

# **WE-Series - Sensor Element with Wire Extensions**

Temperature range -70 °C to +500 °C

## **Performance Characteristics**

- Fast response time
- Excellent long-term stability
- High accuracy and interchangeability
- Reliable laser weld connection
- According to DIN EN 60751

## **Application Examples**

- HVAC
- Chromatographs
- Process industry
- Various use as pre-finished sensor



#### **Dimensions and Materials**

Image for illustration purposes only

No.	Product Type	Element Nominal Resistance $R_0 [\Omega]$	Dimensions and Tolerances (mm)					Conductor		Order
			L	w	н	WL	LØ	Material	Diameter	Number
1	M222-WE-200	Pt100 / F 0.3	2.3 +0.2 -0.1	2.1 ±0.2	0.9 +0.3 -0.2	200 ±2	0.2 ±0.02	Ni (99.6 %)	AWG32	5157675
2	M222-WE-200	Pt1000 / F 0.3	2.3 +0.2 -0.1	2.1 ±0.2	0.9 +0.3 -0.2	200 ±2	0.2 ±0.02	Ni (99.6 %)	AWG32	30200145
3	M310-WE-60	Pt1000 / F 0.3	3.0 ±0.15	1.0 ±0.15	0.8 +0.3 -0.2	60 ±2	0.15 ±0.02	Ni (99.6 %)	AWG32	5157677
4	M310-WE-200	Pt1000 / F 0.3	3.0 ±0.15	1.0 ±0.15	0.8 +0.3 -0.2	200 ±2	0.15 ±0.02	Ni (99.6 %)	AWG32	5157676



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## Performance Data

No.	Temperature	Response Time Water (v = 0.4 m/s)		Response Time Air (v = 2.0 m/s)		Pull Force	Conductor Resistance	Application	
	капде	T0.5 [s]	T0.9 [s]	T0.5 [s]	T0.9 [s]	LN]	[Ω/m]		
1	-70 °C to +500 °C	0.05	0.15	3	10	9	2.546	Multi-Purpose	
2	-70 °C to +500 °C	0.05	0.15	3	10	9	2.546	Multi-Purpose	
3	-70 °C to +500 °C	0.04	0.12	2.5	8	7	2.546	Multi-Purpose	
4	-70 °C to +500 °C	0.04	0.12	2.5	8	7	2.546	Multi-Purpose	

### Temperature Coefficient

TCR = 3850 ppm/K

### **Measuring Current**

Pt100  $\Omega$ : 0.3 to 1.0 mA Pt1000  $\Omega$ : 0.1 to 0.3 mA (self-heating has to be considered)

### Self-Heating (Sensor Element)

0.4 K/mW at 0 °C

#### Storage Life

Min. 12 months (in original packaging)

#### **Customization Options**

- Sensor element (type and resistance)
- Wire extension length
- Wire material
- Certifications (e.g. IMDS, PPAP, IP rating)

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