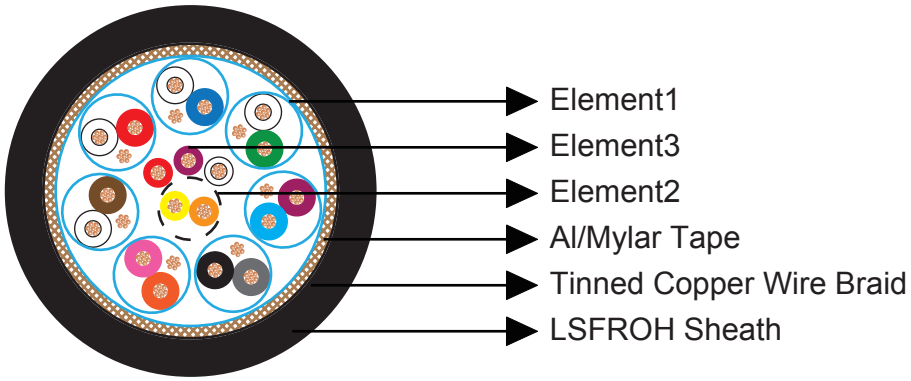
DVI Rolling Stock Cable (7P+1P+3C)

Construction:



Element 1: 7PR×24AWG(Cu/PE/Individual Al-mylar Screen+ TC Drain Wire)

Conductor	Stranded annealed tinned copper wire, 7/0.20mm
Insulation	Polyethylene. Thickness 0.28mm. Outer diameter 1.16±0.05mm
Core Identification	1PR=White/Brown; 2PR=White/Red, 3PR=White/Green; 4PR=White/Blue, 5PR=Grey/Black, 6PR=Pink/Orange, 7PR=Light Blue/Purple
Twisting	The cores shall twisted together in pair, the lay between each twist shall not exceed 100 mm
Individual Shield	Aluminum/ mylar laminated tape applied with the metallic side down in electrical contact with a 24AWG tinned copper drain wire (7 strands formation). A 23 micron mylar tape is applied over the screening tape with a minimum 25% overlap.

Element 2: 1PR×24AWG(7/0.2mm) Stranded TC/PE

Conductor	Stranded annealed tinned copper wire, 7/0.20mm
Insulation	High density polyethylene. Thickness 0.15mm. Outer diameter 0.9mm
Insulation Color	Yellow and orange
Twisting	The cores shall twisted together in pair, the lay between each twist shall not exceed 100 mm

Element 3: 3C×24AWG(7/0.2mm) Stranded TC/PE

Conductor	Stranded annealed tinned copper wire, 7/0.20mm
Insulation	High density polyethylene.Thickness 0.15mm. Outer diameter 0.9mm
Insulation Color	Red/Purple/White

Element Assembly

Overall Screen	Aluminum/ mylar tape
Braid Shield	Braid of tinned copper wire. Coverage ≥ 85%
Outer Sheath	LSFROH elastomeric sheath,Thickness 1.0mm. Outer diameter 12.5±1mm, other materail is optional
Sheath Color	Black or as per the client's requirement

Physical Properties:

Temperature rating: -25°C to +80°C

Minimum bending radius: 3 x Overall Diameter

Electrical Properties:

Rated voltage: 30V

Max conductor resistance at 20°C: ≤89.2 Ohm/Km

Min insulation resistance: ≥100M Ohm/m

Test voltage: Min. AC 250V/1second

Nom. mutual capacitance at 1KHz: 57 pF/m

Fire Performance in General:

Vertical flame propagation for a single insulated wire or cable

EN 50265-2-1; IEC 60332-1-2; NF C 32-070 2.1 (C2)

Vertical flame spread of vertically mounted bunched wires or cables

EN 50266-2-4 + EN 50305; IEC 60332-3-24; NF C 32-070 2.2 (C1); VDE 0472 Teil 804

Low Smoke Emission

EN 50268-2; IEC 61034-2; NF C 32-073 ;NF C 20-902; NF F 16 101; VDE 0472 Teil 816

Halogen Free

EN 50267-2-1; IEC 60754-1; NF C 32-074; NF C 20-454; VDE 0472 Teil 815

Low Corrosivity (Acidity & Conductivity)

EN 50267-2-2/3; IEC 60754-2; NF C 32-074; NF C 20-453; VDE 0472 Teil 813

Low Toxicity

EN 50305; NF X 70-100; NF F 63 808; TM1-04; BS6853

Smoke Index

NF F 63 808; BS6853; NF F 16 101

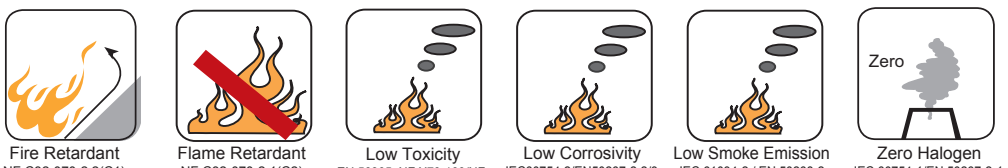
Fire Performance Relating to Rolling Stock Application:

DIN 5510-2

BS 6853

NF F16 101

NF F 63 808



Fire Retardant
NF C32-070-2.2(C1)
IEC60332-3-24/EN50266-2-4

Flame Retardant
NF C32-070-2.1(C2)
IEC60332-1-2/EN50265-2-1

Low Toxicity
EN 50305; NF X70-100/NF F63 808/TM1-04/BS 6853

Low Corrosivity
IEC60754-2/EN50267-2-2/3
NF C32-074/NF C20-453

Low Smoke Emission
IEC 61034-2 / EN 50268-2
NF C32-073/NF C 20-902

Zero Halogen
IEC 60754-1/EN 50267-2-1
NF C20-454

* The data included in the present catalogue are merely indicative; Caledonian Cables Limited reserves to itself the right to change them as its own discretion in any time.