

L220, Pt Temperature Sensor according to DIN EN 60751

Temperature range -50 °C to +400 °C

- Excellent long term stability and low drift
- High accuracy and interchangeability
- High vibration and shock resistance
- Optimized for soldering connection

L series Pt-RTDs are designed for volume applications where long term stability, interchangeability and accuracy over a large temperature range are vital. Typical applications include Energy Management, HVAC, Food and Beverage, Medical and Industrial equipment. AgPd lead wires assure problem-free connection via soldering and other processes.

Nominal Resistance R_0 [Ω]	Tolerance Class	Order Number	Packaging
Pt100	F 0.1 (1/3 B) F 0.15 (A) F 0.3 (B)	32207588 32207584 32207400	VCI-Plastic bag VCI-Plastic bag VCI-Plastic bag
Pt1000	F 0.15 (A) F 0.3 (B)	32207738 32207733	VCI-Plastic bag VCI-Plastic bag

The measuring point for the nominal resistance is 8 mm from the end of the sensor body.

Temperature Range of Tolerance Class

Validity of Class F 0.1 (1/3 B) 0 °C to +150 °C
 Validity of Class F 0.15 (A) -50 °C to +300 °C
 Validity of Class F 0.3 (B) -50 °C to +400 °C
 The specified tolerance classes refer to continuous operation.

Temperature Coefficient

TCR = 3850 ppm/K

Response Time

Water ($v = 0.4$ m/s): $t_{0.5} = 0.06$ s
 $t_{0.9} = 0.2$ s
 Air ($v = 2$ m/s): $t_{0.5} = 3$ s
 $t_{0.9} = 13$ s

Measuring Current

Pt100 Ω : 0.3 to 1 mA
 Pt1000 Ω : 0.1 to 0.3 mA
 (self-heating has to be considered)

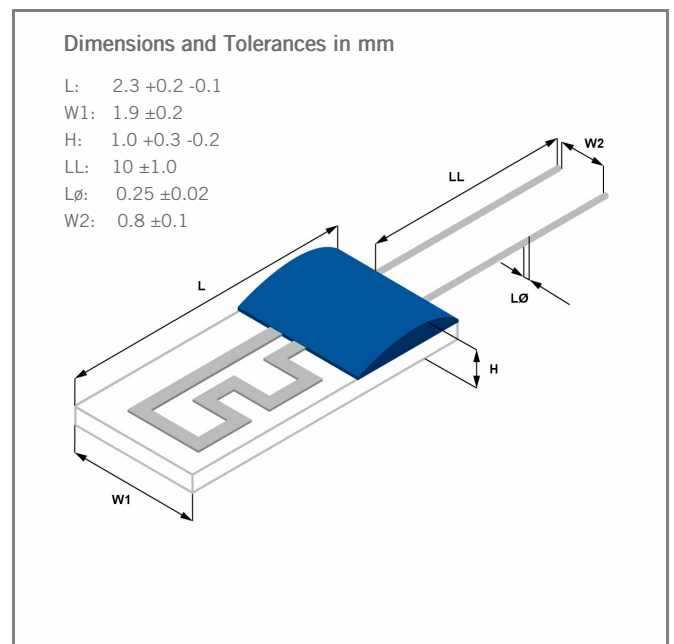


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 Color, shape and forming of fixing drop may vary

L220, Pt Temperature Sensor according to DIN EN 60751

Temperature range -50 °C to +400 °C

Long-Term Stability

The drift of the resistance value at 0 °C after a storage for 1000 hours in air at the declared upper temperature limit is not more than the tolerance value of the declared tolerance class according DIN EN 60751.

Typical drift of R(0 °C) is 0.04 % after 1000 hours at +400 °C.

Self-Heating

0.4 K/mW at 0 °C

Insulation Resistance

> 100 MΩ at +20 °C

> 2 MΩ at +400 °C

Vibration Resistance

At least 40 g acceleration at 10 to 2000 Hz, depends on installation

Shock Resistance

At least 100 g acceleration with 8 ms half sine wave, depends on installation

Connection Technology

Soft Soldering

Note application temperature of the solder

Lead Type

AgPd

Tensile Strength of Leads

≥ 8 N

Packaging

VCI-Plastic bag

Alternative packaging forms on request.

Storage Life

At least 12 months (after manufacture), when stored under the recommended conditions. Longer shelf life may be possible, depending upon actual storage conditions, after requalification by customer. Nitrogen atmosphere recommended.

Note

Other tolerances, values of resistance and wire lengths are available on request.

Due to random sample measurements, a bending of connection wires may occur (called V-shape). This bending is batch-dependent and has no influence on the functionality of the platinum measuring resistor.



