



Product: [RTD8C1.0P](#)

RailTuff™ Thin wall cable EN 50306-4 3P 300V 8 C 1.0 mm² Str TC, XLPO Ins, XLPO Outer Jkt

Product Description

RailTuff™ Thin wall cable EN 50306-4 3P 300V 8 Cores 1.0 mm² Stranded Tinned Copper, XLPO Insulation, 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 |
|------------------------|---|

Construction Details

Conductor

| Size | Stranding | Material |
|-------------------|------------|--------------------|
| 1 mm ² | 37x0.18 mm | TC - Tinned Copper |

Insulation

| Material | Nom. Insulation Diameter | Color Code | Notes |
|-----------------|--------------------------|--|--|
| XLP, XLPO, XLPE | 1.77 mm (0.0697 in) | White#1, White#2, White#3, White#4, White#5, White#6, White#7, White#8 | D.C. stability on insulation at 300Vdc in 3% NaCl solution at (85±2)°C for 240h : No breakdown |

Table Notes: D.C. stability on insulation at 300Vdc in 3% NaCl solution at (85±2)°C for 240h : No breakdown

Outer Shield

| Shield Type | Material | Coverage |
|-------------|--------------------|----------|
| Braid | Tinned Copper (TC) | 80% |

Outer Jacket

| Material | Nom. Thickness |
|-----------------|--------------------|
| XLP, XLPO, XLPE | 0.56 mm (0.022 in) |

Overall Cable Diameter (Nominal): 7.9 ± 0.20 mm

Electrical Characteristics

Electricals

| Max. Conductor DCR |
|-------------------------------|
| 20.0 Ohm/km (6.10 Ohm/1000ft) |

Voltage

| Breakdown Voltage |
|-------------------|
| 2.5kVac/5min |

Mechanical Characteristics

Temperature

| Operating |
|-----------------|
| -40°C to +120°C |

Bend Radius

| Stationary Min. | Installation Min. |
|-----------------|-------------------|
| | |

| | |
|----------------|----------------|
| 79 mm (3.1 in) | 79 mm (3.1 in) |
|----------------|----------------|

| | |
|--------------------|-----------------------------|
| Bulk Cable Weight: | 131 kg/km (88.0 lbs/1000ft) |
|--------------------|-----------------------------|

Standards and Compliance

| | |
|----------------------------------|-------------------------------|
| Flammability / Reaction to Fire: | IEC 60332-1-2, IEC 60332-2-25 |
|----------------------------------|-------------------------------|

| | |
|---------------------|-----------|
| ISO/IEC Compliance: | IEC 60228 |
|---------------------|-----------|

| | |
|---------------------|----------------------|
| CENELEC Compliance: | EN 50306-4EN 45545-2 |
|---------------------|----------------------|

| | |
|----------------------------------|--|
| European Halogen Free Standards: | IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity = 10 μ S/mm, IEC 60754-2 - Halogen Acid Gas Amount - Min. pH = 4.3 |
|----------------------------------|--|

| | |
|-------------------------------|-----------|
| Other Standard Compliance(s): | TJ/CL 313 |
|-------------------------------|-----------|

Product Notes

| | |
|--------|-------------------------------------|
| Notes: | Table 3 Category MM, ROHS Compliant |
|--------|-------------------------------------|

History

| | |
|----------------------|---|
| Update and Revision: | Revision Number: 0.33 Revision Date: 11-27-2023 |
|----------------------|---|

© 2024 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.