

# Temperature sensors

SAUTER temperature sensors are used for heating and air-conditioning systems in residential, office and business spaces. They are used to measure room, duct, outside and pipe temperatures.

## Overview of temperature sensors



Type designation	EGT 130	EGT 330...335, 430	EGT 386, 388, 486, 686, 688	EGT 301, 401
<b>Application</b>				
Pipe/duct	–	–	–	–
Cable	–	–	–	–
Room (passive)	–	•	•	–
Room (active)	•	–	–	–
Clamp-on temperature	–	–	–	–
Outdoor temperature	–	–	–	•
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Type designation	EGT 353...356, 456, 554	EGT 346...348, 392, 446, 447	EGT 311, 411	EGS 100
<b>Application</b>				
Pipe/duct	–	•	–	–
Cable	•	–	–	–
Room (passive)	–	–	–	–
Room (active)	–	–	–	–
Clamp-on temperature	–	–	•	–
Outdoor temperature	–	–	–	–
Radiation temperature	–	–	–	•
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## EGT 130, 330, 332, 335, 430: Room-temperature sensor, surface-mounted

### Features

- Passive measuring element
- Temperature measurement in dry rooms
- Variants with setpoint adjuster, presence button and status LED

### Technical data

Power supply		
	Power supply	See type list
Parameters		
Time characteristic	Time constant in still air	12 minutes
Ambient conditions		
	Storage and transport temperature	-35...70 °C
	Ambient temperature	-35...70 °C
Construction		
	Housing	Pure white, similar to RAL9010
	Housing material	ASA
	Cable inlet	From rear or side top/bottom
	Connection terminals	Screw terminal, max. 1.5 mm <sup>2</sup>
	Weight	50 g
Standards and directives		
	Type of protection	IP30 (EN 60529)
CE conformity according to	EMC Directive 2014/30/EU	EN 60730-1 (mode of operation 1, residential premises)
	RoHS Directive 2011/65/EU	EN 50581

### Resistance values

**i** The tolerance listed below applies only to the corresponding measuring element. The accuracy of the sensor depends on the cable length and the measuring element used.

Measuring element	Standards	Nominal value	Tolerance at 0 °C
Ni500	DIN 43760	500 Ω at 0 °C	±0.4 K
Ni1000	DIN 43760	1000 Ω at 0 °C	±0.4 K
Pt100	DIN EN 60751	100 Ω at 0 °C	±0.3 K
Pt1000	DIN EN 60751	1000 Ω at 0 °C	±0.3 K

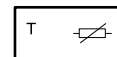
### Overview of passive types

Type	Measuring range	Output signal	Adjuster
EGT330F052	-35...70 °C	Passive, Ni500	-
EGT330F102	-35...70 °C	Passive, Ni1000	-
EGT332F102	-35...70 °C	Passive, Ni1000	Resistor signal 2.5 kΩ
EGT335F102	-35...70 °C	Passive, Ni1000	Resistor signal 2.5 kΩ
EGT430F012	-35...70 °C	Passive, Pt100	-
EGT430F102	-35...70 °C	Passive, Pt1000	-

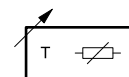
 EGT 335 with presence button and 3 LEDs



EGT\*30F\*\*\*



EGT332F102



## Active

Type	Measuring range	Measuring accuracy at 21 °C	Output signal	Power supply	Power consumption	Adjuster
EGT130F031	3 temperature ranges, adjustable on device (see connection diagram)	Typ. $\pm 1\%$ of measuring range <sup>1)2)</sup>	Active, 0...10 V, min. load 5 k $\Omega$	15...24 V= ( $\pm 10\%$ )/ 24 V~ ( $\pm 10\%$ )	Max. 12 mA / 24 V=	-

<sup>1)</sup> With offset adjustment  $\pm 3$  K

<sup>2)</sup> The transducers must be operated at a constant operating voltage ( $\pm 0.2$  V). Current/voltage peaks when switching the supply voltage on/off must be avoided by the customer.

