

## WAVESERIES

### WAS4 CVC DC 0-20/0-10V

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 16  
 D-32758 Detmold  
 Germany  
 Fon: +49 5231 1429-0  
 Fax: +49 5231 14292083  
 www.weidmueller.com



When used for industrial monitoring applications, sensors can record ambience conditions. Sensor signals are used within the process to continually track changes to the area being monitored. Both digital and analogue signals can occur.

Normally an electrical voltage or current value is produced which corresponds proportionally to the physical variables that are being monitored. Analogue signal processing is required when automation processes have to constantly maintain or reach defined conditions. This is particularly significant for process automation applications. Standardised electrical signals are typically used for process engineering. Analogue standardised currents / voltage 0(4)...20 mA/ 0...10 V have established themselves as physical measurement and control variables.

Weidmüller meets the ever increasing challenges of automation and offers a product portfolio tailored to the requirements of handling sensor signals in analogue signal processing.

The analogue signal processing products can be used universally in combination with other Weidmüller products and in combination among each other. Their electrical and mechanical design is such that they require only minimal wiring efforts.

Housing types and wire-connection methods matched to the respective application facilitate the universal use in process and industrial automation applications.

The product line includes the following functions:

- Isolating transformers, supply isolators and signal converters for DC standard signals
- Temperature measuring transducers for resistance thermometers and thermocouples,
- frequency converters,
- potentiometer-measuring-transducers,
- bridge measuring transducers (strain gauges)
- trip amplifiers and modules for monitoring electrical and non-electrical process variables
- AD/DA converters
- displays
- calibration devices

#### General ordering data

The products mentioned are available as pure signal converters / isolation transducers, 2-way/3-way isolators, supply isolators, passive isolators or as trip amplifiers.

|                     |   |
|---------------------|---|
| Delivery status     | This article will no longer be available in the future. |
| Available until     | 2017-12-31  |
| Type                | WAS4 CVC DC 0-20/0-10V                                  |
| Order No.           | <a href="#">8447020000</a>                              |
| Version             | Signal converter/insulator, Screw connection            |
| GTIN (EAN)          | 4032248056798   |
| Qty.                | 1 pc(s).  |
| Alternative product | <a href="#">1176010000</a>                              |

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**Technical data****Dimensions and weights**

|            |          |                 |            |
|------------|----------|-----------------|------------|
| Length     | 92.4 mm  | Length (inches) | 3.638 inch |
| Width      | 12.5 mm  | Width (inches)  | 0.492 inch |
| Depth      | 112.4 mm | Depth (inches)  | 4.425 inch |
| Net weight | 110 g    |                 |            |

**Temperatures**

|                     |  |                       |              |
|---------------------|--|-----------------------|--------------|
| Humidity            | 40 °C / 93 % rel. humidity,<br>no condensation | Operating temperature | 0 °C...55 °C |
| Storage temperature | -20 °C...85 °C                                 |                       |              |

**Input**

|                           |      |               |           |
|---------------------------|------|---------------|-----------|
| Number of inputs          | 1    | Input current | 0...20 mA |
| Input resistance, current | 50 Ω |               |           |

**Output**

|                           |                      |                      |          |
|---------------------------|----------------------|----------------------|----------|
| Number of outputs         | 1                    | Output voltage, note | 0...10 V |
| Cut-off frequency (-3 dB) | ≥ 15 Hz (typ. 20 Hz) |                      |          |

**General data**

|   |                            |                     |                                  |
|---|----------------------------|---------------------|----------------------------------|
| Accuracy                                    | ± 0.2 % of final value     | Current consumption | < 11 mA @ U <sub>UT</sub> = 10 V |
| Current-carrying capacity of cross-connect. | ≤ 2 A                      | Galvanic isolation  | 2-way isolator                   |
| Input/Output                                | 0...20 mA/ 0...10 V        | Mounting rail       | TS 35                            |
| Step response time                          | ≤ 30 ms (typ. 16 ms)       | Supply voltage      | 24 V DC ± 20 %                   |
| Temperature coefficient                     | ≤ 250 ppm/K of final value |                     |                                  |

**Insulation coordination**

|   |                                   |   |                              |
|---|-----------------------------------|---|------------------------------|
| Clearance & creepage distances          | ≥ 3 mm                            | Galvanic isolation                        | 2-way isolator               |
| Impulse withstand voltage               | 4 kV                              | Insulation voltage                        | 1.2 kV <sub>eff</sub> / 5 s  |
| Insulation voltage input or output/rail | 4 kV <sub>eff</sub> / 1 min.      | Insulation voltage input or output/supply | 4 kV <sub>eff</sub> / 1 min. |
| Pollution severity                      | 2                                 | Rated voltage                             | 300 V                        |
| Standards                               | DIN EN 50178, DIN EN<br>61000-4-2 | Surge voltage category                    | III                          |

