



# DET NORSKE VERITAS

## EC TYPE EXAMINATION CERTIFICATE

Application of: Council Directive 96/98/EC of 20 December 1996 on Marine Equipment as amended by directive 2012/32/EU, issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Directorate. This Certificate is issued by Det Norske Veritas under the authority of the Government of the Kingdom of Norway.

CERTIFICATE NO. **MED-B-8676**

This is to certify that the  
**Surface materials and floor coverings with low flame-spread characteristics: pipe insulation covers**

with type designation(s)  
**Aeroflex KKS / Aeroflex / Aerocel**

Issued to  
**AEROFLEX Europe GmbH**  
**Ulm, Germany**


is found to comply with the requirements in the following Regulations/Standards:  
**Annex A.1, item No. A.1/3.18d and Annex B, Module B in the Directive. SOLAS 74, Reg. II-2/3, II-2/5, II-2/6, II-2/9 & X/3, IMO MSC/Circ. 1120, 2000 HSC Code 7 and IMO FTP Code**

Further details of the equipment and conditions for certification are given overleaf.

**Høvik, 2013-12-18**  
for **Det Norske Veritas AS**

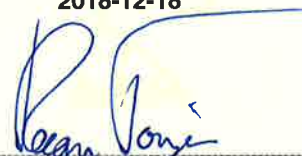


This Certificate is valid until  
**2018-12-18**

  
**Marianne Strand Valderhaug**  
Head of Department

Notified Body No.: **0575**

DNV local office:  
**Essen Business Support**

  
**Ragnar Tonjer**  
Surveyor



The Certificate is subject to terms and conditions overleaf. Any significant changes in design or construction of the product, or amendments to the Directive or Standards referenced above may render this Certificate invalid. The product liability rests with the manufacturer or his representative in accordance with Council Directive 96/98/EC, as amended. The Mark of Conformity may only be affixed to the product and a Declaration of Conformity may only be issued when the production/product assessment module referred to in the council directive, is fully complied with.



Certificate No.: MED-B-8676  
Item No.: A1/3.18d  
Job Id.: 344.1-004057-1

### Product description

"Aeroflex KKS / Aeroflex / AeroceI"  
composed of closed-cell flexible foam elastomeric thermal insulation material made of rubber.

Thickness: maximum 50 mm.  
Density: 50-60 kg/m<sup>3</sup> (0.05-0.06 g/cm<sup>3</sup>).

### Application/Limitation

Approved for use as low flame spread surface material, not generating excessive quantities of smoke nor toxic products in fire.

The product may be used on cold service pipework / fittings for refrigeration system everywhere onboard, and for pipework, fittings, air ducts and tanks insulation in cargo areas, mail rooms, baggage rooms and refrigerated compartments of service spaces, and exterior locations (SOLAS II-2/5.3.1.1).

Any adhesive used, other than the one used during testing, has to be tested for low flame spread characteristics according to IMO 2010 FTP Code part 5 and to be approved according to the Marine Equipment Directive and bear the Mark of Conformity."

Maximum gross calorific value (ref. SOLAS Chapter II-2 Reg. 5.3.2): 22.1 MJ/kg.

Extent of application is to be considered and accepted for each case/project.

Each product is to be supplied with its manual for installation and use.

### Type Examination documentation

Test reports No. 885.4IMO080/09, 885.4IMO090/09 and 885.4IMO100/09 dated 7 July 2009 from LAPI, Italy.

### Tests carried out

Tested according to IMO FTPC Part 2 and 5 and in compliance with IMO 2010 FTP Code Ch. 8.

### Marking of product

The product or packing is to be marked with name of manufacturer, type designation and Mark of Conformity (see below)

### Mark of Conformity

The manufacturer is allowed to affix the Mark of Conformity according to Article 11 in the Council Directive 96/98/EC on Marine Equipment and shall issue a Declaration of Conformity, only when the module D or E or F of Annex B in the same directive is fully complied with.

Module D: The quality system for production and testing shall be approved by the Notified Body.

Module E: The quality system for inspection and testing shall be approved by the Notified Body.

Module F: Compliance of the products to type as described in this EC Type-Examination Certificate must be verified by the Notified Body who also shall issue a Certificate of Conformity.

