Immersion temperature sensor QAE26.9...

Use

Acquisition of flow or return temperature in heating, ventilating, and air conditioning plants.

Type summary

Type	Measuring range	Cable length	Time constant	Immersion length	Nominal pressure
QAE26.9	–30...+130 °C	1.2 m	<4 s	260 mm	PN 40
QAE26.91	–30...+130 °C	2.0 m	<4 s	125 mm	PN 16
QAE26.93	–30...+130 °C	2.0 m	<4 s	240 mm	PN 16

Ordering

When ordering, please indicate give name and type reference, for example:
Immersion temperature sensor **QAE26.9**.

Mechanical design

The immersion temperature sensor consists of a stainless steel immersion stem, a threaded bushing, and ready-wired connection cables. The sensing element is mounted and soldered to the end of the immersion stem by means of a heat transfer compound. The threaded bushing with screwed nipple R ¼ (sealing capacity within thread) is used to mount the sensor on the pipe. The interface between the connection cable and the immersion step is capped by a ca. 30 mm long shrink sleeve.

Technical data

General sensor data	Measuring range	see "Type summary"
	Sensing element	L&S Ni 1000
	Time constant t_{63}	see "Type summary"
	Effective sensor length	
	QAE26.9	25 mm
	QAE26.91, QAE26.93	15 mm
Materials	Immersion stem	stainless steel 1.4571 (V4A)
	Threaded bushing	Ms nickel-plated
	Connection cables	silicone
Degree of protection	IP code	IP64 as per IEC 529
	Protection class	III as per EN 60 730
Connection cables	Number of cores	2
	Core cross section	0.35 mm^2
	Length	see "Type summary"
Mechanical connection	Screwed nipple	R ¼ (sealing capacity inside thread)
Ambient conditions	Permissible cable temperature	−50...+180 °C
	Permissible humidity	< 95 % r.h.
Weight incl. packing	QAE26.9	0.104 kg
	QAE26.91	0.074 kg
	QAE26.93	0.079 kg

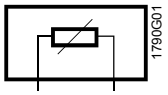
Engineering notes

The permissible electrical line lengths depend on the controller. Refer to the respective controller's data sheet for more information.

Mounting and installation notes

To mount the immersion temperature sensor, weld a T-junction or a threaded fitting with a cylindrical pipe thread for a sealing connection inside the thread (Rp ¼) so that the immersion stem faces the direction of the flow.
In order to ensure temperature acquisition along the entire immersion stem, the immersion length for the QAE26.9 must be at least 25 mm and 15 mm for QAE26.91 and QAE26.93.
If the connection cable needs to be extended, use a branching box.

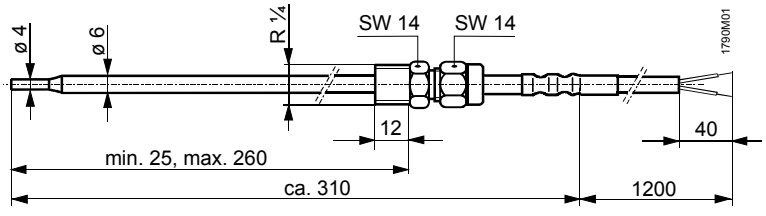
Internal diagram



The internal diagram applies to all types.
The connections are interchangeable.

Dimensions (in mm)

QAE26.9



QAE26.91, QAE26.93