



### **Confirmation of Product Type Approval**

Please refer to the "Service Restrictions" shown below to determine if Unit Certification is required for this product. This certificate reflects the information on the product in the ABS Records as of the date and time the certificate is printed.

Pursuant to the Rules of the American Bureau of Shipping (ABS), the manufacturer of the below listed product held a valid Manufacturing Assessment (MA) with expiration date of 19/AUG/2014. The continued validity of the Manufacturing Assessment is dependent on completion of satisfactory audits as required by the ABS Rules.

And; a Product Design Assessment (PDA) valid until 19/APR/2016 subject to continued compliance with the Rules or standards used in the evaluation of the product.

The above entitle the product to be called Product Type Approved.

The Product Design Assessment is valid for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

**Product Name: Cable, for Ships and Offshore Installations**  
**Model Name(s): AFITOX SM**

**Presented to:**  
NEXANS BRASIL SA  
AV. CEL. PHIDIAS TAVORA, 100, JARDIM AMERICA  
RIO DE JANEIRO  
Brazil

**Intended Service:** General Power, Lighting and control Cables

**Description:** Unarmored, flame retardant, fire resistant, halogen free, low smoke electric cables. Construction: stranded plain or tinned annealed copper conductor class 2 and 5. For class 2 non compacted stranded up to 6mm<sup>2</sup> and compacted stranded over 6 mm<sup>2</sup>. Cables class 5 are identified with additional character (-F) added to the product name (example: Afifox SM-F). Mica tape and a thermoset compound HF XLPE insulation; Thermoplastic compound type SHF1 outer sheathing; Cables: 1 x 4 mm<sup>2</sup> up to 1 x 240 mm<sup>2</sup>; 2 x 1,5 mm<sup>2</sup> up to 2 x 25 mm<sup>2</sup>; 3 x 1,5 mm<sup>2</sup> up to 3 x 240 mm<sup>2</sup>; 4 x 1,5 mm<sup>2</sup> up to 4 x 120 mm<sup>2</sup>; (4 up to 37 conductors) x 1,0 mm<sup>2</sup>; (5 up to 37 conductors) x 1,5 mm<sup>2</sup> and 2,5 mm<sup>2</sup>

**Ratings:** 0.6/1 kV; temperature class 90°C; maximum current carrying capacity as per 4-8-3/Table 6 of the Rules

**Service Restrictions:** <<Unit Certification is required for this product.>> <<Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.>> Unit Certification is not required for this product.

**Comments:** Installation to be carried out in compliance with 4-8-4/21 of 2009 Steel Vessels Rules or 4-3-3/5 of 2008 MODU Rules, as applicable.



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