

Analog signal isolators
WAVEANALOG PRO Bridge
from the WAVESERIES



 RAUS

Analog signal isolators
WAVEANALOG PRO Bridge
from the WAVESERIES

Type	Cat. No.
Screw connection WAS4 PRO Bridge	8581200000
Tension clamp connection WAZ4 PRO Bridge	8581210000

Please read these instructions before using the product
and retain for future information.

1. General instructions

Warning! The analogue signal isolators of the WAVEANALOG PRO may only be installed by qualified personnel. Be sure not to connect the unit to power supply before appropriate installation. Do not select ranges during operation, because live parts are exposed during this process. Only use a screwdriver which is properly insulated against the voltage applied to the input when fine adjusting the potentiometers on the front. Be sure to observe the national regulations for installation and selection of cables.



Appropriate safety measures against electrostatic discharge (ESD) should be taken during assembly and adjustment work on the WAVEANALOG PRO.

2. Application

Analog signal isolators are used for galvanic isolation and conversion of voltage signals. Input and output signals can be calibrated/switched via DIP switches. It is **not** necessary to adjust the pre-settable measurement ranges. The output signal is linear to the measured voltage. The supply voltage to the bridge can be set between 4.8 V...10.2 V; in addition, the offset can also be set.

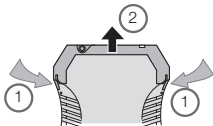
3. Configuration

3.1 Equipment

A screwdriver with a width of 2.5 mm is required to adjust the unit and to connect the wires to the terminals.

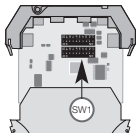
3.2 Opening the unit

Disconnect the plugs. Disengage the top part of the housing by carefully pressing the latches on both sides (1). Pull out the top part of the housing and the electronics section until they lock (2).

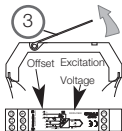


3.3 Settings

Set input and output ranges, minimum input values and measuring span via the DIP switches SW1 according to the following table.



Warning! A screwdriver, correctly insulated against the input voltage (3), must be used when calibrating the supply voltage to the bridge via the potentiometers at the front of the module.

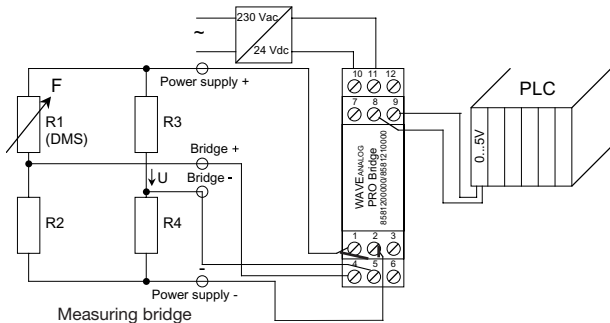


SW1

Input voltage	1	2	3	4	5	6	7	8	9	10
0...10 mV						0	0	0	0	
0...20 mV						0	0	0	1	
0...50 mV						0	0	1	0	
0...100 mV						0	0	1	1	
0...200 mV						0	1	0	0	
0...500 mV						0	1	0	1	
-10 mV...10 mV						1	0	0	0	
-20 mV...20 mV						1	0	0	1	
-50 mV...50 mV						1	0	1	0	
-100 mV...100 mV						1	0	1	1	
-200 mV...200 mV						1	1	0	0	
-500 mV...500 mV						1	1	0	1	
Output										
0...+10 V				0	0					
0...+ 5 V				0	1					
0...20 mA				1	0					
4...20 mA				1	1					
Supply voltage to the bridge										
+10 V	1	0	0							
+ 5 V	1	0	1							
+4,8...+10,2 V adjustable	0	1	0							
+4,8...+10,2 V adjustable and offset is also adjustable	0	1	1							
Response										
Standard output signals										0
Inverse output signals										1

0= open, 1= closed

3.4 Application



4. Mounting

The analogue signal isolators are mounted on standard TS 35 rails.

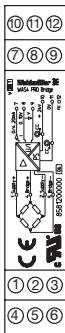
5. Electrical connection

Terminal assignments

- 1 Supply voltage to the bridge +
- 2 Supply voltage to the bridge -
- 3 Not assigned
- 4 Input +
- 5 Input -
- 6 Not assigned
- 7 Output 0/4...20 mA
- 8 Output 0...5/10 V
- 9 Output 0 V- reference potential
- 10 Power supply + 24 Vdc (cross-connected)
- 11 Power supply - GND (cross-connected)
- 12 Not assigned

Wire cross-section max. 2.5 mm²

Multi-wire connection max. 1 mm²
(two wires with same cross-section)



Warning! For applications with high isolation voltages, take measures to prevent accidental contact and make sure that there is sufficient distance or insulation between adjacent devices!

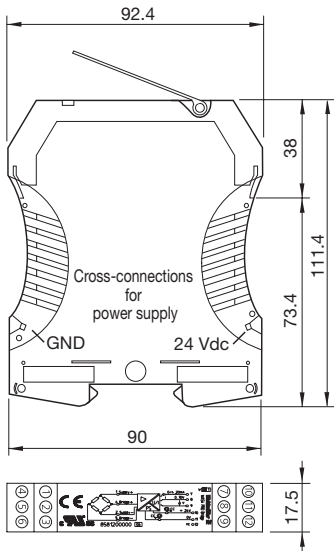
5.1 Power supply

approx. 1 W

18...30 Vdc

Voltage supply via cross-connections. Operating carrying capacity of cross-connection ≤ 2 A (see Cat. No. point 7)

6. Dimensions in mm



7. Accessories (cross-connection)

Designation	Cat. No.
ZQV 2,5 N/2 yellow	1693800000
ZQV 2,5 N/2 red	1717900000
ZQV 2,5 N/2 blue	1717990000
ZQV 2,5 N/2 black	1718080000

Connection markers

Designation	Cat. No.
WS 10/5 Multicard for plotter marking	1635010000
WS 10/5 Neutral	1060860000

8. Notes on CE marking

The WAS5/WAZ5 PRO Freq. analog signal isolators are marked CE in accordance with the EU directives 89/336/EEC "Electromagnetic Compatibility" and 73/23/EEC (low-voltage directive) detailing the Harmonized European Standards (EN).

The declarations of conformity are held, according the above mentioned EU directive, article 10, for the authorizing body by:

Weidmüller Interface GmbH & Co.
Postfach 30 30
32720 Detmold
Phone +49 5231-14-0
Fax +49 5231-14-2083
e-mail: info@weidmueller.com
www.weidmueller.com

