

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Termination and Joint for Cable**

with type designation(s)

Connecting box with 5 x 2,5 mm² flat cable of halogenfree compound

Issued to

WOERTZ AG**MUTTENZ, Switzerland**

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.**Issued at **Hamburg** on **2018-07-03**This Certificate is valid until **2023-07-02**.DNV GL local station: **Augsburg**for **DNV GL**Approval Engineer: **Carsten Hunsalz**

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

Quick connection installation system

Type: Connecting box with 5 x 2,5 mm² flat cable of halogenfree compound

The system consist of:

Flat cable:	- 5 x 2,5 mm ² halogenfree, (0,6/1kV)	Art. No. 49846
	- Cable end piece,	Art. No. 49734
Connecting boxes:	- 5 x 2,5 mm ² for supply and branching	
	with screw connection,	Art. No. 49701P
	- With socket 3-pole type Code 1,	Art. No. 49713P/L1;
		Art. No. 49713P/L2;
		Art. No. 49713P/L3
	- With socket 5-pole type Code 1,	Art. No. 49715P
	- 5 x 2,5 mm ² , flat execution,	Art. No. 49703P

Application/Limitation

To be installed in accordance with the manufacturer's instructions and DNV GL rules.

For fixed installation in dry spaces inside the ship.

Degree of protection: IP 20

Type Approval documentation

Test reports : VDE Prüf- und Zertifizierungsinstitut, Ausweis Nr. 104233;
SEV no. 04-IK 0078.03 and ..04, 29.06.04
SEV no. 96.1 10848/01 and /02, 05.08.98, CB CH-2594:2004-06-29,
CB CH-5170:2009-03-13; CCA IK-298:2009-03-11

Tests carried out

EN 60998-1:2004; EN 60998-2-1:2004; EN 60998-2-3:2004; EN 60947-1:2007; EN 60947-7-1:2009

Marking of product

Manufacturer - Type designation

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