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YAGEO Nexensos GmbH, Reinhard-Heraeus-Ring 23, 63801 Kleinostheim, Germany

L416, Pt Temperature Sensor according to DIN EN 60751

Temperature range -50 °C to +400 °C

- Excellent long term stability and low drift
- High accuracy and interchangeability
- High vibration and shock resistance
- Optimized for soldering connection

L series Pt-RTDs are designed for volume applications where long term stability, interchangeability and accuracy over a large temperature range are vital. Typical applications include Energy Management, HVAC, Food and Beverage, Medical and Industrial equipment. AgPd lead wires assure problem-free connection via soldering and other processes.

Nominal Resistance R_0 [Ω]	Tolerance Class	Order Number	Packaging
Pt100	F 0.15 (A) F 0.3 (B)	32207583 32207440	VCI-Plastic bag VCI-Plastic bag

The measuring point for the nominal resistance is 8 mm from the end of the sensor body.

Temperature Range of Tolerance Class

Validity of Class F 0.15 (A) -50 °C to +300 °C

Validity of Class F 0.3 (B) -50 °C to +400 °C

The specified tolerance classes refer to continuous operation.

Temperature Coefficient

TCR = 3850 ppm/K

Response Time

Water ($v = 0.4$ m/s):
 $t_{0.5} = 0.07$ s
 $t_{0.9} = 0.25$ s

Air ($v = 2$ m/s):
 $t_{0.5} = 3.2$ s
 $t_{0.9} = 14$ s

Measuring Current

Pt100 Ω : 0.3 to 1 mA
 (self-heating has to be considered)

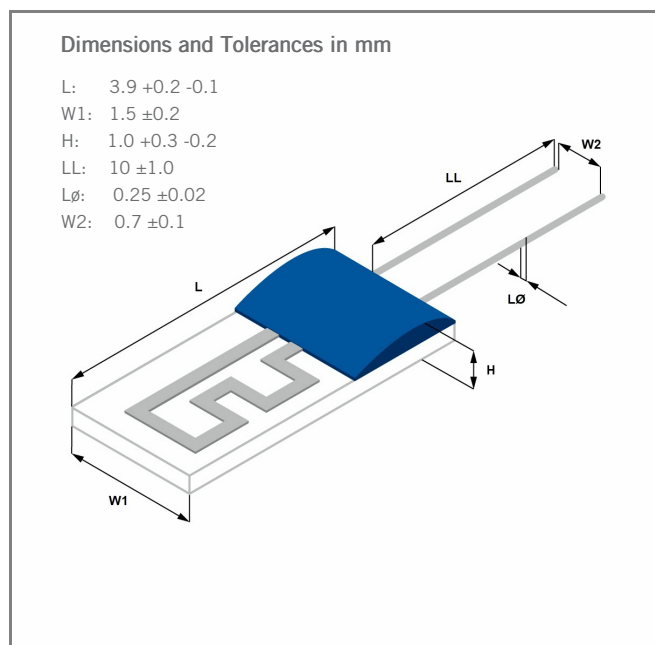


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L416, Pt Temperature Sensor according to DIN EN 60751

Temperature range -50 °C to +400 °C

Long-Term Stability

The drift of the resistance value at 0 °C after a storage for 1000 hours in air at the declared upper temperature limit is not more than the tolerance value of the declared tolerance class according DIN EN 60751.

Typical drift of R(0 °C) is 0.04 % after 1000 hours at +400 °C.

Self-Heating

0.4 K/mW at 0 °C

Insulation Resistance

> 100 MΩ at +20 °C

> 2 MΩ at +400 °C

Vibration Resistance

At least 40 g acceleration at 10 to 2000 Hz, depends on installation

Shock Resistance

At least 100 g acceleration with 8 ms half sine wave, depends on installation

Connection Technology

Soft Soldering

Note application temperature of the solder

Lead Type

AgPd

Tensile Strength of Leads

≥ 8 N

Packaging

VCI-Plastic bag

Alternative packaging forms on request.

Storage Life

At least 12 months (after manufacture), when stored under the recommended conditions. Longer shelf life may be possible, depending upon actual storage conditions, after requalification by customer.

Nitrogen atmosphere recommended.

Note

Other tolerances, values of resistance and wire lengths are available on request.

Due to random sample measurements, a bending of connection wires may occur (called V-shape). This bending is batch-dependent and has no influence on the functionality of the platinum measuring resistor.



