



**Caledonian**

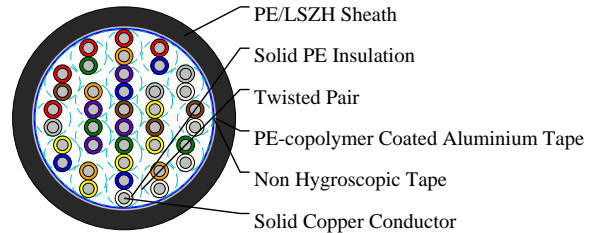
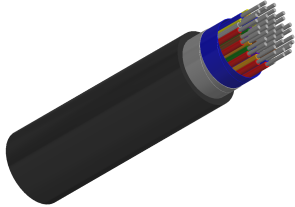
Railway Cables

www.caledonian-cables.com

marketing@caledonian-cables.com

## RT/F3 D type Axle Counter Cable

RS/RT/F3-D-2Y(F)(L)2Y-19P1.4



## APPLICATIONS

The cables are designed for transmission of signals up to 90 kHz in axle counter train detection systems.

## STANDARDS

RT/E/PS/00031

## VOLTAGE RATING

750V DC/450V AC

## CABLE CONSTRUCTION

Conductors: Tinned solid copper wire.

Insulation: Solid polyethylene.

Cabling Element: Two insulated conductors are twisted together to form a pair.

Stranding: Pairs are helically stranded in concentric layers.

Filling: Cable core interstices are filled with a low-permittivity compound. Unfilled cables option can be offered upon request.

Core wrapping: Plastic tape(s) with overlapping

Moisture barrier: One laminated sheath made of aluminium tape coated with PE-Copolymer on at least one side is applied with longitudinally overlap.

Outer Sheath: Polyethylene or LSZH fire retardant compound. Ruggedised PE sheath compound can be offered upon request.

## COLOUR CODE

1P:WHITE+BLUE

2P:WHITE+ORANGE

3P:WHITE+GREEN

4P:WHITE+BROWN

5P:WHITE+GREY

6P:RED+BLUE

7P:RED+ORANGE

8P:RED+GREEN

9P:RED+BROWN



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- 10P:RED+GREY
- 11P:YELLOW+BLUE
- 12P:YELLOW+ORANGE
- 13P:YELLOW+GREEN
- 14P:YELLOW+BROWN
- 15P:YELLOW+GREY
- 16P:VIOLET+BLUE
- 17P:VIOLET+ORANGE
- 18P:VIOLET+GREEN
- 19P:VIOLET+BROWN

## PHYSICAL AND THERMAL PROPERTIES

Minimum Bending Radius: 7.5xOD (unarmoured); 10xOD (armoured)

Temperature Range: -30°C to +60°C (during operation); -10°C to +60°C (during installation)

## Electrical Properties

Electrical Characteristics at 20°C:

Nominal Conductor Diameter:1.4 mm

Nominal Conductor Cross Section:1.5 mm<sup>2</sup>

Maximum Conductor Resistance:12.5 Ω/km

Minimum Insulation Resistance @500 V DC (1min):5000 MΩ.km

Nominal Conductor Capacitance @800Hz/1000Hz (AC):47+3 nF/km

Dielectric Strength, conductor to screen (DC voltage 2mins):3000V

Maximum Average Attenuation:

@1.0KHz:0.46 dB/km

@2.4KHz:0.62 dB/km

@40KHz:1.77 dB/km

@90KHz:2.41 dB/km

@1.024MHz:7.45 dB/km

Minimum Average Near-end Crosstalk:

@1.0KHz:60 dB/km

@2.4KHz:60 dB/km

@40KHz:50 dB/km

@90KHz:50 dB/km

@1.024MHz:35 dB/km

## DIMENSION AND PARAMETERS

No. of Pairs	Conductor Diameter	Nominal Diameter over Insulation	Nominal Outer Sheath Thickness	Nom. Overall Diameter	Approx. Weight
	mm	mm	mm	mm	kg/km



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## Railway Cables

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19	1.4	2.2	2.4	37.3	1450
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Buried in Ground



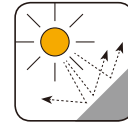
Impact Resistant



Laid In Ducts



Rated voltage



UV Resistant



Water Resistant