

TYPE APPROVAL CERTIFICATE

Certificate No: TAA000018C **Revision No:** 2

This is to certify:

That the Temperature Sensor

with type designation(s) W081, W083, W123, W30

Issued to SIKA Dr. Siebert & Kühn GmbH & Co. KG Kaufungen, Hessen, Germany

is found to comply with

DNV rules for classification - Ships, offshore units, and high speed and light craft

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Location classes: Temperature В Humidity в Vibration в EMC B (IP54 tested, type W30 with gasket IP65 tested) Enclosure

Issued at Hamburg on 2022-05-20 This Certificate is valid until 2027-05-19. DNV local station: Essen

Approval Engineer: Holger Jansen

for DNV

Joannis Papanuskas **Head of Section**

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD



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 Approval Certificate and not to the approval of equipment/systems installed.



Product description

Measurement of temperature

WMJ: Temperature sensor, head type J

Measuring range	-40°C up to 200°C	
Measuring insert	1xPt100	
	2xPT100/B/2	
	2xPT1000/B/2	
	and special sensors	
Immersion tube length	L1 = 50 up to 200 mm	
Immersion tube diameter	8 mm	
	12 mm	
Material	1.4571 stainless steel	
	brass	
Thread connection	G1/2A	
	and special threads	
Connector	head form J	

W30: Temperature sensor, valve connector type A

Measuring range	-50°C up to 200°C
Measuring insert	1xPt100
	1xPt1000
	Class B, 2-wire or 3-wire
Immersion tube length	L1=50mm up to 200mm
Immersion tube diameter	6mm
	8mm
Material	1.4571 stainless steel
	Brass
	and special materials
Thread connection	G1/2A
	and special threads
Connector	according to DIN EN 175301-803, Form A, PA 6.6,
	UL 94 Classification 94V-0

Application/Limitation

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV RU SHIP Pt.4 Ch.9 Sec. 1.

Type Approval documentation



262.1-005416-6 TAA000018C 2

Tests carried out

Applicable tests according to Class Guideline DNV-CG-0339, Edition August 2021.

Marking of product

The products to be marked with:

- · Article number
- · Sensor
- · Fabrication number
- · Circuit diagram

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control
 routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE