TYPE D1 & D2 Railway Signalling Cable

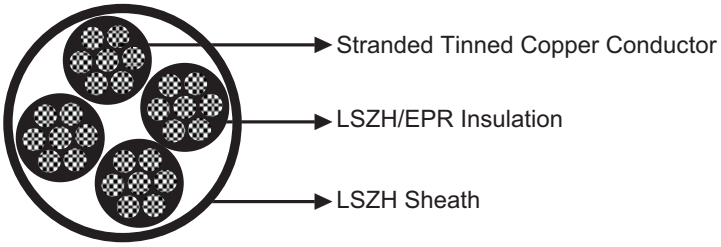
Applications

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℃

Nominal Conductor Cross Section	mm²	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℃ to +85℃ (during operation); -10℃ to +85℃ (during installation)

Dimensions and Weight

Cable Code	No. of cores& Nominal Conductor Cross Sectional Area No.×mm²	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.×mm²	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	2×1.5	7/0.53	2.0	9.4/12.1	140
RS/D2-3GH-2G2.5	2×2.5	7/0.67	2.0	10.5/13.1	170
RS/D2-3GH-2G10	2×10.0	7/1.35	2.0	15.0/18.7	383
RS/D2-3GH-2G16	2×16.0	7/1.70	2.0	16.7/20.9	625
RS/D2-3GH-2G35	2×35.0	19/1.53	2.2	22.3/27.8	994
RS/D2-3GH-2G70	2×70.0	19/2.14	2.4	28.8/36.0	2121
RS/D2-3GH-2G95	2×95.0	19/2.52	2.6	33.2/41.5	2760
RS/D2-3GH-4G0.75	4×0.75	7/0.37	2.0	10.2/12.8	150
RS/D2-3GH-7G0.75	7×0.75	7/0.37	2.0	11.8/14.7	225
RS/D2-3GH-10G0.75	10×0.75	7/0.37	2.0	14.4/18.0	280
RS/D2-3GH-12G0.75	12×0.75	7/0.37	2.0	14.8/18.5	321
RS/D2-3GH-19G0.75	19×0.75	7/0.37	2.0	17.0/21.3	425
RS/D2-3GH-27G0.75	27×0.75	7/0.37	2.0	20.1/25.1	606
RS/D2-3GH-37G0.75	37×0.75	7/0.37	2.2	22.7/28.4	786
RS/D2-3GH-48G0.75	48×0.75	7/0.37	2.2	25.7/32.2	972
RS/D2-3GH-4G1.5	4×1.5	7/0.53	2.0	10.9/13.7	250
RS/D2-3GH-7G1.5	7×1.5	7/0.53	2.0	12.6/15.8	370
RS/D2-3GH-10G1.5	10×1.5	7/0.53	2.0	15.6/19.4	410
RS/D2-3GH-12G1.5	12×1.5	7/0.53	2.0	16.0/20.0	410
RS/D2-3GH-19G1.5	19×1.5	7/0.53	2.0	18.5/23.1	615
RS/D2-3GH-27G1.5	27×1.5	7/0.53	2.2	22.2/27.8	897
RS/D2-3GH-37G1.5	37×1.5	7/0.53	2.2	25.1/31.4	1126
RS/D2-3GH-48G1.5	48×1.5	7/0.53	2.4	28.1/35.1	1280
RS/D2-3GH-4G2.5	4×2.5	7/0.67	2.0	11.9/14.8	340
RS/D2-3GH-7G2.5	7×2.5	7/0.67	2.0	13.8/17.2	500
RS/D2-3GH-10G2.5	10×2.5	7/0.67	2.0	17.1/21.3	680
RS/D2-3GH-12G2.5	12×2.5	7/0.67	2.0	17.6/22.0	613
RS/D2-3GH-19G2.5	19×2.5	7/0.67	2.0	20.4/25.5	815
RS/D2-3GH-27G2.5	27×2.5	7/0.67	2.2	24.6/30.7	1200
RS/D2-3GH-37G2.5	37×2.5	7/0.67	2.4	27.8/34.7	1600
RS/D2-3GH-48G2.5	48×2.5	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