## EGT 386, 388, 486, 686, 688: Room temperature sensor, recessed

### Features

- Passive room temperature measurement
- For temperature measurement in dry rooms (e.g. in residential properties, offices and business premises)
- Including frame

### Technical data

#### Parameters

	Measuring range	-35...70 °C
Time characteristic	Time constant in still air	30 minutes

#### Ambient conditions

	Storage and transport temperature	-35...70 °C
	Ambient temperature	-35...70 °C

#### Construction

	Housing	Pure white
	Housing material	Thermoplastic
	Frame design	Gira E2

#### Standards and directives

	Type of protection	IP20 (EN 60529)
CE conformity according to	RoHS Directive 2011/65/EU	EN 50581

#### Resistance values / characteristics

**i** The tolerance listed below applies only to the corresponding measuring element. The accuracy of the sensor depends on the cable length and the measuring element used.

Measuring element	Standard	Nominal value at 0 °C	Tolerance at 0 °C
Ni1000	DIN 43760	1000 Ω	±0.4 K
Pt1000	DIN EN 60751	1000 Ω	±0.3 K
NTC 10k	-	10 kΩ at 25 °C	±0.3 K

### Overview of types

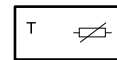
Type	Measuring element	Adjuster	Weight
EGT386F101	Ni1000	-	53 g
EGT388F101	Ni1000	10 kΩ	83 g
EGT388F102	Ni1000	100 Ω	83 g
EGT486F101	Pt1000	-	83 g
EGT686F101	NTC 10k	-	53 g
EGT688F101	NTC 10k	10 kΩ	83 g



EGT386F101

EGT486F101

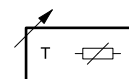
EGT686F101



EGT388F101

EGT388F102

EGT688F101



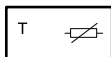




EGT\*01F102



EGT301F031



## EGT 301, 401, 601: Outdoor-temperature sensor

### Features

- Passive or active measuring element
- Extra protection against dust and humidity (IP65)
- Cable inlet on back or via cable gland
- For weather-dependent heating and ventilation systems

### Technical data

Parameters		
	Recommended measurement current	< 1 mA
Time characteristic	Time constant in still air	EGT*01F102: 12 minutes EGT301F031: 7 minutes
Ambient conditions		
	Ambient temperature	EGT*01F102: -35...90 °C EGT301F031: -35...70 °C
Storage and transport	Storage and transport temperature	-35...70 °C
	Humidity (non-condensing)	85% rh
Construction		
	Sensor sleeve	EGT301F031: stainless steel 1.4571 Ø 6 × 25 mm
	Housing	White
	Housing material	Polyamide
	Connection terminals	Screw terminals 0.35...1.5 mm <sup>2</sup> , for number of poles, see connection diagram
	Cable inlet	EGT*01F102: M16 for cable min. Ø 5 mm, max. Ø 8 mm EGT301F031: M20 for cable min. Ø 5 mm, max. Ø 8 mm
Standards and directives		
	Type of protection	IP65 (EN 60529)
CE conformity according to	RoHS Directive 2011/65/EU	EN 50581
	EMC Directive 2014/30/EU	EGT301F031: EN 60730-1 (mode of operation 1, residential premises)

### Resistance values / characteristics

**i** The tolerance listed below applies only to the corresponding measuring element. The accuracy of the sensor depends on the cable length and the measuring element used.

Measuring element	Standards	Nominal value at 0 °C	Tolerance at 0 °C
Ni1000	DIN 43760	1000 Ω	±0.4 K
Ni1000 TK5000		1000 Ω	±0.4 K
Pt1000	DIN EN 60751	1000 Ω	±0.3 K

### Overview of types

Type	Description
EGT301F102	Outdoor-temperature sensor; Ni1000
EGT401F102	Outdoor-temperature sensor; Pt1000
EGT601F102	Outdoor-temperature sensor; Ni1000 TK5000
EGT301F031	Outdoor-temperature transmitter; 0...10 V



