



**Product:** [BA43800](#) 

RailTuff™ Cat 5e, 4PR AWG26 Str TC, PP ins, SF/UTP, XL-FRNC/LSZH Jkt

## Product Description

RailTuff™ Cat 5e, 4PR AWG26 Str TC, PP ins, SF/UTP, XL-FRNC/LSZH Jkt

## Technical Specifications

### Product Overview

Suitable Applications:	For use in railway applications such as rolling stock, buses or other vehicles, cable meets the requirements of the relevant parts of international railway standards like DIN 5510-2, EN 50153, EN 50155, EN 50305 and EN 45545-2
------------------------	--

### Construction Details

#### Conductor

Size	Material	No. of Pairs
26 AWG	TC - Tinned Copper	4

#### Insulation

Material	Nom. Insulation Diameter	Color Code
PP - Polypropylene	1 mm (0.039 in)	Blue&White/Blue, Orange&White/Orange, Green&white/Green, Brown&White/Brown

#### Outer Shield

Shield Type	Material	Coverage
Tape	Bi-Laminate (Alum+Poly)	100%
Braid	Tinned Copper (TC)	85%

#### Outer Jacket

Material	Nom. Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant, Thermoset)	7.0 mm (0.28 in)

### Electrical Characteristics

#### Electricals

Max. Conductor DCR	Max. Mutual Capacitance	Max. Capacitance Unbalance	Nom. Characteristic Impedance
145 Ohm/km (44.2 Ohm/1000ft)	5.6 pF/m (1.7 pF/ft)	160 pF/100m	100 Ohm

#### Delay

Max. Delay Skew	Nom. Velocity of Prop.
45 ns/100m	65%

#### High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation) [dB/100m]	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACR [dB]	Min. PSACR [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]	Min. TCL [dB]	Min. ELTCTL [dB]
1	3.1	65.3	62.3	62.1	59.1	64	61	20	40	35
4	6	56.3	53.3	50.3	47.3	52	49	23	34	23
10	9.5	50.3	47.3	40.8	37.8	44	41	25	30	15
16	12.1	47.2	44.2	35.2	32.2	39.9	36.9	25	28	10.9
20	13.5	45.8	42.8	32.2	29.2	38	35	25	27	9
31.25	17.1	42.9	39.9	25.8	22.8	34.1	31.5	23.6	25.1	5.5
62.5	24.8	38.4	35.4	13.6	10.6	28.1	25.1	21.5	22	

100	32	35.3	32.3	3.3	0.3	24	21	20.1	20
-----	----	------	------	-----	-----	----	----	------	----

High Frequency Table Notes:	According ISO/IEC 11801 , ANSI/TIA 568.2-D, IEC61156-6 CAT5e, TJ/CL313, EN 45545-2
-----------------------------	--

#### Transfer Impedance

Frequency	Max. Transfer Impedance
1 Mhz	Max. 10 mOhm/m
10 Mhz	Max. 10 mOhm/m
30 Mhz	Max. 30 mOhm/m
100 Mhz	100 mOhm/m

Transfer Impedance Class:	Grade 1
Screening Class:	Type I

#### Voltage

Voltage Rating
300 V

## Mechanical Characteristics

#### Temperature

Operating
-40°C to +90°C

#### Bend Radius

Installation Min.
10 X D

Bulk Cable Weight:	65 (kg/km)
--------------------	------------

## Standards and Compliance

Flammability / Reaction to Fire:	IEC 60332-1-2, IEC 60332-2-25
Data Category:	Category 5e
CENELEC Compliance:	EN 45545-2
European Halogen Free Standards:	IEC 62821-1 Halogen Free Compliance = Yes, IEC 60754-1 - Halogen Amount = Zero, IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity = 10 µS/mm, IEC 60754-2 - Halogen Acid Gas Amount - Min. pH = 4.3, IEC 61034-2 - Smoke Density Min. Transmittance = 70%
European Directive Compliance:	EU CE Mark

## History

Update and Revision:	Revision Number: 0.3 Revision Date: 05-11-2026
----------------------	--

© 2026 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.