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L420, Pt Temperature Sensor according to DIN EN 60751

Temperature range -50 °C to +400 °C

- Excellent long term stability and low drift
- High accuracy and interchangeability
- High vibration and shock resistance
- Optimized for soldering connection

L series Pt-RTDs are designed for volume applications where long term stability, interchangeability and accuracy over a large temperature range are vital. Typical applications include Energy Management, HVAC, Food and Beverage, Medical and Industrial equipment. AgPd lead wires assure problem-free connection via soldering and other processes.

Nominal Resistance R_0 [Ω]	Tolerance Class	Order Number	Packaging
Pt1000	F 0.1 (1/3 B)	32207587	VCI-Plastic bag
	F 0.15 (A)	32207582	VCI-Plastic bag
	F 0.3 (B)	32207704	VCI-Plastic bag

The measuring point for the nominal resistance is 8 mm from the end of the sensor body.

Temperature Range of Tolerance Class

Validity of Class F 0.1 (1/3 B) 0 °C to +150 °C
 Validity of Class F 0.15 (A) -50 °C to +300 °C
 Validity of Class F 0.3 (B) -50 °C to +400 °C
 The specified tolerance classes refer to continuous operation.

Temperature Coefficient

TCR = 3850 ppm/K

Response Time

Water ($v = 0.4$ m/s):
 $t_{0.5} = 0.08$ s
 $t_{0.9} = 0.25$ s

Air ($v = 2$ m/s):
 $t_{0.5} = 3.5$ s
 $t_{0.9} = 15$ s

Measuring Current

Pt1000 Ω : 0.1 to 0.3 mA
 (self-heating has to be considered)

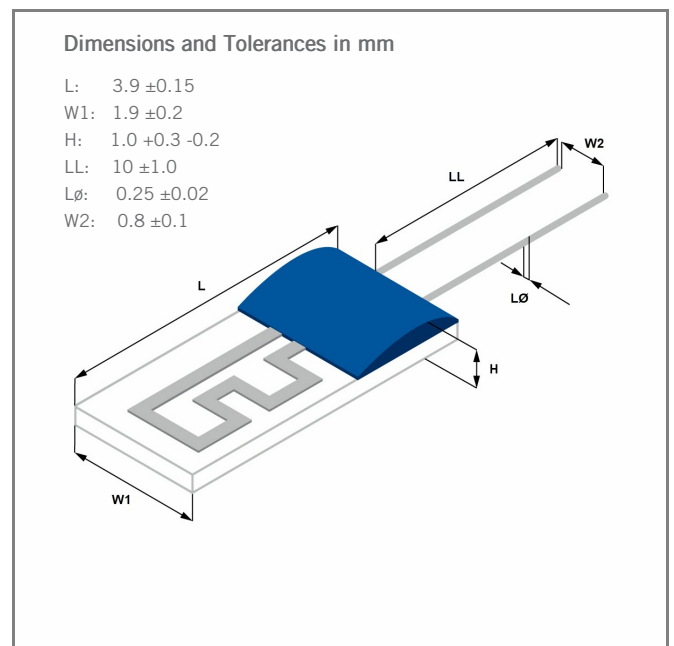


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L420, Pt Temperature Sensor according to DIN EN 60751

Temperature range -50 °C to +400 °C

Long-Term Stability

The drift of the resistance value at 0 °C after a storage for 1000 hours in air at the declared upper temperature limit is not more than the tolerance value of the declared tolerance class according DIN EN 60751.

Typical drift of R(0 °C) is 0.04 % after 1000 hours at +400 °C.

Self-Heating

0.3 K/mW at 0 °C

Insulation Resistance

> 100 MΩ at +20 °C

> 2 MΩ at +400 °C

Vibration Resistance

At least 40 g acceleration at 10 to 2000 Hz, depends on installation

Shock Resistance

At least 100 g acceleration with 8 ms half sine wave, depends on installation

Connection Technology

Soft Soldering

Note application temperature of the solder

Lead Type

AgPd

Tensile Strength of Leads

≥ 8 N

Packaging

VCI-Plastic bag

Alternative packaging forms on request

Storage Life

At least 12 months (after manufacture), when stored under the recommended conditions. Longer shelf life may be possible, depending upon actual storage conditions, after requalification by customer.

Nitrogen atmosphere recommended.

Note

Other tolerances, values of resistance and wire lengths are available on request.

Due to random sample measurements, a bending of connection wires may occur (called V-shape). This bending is batch-dependent and has no influence on the functionality of the platinum measuring resistor.