## Passive types

Type	Measuring element	Measuring range	Weight
EGT301F102	Ni1000	-35...90 °C	80 g
EGT401F102	Pt1000	-35...90 °C	80 g
EGT601F102	Ni1000 TK5000	-35...90 °C	80 g

## Active types

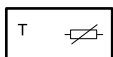
Type	Measuring accuracy at 21 °C	Output signal	Power supply	Power consumption	Measuring range	Weight
EGT301F031	Typ. $\pm 1\%$ of measuring range <sup>1)2)</sup>	0...10 V, min. load impedance 1 k $\Omega$	15...24 V= ( $\pm 10\%$ )/ 24 V~ ( $\pm 10\%$ )	Max. 0.42 W / 0.84 VA	5 temperature ranges (-50...160 °C), adjustable on device (see connection diagram)	120 g

<sup>1)</sup> With offset adjustment  $\pm 3$  K

<sup>2)</sup> The transducers must be operated at a constant operating voltage ( $\pm 0.2$  V). Current/voltage peaks when switching the supply voltage on/off must be avoided by the customer.



EGT\*5\*F\*\*\*



## EGT 353...356, 456, 554, 654: Cable temperature sensor

### Features

- Passive measuring element
- Particularly suitable for direct connection in installations with short distances between the controllers and the sensors
- Sensor with a wide range of applications and high type of protection (IP67) and fast time characteristic
- Used in air, used in liquid media with thermowells, or as a clamp-on temperature sensor with an accessory
- Large temperature measuring range

### Technical data

Parameters		
	Recommended measurement current	Typ. < 1 mA
Time characteristic in water	Time constant with thermowell (LW 7) in still water	9 seconds ( $t_{63}$ )
Time characteristic in air	Time constant in still air	155 seconds ( $t_{63}$ )
	Time constant in moving air (3 m/s)	35 seconds ( $t_{63}$ )

### Construction

Sensor sleeve	$\varnothing 6 \times L$ (mm) - see table, up to 16 bar
Material	Sensor sleeve: Stainless steel 1.4571 Cable: see table
Power cable	$\varnothing 5$ mm with wire ferrules
Cable cross-section	$2 \times 0.25$ mm <sup>2</sup>
Active length	10 mm

### Standards and directives

	Type of protection	IP67 (EN 60529)
CE conformity according to	RoHS Directive 2011/65/EU	EN 50581

### Resistance values / characteristics

**i** The tolerance listed below applies only to the corresponding measuring element. The accuracy of the sensor depends on the cable length and the measuring element used.

Measuring element	Standards	Nominal value	Tolerance at 0 °C
Ni1000	DIN 43760	1000 $\Omega$ at 0 °C	$\pm 0.4$ K
Ni1000 TK5000		1000 $\Omega$ at 0 °C	$\pm 0.4$ K
Pt100	DIN EN 60751	100 $\Omega$ at 0 °C	$\pm 0.3$ K
Pt1000	DIN EN 60751	1000 $\Omega$ at 0 °C	$\pm 0.3$ K
NTC 10k	-	10 k $\Omega$ at 25 °C	$\pm 0.3$ K
NTC 22k	-	22 k $\Omega$ at 25 °C	$\pm 0.3$ K

### Overview of types

Type	Measuring element	Sleeve length LH	Total length Lg	Material	Measuring range	Weight
EGT353F101	NTC 10k	50 mm	1.5 m	PVC	-35...100 °C	40 g
EGT353F103	NTC 10k	50 mm	3 m	PVC	-35...100 °C	85 g
EGT353F110	NTC 10k	50 mm	10 m	PVC	-35...100 °C	280 g
EGT353F120	NTC 10k	50 mm	20 m	PVC	-35...100 °C	550 g
EGT554F103	NTC 22k	50 mm	3 m	PVC	-35...100 °C	85 g
EGT354F102	Ni1000	50 mm	1 m	PVC	-35...100 °C	30 g
EGT354F104	Ni1000	50 mm	3 m	PVC	-35...100 °C	85 g
EGT354F111	Ni1000	50 mm	10 m	PVC	-35...100 °C	280 g
EGT354F121	Ni1000	50 mm	20 m	PVC	-35...100 °C	550 g



