K25 Track Feeder Cables to NF F 55-625

Applications

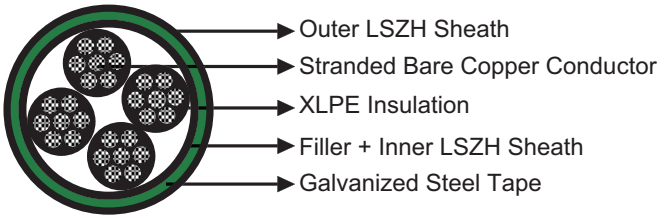
The cables are designed for fixed power or lighting installations in rail transport.

Standards

- NF F 55-625
- UNE 21123

Construction

- Conductors: Stranded bare copper conductor, 1.5mm² to IEC 60228 class 2.
- Insulation: XLPE.
- Filler & Inner Covering: LSZH.
- Armour: Galvanized steel tapes.
- Outer Sheath: LSZH, antitermite, coloured black.



Electrical Characteristics at 20℃

Nominal Conductor Cross Section	mm²	1.5
Maximum DC Conductor Resistance	Ω/km	12.2
Minimum Insulation resistance @500VDC	MΩ.km	1500
Voltage Rating	KV	0.6/1（0.45/0.75 optional）

Mechanical and Thermal Properties

- Miniumum Bending Radius: 10×OD
- Operating Temperatures: -20℃ to +60℃ (during operation); -10℃ to +60℃ (during installation)

Core Identification

Colours coding: Black, Light blue, Brown, Green/Yellow, Black

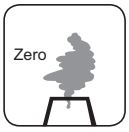
Dimensions and Weight

Cable Code	No. of cores& Nominal Conductor Cross Sectional Area No.×mm²	No. & Nominal Diameter of Strands No/mm	Minimum Overall Diameter mm	Maximum Overall Diameter mm	Nominal Weight kg/km
RF/K25-RZ1F3Z1-U(AS)-0.6/1KV-2G1.5	2 x 1.5	7/0.53	8.0	12.0	100
RF/K25-RZ1F3Z1-U(AS)-0.6/1KV-4G1.5	4 x 1.5	7/0.53	12.5	14.5	300
RF/K25-RZ1F3Z1-U(AS)-0.6/1KV-12G1.5	12 x 1.5	7/0.53	18.0	20.0	590
RF/K25-RZ1F3Z1-U(AS)-0.6/1KV-21G1.5	21 x 1.5	7/0.53	22.0	24.0	830

U is changed to K if the stranding class is changed from class 2 to class 5

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

450/750V Track Feeder Cables to RT/E/S/21101

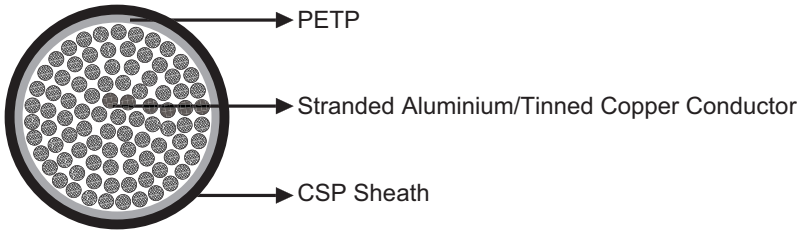
Applications

The cables can provide the 450/750 volt DC supply from Traction Substations and Track Paralleling Huts to conductor rails, negative cable connections and where appropriate bonding.

Standards

- NR/PS/ELP/21101 (formerly RT/E/S/21101)
- BS 638 Part 4
- UNE 21027

Construction



- Conductors: Class 5 stranded aluminium or tinned copper to BS EN 60228: 2005 (previously BS 6360).
- Core Wrapping: PETP (Polyethylene Terephthalate).
- Sheath: CSP(Chlorosulfonated Polyethylene) type RS4 to BS 6899.
- H.O.F.R. heat resistant, oil resistant and flame retardant.

Electrical Characteristics at 20℃

Nominal Conductor Cross Section	mm²	161	500	630	150	240	500	800	1000
Conductor Material		copper			Aluminium				
Maximum DC Conductor Resistance	Ω/km	0.109	0.0369	0.0286	0.206	0.125	0.0605	0.0307	0.0291
Assigned Continuous Current Rating	A	550	1200	1500	430	550	800	1200	1500
Voltage Rating	KV	0.45/0.75							

Mechanical and Thermal Properties

- Miniumum Bending Radius: 10×OD (Aluminium Conductor); 8×OD (Copper Conductor)
- Operating Temperatures: -25℃ to +85℃ (during operation); -10℃ to +70℃ (during installation)

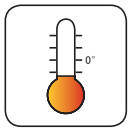
Dimensions and Weight

Cable Code	No. of cores& Nominal Conductor Cross Sectional Area No.×mm²	No. & Nominal Diameter of Strands No/mm	Nominal Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km	Polarity/ Gland Size
Copper Conductor						
RF21101-H01N2-D-450/750V-1G161CU	1×161	820/0.5	4.0	25.9	2050	negative/32
RF21101-H01N2-D-450/750V-1G500CU	1×500	1769/0.6	4.0	42.3	5582	negative/50
RF21101-H01N2-D-450/750V-1G630CU	1×630	2257/0.6	4.0	45.9	6879	positive/63S
Aluminium Conductor						
RF21101-H01N2-D-450/750V-1G150AL	1×150	756/0.5	4.0	20.5	581	negative/25
RF21101-H01N2-D-450/750V-1G240AL	1×240	1221/0.5	4.0	29.6	1171	negative/40
RF21101-H01N2-D-450/750V-1G500AL	1×500	1769/0.6	4.0	42.0	2361	positive/50
RF21101-H01N2-D-450/750V-1G800AL	1×800	2825/0.6	4.0	50.2	3498	negative/63S
RF21101-H01N2-D-450/750V-1G1000AL	1×1000	3531/0.6	4.0	55.0	4226	positive/63


Impact Resistant


Highly Flexible


Oil Resistant


Weather Resistant


Laid In Ducts

450/750V LSZH Track Feeder Cables to EME-SP-14-025/SE908

Applications

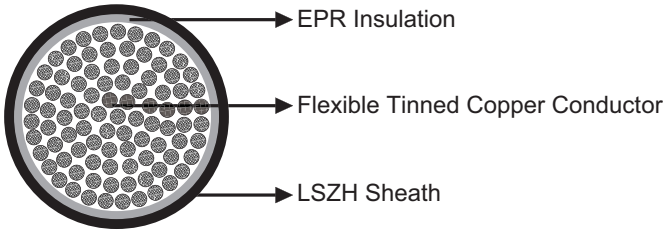
The cables can provide the 450/750 volt DC supply from Traction Substations and Track Paralleling Huts to conductor rails, negative cable connections and where appropriate bonding.

