



TYPE D1 & D2 Railway Signalling Cable

Applications

The cables are designed for railway signalling systems. The cables are suitable for use in d.c. circuits where the nominal voltage to earth does not exceed 1100 volts and installation in ducts.

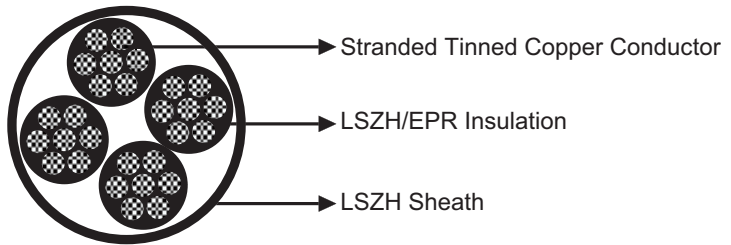


Standards

- NR/PS/SIG/00005(formerly RT/E/PS/00005)

Construction

- Conductors: Tinned stranded copper, according to IEC 60228 class 2& BS 6360.
- Insulation: LSZH or EPR Type GP4 to BS 7655.
- Core Wrapping: Plastic tape(s) with overlapping.
- Sheath: LSZH.



Electrical Characteristics at 20°C

| | | | | | | | | | |
|---------------------------------|-----------------|----------|------|------|------|------|-------|------|-------|
| Nominal Conductor Cross Section | mm ² | 0.75 | 1.5 | 2.5 | 10.0 | 16.0 | 35.0 | 70.0 | 95.0 |
| Maximum DC Conductor Resistance | Ω/km | 24.8 | 12.2 | 7.56 | 1.84 | 1.16 | 0.529 | 0.27 | 0.195 |
| Voltage Rating | KV | 0.65/1.1 | | | | | | | |
| Nominal Insulation Thickness | mm | 0.85 | 0.8 | 0.8 | 1.0 | 1.0 | 1.2 | 1.4 | 1.6 |

Mechanical and Thermal Properties

- Minimum Bending Radius: 6×OD (static); 15×OD (dynamic)
- Temperature Range: -25°C to +85°C (during operation); -10°C to +85°C (during installation)

Dimensions and Weight

| Cable Code | No. of cores & Nominal Conductor Cross Sectional Area No. × mm ² | No. & Nominal Diameter of Strands No/mm | Nominal Sheath Thickness mm | Overall Diameter Min/Max mm | Nominal Weight kg/km |
|------------------|---|---|-----------------------------|-----------------------------|----------------------|
| Type D1 | | | | | |
| RS/D1-3GH-1G0.75 | 1×0.75 | 7/0.37 | 2.0 | 6.5/8.1 | 25 |
| RS/D1-3GH-1G1.5 | 1×1.5 | 7/0.53 | 2.0 | 6.8/8.5 | 30 |
| RS/D1-3GH-1G2.5 | 1×2.5 | 7/0.67 | 2.0 | 7.2/8.9 | 34 |
| RS/D1-3GH-1G10 | 1×10.0 | 7/1.35 | 2.0 | 9.4/11.8 | 205 |
| RS/D1-3GH-1G35 | 1×35.0 | 19/1.53 | 2.0 | 12.9/16.1 | 495 |