Type	Measuring element	Sleeve length LH	Total length Lg	Material	Measuring range	Weight
EGT654F102	Ni1000 TK5000	50 mm	1 m	PVC	-35...100 °C	30 g
EGT355F902	Ni1000	100 mm	2 m	Silicone	-50...180 °C	60 g
EGT355F903	Ni1000	150 mm	2 m	Silicone	-50...180 °C	60 g
EGT356F102	Ni1000	50 mm	1 m	Silicone	-50...180 °C	30 g
EGT356F104	Ni1000	50 mm	3 m	Silicone	-50...180 °C	90 g
EGT356F111	Ni1000	50 mm	10 m	Silicone	-50...180 °C	300 g
EGT356F304	Ni200	50 mm	3 m	Silicone	-50...180 °C	90 g
EGT456F012	Pt100	50 mm	1 m	Silicone	-50...180 °C	30 g
EGT456F102	Pt1000	50 mm	1 m	Silicone	-50...180 °C	30 g

### Accessories

Type	Description
0300360000	Compression fitting G $\frac{1}{4}$ " ; stainless steel, up to 16 bar
0300360003	Mounting flange; plastic (max. 140 °C)
0300360004	Heat-conducting paste incl. gun with 2 g content
0300360008	Retaining holder for cable temperature sensor or capillary tube with 0392022*** (LW 7) or LW 15 (10 pcs)
0300360012	Sensor support spiral for fitting in ventilation duct
0313214001	Fixing kit for cable temperature sensor (holder, heat-conducting paste, retaining strap)

☛ 039\*\*\*\*\*: Thermowells (LW 7 and LW 15) made of brass or stainless steel (see product data sheet)

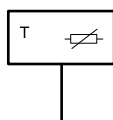
## EGT 346...348, 392, 446, 447, 646, 647: Duct temperature sensor



EGT\*4\*



EGT392F102



### Features

- Passive or active measuring element
- For use in pipes and vessels by means of optional thermowells (LW 7). For use in standard HVAC applications up to 160 °C and aggressive ambient conditions up to 260 °C (EGT392F102)

### Technical data

Parameters		
	Recommended measurement current	Typ. < 1 mA
Time characteristic	Time constant in moving air (3 m/s)	35 s ( $t_{63}$ )
	Time constant in still air	155 s ( $t_{63}$ )
	Time constant in still water	9 s ( $t_{63}$ )
	Time constant in still water, with thermo-well made of brass	17 s ( $t_{63}$ )
	Time constant in still water, with thermo-well made of stainless steel	20 s ( $t_{63}$ )

Ambient conditions		
	Ambient temperature	EGT*4* passive: -35...90 °C EGT*4* active: -35...70 °C EGT392F102: -25...90 °C
Storage and transport	Storage and transport temperature	-35...70 °C
	Humidity (non-condensing)	85% rh

Construction		
	Housing	EGT*4*: Black/yellow
	Housing material	EGT*4*: Polyamide EGT392F102: Form J made of die-cast aluminium
	Connection terminals	EGT*4*: 45° screw terminals 0.35...1.5 mm <sup>2</sup> For number of poles, see connection diagram
	Cable inlet	M16 for cable min. Ø 5 mm, max. Ø 8 mm
	Immersion stem	Ø 6×L (mm) made of stainless steel 1.4571, up to 16 bar, see table
	Active length	10 mm

Standards and directives		
	Type of protection	IP65 (EN 60529)
CE conformity according to	RoHS Directive 2011/65/EU	EN 50581
	EMC Directive 2014/30/EU	EGT34*F031: EN 60730-1 (mode of operation 1, residential premises)

### Resistance values / characteristics

*i* The tolerance listed below applies only to the corresponding measuring element. The accuracy of the sensor depends on the cable length and the measuring element used.