Standards

- EME SP 14 025 (replaced by LUL 1-108 and Metronet MR SE908)
- UNE 21123

Construction

- Conductors: Stranded tinned copper conductors to IEC 60228 class 2 or 5.
- Insulation: EPR.
- Sheath: LSZH sheathed with yellow stripe.



Electrical Characteristics at 20℃

Nominal Conductor Cross Section	mm²	500	935
Maximum DC Conductor Resistance	Ω/km	0.0361	0.0194
Voltage Rating	KV	0.45/0.75	

Mechanical and Thermal Properties

- Miniumum Bending Radius: 8×OD
- Operating Temperatures: -25℃ to +85℃ (during operation); -10℃ to +70℃ (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	Nominal Overall Diameter mm	Nominal Weight kg/km
RF14025-DZ1-U(AS)-450/750V-1G500	1×500	91/2.65	8.5	54.0	7185
RF14025-DZ1-U(AS)-450/750V-1G935	1×935	169/2.65	9.5	65.0	11749

U is changed to K if the stranding class is changed from class 2 to class 5

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

450/750V LSZH Single Core Conduit Wires to EME-SP-14-026

Applications

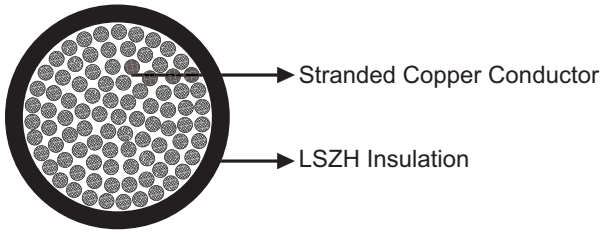
The cables are designed for fixed power or lighting installations in rail transport.

Standards

- EME SP 14 026 (LUL version of BS 7211)
- UNE 211002

Construction

- Conductors: Stranded plain copper conductors to IEC 60228 class 2 or 5.
- Insulation: LSZH.



Electrical Characteristics at 20℃

Nominal Conductor Cross Section	mm²	1.5	2.5	4.0	6.0	10.0	16.0	25.0	35.0	50.0	70.0
Maximum DC Conductor Resistance	Ω/km	12.1	7.41	4.61	3.08	1.83	1.15	0.727	0.524	0.387	0.268
Voltage Rating	KV	0.45/0.75									

Nominal Conductor Cross Section	mm²	95	120	150	185	240	300	400	500	630
Maximum DC Conductor Resistance	Ω/km	0.193	0.153	0.124	0.0991	0.0754	0.0601	0.0470	0.0366	0.0283
Voltage Rating	KV	0.45/0.75								

Mechanical and Thermal Properties

- Miniumum Bending Radius: 8×OD
- Operating Temperatures: -25℃ to +85℃ (during operation); -10℃ to +70℃ (during installation)

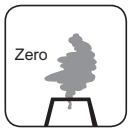
Dimensions and Weight

Cable Code	No. of cores& Nominal Conductor Cross Sectional Area No.×mm²	No. & Nominal Diameter of Strands No/mm	Nominal Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
RF14026-ES07Z-U(AS)-450/750V-1G1.5	1 x 1.5	7/0.53	0.7	3.0	22
RF14026-ES07Z-U(AS)-450/750V-1G2.5	1 x 2.5	7/0.67	0.8	3.6	34
RF14026-ES07Z-U(AS)-450/750V-1G4	1 x 4.0	7/0.85	0.8	4.1	50
RF14026-ES07Z-U(AS)-450/750V-1G6	1 x 6.0	7/1.04	0.8	4.7	70
RF14026-ES07Z-U(AS)-450/750V-1G10	1 x 10.0	7/1.35	1.0	5.8	114
RF14026-ES07Z-U(AS)-450/750V-1G16	1 x 16.0	7/1.70	1.0	6.8	175
RF14026-ES07Z-U(AS)-450/750V-1G25	1 x 25.0	7/2.14	1.2	8.6	272
RF14026-ES07Z-U(AS)-450/750V-1G35	1 x 35.0	19/1.53	1.2	10.2	377
RF14026-ES07Z-U(AS)-450/750V-1G50	1 x 50.0	19/1.78	1.4	11.9	509
RF14026-ES07Z-U(AS)-450/750V-1G70	1 x 70.0	19/2.14	1.4	12.8	697
RF14026-ES07Z-U(AS)-450/750V-1G95	1 x 95.0	37/1.78	1.6	15.0	961
RF14026-ES07Z-U(AS)-450/750V-1G120	1 x 120.0	37/2.03	1.6	16.6	1203
RF14026-ES07Z-U(AS)-450/750V-1G150	1 x 150.0	37/2.25	1.8	18.5	1510
RF14026-ES07Z-U(AS)-450/750V-1G185	1 x 185.0	37/2.52	2.0	20.8	1855
RF14026-ES07Z-U(AS)-450/750V-1G240	1 x 240.0	61/2.25	2.2	25.4	2451
RF14026-ES07Z-U(AS)-450/750V-1G300	1 x 300.0	61/2.52	2.4	28.1	3031
RF14026-ES07Z-U(AS)-450/750V-1G400	1 x 400.0	61/2.85	2.6	31.6	3898
RF14026-ES07Z-U(AS)-450/750V-1G500	1 x 500.0	61/3.20	2.8	35.2	4894
RF14026-ES07Z-U(AS)-450/750V-1G630	1 x 630.0	127/2.52	2.8	39.1	6244

U is changed to K if the stranding class is changed from class 2 to class 5

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

0.6/1KV Limited Fire Hazard/Fire Survival Multicore Armoured Cables to EME-SP-14-027

Applications

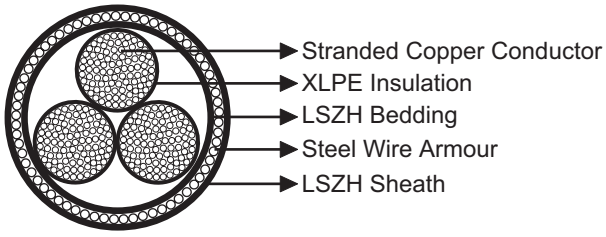
The cables are designed for station range installation typically in public help points (PHP), public address (PA), station announcement platforms (SAP) & CCTV camera power systems. The LSZH cables has been designed to provide superior flame retardance and circuit integrity if necessary, suitable for installation where fire, smoke emission and toxi fumes may create a potential threat.

