

WTZ4 PT100/3 C 0/4-20mA**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Do not use product for new developments, Only remaining stock available



RTD temperature signal converters for connecting resistance temperature sensors and analogue DC current or voltage outputs.

A variety of resistance thermometers (e.g., PT100) are used to measure temperature in an industrial environment. These are used with 2-, 3-, or 4-wire technology.

We distinguish here between PTC and NTC thermistors. For an exact temperature measurement, the resistance value must be logged, linearised and converted into an analogue signal proportional to the temperature. Signal isolating converters carry out these important functions. They isolate signals between the harsh industrial environments and the downstream electronics. Furthermore, they compensate for potential differences caused by long cable lengths. Sensor-related inadequacies such as cold joints and linearity errors are also minimised.

General ordering data

Version	RTD transformer, PT100, 2-/3-wire connection technology, Configurable, Input : Temperature, PT100 (3- wire), Output : 0(4)-20 mA
Order No.	8432160000
Type	WTZ4 PT100/3 C 0/4-20MA
GTIN (EAN)	4032248110179
Qty.	1 pc(s).
Delivery status	This article will no longer be available in the future.
Available until	2023-12-30
Alternative product	7760054183

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Technical data

Dimensions and weights

Depth	112.4 mm	Depth (inches)	4.425 inch
Width	12.5 mm	Width (inches)	0.492 inch
Length	92.4 mm	Length (inches)	3.638 inch
Net weight	123 g		

Temperatures

Storage temperature	-20 °C...85 °C	Operating temperature	0 °C...55 °C
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Probability of failure

SIL in compliance with IEC 61508	None
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Input

Number of inputs	1	Sensor	PT100 (3 wire)
Sensor supply	1.45 mA	Temperature input range	Adjustable from -200...+800°C

Output

Load impedance current	$\leq 500 \Omega$	Number of outputs	1
Output current	0...20 mA, 4...20 mA		

Output (analogue)

Output current	0...20 mA, 4...20 mA
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General data

Accuracy	$\pm 0.5 \%$ of measuring range	Configuration	DIP switch, Potentiometer, and PT100-Simulator
Current consumption	$< 48 \text{ mA}$ @ $I_{OUT} = 20 \text{ mA}$	Galvanic isolation	Without isolation
Linearity	Yes	Rail	TS 35
Temperature coefficient	Measuring range $\geq 200 \text{ K}$: ≤ 200 ppm/K (typ. 80 ppm/K) 100 K \leq measuring range <200 K: <250 ppm/K (typ. 100 ppm/K)	Voltage supply	24 V DC $\pm 20 \%$

Insulation coordination

EMC standards	EN 55011, EN 61000-6	Galvanic isolation	Without isolation
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Connection data

Type of connection	Tension-clamp connection	Stripping length, rated connection	7 mm
Clamping range, rated connection	1.5 mm ²	Clamping range, min.	0.5 mm ²
Clamping range, max.	2.5 mm ²		

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Classifications

ETIM 6.0	EC002919	ETIM 7.0	EC002919
ETIM 8.0	EC002919	ETIM 9.0	EC002919
ECLASS 9.0	27-21-01-29	ECLASS 9.1	27-21-01-29
ECLASS 10.0	27-21-01-29	ECLASS 11.0	27-21-01-29
ECLASS 12.0	27-21-01-29	ECLASS 13.0	27-21-01-29

Tender specification sheets

Long specification

PT100 temperature measuring transformer, configured with DIP switches, 3-wire connection technology

RTD measurement isolating transformer in 12.5 mm width with external power supply, for transmitting PT100 3-wire signals.
 Input temperature range **-200...+800 °C**.
 Analogue DC signals (0(4) to 20 mA) are available on the output side.
 Zero/span compensation with potentiometer.

Add-on housing for TS35 rail mounting
 Dimensions: L/W/H 92.4/12.5/ 112.4 mm
 Tension-clamp connection / Nominal cross-section 1.5 mm²
 Protection degree: IP 20
 Input PT100, 3-wire Output 0/4...20 mA Load resistance Transmission error typ. 200 ppm / °C
 Auxiliary power 24 VDC +/- 20 % Ambient temperature range 0°C...+55 °C
 Isolation no electrical isolation Approvals cULus, CSA

Type WTZ4 PT100/3 C 0/4-20mA

Short specification

PT100 temperature measuring transformer, configured with DIP switches, 3-wire connection technology
RTD measurement isolating transformer in 12.5 mm width with external power supply, for transmitting PT100 3-wire signals.
Input temperature range -200...+800 °C.
Analogue DC signals (0(4) to 20 mA) are available on the output side.
Zero/span compensation with potentiometer.

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
SCIP	c2a21576-d875-4548-ae68-5e7f85ddf0c7

Important note

Product information	This product will soon be replaced by a new product. Please do not use with new systems. Please contact our technical support.
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Technical data

Approvals

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate no. (cULus)	E141197

Downloads

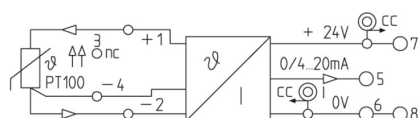
Approval/Certificate/Document of Conformity	Application notes – Declaration of Conformity
Engineering Data	CAD data – STEP
Product Change Notification	20220218 Technical change - WAVE series' signal conditioners WS WZ
User Documentation	Device description – Instruction sheet
Catalogues	Catalogues in PDF-format
Brochures	

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www.weidmueller.com**Drawings****Electric symbol****Similar to illustration**

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www.weidmueller.com**Accessories****2.5 mm²**

2.5
mm²

The plug-in cross-connections feature easy handling and quick installation. This saves a great deal of time during installation in comparison with screwed solutions.

General ordering data

Type	ZQV 2.5N/2 GE	Version
Order No.	1693800000	W-Series, Cross-connector, 24 A
GTIN (EAN)	4008190883621	
Qty.	60 pc(s).	
Type	ZQV 2.5N/2 RT	Version
Order No.	1717900000	W-Series, Cross-connector, 24 A
GTIN (EAN)	4008190349288	
Qty.	60 pc(s).	
Type	ZQV 2.5N/2 BL	Version
Order No.	1717990000	W-Series, Cross-connector, 24 A
GTIN (EAN)	4008190349295	
Qty.	60 pc(s).	
Type	ZQV 2.5N/2 SW	Version
Order No.	1718080000	W-Series, Cross-connector, 24 A
GTIN (EAN)	4008190349301	
Qty.	60 pc(s).	

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www.weidmueller.com**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 PrintJet CONNECT oder/or Plotter is possible.

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

For custom printing: Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

General ordering data

Type	WS 10/5 MC NE WS	Version
Order No.	1635000000	WS, Terminal marker, 10 x 5 mm, Pitch in mm (P): 5.00 Weidmueller,
GTIN (EAN)	4008190261948	Allen-Bradley, white
Qty.	720 pc(s).	