Measuring element	Standard	Nominal value at 0 °C	Tolerance at 0 °C
Ni1000	DIN 43760	1000 Ω	±0.4 K
Ni1000 TK5000		1000 Ω	±0.4 K
Ni200	DIN 43760	200 Ω	±0.4 K
Pt1000	DIN EN 60751	1000 Ω	±0.3 K
Pt100	DIN EN 60751	100 Ω	±0.3 K



## Overview of types

Type	Description
EGT346F022	Duct temperature sensor; Ni200; -50...160 °C; L=100 mm
EGT346F102	Duct temperature sensor; Ni1000; -50...160 °C; L=100 mm
EGT347F022	Duct temperature sensor; Ni200; -50...160 °C; L=200 mm
EGT347F102	Duct temperature sensor; Ni1000; -50...160 °C; L=200 mm
EGT348F102	Duct temperature sensor; Ni1000; -50...160 °C; L=450 mm
EGT392F102	Duct temperature sensor; Ni1000; -50...260 °C; L = 100 mm
EGT446F012	Duct temperature sensor; Pt100; -50...160 °C; L=100 mm
EGT446F102	Duct temperature sensor; Pt1000; -50...160 °C; L=100 mm
EGT447F012	Duct temperature sensor; Pt100; -50...160 °C; L=200 mm
EGT447F102	Duct temperature sensor; Pt1000; -50...160 °C; L=200 mm
EGT646F102	Duct temperature sensor; Ni1000 TK5000; -35...160 °C; L=100 mm
EGT647F102	Duct temperature sensor; Ni1000 TK5000; -35...160 °C; L=200 mm
EGT346F031	Duct temperature transmitter; 0...10 V; L=100 mm
EGT347F031	Duct temperature transmitter; 0...10 V; L=200 mm
EGT348F031	Duct temperature transmitter; 0...10 V; L=450 mm

### Passive types

Type	Measuring element	Immersion length L (mm)	Measuring range	Weight
EGT346F022	Ni200	100 mm	-50...160 °C	85 g
EGT346F102	Ni1000	100 mm	-50...160 °C	85 g
EGT347F022	Ni200	200 mm	-50...160 °C	95 g
EGT347F102	Ni1000	200 mm	-50...160 °C	95 g
EGT348F102	Ni1000	450 mm	-50...160 °C	120 g
EGT392F102	Ni1000	100 mm	-50...260 °C	105 g
EGT446F012	Pt100	100 mm	-50...160 °C	85 g
EGT446F102	Pt1000	100 mm	-50...160 °C	85 g
EGT447F012	Pt100	200 mm	-50...160 °C	95 g
EGT447F102	Pt1000	200 mm	-50...160 °C	95 g
EGT646F102	Ni1000 TK5000	100 mm	-35...160 °C	85 g
EGT647F102	Ni1000 TK5000	200 mm	-35...160 °C	85 g

### Active types

Type	Measuring accuracy at 21 °C <sup>1)2)</sup>	Output signal	Power supply	Power consumption	Immersion length L (mm)	Measuring range	Weight
EGT346F031	Typ. ±1% of measuring range	0...10 V, min. load 5 kΩ	15...24 V= (±10%) or 24 V~ (±10%)	Typ. 0.35 W / 0.82 VA	100 mm	5 temperature ranges (-50...160 °C), adjustable on device (see connection diagram)	90 g
EGT347F031	Typ. ±1% of measuring range	0...10 V, min. load 5 kΩ	15...24 V= (±10%) or 24 V~ (±10%)	Typ. 0.35 W / 0.82 VA	200 mm	5 temperature ranges (-50...160 °C), adjustable on device (see connection diagram)	100 g
EGT348F031	Typ. ±1% of measuring range	0...10 V, min. load 5 kΩ	15...24 V= (±10%) or 24 V~ (±10%)	Typ. 0.35 W / 0.82 VA	450 mm	5 temperature ranges (-50...160 °C), adjustable on device (see connection diagram)	120 g

## Accessories

Type	Description
0300360000	Compression fitting G $\frac{1}{4}$ "; stainless steel, up to 16 bar
0300360003	Mounting flange; plastic (max. 140 °C)
0300360004	Heat-conducting paste incl. gun with 2 g content

☛ 039\*\*\*\*\*: Thermowells (LW 7 and LW 15) made of brass or stainless steel (see product data sheet)

<sup>1)</sup> With offset adjustment ±3 K

<sup>2)</sup> The transducers must be operated at a constant operating voltage (±0.2 V). Current/voltage peaks when switching the supply voltage on/off must be avoided by the customer.