Standards

- EME SP 14 027 (LUL version of BS 6724 for fire retardant version and BS 6387 for fire resisting version)
- UNE 21123

Construction

- Conductors: Stranded plain copper conductors to IEC 60228 class 2 or 5.
- Fire Barrier Tape (optional): Mica.
- Insulation: XLPE insulation.
- Bedding: LSZH bedding.
- Armoured: SWA.
- Outer Sheath: LSZH Sheath.



Electrical Characteristics at 20℃

Nominal Conductor Cross Section	mm²	2.5	4.0	6.0	10.0	16.0	25.0	35.0	50
Maximum DC Conductor Resistance	Ω/km	7.41	4.61	3.08	1.83	1.15	0.727	0.524	0.387
Voltage Rating	KV	0.6/1.0							

Nominal Conductor Cross Section	mm²	70.0	95	120	150	185	240	300
Maximum DC Conductor Resistance	Ω/km	0.268	0.193	0.153	0.124	0.0991	0.0754	0.0601
Voltage Rating	KV	0.6/1.0						

Mechanical and Thermal Properties

- Miniumum Bending Radius: 8×OD
- Operating Temperatures: 0℃ to +90℃ (during operation); 0℃ to +70℃ (during installation)

↘ Dimensions and Weight

Cables without fire barrier tape

Cable Code	No. of cores& Nominal Conductor Cross Sectional Area No.×mm²	No. & Nominal Diameter of Strands No/mm	Nominal Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
RF14027-RZ1MZ1-U(AS)-0.6/1KV-2G2.5	2×2.5*	7/0.67	1.4	12.2	323
RF14027-RZ1MZ1-U(AS)-0.6/1KV-2G4	2×4.0*	7/0.85	1.4	13.3	387
RF14027-RZ1MZ1-U(AS)-0.6/1KV-2G6	2×6.0*	7/1.04	1.4	14.4	460
RF14027-RZ1MZ1-U(AS)-0.6/1KV-2G10	2×10.0*	7/1.35	1.5	16.1	611
RF14027-RZ1MZ1-U(AS)-0.6/1KV-2G16	2×16.0*	7/1.70	1.5	18.7	904
RF14027-RZ1MZ1-U(AS)-0.6/1KV-2G25	2×25.0	7/2.14	1.6	21.0	1050
RF14027-RZ1MZ1-U(AS)-0.6/1KV-2G35	2×35.0	19/1.53	1.7	22.0	1450
RF14027-RZ1MZ1-U(AS)-0.6/1KV-2G50	2×50.0	19/1.78	1.8	24.0	1800
RF14027-RZ1MZ1-U(AS)-0.6/1KV-2G70	2×70.0	19/2.14	1.9	27.0	2300
RF14027-RZ1MZ1-U(AS)-0.6/1KV-2G95	2×95.0	37/1.78	2.0	32.0	3250
RF14027-RZ1MZ1-U(AS)-0.6/1KV-2G120	2×120.0	37/2.03	2.1	35.0	3950
RF14027-RZ1MZ1-U(AS)-0.6/1KV-2G150	2×150.0	37/2.25	2.2	38.0	4650
RF14027-RZ1MZ1-U(AS)-0.6/1KV-2G185	2×185.0	37/2.52	2.4	43.0	6050
RF14027-RZ1MZ1-U(AS)-0.6/1KV-2G240	2×240.0	61/2.25	2.5	49.0	7500
RF14027-RZ1MZ1-U(AS)-0.6/1KV-2G300	2×300.0	61/2.52	2.6	54.0	9050
RF14027-RZ1MZ1-U(AS)-0.6/1KV-3G2.5	3×2.5*	7/0.67	1.4	12.1	335
RF14027-RZ1MZ1-U(AS)-0.6/1KV-3G4	3×4.0*	7/0.85	1.4	13.3	430
RF14027-RZ1MZ1-U(AS)-0.6/1KV-3G6	3×6.0*	7/1.04	1.4	14.4	523
RF14027-RZ1MZ1-U(AS)-0.6/1KV-3G10	3×10.0*	7/1.35	1.5	17.0	811
RF14027-RZ1MZ1-U(AS)-0.6/1KV-3G16	3×16.0*	7/1.70	1.6	19.3	1072
RF14027-RZ1MZ1-U(AS)-0.6/1KV-3G25	3×25.0	7/2.14	1.7	24.0	1750
RF14027-RZ1MZ1-U(AS)-0.6/1KV-3G35	3×35.0	19/1.53	1.8	27.0	2000
RF14027-RZ1MZ1-U(AS)-0.6/1KV-3G50	3×50.0	19/1.78	1.8	28.0	2450
RF14027-RZ1MZ1-U(AS)-0.6/1KV-3G70	3×70.0	19/2.14	1.9	32.0	3250
RF14027-RZ1MZ1-U(AS)-0.6/1KV-3G95	3×95.0	37/1.78	2.1	36.0	4500
RF14027-RZ1MZ1-U(AS)-0.6/1KV-3G120	3×120.0	37/2.03	2.2	40.0	5350
RF14027-RZ1MZ1-U(AS)-0.6/1KV-3G150	3×150.0	37/2.25	2.3	44.0	6900
RF14027-RZ1MZ1-U(AS)-0.6/1KV-3G185	3×185.0	37/2.52	2.4	49.0	8200
RF14027-RZ1MZ1-U(AS)-0.6/1KV-3G240	3×240.0	61/2.25	2.6	56.0	10350
RF14027-RZ1MZ1-U(AS)-0.6/1KV-3G300	3×300.0	61/2.52	2.7	62.0	12600
RF14027-RZ1MZ1-U(AS)-0.6/1KV-4G2.5	4×2.5*	7/0.67	1.4	13.6	406
RF14027-RZ1MZ1-U(AS)-0.6/1KV-4G4	4×4.0*	7/0.85	1.4	14.9	505
RF14027-RZ1MZ1-U(AS)-0.6/1KV-4G6	4×6.0*	7/1.04	1.5	17.1	737
RF14027-RZ1MZ1-U(AS)-0.6/1KV-4G10	4×10.0*	7/1.35	1.5	18.9	969
RF14027-RZ1MZ1-U(AS)-0.6/1KV-4G16	4×16.0*	7/1.70	1.6	21.5	1303
RF14027-RZ1MZ1-U(AS)-0.6/1KV-4G25	4×25.0	7/2.14	1.7	27.0	2100
RF14027-RZ1MZ1-U(AS)-0.6/1KV-4G35	4×35.0	19/1.53	1.8	29.0	2450
RF14027-RZ1MZ1-U(AS)-0.6/1KV-4G50	4×50.0	19/1.78	1.9	32.0	3100
RF14027-RZ1MZ1-U(AS)-0.6/1KV-4G70	4×70.0	19/2.14	2.1	37.0	4400
RF14027-RZ1MZ1-U(AS)-0.6/1KV-4G95	4×95.0	37/1.78	2.2	41.0	5650
RF14027-RZ1MZ1-U(AS)-0.6/1KV-4G120	4×120.0	37/2.03	2.3	46.0	7300
RF14027-RZ1MZ1-U(AS)-0.6/1KV-4G150	4×150.0	37/2.25	2.4	51.0	8700
RF14027-RZ1MZ1-U(AS)-0.6/1KV-4G185	4×185.0	37/2.52	2.6	55.0	10450
RF14027-RZ1MZ1-U(AS)-0.6/1KV-4G240	4×240.0	61/2.25	2.7	63.0	13250
RF14027-RZ1MZ1-U(AS)-0.6/1KV-4G300	4×300.0	61/2.52	2.9	68.0	16100

