

# TYPE EXAMINATION CERTIFICATE

**This is to certify:****That the Thermometer**

with type designation(s)

**301, 302, 303, 304, 305, 306, 310, 311, 313, 320, 321, 323, 330, 331, 332, 333, 334, 341, 342, 343, 344, 345, 346, 1312, 1372, 6312, 6372, 8312 and 8372**

Issued to

**SIKA Dr. Siebert & Kühn GmbH & Co. KG  
KAUFUNGEN, Germany**

is found to comply with

**DNV GL class guideline DNVGL-CG-0339 – Environmental test specification for electrical, electronic and programmable equipment and systems****Application :****Thermometer types according to DIN EN 13190.****Temperature range: Refer to certificate.**Issued at **Hamburg** on **2018-02-26**This Certificate is valid until **2022-10-05**.DNV GL local station: **Magdeburg**for **DNV GL**Approval Engineer: **Andrii Pishchanskyi**.....  
**Olaf Drews  
Head of Section**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Examination Certificate and not to the approval of equipment/systems installed.



## Product description

Technical conformity according to EN 13190. Types and additional technical data, range of application and test standard, based on DNV GL Class Guideline, DNVGL-CG-0339 "Environmental test specification for electrical, electronic and programmable equipment and systems".

Type	Case nominal Ø [mm]	Case configuration	Temperature class as per DNV GL CG-0339	Dry heat/cold test range	Vibration class as per DNV GL CG-0339	Stem type
301, 302, 303, 304, 305, 306	63, 100, 160	Bayonet ring case, without dampening	D	-40°C up to +60°C	A	Rigid mount stem with neck tube
341, 342, 343, 344, 345, 346	63, 80, 100, 160	Crimped on ring case, without dampening	D	-40°C up to +60°C	A	Rigid mount stem with neck tube
301, 302, 303, 304, 305, 306	63, 100, 160	Bayonet ring case, with dampening fluid	B	-20°C up to +60°C	B	Rigid mount stem with neck tube
341, 342, 343, 344, 345, 346	63, 80, 100, 160	Crimped on ring case, with dampening fluid	B	-20°C up to +60°C	B	Rigid mount stem with neck tube
6312, 6372, 8312, 8372, 1312, 1372	63, 80, 100	Crimped on ring case, with dampening fluid	B	-20°C up to +60°C	B.2 increased	Rigid mount stem with neck tube
310, 320, 330	63, 100, 160	Bayonet ring case, without dampening	D	-40°C up to +60°C	A	With capillary line mount stem
313, 323, 333, 334	63, 80, 100, 160	Crimped on ring case, without dampening	D	-40°C up to +60°C	A	With capillary line mount stem
310, 320, 330	63, 100, 160	Bayonet ring case, with dampening fluid	B	-20°C up to +60°C	B	With capillary line mount stem
313, 323, 333, 334	63, 80, 100, 160	Crimped on ring case, with dampening fluid	B	-20°C up to +60°C	B	With capillary line mount stem
311, 321, 331, 332	63, 80, 100	Crimped on ring case, with dampening fluid	B	-20°C up to +60°C	B.2 increased	With capillary line mount stem

## Production place

### Application/Limitation

The selection of the thermometers for the corresponding service conditions (temperature and type of flowing media) as well as the proper assembly and installation shall be carried out in accordance with the instructions of the manufacturer.

Types 301,302,303,304,305,306, 310,320,330, 313,323,333,334, 341,342,343,344,345 and 346 may not be used for adverse conditions where high pulsation or vibration exists.

## **Type Examination documentation**

### **Tests carried out**

### **Marking of product**

Each thermometer is to be marked in accordance with EN 13190. The identification marking will include the following:

- Manufacturers name or trade mark
- Individual serial number
- Temperature range
- Unit of temperature
- Accuracy class

### **Periodical assessment**

A condition for retention of the Type Approval Certificate in its validity period is that periodical assessments are successfully carried out.

The objective of the periodical assessment is to verify that the conditions for the type approval have not been altered. The main scope of the periodical assessment will normally include:

- Verification of the TA applicant's production and quality system w.r.t ensuring continued consistent production of the type approved products at the TA applicant's own premises and at other companies that are given the responsibility for manufacturing of the products.
- Review of the TA documentation and that this is still used as a basis for the production
- Review of possible changes to the design, the material and the performance of the product
- Verification of the product marking

### **END OF CERTIFICATE**