## Thermowells



### Features

- Fitted in pipes and containers for holding sensor cartridges, immersion stems, temperature sensors, temperature controllers or thermostats
- Made of brass (Ms) or stainless steel (V4A)
- Versions with cylindrical pipe thread (G½" male ISO 228/1, flat-sealing)<sup>1)</sup> or cone-shaped (R½" ISO 7/1 sealing in thread)
- With pressure spring (LW 15)
- With retaining holder

### Overview of types

Type	LW	Length	Material	Thread	Nominal pressure	Test pressure	T <sub>max</sub>
0391022050	7	50 mm	Stainless steel	G½"	40 bar	60 bar	325 °C
0391022100	7	100 mm	Stainless steel	G½"	40 bar	60 bar	325 °C
0391022200	7	200 mm	Stainless steel	G½"	40 bar	60 bar	325 °C
0391022300	7	300 mm	Stainless steel	G½"	40 bar	60 bar	325 °C
0391022450	7	450 mm	Stainless steel	G½"	40 bar	60 bar	325 °C
0391022600	7	600 mm	Stainless steel	G½"	40 bar	60 bar	325 °C
0391011050	7	50 mm	Brass	R½"	10 bar	16 bar	160 °C
0391011100	7	100 mm	Brass	R½"	10 bar	16 bar	160 °C
0391011150	7	150 mm	Brass	R½"	10 bar	16 bar	160 °C
0391011200	7	200 mm	Brass	R½"	10 bar	16 bar	160 °C
0391011300	7	300 mm	Brass	R½"	10 bar	16 bar	160 °C
0391011450	7	450 mm	Brass	R½"	10 bar	16 bar	160 °C
0393022100	15	100 mm	Stainless steel	G½"	40 bar	60 bar	450 °C
0393022200	15	200 mm	Stainless steel	G½"	40 bar	60 bar	450 °C
0393022450	15	450 mm	Stainless steel	G½"	40 bar	60 bar	450 °C
0393012100	15	100 mm	Brass	G½"	16 bar	25 bar	160 °C
0393012200	15	200 mm	Brass	G½"	16 bar	25 bar	160 °C
0392022100	7	100 mm	Stainless steel	G½"	25 bar	40 bar	450 °C
0392022300	7	300 mm	Stainless steel	G½"	25 bar	40 bar	450 °C




<sup>1)</sup> G½" male ISO 228/1, flat-sealing: for welding bushings with flat seal (accessories)



- ☛ 0392022100 and 0392022300 for TUC thermostats only
- ☛ With TUC407F001 and TUC207F003, only use the supplied thermowells or stainless-steel thermowells (part nos.: 0393022\*\*\* or 0392022\*\*\*).
- ☛ 0391... with pressure screw (retaining holder) up to max. 200°C

### Accessories

Type	Description
0300360008	Retaining holder for cable temperature sensor or capillary tube with 0392022*** (LW 7) or LW 15 (10 pcs)
0364263000	Welding sleeve of steel, with female thread G $\frac{1}{2}$ ", flat seal of copper
0300360017	Pressure spring for LW 15 (10 pieces)

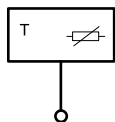
			
LW 7, 50 mm	•	• L > 50 mm	–
LW 7, 100 mm	•	•	–
LW 7, 150 mm	•	•	–
LW 7, 200 mm	•	•	–
LW 7, 300 mm	•	• L > 300 mm	–
LW 7, 450 mm	•	•	–
LW 7, 600 mm	•	–	–
LW 15, 100 mm	•	–	•
LW 15, 200 mm	•	–	•
LW 15, 450 mm	•	–	•
0392022100	–	–	•
0392022300	–	–	•

- ☛ 0392022100 and 0392022300 for TUC thermostats only.
- ☛ With TUC407F001 and TUC207F003, only use the supplied thermowells or stainless-steel thermowells (part nos.: 0393022\*\*\* or 0392022\*\*\*).
- ☛ Only use the thermowells (LW 15) with at least 2 sensors or thermostats with a diameter of at least 6 mm.
- ☛ 0391... with pressure screw (retaining holder) up to max. 200°C.