*Circular conductors

U is changed to K if the stranding class is changed from class 2 to class 5

Cables with fire barrier tape

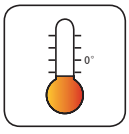
Cable Code	No. of cores& Nominal Conductor Cross Sectional Area No.×mm²	No. & Nominal Diameter of Strands No/mm	Nominal Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-2G2.5	2×2.5	7/0.67	1.4	13.1	352
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-2G4	2×4.0	7/0.85	1.4	14.1	424
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-2G6	2×6.0	7/1.04	1.4	15.2	504
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-2G10	2×10.0	7/1.35	1.5	16.9	620
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-2G16	2×16.0	7/1.70	1.5	19.5	954
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-2G25	2×25.0	7/2.14	1.6	25.5	1330
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-2G35	2×35.0	19/1.53	1.7	29.1	1785
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-2G50	2×50.0	19/1.78	1.8	32.2	2165
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-2G70	2×70.0	19/2.14	1.9	28.8	2445
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-2G95	2×95.0	37/1.78	2.0	33.9	3385
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-2G120	2×120.0	37/2.03	2.1	37.2	4065
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-2G150	2×150.0	37/2.25	2.2	39.9	4745
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-2G185	2×185.0	37/2.52	2.4	45.0	6095
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-2G240	2×240.0	61/2.25	2.5	50.0	7575
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-2G300	2×300.0	61/2.52	2.6	55.0	9165
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-3G2.5	3×2.5	7/0.67	1.4	13.7	392
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-3G4	3×4.0	7/0.85	1.4	14.8	478
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-3G6	3×6.0	7/1.04	1.4	16.0	573
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-3G10	3×10.0	7/1.35	1.5	18.5	868
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-3G16	3×16.0	7/1.70	1.6	20.8	1136
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-3G25	3×25.0	7/2.14	1.7	27.6	1865
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-3G35	3×35.0	19/1.53	1.8	30.9	2235
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-3G50	3×50.0	19/1.78	1.8	33.9	2735
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-3G70	3×70.0	19/2.14	1.9	35.7	3355
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-3G95	3×95.0	37/1.78	2.1	38.2	4580
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-3G120	3×120.0	37/2.03	2.2	41.6	5505
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-3G150	3×150.0	37/2.25	2.3	47.0	6950
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-3G185	3×185.0	37/2.52	2.4	50.5	8295
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-3G240	3×240.0	61/2.25	2.6	57.2	10455
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-3G300	3×300.0	61/2.52	2.7	63.2	12660
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-4G2.5	4×2.5	7/0.67	1.4	14.7	454
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-4G4	4×4.0	7/0.85	1.4	16.0	556
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-4G6	4×6.0	7/1.04	1.5	18.2	783
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-4G10	4×10.0	7/1.35	1.5	20.0	1029
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-4G16	4×16.0	7/1.70	1.6	22.5	1367
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-4G25	4×25.0	7/2.14	1.7	29.9	2240
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-4G35	4×35.0	19/1.53	1.8	33.5	2705
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-4G50	4×50.0	19/1.78	1.9	37.1	3375
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-4G70	4×70.0	19/2.14	2.1	39.1	4560
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-4G95	4×95.0	37/1.78	2.2	43.0	5805
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-4G120	4×120.0	37/2.03	2.3	48.3	7430
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-4G150	4×150.0	37/2.25	2.4	52.4	8820
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-4G185	4×185.0	37/2.52	2.6	56.6	10600
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-4G240	4×240.0	61/2.25	2.7	64.3	13380
RF14027-RZ1MZ1-U-MICA(AS+)-0.6/1KV-4G300	4×300.0	61/2.52	2.9	70.7	16255

U is changed to K if the stranding class is changed from class 2 to class 5


Impact Resistant


Highly Flexible


Oil Resistant


Weather Resistant

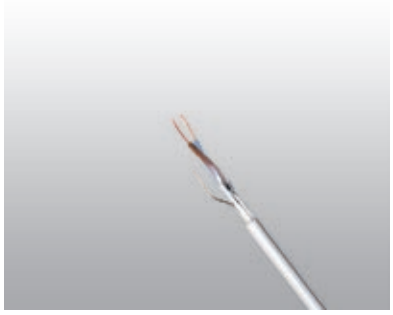

Laid In Ducts

Insulation Integrity FE180
EN 50200/IEC 60331
/NF C32-070-2.3(CR1)

LU Section 12 Fire Integrity Cables

Applications

The cables are designed for installation typically in public help points (PHP), public address (PA), station announcement platforms (SAP) & CCTV camera power systems. The LSZH cables has been designed to provide superior flame retardance and circuit integrity, together with optimized ease of installation characteristics and complies with LU Section 12 station regulations.



