**SIEMENS** OEM



QAZ21... and QAZ36...

# Cable Temperature Sensors QAZ...

with different types of sensing elements

Cable temperature sensors for acquiring the medium temperature in boilers, DHW storage tanks, heat exchangers and solar plants. For use with protection pockets.

The QAZ... and this Data Sheet are intended for use by OEMs which integrate the temperature sensors in their products.

#### Use

- QAZ21... standard sensors: With LG-Ni 1000 sensing element for control or limitation
  of the temperature in boilers, DHW storage tanks or heat exchangers. Suited for use
  with controllers capable of handling resistance values from such sensors
- QAZ21.681/101 solar collector sensor: With LG-Ni 1000 sensing element for the control of the medium temperature in solar plants. Suited for use with controllers capable of handling resistance values from this type of sensor
- QAZ36... sensors for Boiler Management Units (BMUs): With sensing element NTC 10 k $\Omega$  for control of the DHW temperature in gas-fired heating appliances. Suited for use with all BMUs type LMU...capable of handling resistance values from this type of sensor

# Type summary

Type reference	Sensing element	Measuring	Toler-	Approx. time	Type of	Cable	Weight	Packing
		range °C	ance *	constant**	cable	length x mm	g	size/pcs
QAZ21.5120	LG-Ni 1000 $\Omega$ at 0 °C	0130	± 0.4 K	30 s	PE	2000	58	200
QAZ21.5220	LG-Ni 1000 $\Omega$ at 0 °C	095	± 0.4 K	30 s	PVC	2000	66	200
QAZ21.5240	LG-Ni 1000 Ω at 0 °C	095	± 0.4 K	30 s	PVC	4000	126	100
QAZ21.5260	LG-Ni 1000 $\Omega$ at 0 °C	095	± 0.4 K	30 s	PVC	6000	186	50
QAZ21.681/101	LG-Ni 1000 Ω at 0 °C	-30180	± 0.4 K	30 s	Silicone	1500	51	20
QAZ21/0120	LG-Ni 1000 $\Omega$ at 0 °C	095	± 0.4 K	30 s	PVC	800	30	500
QAZ21/0220	LG-Ni 1000 Ω at 0 °C	095	± 0.4 K	30 s	PVC	1500	51	250
QAZ21/0720	LG-Ni 1000 Ω at 0 °C	095	± 0.4 K	30 s	PVC	900	33	500
QAZ21/0820	LG-Ni 1000 $\Omega$ at 0 °C	095	± 0.4 K	30 s	PVC	1700	57	200
QAZ36.522/109	NTC 10 kΩ at 25 °C	095	$\pm0.5\mathrm{K}$	30 s	PVC	2000	66	200
QAZ36.526/109	NTC 10 kΩ at 25 °C	095	± 0.5 K	30 s	PVC	6000	186	50

<sup>\*</sup> Tolerance band QAZ21... at 0 °C and QAZ36... at 25 °C

# Ordering

When ordering, please give type reference according to "Type summary".

### Mechanical design

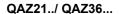
The standard version of the cable temperature sensor consists of stainless steel sleeve (6 mm diameter, 40.5 mm long), sensing element and connecting cable with ferrules at the end. The sensing element is accommodated in the sleeve to which the connecting cable is attached. The sensor is not suited for direct immersion in liquid media (without using a protection pocket).

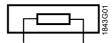
Other types of sensing elements, connecting cables and connectors are available on request.

## **Technical data**

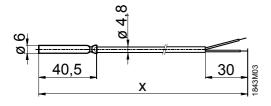
For general sensor data, also refer to "Type summary"	Ambient temperature (PVC cable) Ambient temperature (PE cable) Ambient temperature (silicone cable)	max. 95 °C max. 125 °C max. 180 °C (short-time 220 °C)			
Type canimary	Electrical strength	500 V			
	Electrical connections	interchangeable			
Norms and standards	Climatic and mechanical requirements	to IEC 721-3			
	Safety class	III to EN 60 730			

#### **Connection diagram**





#### **Dimensions**



QAZ21..and QAZ36...

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Subject to alteration

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<sup>\*\*</sup> Time constant QAZ21... and QAZ36... with protection pocket in air at 1 m/s