Certificate No: LR26478450TA
Issue Date: 06/10/2026
Expiry Date: 21/05/2031

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer	**CCI Cable Service S.r.l.**
Address	Via Ex Casello Autostrada, 4, Bernate Ticino (MI), 20010, Italy
Place of Production	CCI Cable Service S.r.l. Via Casilina km 78,600, Ferentino (FR), 03013, Italy
Type	Instrumentation Cables
Description	Halogen Free, Low Smoke Emission, Flame Retardant, Flame Retardant to: Fire + Mechanical Shock + Water Spray + Water Jets, Oils and Mud Resistant (on request), Enhanced Silicon Rubber Insulated, Elastomeric Sheathed, Armoured/Unarmoured, UV and Ozone Resistant, Instrumentation Cables (150/250V)
Trade Name	FIREBAR®-BS(c), FIREBAR®-BS(ic)
Application	Fixed wiring on Marine and Off-shore applications.

Specified Standard

BS 7917:1999 (as applicable)
IEC 60092-360:2021
BS EN 60332-1-2:2004 + A12:2020
IEC 60331-1:2018
BS EN 50200:2015 Annex E
BS EN 61034-2:2005 + A2:2020
BS EN 60228:2024
BS 7655-2.6:2000
BS EN 60332-3-22:2018
IEC 60331-2:2018
BS EN 61034-1:2005 + A2:2020
BS EN 60754-1:2014+A1:2020

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Hrishikesh Rajeev

Electrical & Control Engineer to Lloyd's Register Marine and Offshore India LLP
A member of the Lloyd's Register group

Units 1702-1704, 17th Floor (Level-13), Building Q2, Aurum Q Parc; Gen 4/1 TTC, Thane-Belapur Road, Ghansoli, Navi Mumbai, 400710, India

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BS EN 60754-2:2014+A1:2020 IEC 60684-2:2025
NEK 606:2025 IEC 60811-403:2012
UL 1581:2023
CSA C.22.2 No. 03-09:2018, No.38-18:2018

Ratings

Rated Voltage Uo/U:	150/250V
Maximum operating temperature:	95°C
Pairs no of cores:	1 to 37
Triples no of cores:	1 to 19
Quads no of cores:	1 to 3
Cross section area [mm^2]:	0.5 to 2.5
Construction:	BS 7917
Conductor:	Tinned flexible copper, class 2 or class 5 (BS EN 60228).
Insulation:	Mica tape + S95 (IEC 60092-360)
Individual screen:	Al/PET tape on each individual pair/triple/ quad with tinned copper drain wire (ic type only)
Common screen(c) + firebar® protection:	Fiberglass tape(s) + Overall Cu PET tape(s) with tinned copper drain wire
Inner Sheath:	LSOH compound (if any)
Armour:	Galvanized steel wire braid or Phosphor bronze wire braid (single core)
Outer Sheath:	SW4 (BS 7655-2.6) or SHF2 H-M (NEK 606)
Flame retardance:	BS EN 60332-1-2 (single cable) BS EN 60332-3-22 Category A (bunched cables)

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Fire resistance:	IEC 600331-1 , IEC 60331-2
Performance under fire:	Fire + mechanical shocks + water spray + water jet (BS 8491:2008) for D>20mm EN 50200 Annex E (D<20 mm)
Corrosive acid gas emission:	BS EN 60754-1 (Halogen gas other than hydrofluoric), IEC 60684-2 (Hydrofluoric), BS EN 60754-2
Smoke emission:	BS EN 61034-1, BS EN 61034-2
Oils & Mud resistance:	NEK 606 (on request)
UV resistance:	UL 1581 par.1200
Ozone resistance:	IEC 60092-360, IEC 60811-403
Cold bend and impact:	CSA C22.2 No. 03-09, No. 38.18 (Low temp -40°C)

Other Conditions

Type Approval does not eliminate the need (as required by LR Rules) the requirements for further review or for the product to be further inspected and/ or surveyed to be installed in ships classed or intended to be classed with LR.

If the specified standards are amended during the validity of this certificate, the product is to be reapproved prior to it being supplied to vessels to which the amended standards apply.

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register Marine and Offshore India LLP of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: LR22161809TA-01

The Design Appraisal Document TSO-26-060124-E-09 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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