



Confirmation of Product Type Approval

Company Name: TELDOR CABLES & SYSTEMS LTD

Address: EIN DOR, 0 19335 Israel

Product: Communication Cable

Model(s): Teldor MG twisted-balanced pair Data transmission LAN-Category copper Flame retardant per IEC60332-3-22, Low smoke, Zero Halogens, FR-LSZH/HFFR cables, armored/non-armored, solid/stranded conductors, Category 3/5/5e/6/6A/7/7A/8/1200MHz with Fire Resistance option per IEC60331-23, jacketed with SHF1/SHF2/MUD resistance (NEK 606) jacket types.

Certificate Type	Certificate Number	Issue Date	Expiry Date
Product Design Assessment (PDA)	18-GE1739937-PDA	11-MAY-2018	10-MAY-2023
Manufacturing Assessment (MA)	19-PR3653933	08-APR-2019	07-APR-2024
Product Quality Assurance (PQA)	NA	NA	NA

Tier

3

Intended Service

Data transmission, communications and LAN cables for Marine, oil & gas and Offshore wiring applications with Low smoke, Zero halogens and flame retardant / fire resistant (circuit integrity) characteristics up to Category 8.

Description

4-pair / multi-pair / multi-core / multi-cable data transmission, communication & LAN, flame retardant per IEC60332-3-22, halogen free and low smoke emission cables.

The cables are jacketed and sheathed with FR-LSZH materials including SHF1, SHF2 and MUD resistant per NEK 606.

The cables are made with solid or stranded conductors, armored and non-armored and have fire resistance property per IEC 60331-23 (optional).

The cables meet the relevant standards from category 3 up to category 8 (category 3, 5, 5e, 6, 6A, 7, 7A, 8,1200MHz).

Ratings

300V max

Service Restrictions

1) Unit Certification is required for cables used for propulsion systems. All propulsion cables, other than internal wiring in control gears and switchboards, are to be subjected to dielectric and insulation tests in

the presence of the Surveyor (See 4-8-5/5.17.11 (e) of 2018 Steel Vessels Rules).

2) For uses other than propulsion Unit Certification is not required for this product. If the manufacturer or purchaser requests an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

3) Termination itself shall be in the outer sheath of the cable and conductors should be locked in place in order to avoid damage from vibration.

4) In order to achieve a transmission compliant with all categories, cables shall be installed with suitable termination equipment according to manufacturer's recommendations.

5) The scope of Type Approval is to comply with MSC.1/Circ.1221 dated 11 December 2006.

Comments

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Cables shall be provided with a continuous marking as follows:

- Manufacturer's identification (name or trade name)
- Conductor Size
- Number of conductors
- Voltage Rating

When agreed between the manufacturer and purchaser, cables may, in addition, be marked with a code designation that signifies the type of insulation/screening/armouring and sheathing materials used in their construction.

The marking is deemed to be continuous if the distance between the end of any marking and the beginning of the next does not exceed: (a) 550 mm if the marking is on the outer surface of the cable; (b) 275 mm in all other cases.

Notes, Drawings and Documentation

Drawing No. Teldor Data Lan Category cables v09

Drawing No. Teldor Type MGD-1 Solid Armor SHF1 Data Cables Rev.01 dated February 05, 2014

Drawing No. Teldor Type MGD-1 Solid Non-Armor SHF1 Data Cables Rev.01 dated February 05, 2014

Drawing No. Teldor Type MGD-1 Stranded Armor SHF1 Data Cables Rev.01 dated February 05, 2014

Drawing No. Teldor Type MGD-1 Stranded Non-Armor SHF1 Data Cables Rev.01 dated February 05, 2014

BREGLOBAL Report No 287633-1 dated 28 August 2013

Report 9MGD242XXX Category 6 SOLID 23AWG UUTP SHF1 IEC60332-3-22 dated 06-02-2014

Report 9MGD240XXX Category 7 STRANDED 26AWG SFTP SHF1 IEC60332-3-22 dated 05-02-2014

