

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Cable Gland

with type designation(s)

SKE/1(S)(-L)-*(-RDE) ** (LT) (MFD**/(-**/**))**

Issued to

WISKA Hoppmann GmbH
Kaltenkirchen, Schleswig-Holstein, Germany

is found to comply with

DNV GL 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 GL.

Material	Polyamide
Suitable for open deck	Yes
Suitable for Hazardous areas	Yes

Issued at **Hamburg** on **2018-08-30**

This Certificate is valid until **2019-04-06**.

DNV GL local station: **Hamburg**

for **DNV GL**

Approval Engineer: **Uwe Supke**

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



Product description

Explosion protected non-metallic cable glands:

- Type designation: *SKE/1(S)(-L)-*(-RDE) ** (LT) (MFD**/***(-**/***))
Connection thread: M12, 16, 20, 25, 32, 40, 50, 63
- Material: Polyamide
- Temperature range: Normal type -40°C to +75°C
LT type -60°C to +75°C
- Ingress protection: IP 68 (5bar, 30min)
- Ex classification: II 2 G Ex eb IIC Gb
II 2 D Ex tb IIIC Db

Application/Limitation

- Manufacturer's installation description, instructions and DNV GL rules to be followed.
- Not to be used in bulkheads/decks or for penetrating boundaries of tanks.
- Suitable for open deck
- The information related to Ex certification from recognized test institution is given as information only.
- Applications where Ex certified equipment is required will in general be subject to approval case by case based on documentation as required in DNV GL rules.

Type Approval documentation

Tests carried out

Applicable tests according to GL Guidelines for the Performance of Type Approvals, Chapter 2- Test Requirements for Electrical / Electronic Equipment and Systems (VI-7-2), Edition 2012

GL Guidelines for the Performance of Type Approvals: 2007

EN 60079-0:2012+A11:2013; EN 60079-7:2015; EN 60079-31:2014

Marking of product

The products to be marked with:

- Manufacturer
- Type designation
- Ex rating

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and 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