California Proposition 65



WARNING

WARNING: This product can expose you to chemicals including lead oxide, which is known to the State of California to cause cancer and birth defects or other reproductive harm, and including cobalt oxide, which is known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov



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Document: 20002220879 | Part 001 | Version 03 | Status: 03/2023

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L1020, Pt Temperature Sensor according to DIN EN 60751

Temperature range -50 °C to +400 °C

- Excellent long term stability and low drift
- High accuracy and interchangeability
- High vibration and shock resistance
- Optimized for soldering connection

L series Pt-RTDs are designed for volume applications where long term stability, interchangeability and accuracy over a large temperature range are vital. Typical applications include Energy Management, HVAC, Food and Beverage, Medical and Industrial equipment. AgPd lead wires assure problem-free connection via soldering and other processes.

Nominal Resistance R_0 [Ω]	Tolerance Class	Order Number	Packaging
Pt1000	F 0.1 (1/3 B)	32207586	VCI-Plastic bag
	F 0.15 (A)	32207581	VCI-Plastic bag
	F 0.3 (B)	32207710	VCI-Plastic bag

The measuring point for the nominal resistance is 8 mm from the end of the sensor body.

Temperature Range of Tolerance Class

Validity of Class F 0.1 (1/3 B) 0 °C to +150 °C
 Validity of Class F 0.15 (A) -50 °C to +300 °C
 Validity of Class F 0.3 (B) -50 °C to +400 °C
 The specified tolerance classes refer to continuous operation.

Temperature Coefficient

TCR = 3850 ppm/K

Response Time

Water ($v = 0.4$ m/s):
 $t_{0.5} = 0.12$ s
 $t_{0.9} = 0.3$ s

Air ($v = 2$ m/s):
 $t_{0.5} = 6$ s
 $t_{0.9} = 20$ s

Measuring Current

Pt1000 Ω : 0.1 to 0.3 mA
 (self-heating has to be considered)

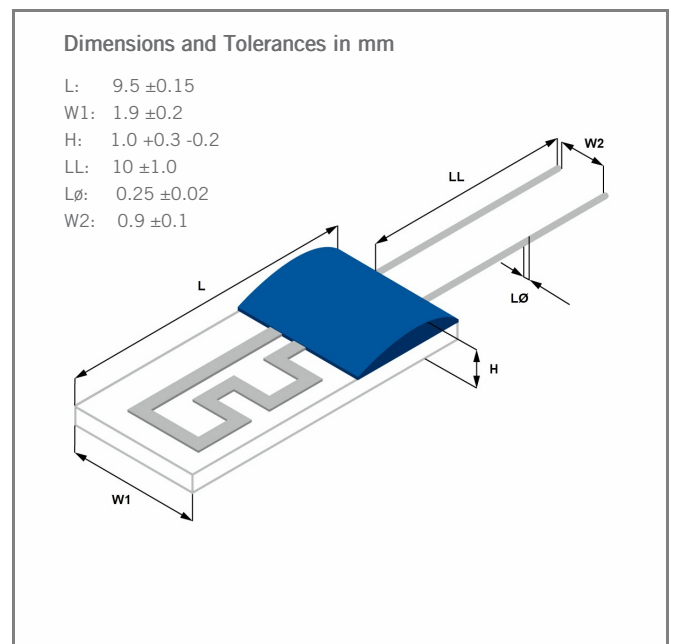


Image for illustration purposes only
 Color, shape and forming of fixing drop may vary

L1020, Pt Temperature Sensor according to DIN EN 60751

Temperature range -50 °C to +400 °C

Long-Term Stability

The drift of the resistance value at 0 °C after a storage for 1000 hours in air at the declared upper temperature limit is not more than the tolerance value of the declared tolerance class according DIN EN 60751.

Typical drift of R(0 °C) is 0.04 % after 1000 hours at +400 °C.

Self-Heating

0.2 K/mW at 0 °C

Insulation Resistance

> 100 MΩ at +20 °C

> 2 MΩ at +400 °C

Vibration Resistance

At least 40 g acceleration at 10 to 2000 Hz, depends on installation

Shock Resistance

At least 100 g acceleration with 8 ms half sine wave, depends on installation

Connection Technology

Soft Soldering

Note application temperature of the solder

Lead Type

AgPd

Tensile Strength of Leads

≥ 8 N

Packaging

VCI-Plastic bag

Alternative packaging forms on request.

Storage Life

At least 12 months (after manufacture), when stored under the recommended conditions. Longer shelf life may be possible, depending upon actual storage conditions, after requalification by customer.

Nitrogen atmosphere recommended.

Note

Other tolerances, values of resistance and wire lengths are available on request.

Due to random sample measurements, a bending of connection wires may occur (called V-shape). This bending is batch-dependent and has no influence on the functionality of the platinum measuring resistor.



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LN222, Pt Temperature Sensor according to DIN EN 60751

Temperature range -50 °C to +400 °C

- Excellent long term stability and low drift
- High accuracy and interchangeability
- High vibration and shock resistance
- Optimized for soldering connection

LN series Pt-RTDs are designed for high volume applications where long term stability, interchangeability and accuracy over a large temperature range are vital. Typical applications include HVAC, Appliance, Food and Beverage, Medical and Industrial equipment.

Nominal Resistance R_0 [Ω]	Tolerance Class	Order Number	Packaging
Pt100	F 0.15 (A) F 0.3 (B)	32207771 32207770	VCI-Plastic bag VCI-Plastic bag
Pt1000	F 0.15 (A) F 0.3 (B)	32207773 32207772	VCI-Plastic bag VCI-Plastic bag

The measuring point for the nominal resistance is 8 mm from the end of the sensor body.

Temperature Range of Tolerance Class

Validity of Class F 0.15 (A) -50 °C to +300 °C

Validity of Class F 0.3 (B) -50 °C to +400 °C

The specified tolerance classes refer to continuous operation.

Temperature Coefficient

TCR = 3850 ppm/K

Response Time

Water ($v = 0.4$ m/s):
 $t_{0.5} = 0.05$ s
 $t_{0.9} = 0.15$ s

Air ($v = 2$ m/s):
 $t_{0.5} = 3$ s
 $t_{0.9} = 10$ s

Measuring Current

Pt100 Ω : 0.3 to 1 mA

Pt1000 Ω : 0.1 to 0.3 mA

(self-heating has to be considered)

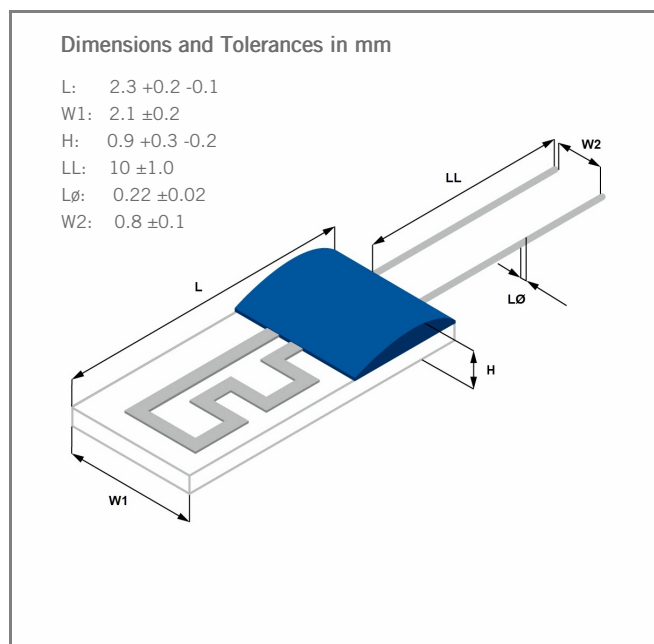


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LN222, Pt Temperature Sensor according to DIN EN 60751

Temperature range -50 °C to +400 °C

Long-Term Stability

The drift of the resistance value at 0 °C after a storage for 1000 hours in air at the declared upper temperature limit is not more than the tolerance value of the declared tolerance class according DIN EN 60751.

Typical drift of R(0 °C) is 0.04 % after 1000 hours at +400 °C.

Self-Heating

0.4 K/mW at 0 °C

Insulation Resistance

> 100 MΩ at +20 °C

> 2 MΩ at +400 °C

Vibration Resistance

At least 40 g acceleration at 10 to 2000 Hz, depends on installation

Shock Resistance

At least 100 g acceleration with 8 ms half sine wave, depends on installation

Connection Technology

Crimping, Soft Soldering

Lead Type

Ni-silvercoated

Tensile Strength of Leads

≥ 10N

Packaging

VCI-Plastic bag

Alternative packaging forms on request.

Storage Life

At least 12 months (after manufacture), when stored under the recommended conditions. Longer shelf life may be possible, depending upon actual storage conditions, after requalification by customer.

Nitrogen atmosphere recommended.

Note

Other tolerances, values of resistance and wire lengths are available on request.

Due to random sample measurements, a bending of connection wires may occur (called V-shape). This bending is batch-dependent and has no influence on the functionality of the platinum measuring resistor.

California Proposition 65



WARNING

WARNING: This product can expose you to chemicals including nickel and cobalt, which are known to the State of California to cause cancer.

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Document: 20002220905 | Part 001 | Version 03 | Status: 03/2023

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