Report 9MGD241XXX Category 7 STRANDED 26AWG SFTP SHF1 IEC60332-3-22 dated 06-02-2014

Report 9MGD240129 dated 07-02-2014

Type test DB1B04R2401 9DNV001108 cat 6 stranded dated 20/03/2012

Type test DB2C04S2601 9DNV004108 cat 6A stranded dated 20/03/2012

Type test DB5D04s2601 9DNV002108 cat7 stranded dated 20/03/2012

Type test DB5F04S2601 9DNV005108 cat 7A stranded dated 20/03/2012

Type test DB5G04B2201 9DNV003108 1200MHz solid dated 20/03/2012

Type test TAB136A129 Data Cable Fire Resistance dated 15/10/2015

Type test TAB131J129 Data Cable Fire Resistance dated 15/10/2015

Type test TAB131H129 Data Cable Fire Resistance dated 15/10/2015

Type test TAB131A129 Data Cable Fire Resistance dated 15/10/2015

Term of Validity

This Product Design Assessment (PDA) Certificate 18-GE1739937-PDA, dated 11/May/2018 remains valid until 10/May/2023 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

ABS Rules

2018 Rules for Conditions of Classification, 1-1-4/7.7, 1-1-A3 and A4, which covers the following:

2018 Steel Vessel Rules 4-8-3/9

2018 Offshore Support Vessels, 4-8-3/9

2018 Steel Vessels Under 90 Meters (295 Feet) in Length, 4-6-4/13

2018 Rules for Conditions of Classification – Offshore Units and Structures 1-1-4/9.7, 1-1-A2 and A3, which covers the following:

2018 Mobile Offshore Drilling Unit Rules, 4-3-4/7

2018 Facilities on Offshore Installations 3-6/13

International Standards

IEC 61156-1 Edition 3.1 (2009-10)

IEC 61156-2 Edition 3.0 (2010-04)

IEC 61156-5 Edition 2.1 (2012-12)

IEC 61156-6 Edition 3.1 (2012-12)

IEC 61156-7 Edition 1.1 (2012-12)

IEC 61156-8 Edition 1.1 (2013-05)

IEC 60092-350 Edition 4.0 (2014-08)

IEC 60092-360 Edition 1.0 (2014-04)

IEC 60754-1 Edition 3.0 (2011-11)

IEC 60754-2 Edition 2.0 (2011-11)

IEC 60331-23 First Edition (1999-04)

IEC 60332-3-22 Edition 1.1 (2009-02)

IEC 60332-3-24 Edition 1.1 (2009-02)

- IEC 61034-1 Edition 3.1 (2013-06)
- IEC 61034-2 Edition 3.1 (2013-06)
- IEC 60332-1-1 Edition 1.1 (2015-07)
- IEC 60332-1-2 Edition 1.1 (2015-07)
- IEC 60332-1-3 Edition 1.1 (2015-07)
- IEC 60332-2-1 First edition (2004-07)

EU-MED Standards

NA

National Standards

- NEK TS 606: 2016
- ANSI/TIA-568-C.2 (2009-08)

Government Standards

SOLAS Chapter II-1 Part D Reg. 45.5.2

Other Standards

NA



A handwritten signature in black ink, appearing to read 'James W. ...', is positioned above the printed name.

Corporate ABS Programs
American Bureau of Shipping
Print Date and Time: 18-Sep-2019 5:43

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 is printed.

If the Rules and/or standards used in the PDA evaluation are revised or if there is a design modification (whichever occurs first), a PDA revalidation may be necessary.

The continued validity of the MA is dependent on completion of satisfactory audits as required by the ABS Rules. The validity of both PDA and MA entitles the product to receive a **Confirmation of Product Type Approval**.

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or prior to the effective date of the ABS Rules and standards applied at the time of PDA issuance. 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.

Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. The manufacturer is responsible to maintain compliance with all specifications applicable to the product design assessment. Unless specifically indicated in the description of the product, certification under type approval does not waive requirements for witnessed inspection or additional survey for product use on a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS.

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.

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.