Standards

- BS 7629-1/ 5839-1: 2002/ 8434-1: 2003/6387 C W Z
- BS EN 50200 (PH90)
- UNE 211025

Construction

- Conductors: Class 1 solid or Class 2 stranded annealed bare copper conductors to BS EN 60228: 2005 (previously BS 6360).
- Insulation: Silicone rubber insulation.
- Core Wrapping: Plastic tape(s) with overlapping.
- Screen: Aluminium/Polyester tape.
- Drain Wire: Tinned copper.
- Sheath: High performance, thermoplastic LSZH.

Electrical Characteristics at 20℃

Nominal Conductor Cross Section	mm²	1.0	1.5	2.5
Maximum Conductor DC Resistance	Ω/km	18.1	12.1	7.41
Nominal Insulation Thickness	mm	0.6	0.7	0.8
Voltage Rating	KV	0.3/0.5		

Mechanical and Thermal Properties

- Minimum Bending Radius: 6×OD
- Temperature Range: -40℃ to +90℃ (during operation); -10℃ to +70℃ (during installation)

Dimensions and Weight

Cable Code	No. of cores& Nominal Conductor Cross Sectional Area No.×mm²	Conductor Diameter		Nominal Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
		Stranded Conductor No/mm	Solid Conductor mm			
RFLU12-SOZ1-U-PH90(AS+)-300/500V-2G1	2×1.0	7/0.44	1.13	1.3	7.0	83
RFLU12-SOZ1-U-PH90(AS+)-300/500V-3G1	3×1.0	7/0.44	1.13	1.3	7.3	95
RFLU12-SOZ1-U-PH90(AS+)-300/500V-4G1	4×1.0	7/0.44	1.13	1.3	8.2	115
RFLU12-SOZ1-U-PH90(AS+)-300/500V-7G1	7×1.0	7/0.44	1.13	1.3	10.5	175
RFLU12-SOZ1-U-PH90(AS+)-300/500V-2G1.5	2×1.5	7/0.53	1.38	1.4	7.9	110
RFLU12-SOZ1-U-PH90(AS+)-300/500V-3G1.5	3×1.5	7/0.53	1.38	1.4	8.3	128
RFLU12-SOZ1-U-PH90(AS+)-300/500V-4G1.5	4×1.5	7/0.53	1.38	1.4	9.5	160
RFLU12-SOZ1-U-PH90(AS+)-300/500V-7G1.5	7×1.5	7/0.53	1.38	1.4	12.2	250
RFLU12-SOZ1-U-PH90(AS+)-300/500V-2G2.5	2×2.5	7/0.67	1.78	1.5	9.3	160
RFLU12-SOZ1-U-PH90(AS+)-300/500V-3G2.5	3×2.5	7/0.67	1.78	1.5	9.9	190
RFLU12-SOZ1-U-PH90(AS+)-300/500V-4G2.5	4×2.5	7/0.67	1.78	1.5	11.3	235

U is changed to K if the stranding class is changed from class 2 to class 5


Impact Resistant


Highly Flexible


Oil Resistant


Weather Resistant


Laid In Ducts

Insulation Integrity FE180
EN 50200/IEC 60331
/NF C32-070-2.3(CR1)

500/750V Fire Survival Mineral Insulated Multicore LSZH Cables to EME-SP-14-028

Applications

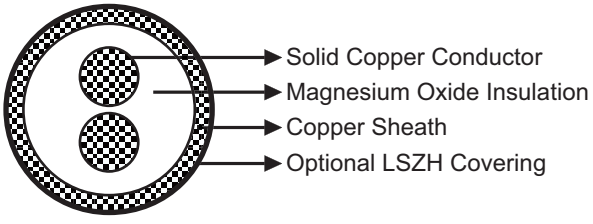
These fire survival cables are designed for installation in hazardous installations and radioactive environments.

Standards

- EME SP 14 028
- BS 6387 CWZ
- BS 5839-1 Standard
- BS 5839-1 Enhanced
- BS 7346-6
- BS EN 60702

Construction

- Conductors: Solid plain copper conductors.
- Insulation: Magnesium Oxide.
- Outer sheath: Plain copper sheath with optional LSZH covering.



Electrical Characteristics at 20℃

Light Duty 0.5KV Grade

Nominal Conductor Diameter	mm	1.13	1.39	1.77	2.25
Nominal Conductor Cross Section	mm²	1.0	1.5	2.5	4.0
Maximum DC Conductor Resistance	Ω/km	18.1	12.1	7.41	4.61
Voltage Rating	KV	0.5			

Heavy Duty 0.75KV Grade

Nominal Conductor Diameter	mm	1.39	1.77	2.25	2.75	3.57	4.5	5.66	6.66	7.75
Nominal Conductor Cross Section	mm²	1.5	2.5	4.0	6.0	10.0	16.0	25.0	35.0	50.0
Maximum DC Conductor Resistance	Ω/km	12.1	7.41	4.61	3.08	1.83	1.15	0.727	0.524	0.387
Voltage Rating	KV	0.75								

Nominal Conductor Diameter	mm	9.32	10.98	12.33	13.7	15.18	17.33	19.37	22.37
Nominal Conductor Cross Section	mm²	70.0	95.0	120.0	150.0	185.0	240.0	300	400
Maximum DC Conductor Resistance	Ω/km	0.268	0.193	0.153	0.124	0.101	0.0775	0.0601	0.047
Voltage Rating	KV	0.75							

Mechanical and Thermal Properties

- Minimum Bending Radius: 2×OD (D<7); 3×OD (7 ≤ D<12); 4×OD (12 ≤ D<15); 6×OD (D ≥ 15)
- Temperature Range: -80℃ to +105℃