EGT\*11F\*\*\*



## EGT 311, 411, 611: Clamp-on temperature sensor

### Features

- Passive or active measuring element
- Extra protection against dust and humidity (IP65)
- Temperature measurement on pipes
- Including retaining strap for pipes of  $\varnothing$  10...50 mm
- Heat-conducting paste (silicone-free) is included in the scope of delivery

### Technical data

Parameters		
	Recommended measurement current	Typ. < 1 mA
Time characteristic with heat-conducting paste	Time constant	16 s
Ambient conditions		
	Storage and transport temperature	-35...70 °C
	Humidity (non-condensing)	85% rh
Construction		
	Housing	Yellow/black
	Housing material	Polyamide
	Connection terminals	Screw terminals 0.35...1.5 mm <sup>2</sup> , for number of poles, see connection diagram
	Cable inlet	M16 for cable min. $\varnothing$ 5 mm, max. $\varnothing$ 8 mm
Standards and directives		
	Type of protection	IP65 (EN 60529)
CE conformity according to	RoHS Directive 2011/65/EU	EN 50581
	EMC Directive 2014/30/EU	EGT311F031: EN 60730-1 (mode of operation 1, residential premises)

### Resistance values / characteristics

**i** The tolerance listed below applies only to the corresponding measuring element. The accuracy of the sensor depends on the cable length and the measuring element used.

Measuring element	Standards	Nominal value	Tolerance at 0 °C
Ni1000	DIN 43760	1000 $\Omega$ at 0 °C	$\pm$ 0.4 K
Ni1000 TK5000		1000 $\Omega$ at 0 °C	$\pm$ 0.4 K
Ni200	DIN 43760	200 $\Omega$ at 0 °C	$\pm$ 0.4 K
Pt1000	DIN EN 60751	1000 $\Omega$ at 0 °C	$\pm$ 0.3 K

### Overview of types

Type	Description
EGT311F022	Clamp-on temperature sensor; Ni200
EGT311F102	Clamp-on temperature sensor; Ni1000
EGT411F102	Clamp-on temperature sensor; Pt1000
EGT611F102	Clamp-on temperature sensor; Ni1000 TK5000
EGT311F031	Clamp-on temperature transmitter; 0...10 V

### Passive types

Type	Measuring element	Measuring range	Weight
EGT311F022	Ni200	-35...90 °C	80 g
EGT311F102	Ni1000	-35...90 °C	80 g



Type	Measuring element	Measuring range	Weight
EGT411F102	Pt1000	-35...90 °C	80 g
EGT611F102	Ni1000 TK5000	-35...90 °C	80 g

#### Active types

Type	Measuring accuracy at 21 °C	Output signal	Supply voltage	Power consumption	Measuring range	Weight
EGT311F031	Typ. $\pm 1\%$ of measuring range <sup>1)2)</sup>	0...10 V, min. load impedance 5 k $\Omega$	15...24 V= ( $\pm 10\%$ ) 24 V~ ( $\pm 10\%$ )	Max. 0.42 W / 0.84 VA	5 temperature ranges (-50...160 °C), adjustable on device (see connection diagram)	120 g

#### Accessories

Type	Description
0300360002	Retaining strap 900 mm and heat-conducting paste
0300360004	Heat-conducting paste incl. gun with 2 g content

<sup>1)</sup> With offset adjustment  $\pm 3$  K

<sup>2)</sup> The transducers must be operated at a constant operating voltage ( $\pm 0.2$  V). Current/voltage peaks when switching the supply voltage on/off must be avoided by the customer.