



Certificate of Type Approval (RQS)

This is to certify that General Cable Industries, Inc.
has met the requirements of ABS Product Type Approval for
Cables, Fiber Optic Marine Shipboard Cable

Model Name(s): FC9700107, FC9700108, FC9700109, FC9700110, FC9700111

Presented to:

General Cable Industries, Inc.
300 Lake Road West
Dayville
Connecticut 06241
United States of America

Intended Service: Signaling, Communication and Data transmission

Description: Low smoke-zero Halogen (LSZH) Thermoplastic Jacket Marine Shipyard & Offshore Fiber Optic cables from four (4) to sixteen (16) fibers.

Ratings: Operating temperature: -28 to +65 deg C

Service Restrictions: Unit Certification is not required for this product.

Comments: None

Notes / Documentation: IEC 60794-1-2-E1A Tensile Strength test. IEC 60794-1-2-E3 Crush test. IEC 60794-1-2-E4 Impact test. IEC 60794-1-2-E6 Repeated Bending test. IEC 60794-1-2-E7 Torsion test. IEC 60794-1-2-E10 Kink test. IEC 60794-1-2-E11 Cable Bend test. IEC 60794-1-2-E11 Cold Bend test. IEC 60332-22 Cat. A Flammability test. IEC 60754-1 Halogen Acid test. IEC 61034-1 & 2 Smoke test. IEC 60754-2 Acidity of Gases test

Term of Validity: This product/model is covered under Product Design Assessment (PDA) Certificate # 05-HS472782-PDA, dated 12/Jan/2005. This PDA Certificate expires Jan of 2010. It will remain valid for the 5 years from date of issue or until the Rules or specifications used in the assessment are revised (whichever occurs first).

ABS Rules: 2005 Steel Vessel Rules 1-1-4/7.7, 4-8-3/9.5 (i & ii) & 4-8-3/9.13 and 2001 MODU Rules 4-3-3/5.21

National Standards: Intertek / ETL Semco, Report No. 3066169 - 001 thru 008 (IEC 60332-3-22)

International Standards:

Government Authority:

EUMED:

Others:

Manager, ABS Programs

ABS has used due diligence in the preparation of this certificate and it represents the information on the product in the ABS Records as of the date and time the certificate was printed. Type Approval requires Drawing Assessment, Prototype Testing and assessment of the

manufacturer's quality assurance and quality control arrangements. Limited circumstances may allow only Prototype Testing to satisfy Type Approval. The approvals of Drawings and Products remain valid as long as the ABS Rule, to which they were assessed, remains valid. ABS cautions manufacturers to review and maintain compliance with all other specifications to which the product may have been assessed. Further, unless it is specifically indicated in the description of the product; Type Approval does not necessarily waive witnessed inspection or survey procedures (where otherwise required) for products to be used in a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS. Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.