Dimensions and Weight

Light Duty 0.5KV Grade

Cable Code	No. of cores& Nominal Conductor Cross Sectional Area No.×mm²	Cross Sectional Area of Copper Sheath mm²	Nominal Overall Diameter mm		Nominal Weight kg/km	
			With LSZH Covering	Without LSZH Covering	With LSZH Covering	Without LSZH Covering
RF14028L-MICC-300/500V-2G1	2×1.0	5.4	6.4	5.1	126	104
RF14028L-MICC-300/500V-2G1.5	2×1.5	6.3	7.0	5.7	154	136
RF14028L-MICC-300/500V-2G2.5	2×2.5	8.2	7.9	6.6	206	187
RF14028L-MICC-300/500V-2G4	2×4.0	10.7	9.2	7.7	322	248
RF14028L-MICC-300/500V-3G1	3×1.0	6.7	7.1	5.8	159	136
RF14028L-MICC-300/500V-3G1.5	3×1.5	7.8	7.7	6.4	194	176
RF14028L-MICC-300/500V-3G2.5	3×2.5	9.5	8.8	7.3	272	223
RF14028L-MICC-300/500V-4G1	4×1.0	7.7	7.6	6.3	187	162
RF14028L-MICC-300/500V-4G1.5	4×1.5	9.1	8.3	7.0	231	203
RF14028L-MICC-300/500V-4G2.5	4×2.5	11.3	9.6	8.1	336	277
RF14028L-MICC-300/500V-7G1	7×1.0	11.0	9.3	7.6	269	236
RF14028L-MICC-300/500V-7G1.5	7×1.5	11.8	9.9	8.4	351	295
RF14028L-MICC-300/500V-7G2.5	7×2.5	15.4	11.2	9.7	475	411

Heavy Duty 0.75KV Grade

Cable Code	No. of cores& Nominal Conductor Cross Sectional Area No.×mm²	Cross Sectional Area of Copper Sheath mm²	Nominal Overall Diameter mm		Nominal Weight kg/km	
			With LSZH Covering	Without LSZH Covering	With LSZH Covering	Without LSZH Covering
RF14028H-MICC-450/750V-1G6	1×6.0	8.0	7.7	6.2	213	173
RF14028H-MICC-450/750V-1G10	1×10.0	9.0	8.8	7.3	273	240
RF14028H-MICC-450/750V-1G16	1×16.0	12.0	9.8	8.3	361	326
RF14028H-MICC-450/750V-1G25	1×25.0	15.0	11.1	9.6	506	457
RF14028H-MICC-450/750V-1G35	1×35.0	18.0	12.2	10.7	650	585
RF14028H-MICC-450/750V-1G50	1×50.0	22.0	13.6	12.1	842	758
RF14028H-MICC-450/750V-1G70	1×70.0	27.0	15.2	13.7	1147	1016
RF14028H-MICC-450/750V-1G95	1×95.0	32.0	17.4	15.4	1520	1324
RF14028H-MICC-450/750V-1G120	1×120.0	37.0	18.8	16.8	1870	1612
RF14028H-MICC-450/750V-1G150	1×150.0	44.0	20.4	18.4	2230	1949
RF14028H-MICC-450/750V-1G185	1×185.0	54.0	23.2	20.4	2575	2370
RF14028H-MICC-450/750V-1G240	1×240.0	70.0	26.1	23.3	3312	3050
RF14028H-MICC-450/750V-1G300	1×300.0	79.0	28.8	26.0	3972	3791
RF14028H-MICC-450/750V-1G400	1×400.0	91.0	32.8	30.0	5211	5004
RF14028H-MICC-450/750V-2G1.5	2×1.5	11.0	9.4	7.9	259	237
RF14028H-MICC-450/750V-2G2.5	2×2.5	13.0	10.2	8.7	314	276
RF14028H-MICC-450/750V-2G4	2×4.0	16.0	11.3	9.8	398	355
RF14028H-MICC-450/750V-2G6	2×6.0	18.0	12.4	10.9	483	446
RF14028H-MICC-450/750V-2G10	2×10.0	24.0	14.2	12.7	697	619
RF14028H-MICC-450/750V-2G16	2×16.0	30.0	16.2	14.7	968	850
RF14028H-MICC-450/750V-2G25	2×25.0	38.0	19.1	17.1	1275	1178

Cable Code	No. of cores& Nominal Conductor Cross Sectional Area No.×mm²	Cross Sectional Area of Copper Sheath mm²	Nominal Overall Diameter mm		Nominal Weight kg/km	
			With LSZH Covering	Without LSZH Covering	With LSZH Covering	Without LSZH Covering
RF14028H-MICC-450/750V-3G1.5	3×1.5	12.0	9.8	8.3	290	254
RF14028H-MICC-450/750V-3G2.5	3×2.5	14.0	10.8	9.3	365	323
RF14028H-MICC-450/750V-3G4	3×4.0	17.0	11.9	10.4	461	415
RF14028H-MICC-450/750V-3G6	3×6.0	20.0	13.0	11.5	590	526
RF14028H-MICC-450/750V-3G10	3×10.0	27.0	15.1	13.6	853	754
RF14028H-MICC-450/750V-3G16	3×16.0	34.0	17.1	15.6	1080	1034
RF14028H-MICC-450/750V-3G25	3×25.0	42.0	20.2	18.2	1548	1444
RF14028H-MICC-450/750V-4G1.5	4×1.5	14.0	10.6	9.1	344	305
RF14028H-MICC-450/750V-4G2.5	4×2.5	16.0	11.6	10.1	430	384
RF14028H-MICC-450/750V-4G4	4×4.0	20.0	12.9	11.4	577	507
RF14028H-MICC-450/750V-4G6	4×6.0	24.0	14.2	12.7	718	644
RF14028H-MICC-450/750V-4G10	4×10.0	30.0	16.3	14.8	1050	911
RF14028H-MICC-450/750V-4G16	4×16.0	39.0	19.3	17.3	1390	1286
RF14028H-MICC-450/750V-4G25	4×25.0	49.0	22.3	20.1	1943	1805
RF14028H-MICC-450/750V-7G1.5	7×1.5	18.0	12.3	10.8	478	432
RF14028H-MICC-450/750V-7G2.5	7×2.5	22.0	13.6	12.1	614	559
RF14028H-MICC-450/750V-12G1.5	12×1.5	28.0	15.8	14.1	772	712
RF14028H-MICC-450/750V-12G2.5	12×2.5	34.0	17.9	15.6	970	911
RF14028H-MICC-450/750V-19G1.5	19×1.5	37.0	18.9	16.6	1086	992