| Cable Code | No. of cores & Nominal Conductor Cross Sectional Area No. x mm ² | No. & Nominal Diameter of Strands No/mm | Nominal Sheath Thickness mm | Overall Diameter Min/Max mm | Nominal Weight kg/km |
|-------------------|--|--|--------------------------------|-----------------------------------|-------------------------|
| Type D2 | | | | | |
| RS/D2-3GH-2G1.5 | 2x1.5 | 7/0.53 | 2.0 | 9.4/12.1 | 140 |
| RS/D2-3GH-2G2.5 | 2x2.5 | 7/0.67 | 2.0 | 10.5/13.1 | 170 |
| RS/D2-3GH-2G10 | 2x10.0 | 7/1.35 | 2.0 | 15.0/18.7 | 383 |
| RS/D2-3GH-2G16 | 2x16.0 | 7/1.70 | 2.0 | 16.7/20.9 | 625 |
| RS/D2-3GH-2G35 | 2x35.0 | 19/1.53 | 2.2 | 22.3/27.8 | 994 |
| RS/D2-3GH-2G70 | 2x70.0 | 19/2.14 | 2.4 | 28.8/36.0 | 2121 |
| RS/D2-3GH-2G95 | 2x95.0 | 19/2.52 | 2.6 | 33.2/41.5 | 2760 |
| RS/D2-3GH-4G0.75 | 4x0.75 | 7/0.37 | 2.0 | 10.2/12.8 | 150 |
| RS/D2-3GH-7G0.75 | 7x0.75 | 7/0.37 | 2.0 | 11.8/14.7 | 225 |
| RS/D2-3GH-10G0.75 | 10x0.75 | 7/0.37 | 2.0 | 14.4/18.0 | 280 |
| RS/D2-3GH-12G0.75 | 12x0.75 | 7/0.37 | 2.0 | 14.8/18.5 | 321 |
| RS/D2-3GH-19G0.75 | 19x0.75 | 7/0.37 | 2.0 | 17.0/21.3 | 425 |
| RS/D2-3GH-27G0.75 | 27x0.75 | 7/0.37 | 2.0 | 20.1/25.1 | 606 |
| RS/D2-3GH-37G0.75 | 37x0.75 | 7/0.37 | 2.2 | 22.7/28.4 | 786 |
| RS/D2-3GH-48G0.75 | 48x0.75 | 7/0.37 | 2.2 | 25.7/32.2 | 972 |
| RS/D2-3GH-4G1.5 | 4x1.5 | 7/0.53 | 2.0 | 10.9/13.7 | 250 |
| RS/D2-3GH-7G1.5 | 7x1.5 | 7/0.53 | 2.0 | 12.6/15.8 | 370 |
| RS/D2-3GH-10G1.5 | 10x1.5 | 7/0.53 | 2.0 | 15.6/19.4 | 410 |
| RS/D2-3GH-12G1.5 | 12x1.5 | 7/0.53 | 2.0 | 16.0/20.0 | 410 |
| RS/D2-3GH-19G1.5 | 19x1.5 | 7/0.53 | 2.0 | 18.5/23.1 | 615 |
| RS/D2-3GH-27G1.5 | 27x1.5 | 7/0.53 | 2.2 | 22.2/27.8 | 897 |
| RS/D2-3GH-37G1.5 | 37x1.5 | 7/0.53 | 2.2 | 25.1/31.4 | 1126 |
| RS/D2-3GH-48G1.5 | 48x1.5 | 7/0.53 | 2.4 | 28.1/35.1 | 1280 |
| RS/D2-3GH-4G2.5 | 4x2.5 | 7/0.67 | 2.0 | 11.9/14.8 | 340 |
| RS/D2-3GH-7G2.5 | 7x2.5 | 7/0.67 | 2.0 | 13.8/17.2 | 500 |
| RS/D2-3GH-10G2.5 | 10x2.5 | 7/0.67 | 2.0 | 17.1/21.3 | 680 |
| RS/D2-3GH-12G2.5 | 12x2.5 | 7/0.67 | 2.0 | 17.6/22.0 | 613 |
| RS/D2-3GH-19G2.5 | 19x2.5 | 7/0.67 | 2.0 | 20.4/25.5 | 815 |
| RS/D2-3GH-27G2.5 | 27x2.5 | 7/0.67 | 2.2 | 24.6/30.7 | 1200 |
| RS/D2-3GH-37G2.5 | 37x2.5 | 7/0.67 | 2.4 | 27.8/34.7 | 1600 |
| RS/D2-3GH-48G2.5 | 48x2.5 | 7/0.67 | 2.6 | 31.2/39.0 | 1960 |



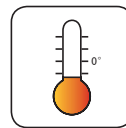
Impact Resistant



Highly Flexible



Oil Resistant



Weather Resistant



Rated Voltage



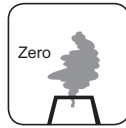
Laid In Ducts



Flame Retardant
NF C32-070-2.1(C2)
IEC 60332-1/EN 50265-2-1



Fire Retardant
NF C32-070-2.2(C1)
IEC 60332-3/EN50266



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



Low Smoke Emission
IEC 61034/NFC20-902
EN 50268/NF C32-073



Low Corrosivity
EN 50267-2-2/NF C32-074
IEC 60754-2/NF C20-453



Low Toxicity