



**Product:** [RTE7P0.5P](#)

RailTuff™ Thin wall cable EN 50306-4 5P 300V 7Pr 0.5 mm<sup>2</sup> Str TC, XLPO Ins, TCBS, XLPO Inner Jkt, XLPO Outer Jkt

## Product Description

RailTuff™ Thin wall cable EN 50306-4 5P 300V 7 Pair 0.5 mm<sup>2</sup> Stranded Tinned Copper, XLPO Insulation, Tinned Copper Braid Shield, XLPO Inner Jacket, 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
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### Construction Details

#### Conductor

Size	Stranding	Material
0.5 mm <sup>2</sup>	19x0.18 mm	TC - Tinned Copper

#### Insulation

Material	Nom. Thickness	Nom. Insulation Diameter	Color Code	Notes
XLP, XLPO, XLPE	0.29 mm (0.011 in)	1.42 mm (0.0559 in)	White#1, White#2, White#3, White#4, White#5, White#6, White#7, White#8, White#9, White#10, White#11, White#12, White#13, White#14	D.C. stability on insulation at 300Vdc in 3% NaCl solution at (85±2)°Cfor 240h : No breakdown

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

#### Outer Shield

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

#### Inner Jacket

Material	Nom. Thickness	Nom. Diameter
XLP, XLPO, XLPE	0.41 mm (0.016 in)	4.10 mm (0.161 in)

#### Outer Jacket

Nom. Thickness	Nom. Diameter
0.75 mm (0.030 in)	13.95 mm (0.5492 in)

Overall Cable Diameter (Nominal): 13.95 ± 0.25 mm

### Electrical Characteristics

#### Electricals

Max. Conductor DCR
40.1 Ohm/km (12.2 Ohm/1000ft)

#### Voltage

Breakdown Voltage
2.5kVac/5min

### Mechanical Characteristics

## Temperature

Operating
-40°C to +120°C

## Bend Radius

Stationary Min.	Installation Min.
140 mm (5.5 in)	140 mm (5.5 in)

Bulk Cable Weight:	244 kg/km (164 lbs/1000ft)
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## Standards and Compliance

Flammability / Reaction to Fire:	IEC 60332-1-2, IEC 60332-3-24
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 $\mu$ S/mm, IEC 60754-2 - Halogen Acid Gas Amount - Min. pH = 4.3
Other Standard Compliance(s):	TJ/CL 313

## Product Notes

Notes:	EMEA PN: RTE7P05P; Table 5 Category MMM, ROHS Compliant
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## History

Update and Revision:	Revision Number: 0.34 Revision Date: 11-27-2023
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