Impact Resistant


Highly Flexible


Oil Resistant


Weather Resistant


Laid In Ducts

Insulation Integrity FE180
EN 50200/IEC 60331
/NF C32-070-2.3(CR1)

Pigtail Rail Connection Cables to SE260L

Applications

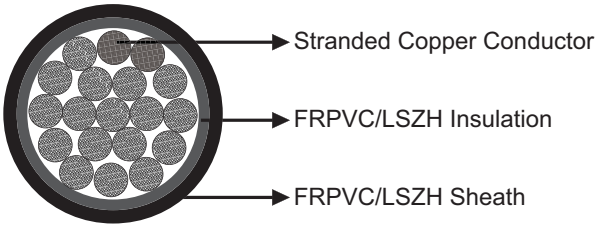
These connection cables are designed for use in signalling equipment rooms.

Standards

- SE260
- UNE 21123

Construction

- Conductors: Stranded plain copper conductors to IEC 60228 class 2 or 5.
- Insulation: FRPVC.
- Outer sheath: FRPVC.



Optional

Limited fire hazard pigtail rail connection cables: Stranded tinned copper conductors, LSZH composite insulation.

Electrical Characteristics at 20℃

Nominal Conductor Cross Section	mm²	0.6
Maximum DC Conductor Resistance	Ω/km	1.15/1.16*
Voltage Rating	KV	0.6/1.0

*For LSZH cable

Mechanical and Thermal Properties

- Minimum Bending Radius: 7.5×OD
- Temperature Range: -25℃ to +85℃ (during operation);
  -10℃ to +70℃ (during installation)

PVC Sheath

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

Dimensions and Weight

Cable Code	No. of cores& Nominal Conductor Cross Sectional Area No.×mm²	No. & Nominal Diameter of Strands No/mm	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
RF260-VV-K-0.6/1KV-1G16	1×16	19/1.04	0.7	1.4	10.3	249
RF260-RZ1-K-0.6/1KV-1G16	1×16	19/1.04	0.7	1.4	10.3	255

K is changed to U if the stranding class is changed from class 5 to class 2

LSZH Sheath

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

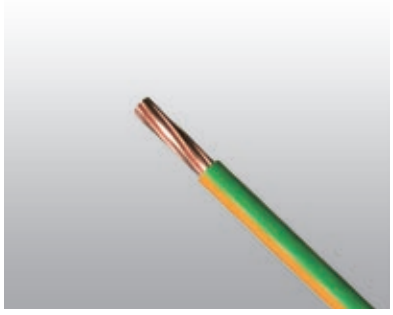
Low Corrosivity
EN 50267-2-2/NF C32-074
IEC 60754-2/NF C20-453

Low Toxicity

450/750V Limited Fire Hazard Earthing Cables to SE774

Applications

The single core signalling earth and power cables are used in safety signalling equipment rooms.

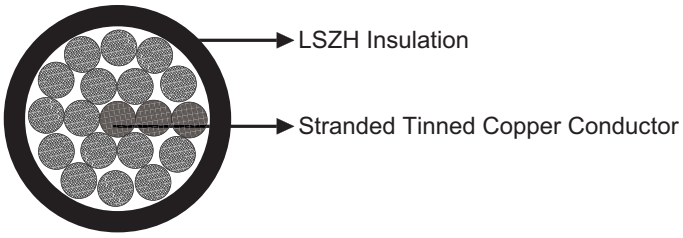


Standards

- SE774
- UNE 21027

Construction

- Conductors: Stranded tinned copper conductors.
- Insulation: Thermoplastic LSZH.



Electrical Characteristics at 20℃

Nominal Conductor Cross Section	mm²	1.0	4.0	6.0	16.0	35.0
Maximum DC Conductor Resistance	Ω/km	18.2	4.7	3.11	1.16	0.529
Voltage Rating	KV	0.45/0.75				

Mechanical and Thermal Properties

- Minimum Bending Radius: 7.5×OD
- Temperature Range: -25℃ to +85℃ (during operation); -10℃ to +70℃ (during installation)

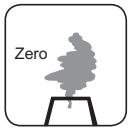
Dimensions and Weight

Cable Code	No. of cores& Nominal Conductor Cross Sectional Area No.×mm²	No. & Nominal Diameter of Strands No/mm	Nominal Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
RF774-ES07Z-U-450/750V-1G1	1×1.0	1/1.13	0.6	4.0	28
RF774-ES07Z-U-450/750V-1G4	1×4.0	7/0.85	0.8	5.5	33
RF774-ES07Z-U-450/750V-1G6	1×6.0	7/1.04	0.8	6.1	90
RF774-ES07Z-U-450/750V-1G16	1×16.0	7/1.7	1.0	8.1	197
RF774-ES07Z-U-450/750V-1G35	1×35.0	19/1.53	1.2	10.9	389

U is changed to K if the stranding class is changed from class 2 to class 5

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

300/500V Limited Fire Hazard Track Circuit Feeder Cables to SE895

Applications

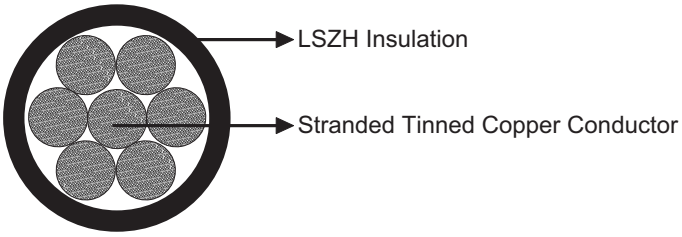
The cables are designed for making connection across the track at the ballast level to the running rails for the signalling track circuits. They are characterized by being high resistant to mechanical damage, fire and contaminants such as oil and water.

