

Bridge measuring converter

Configurable

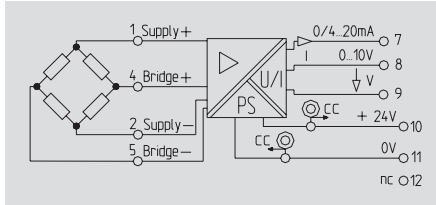
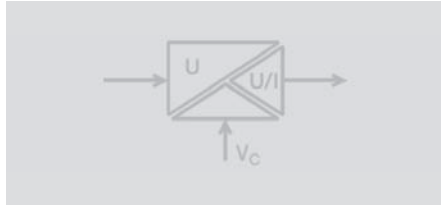
- 3-way isolation
- Input and output selectable via DIP-switch
- Calibration not necessary
- Inverse output signal

PRO BRIDGE



Switch position/setting options

| Input voltage | SW 1 | | | | | | | | | |
|------------------|------|---|---|---|---|---|---|---|---|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 0...10 mV | | | | | | | | | | |
| 0...20 mV | | | | | | | | | | |
| 0...50 mV | | | | | | | | | | |
| 0...100 mV | | | | | | | | | | |
| 0...200 mV | | | | | | | | | | |
| 0...500 mV | | | | | | | | | | |
| -10 mV...10 mV | | | | | | | | | | |
| -20 mV...20 mV | | | | | | | | | | |
| -50 mV...50 mV | | | | | | | | | | |
| -100 mV...100 mV | | | | | | | | | | |
| -200 mV...200 mV | | | | | | | | | | |
| -500 mV...500 mV | | | | | | | | | | |
| Ausgang | | | | | | | | | | |
| 0...+10 V | | | | | | | | | | |
| 0...+5 V | | | | | | | | | | |
| 0...20 mA | | | | | | | | | | |
| 4...20 mA | | | | | | | | | | |

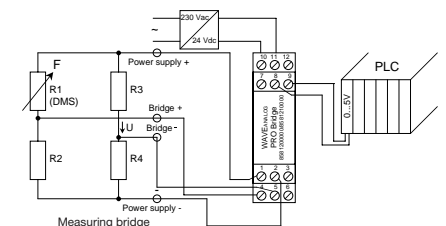


| Bridge supply voltage | |
|--|--|
| +10V | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| +5V | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| +4,8...+10,2V adjustable | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| +4,8...+10,2V adjustable man. adjustment and offset possible | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| Transmission method | |
| standard output signal | <input type="checkbox"/> |
| inverse output signal | <input type="checkbox"/> |

■ = on
□ = off

| Status LED | |
|-----------------|---|
| LED on | normal operating |
| LED off | Error |
| LED blinks slow | measurement range undershoot $U_{in} < U_{max} + 10\%$ |
| LED blinks fast | measurement range overshoot $U_{in} < U_{max} - 10\%$ |

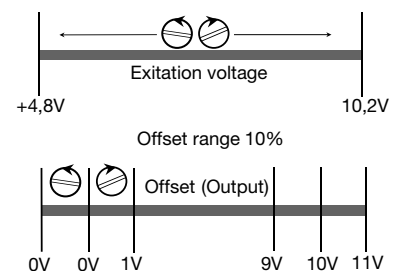
Application



Example for bridge supply voltage

| Temperature adjustment: | |
|-------------------------|---------------|
| Input voltage | 0...10 mA |
| Output | 0...10 V |
| Bridge supply voltage | +4,8...10,2 V |
| Bridge excitation | 1 mV/V |

(Declaration from manufacturer)



Technical data

| | |
|---|---|
| Input | |
| Input voltage/ | -500mV...+500mV/ |
| Input resistance voltage | > 1 MΩ |
| Output | |
| Output voltage/Output current | 0...5 V, 5...0 V, 10...0 V, 0...10 V/ |
| Load resistance voltage/Current | 0...20 mA, 20...0 mA, 4...20 mA, 20...4 mA |
| Offset current/Offset voltage | >= 1 kΩ / <= 600 Ω |
| Accuracy | max. 100 μA/max. 0.05 V |
| Temperature coefficient | 0.3 % of output range |
| Step response time | +/- 250 ppm/K of output range |
| Status indicator | typ. < 200 ms |
| Wire break detection | LED green |
| Bridge supply voltage | output: 0 V resp. 0/4 mA |
| General data | |
| Supply voltage | +10 V, +5 V, 4,8...10,2 V; offset adjustable; max. 40mA |
| Power consumption | 24 Vdc +/- 25 % |
| Current-carrying cap. of cross-connect. | max. 1.9 W at I _{out} = 20 mA |
| Operation temperature | <= 2 A |
| Storage temperature | 0 °C...+55 °C |
| Default settings | -20 °C...+85 °C |
| Approvals | -500 mV...+500 mV / 0...10 V / + 10 V / standard |
| Insulation coordinates | |
| Standards | CE / ESD / cURus |
| EMC standards | EN 50178 |
| Rated voltage | EN 61000-6-2, EN 50081-2 |
| Impulse withstand voltage | 300 V |
| Isolation voltage Input, output/ | 4 kV |
| Overshoot category | 2 kVeff / 5s/ |
| Pollution severity | III |
| Clearance & creepage path | 2 |
| | >= 3 mm |

| Dimensions | | Screw connection | Tension clamp c. |
|--|-----------------|------------------------|---------------------|
| Clamping range (rating- / min. / max.) | mm ² | 2.50 / 0.50 / 2.50 | 1.50 / 0.50 / 2.50 |
| Length x width x height | mm | 92.4 x 17.5 x 112.4 | 92.4 x 17.5 x 112.4 |
| Information | | TU=23°C, single module | |

Ordering data

| Type of connection | Type | Qty. | Order No. |
|--------------------------------------|-----------------|------|-----------|
| Screw connection Tension clamp c. | WAS5 PRO Bridge | 1 | 858120000 |
| | WAZ5 PRO Bridge | 1 | 858121000 |

| Information | |
|-------------|--|
| | |

Accessories

| Information | |
|-------------|--|
| | Voltage supply 24V and 0V with ZQV 2.5N/2 cross-connection |

Articles with coloured order number are kept permanently in stock at the central warehouse in Germany. Delivery times see page X.2