**Connection data**

|  |                     |  |                     |
|--|---------------------|--|---------------------|
| Type of connection                     | Screw connection    | Stripping length, rated connection     | 7 mm                |
| Tightening torque, min.                | 0.4 Nm              | Tightening torque, max.                | 0.5 Nm              |
| Clamping range, rated connection       | 2.5 mm <sup>2</sup> | Clamping range, rated connection, min. | 0.5 mm <sup>2</sup> |
| Clamping range, rated connection, max. | 2.5 mm <sup>2</sup> |  |                     |

**Classifications**

|            |             |            |             |
|------------|-------------|------------|-------------|
| ETIM 3.0   | EC001774    | ETIM 4.0   | EC002653    |
| ETIM 5.0   | EC002653    | ETIM 6.0   | EC002653    |
| eClass 6.2 | 27-21-01-20 | eClass 7.1 | 27-21-01-20 |
| eClass 8.1 | 27-21-01-20 | eClass 9.0 | 27-21-01-20 |
| eClass 9.1 | 27-21-01-20 |            |             |

**Data sheet**

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**Technical data**

**Product information**

|                              |   |
|------------------------------|---|
| Product information          | This product will soon be replaced by a new product.<br>Please do not use with new systems. Please contact our technical support. |
| Descriptive text accessories | Cross-connector for power supplies and markers – refer to Accessories   |

**Approvals**

Approvals



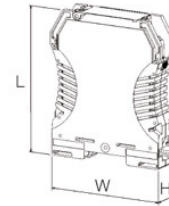
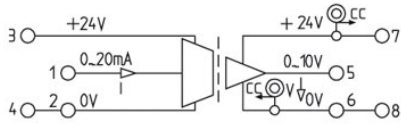
|      |         |
|------|---------|
| ROHS | Conform |
|------|---------|

**Downloads**

|   |   |
|---|---|
| Approval/Certificate/Document of Conformity | <a href="#">Declaration of Conformity</a> |
| Engineering Data                            | <a href="#">EPLAN, WSCAD</a>              |
| User Documentation                          | <a href="#">Instruction sheet</a>         |

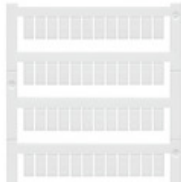
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**Drawings****Electric symbol**

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**Accessories**
**Blank**


WS markers are the perfect match for the W-series connectors. Thanks to their system compatibility, the WS tags can also be used with the I-series and the Z-series. The large marking surfaces do not only permit long character strings but also multi-line text. WS markers are ideal for labels with long, customised character strings. Thanks to the proven MultiCard format, printing with laser printer, PrintJet ADVANCED, plotter or MC-Mobilo is possible.

- Can be fitted in strips or individually
- Markers in proven MultiCard format

**General ordering data**

| Type       | Order No.                  | Version   | GTIN (EAN)    | Qty.       |
|------------|----------------------------|---|---------------|------------|
| WS 10/5 MC | <a href="#">1635000000</a> | WS, Terminal marker, 10 x   | 4008190261948 | 720 pc(s). |
| NE WS      |                            | 5 mm, Pitch in mm (P): 5.00<br>Weidmueller, Allen-Bradley,<br>White |               |            |

**ZQV 2.5N**


**Spring connection with tension clamp Technology**  
 Tension clamp technology is a universal contact system for all common conductor connection types. Its fantastic level of flexibility makes the tension clamp a profitable alternative connection.

**General ordering data**

| Type             | Order No.                  | Version  | GTIN (EAN)    | Qty.      |
|------------------|----------------------------|--|---------------|-----------|
| ZQV 2.5N/2<br>BL | <a href="#">1717990000</a> | Accessories, Cross-<br>connector, 24 A           | 4008190349295 | 60 pc(s). |
| ZQV 2.5N/2<br>RT | <a href="#">1717900000</a> | Accessories, Z-series, Cross-<br>connector, 24 A | 4008190349288 | 60 pc(s). |
| ZQV 2.5N/2<br>SW | <a href="#">1718080000</a> | Accessories, Cross-<br>connector, 24 A           | 4008190349301 | 60 pc(s). |
| ZQV 2.5N/2<br>GE | <a href="#">1693800000</a> | Z-series, Cross-connector,<br>24 A               | 4008190883621 | 60 pc(s). |