



Product: [RTB8C0.5](#)

RailTuff™ Thin wall cable 300V 8 C 0.5 mm² TC, XLPO Ins, TCBS, XLPO Outer Jkt

Product Description

RailTuff™ Thin wall cable 300V 8 Cores 0.5 mm² Tinned Copper, XLPO Insulation, Tinned Copper Braid Shield, XLPO Outer Jacket

Technical Specifications

Product Overview

Suitable Applications:	Applicable for fixed or moderate flexing wiring inside Railway Rolling Stock like High-Speed Trains (CRH, Shinkansen, ICE, TGV), Metro, locomotives, and trolley buses, etc
------------------------	---

Physical Characteristics (Overall)

Conductor		
AWG	Material	No. of Conductors
0.5 mm²	TC - Tinned Copper	8

Insulation	
Material	Nominal Diameter
XLP, XLPO, XLPE	1.42 mm

Color Chart

Color
White#1
White#2
White#3
White#4
White#5
White#6
White#7
White#8

Outer Shield	
Type	Material
Braid	Tinned Copper (TC)

Outer Jacket	
Material	Nominal Diameter
XLP, XLPO, XLPE	6.35 mm

Electrical Characteristics

Voltage	
Voltage Rating [V]	
300 /500 Vac	
450 Vdc	

Temperature Range

Operating Temperature Range:	-40°C to +90°C
------------------------------	----------------

Mechanical Characteristics

Ozone Resistance:	(0.025~0.03)%/25°C/24h/1.5kVac/1min
Aging:	Long-term thermal endurance testing and demonstrated a lifetime of 20,000 hours at 120°C
Bulk Cable Weight:	79.1 kg/km

Applicable Environmental and Other Programs

EU Directive 2011/65/EU (RoHS 2):	Compliant
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Hazardous Locations:	Yes
Suitability - Indoor:	Yes
Suitability - Non-Halogenated:	Yes
Suitability - Outdoor:	Yes

Flammability, LS0H, Toxicity Testing

IEC Flammability:	IEC 60332-1-2, IEC 60332-2-25
Other Flammability:	EN 50305
Load Capacity:	Normal Fire Load : 519 kJ/m
IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity:	10 µS/mm
IEC 60754-2 - Halogen Acid Gas Amount - Min. pH:	4.3
Halogenfree:	HCl+HBr ≤ 0.5%
IEC 61034-2 - Smoke Density Min. Transmittance:	70%
IRM 903 Fuel Resistance Test:	IRM 903 oil at (70±2)°C for 168h
IRM 902 Mineral Oil Resistance Test:	IRM 902 oil at (100±2)°C for 24h
Acid Resistance:	N-Oxalic acid solution at (23±2)°C for 168h
Alkali Resistance:	N-Sodium hydroxide solution at 23°C for 168h
Toxicity of Insulation:	≤ 6
Toxicity of Jacket:	≤ 3
Fluorine Content Test IEC60684-2:	HF ≤ 0.1%

History

Update and Revision:	Revision Number: 0.21 Revision Date: 10-31-2022
----------------------	---

© 2022 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.