to + 75 |
| Temperature influence per 10 $^{\circ}C$ - on zero at amplifier output - on calibration | mV % ¹ | < 10 < 0,05 |
| Supply voltage | V DC | 20 to 28 |
| Current consumption (with 350 Ω bridge, no load) | mA | approx. 36 |
| Dimensions (L x W x H) | mm | 50 x 64 x 33 |
| Weight (without connection cable) | g | approx. 100 |
| Connection cable - Sensor connection - Power / Out connection | robust, flexible, shielded, 4 x 0,14 mm ² cable \varnothing 4,5 mm, open ends with splices sheath special PVC operating temperature -30 to +80 $^{\circ}C$ 0,4 m long, fixed connection 3 m long, open ends with splices | |

¹ of final value

Explanation of grammalogue:

f_c \Rightarrow Cut-off frequency
 G_{nom} \Rightarrow Nominal Gain

U_{sig} \Rightarrow Input voltage
 F_N \Rightarrow Nominal measuring force

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Connections

Power Supply and Output Signal

Connection cable: Amp-Power supply / Amp-Output, fixed → (open ends)

| | | |
|---------|--------------------------------------|--------------|
| yellow | +24V DC | Power supply |
| white | ⌊ GND | |
| green | Signal | Output |
| brown | ⌊ GND | |
| transp. | Shield (not connected to housing) | |

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Connection cable: Amp-Power supply / Amp-Output, fixed → (plug)

| | | |
|---|----------|--------------|
| 1 | +24V DC | Power supply |
| 4 | ⌊ GND | |
| 3 | Signal | Output |
| 5 | ⌊ GND | |
| 2 | reserved | |

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Sensor connection

In standard the connection between sensor and amplifier is fix.

Connection cable for Amp-Sensor connection → (open ends)

| | | |
|--------------------------------------|-------------------|---------|
| Excitation | +U _{Br} | yellow |
| | -U _{Br} | |
| Input | +U _{Sig} | white |
| | -U _{Sig} | green |
| Shield (not connected to housing) | | transp. |

open ends with splices

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Connection cable for Amp-Sensor connection, fixed → (plug)

| | | |
|--------------------------------------|-------------------|---|
| Excitation | +U _{Br} | 1 |
| | -U _{Br} | 2 |
| Shield (not connected to housing) | | 3 |
| Input | +U _{Sig} | 4 |
| | -U _{Sig} | 5 |
| | reserved | 6 |

View

female cable connector 6-pole, 270°

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Amp → amplifier

Dimensions

