Certificate No.: 2507210809508034

TÜRK LOYDU

TYPE APPROVAL CERTIFICATE

This is to certify that the

TYPE 7: NAVY SHIP SIGNAL AND COMMUNICATION CABLES

TL Project No	**23-1517**
Manufacturer	**BAŞOĞLU Kablo ve Profil Sanayi ve Tic. A.Ş.**
Address	**Merkez, Organize Sanayi Bölgesi, Akın Çakmak Blv. Bolu**
Product Type	**TAZSEYEEYO, TAZSEYEEYO FR-180**
Reference Rule	**TL Rules, Part E, Chapter 105 - Naval Ship Technology, Electrical Installations, 01.01.2022** **TL Rules, Part B, Chapter 5, Electric, 01.07.2022** **S-P 01/21 REV.01 ASKERİ GEMİ KABLOLARI İÇİN TEST GEREKSİNİMLERİ, 01.07.2024**
Expire Date of Previous Certificate	**-**
Place and Date	**İSTANBUL / 22.07.2025**

This certificate supersedes 2312151045123878 numbered certificate.

Subject to the conditions referred to in the following pages, this certificate is valid until 18.03.2029.

Emrah SÖĞÜTÇÜ

New Building Division Manager

124906

This certificate is subject to terms and conditions described below:

- Any significant change in design or construction may render this Certificate invalid. Type Approval Certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. This certificate is not valid for products without marking above mentioned. The manufacturer should notify TÜRK LOYDU of any modifications or changes to equipment in order to obtain valid certificate. This certificate shows that tested specimens as representative of the product complies of the TÜRK LOYDU rules, and revelant international instruments that apply to it.

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Product	: TYPE 7: NAVY SHIP SIGNAL AND COMMUNICATION CABLES
Type of Product	: TAZSEYEEYO, TAZSEYEEYO FR-180
Product Description	: Number of Triples: 5 and 12, Cross Section : 0,40 mm2 Voltage Rate: 250 VAC / 355 VDC Test Voltage: 2 kV AC Operating Temperature: -30 °C / +90 °C Conductor: Electrolytic Copper Wires (Bare or Tinned Coated) Fire barrier: Mica Tape for FR types Insulation: Halogen Free, Cross-Linked Insulation Compound Lay Up: Cores are Stranded as Triples. Individual Separator - I: PET Foil Individual Screen - I: Tinned Copper Braid Individual Separator - II: PET Foil Lay Up: Screened Twisted Triples are Stranded in Layers. Separator: PET Foil Collective Screen - I: Tinned Copper Braid Separator: PET Foil Collective Screen-II : Tinned Copper Braid Separator: PET Foil (Optional) Outer Sheath: Halogen-Free, Flame Retardant, Cross-Linked Sheathing Compound Outer Sheath Colours: Black (Green for -FR type) (Other Colours on Request.)
Approval No / Date	: PAE-EPAS/016449/23-1248/EA, 04.07.2023 PAE-EPAS/017635/23-1248/EA, 08.12.2023
Type Approval Certificate Number	: -
Application	: Type 7, Double Overall Screened and Screened Triple, Signal and Communication Cables for Naval Ships
Drums Number	: -
Ordered by	: BAŞOĞLU KABLO VE PROFİL SANAYİ VE TİCARET ANONİM ŞİRKETİ
Quantity	: -
Cable Lenght	: -
Cross Section	: 0.40 mm2
Standart	: Flame Retardant: IEC 60332-1-2, IEC 60332-3 22, Halogen Free: IEC 60754/1-2, Smoke Density: IEC 61034-2, Fire resistant : IEC 60331-21 (for FR types), EN 50147-1
Total Weight	: -
Rated Voltage	: 250 VAC /355 VDC
Performed Tests	: Following tests and QMS Audit have been carried out and found satisfactory according to TL SP01/21 "Test Requirements for Cables of Naval Ships" ; Visual Inspection and Dimensional Controls Marking Control Print Durability Control Mechanical Controls; - Tensile Strength and Elongation Tests - Abrasion Test - Tear Resistance Test - Pressure Test at High Temperature Thermal Effect Tests; - Cold Bending Test - Hot Set Test - Shrinkage Test - Heat Shock Test Flame Retardant Tests

Surveyor Name : İbrahim Evren DAL

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Tensile Strength and Elongation Change Tests After Ageing Treatment Ozone Resistance Test
Smoke Density Test
In Service Life Test
Electrical Controls;
- Conductor Resistance Test
- High Voltage Test
- Insulation Resistance Test
- Electromagnetic Compatibility
- Increase in AC Capacitance Test
- Effective Capacitance test
- Cross Talk Attenuation Test

Halogen Content Control, Corrosivity of Combustion Gases and Fluorine Content Test
Toxicity Index Control
Operation Under Fire Condition(3 hours) test (Fire Resistant Types Only.)
Chemical Resistance and Oil Resistance Tests for Sheath

Test Place	: BAŞOĞLU KABLO VE PROFİL SANAYİ VE TİCARET ANONİM ŞİRKETİ-BOLU
Test Scope	: Type Tests
Last Inspection Date	: 17.07.2025
Others	: -
Surveyor Remarks	: -

Approval Conditions : Applications other than the "Product Description" mentioned in this certificate are not covered by this type approval certificates.

Surveyor Name : İbrahim Evren DAL

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