WAVESERIES
WAS5 PRO RTD 1000

Weidmüller Interface GmbH & Co. KG
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Germany
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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

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

General ordering data

Type	WAS5 PRO RTD 1000
Order No.	8870490000
Version	RTD isolating amplifier, Screw connection
GTIN (EAN)	4032248813094
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Length	92.4 mm	Length (inches)	3.638 inch
Width	17.5 mm	Width (inches)	0.689 inch
Depth	112.4 mm	Depth (inches)	4.425 inch
Weight	100 g	Net weight	103.3 g

Temperatures

Operating temperature, max.	55 °C	Operating temperature, min.	0 °C
Storage temperature, max.	85 °C	Storage temperature, min.	-20 °C
Operating temperature	0 °C...55 °C	Storage temperature	-20 °C...85 °C

Probability of failure

MTTF	267 Years

Input

Number of inputs	1	Sensor	Ni1000/2-/3-/4-wire, Potentiometer: min. 0-1kΩ, max. 0-100kΩ, PT1000/2-/3-/4-wire, Resistance: 0-4.5kΩ
Line resistance in measuring circuit	50 Ω for 3- and 4-conductor	Temperature input range	Configurable, PT1000: -200°C...850 &degC, NI1000: -60°C...+250 °C

Output

Number of outputs	1	Output voltage, note	0...10 V
Output current	0...20 mA, 4...20 mA	Wire break detection	LED flashing (output value: > 20 mA, >10 V)
Fine adjustment	± 12.5 % of FSR; potentiometer: ± 12.5 % ... ± 25 %	load impedance voltage	≥ 1 kΩ
load impedance current	≤ 600 Ω	Offset voltage	max. 0.05 V
Offset current	max. 100 µA	Status indicator	Module active: LED on/ wire breakage: LED flashing/ Error: LED off

General data

Accuracy	< 0.3 % of measured value	Configuration	DIP switch, Potentiometer
Current-carrying capacity of cross-connect.	≤ 2 A	Galvanic isolation	3-way isolator
Input/Output	configurable	Linearity	Yes
Mounting rail	TS 35	Power consumption	830...880...980mW at I_{OUT} = 20 mA
Step response time	Fast/slow:2-/3-/4-conductor: 1.2s/2.3s; potentiometer: 0.5s/1.2s	Supply voltage	24 V DC ± 20 %
Temperature coefficient	Measuring range ≥ 200K and resistant measurement: <= 200ppm/K of measuring range; 100< = measuring range < 200K: < = 250ppm vo		

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Technical data

Insulation coordination

Clearance & creepage distances	≥ 3 mm	EMC standards	EN 55011, EN 61000-6
Galvanic isolation	3-way isolator	Impulse withstand voltage	4 kV
Insulation voltage	2 kV_{eff} / 5 s	Insulation voltage input or output/rail	4 kV_{eff} / 1 min.
Insulation voltage input or output/supply	2 kV_{eff} / 5 s	Pollution severity	2
Rated voltage	300 V	Standards	DIN EN 50178, DIN EN 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 mm²	Clamping range, min.	0.5 mm²
Clamping range, max.	2.5 mm²		

Classifications

ETIM 3.0	EC001774	ETIM 4.0	EC001774
ETIM 5.0	EC001774	ETIM 6.0	EC002919
UNSPSC	30-21-18-01	eClass 5.1	27-21-01-07
eClass 6.2	27-21-01-07	eClass 7.1	27-21-01-07
eClass 8.1	27-21-01-07	eClass 9.0	27-21-01-07
eClass 9.1	27-21-01-29		

Product information

Product information	This product will soon be replaced by a new product. 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	Declaration of Conformity
Brochure/Catalogue	CAT 4.1 ELECTR 16/17 EN
Engineering Data	EPLAN, WSCAD
User Documentation	Instruction sheet

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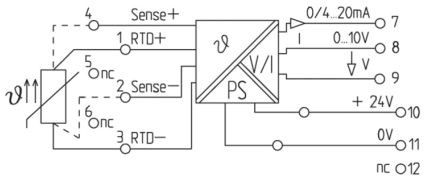
Drawings

Electric symbol



Similar to illustration

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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 NE WS	1635000000	WS, Terminal marker, 10 x 5 mm, Pitch in mm (P): 5.00 Weidmueller, Allen-Bradley, White	4008190261948	720 pc(s).

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 SW	1718080000	Accessories, Cross-connector, 24 A	4008190349301	60 pc(s).
ZQV 2.5N/2 RT	1717900000	Accessories, Z-series, Cross-connector, 24 A	4008190349288	60 pc(s).
ZQV 2.5N/2 BL	1717990000	Accessories, Cross-connector, 24 A	4008190349295	60 pc(s).
ZQV 2.5N/2 GE	1693800000	Z-series, Cross-connector, 24 A	4008190883621	60 pc(s).