Standards

- SE895
- UNE 21027

Construction

- Conductors: Stranded tinned copper conductors to IEC 60228 class 2 or 5.
- Insulation: LSZH Insulation.



Electrical Characteristics at 20℃

Nominal Conductor Cross Section	mm²	4.0
Maximum DC Conductor Resistance	Ω/km	4.7
Voltage Rating	KV	0.3/0.5

Mechanical and Thermal Properties

- Minimum Bending Radius: 7.5×OD
- Temperature Range: -25℃ to +85℃ (during operation); -10℃ to +70℃ (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 Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
RF895-ES05Z-U-300/500V-1G4	1×4.0	7/0.85	0.8	6.8	85

U is changed to K if the stranding class is changed from class 2 to class 5


Mineral Oil Resistant


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

0.6/1KV Limited Fire Hazard Rail Connection Cables to SE902

Applications

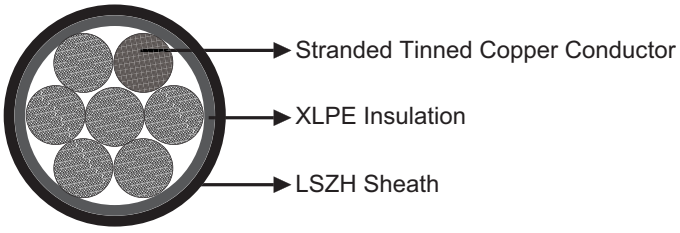
The single core high performance power cables are used in safety signalling equipment rooms.

Standards

- SE902
- UNE 21123

Construction

- Conductors: Stranded tinned copper conductors to IEC 60228 class 2 or 5.
- Insulation: XLPE.
- Sheath: LSZH.



Electrical Characteristics at 20℃

Nominal Conductor Cross Section	mm²	4.0
Maximum DC Conductor Resistance	Ω/km	4.7
Voltage Rating	KV	0.6/0.1

Mechanical and Thermal Properties

- Minimum Bending Radius: 7.5×OD
- Temperature Range: -25℃ to +85℃ (during operation); -10℃ to +70℃ (during installation)

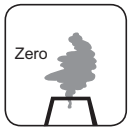
Dimensions and Weight

Cable Code	No. of cores& Nominal Conductor Cross Sectional Area No.×mm²	No. & Nominal Diameter of Strands No/mm	Nominal Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
RF902-RZ1-U-0.6/1KV-1G4	1×4.0	7/0.85	0.8	21.6	624

U is changed to K if the stranding class is changed from class 2 to class 5

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

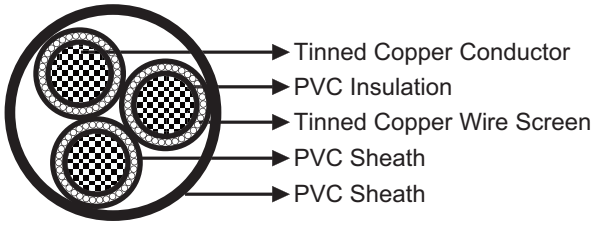
Concentric Signalling Cables Type 1 to SE1047

Applications

The mission critical signalling cables are used between central signalling terminations frame and vital signalling equipments.

Standards

- SE1047
- UNE 21031



Construction

- Conductors: Stranded tinned copper conductors.
- Insulation: PVC.
- Screen: TCW (Tinned Copper Wire) screen.
- Inner Sheath: PVC.
- Outer Sheath: PVC.

Optional

Limited fire hazard concentric signalling cables: Stranded tinned copper conductors, XLPE insulation, TCW screen, PE sheath, units laid up, LFH sheath. (SE 1047 Type 2)

Concentric signalling screened cables: Stranded tinned copper conductors, PVC insulation, TCW spiral screen, PVC sheath, TCWB, units laid up, PVC sheath. (SE 1047 Type 3)

Limited fire hazard concentric signalling screened cables: Stranded tinned copper conductors, XLPE insulation, TCW spiral screen, PE sheath, TCWB, units laid up, LFH sheath. (SE 1047 Type 4)

Electrical Characteristics at 20℃

Nominal Conductor Cross Section	mm²	1.85
Maximum DC Conductor Resistance	Ω/km	11
Maximum DC Screen Resistance	Ω/km	9.66

Mechanical and Thermal Properties

- Minimum Bending Radius: 7.5×OD
- Temperature Range: -25℃ to +85℃ (during operation); -10℃ to +70℃ (during installation)

Dimensions and Weight

SE 1047 Type 1 Concentric Signalling PVC Sheathed Cables

Cable Code	No. of units& Nominal Conductor Cross Sectional Area No.×mm²	No. & Nominal Diameter of Strands No/mm	Nominal Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
RF1047-VC4VV-450/750V-1G1.85	1×1.85	1/1.53	0.7	10.9	173
RF1047-VC4VV-450/750V-3G1.85	3×1.85	1/1.53	0.7	18.4	453
RF1047-VC4VV-450/750V-7G1.85	7×1.85	1/1.53	0.7	23.9	771
RF1047-VC4VV-450/750V-19G1.85	19×1.85	1/1.53	0.7	36.8	1815

SE 1047 Type 2 Concentric Signalling LFH Sheathed Cables

Cable Code	No. of units& Nominal Conductor Cross Sectional Area No.×mm²	No. & Nominal Diameter of Strands No/mm	Nominal Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
RF1047-RC4Z1Z1-450/750V-1G1.85	1×1.85	1/1.53	0.7	10.3	140
RF1047-RC4Z1Z1-450/750V-3G1.85	3×1.85	1/1.53	0.7	17.1	361
RF1047-RC4Z1Z1-450/750V-7G1.85	7×1.85	1/1.53	0.7	22.1	612
RF1047-RC4Z1Z1-450/750V-19G1.85	19×1.85	1/1.53	0.7	33.8	1429

SE 1047 Type 3 Concentric Signalling Screened PVC Sheathed Cables

Cable Code	No. of units& Nominal Conductor Cross Sectional Area No.×mm²	No. & Nominal Diameter of Strands No/mm	Nominal Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
RF1047-VC4VC4V-450/750V-1G1.85	1×1.85	1/1.53	0.8	11.6	210
RF1047- VC4VC4V-450/750V-3G1.85	3×1.85	1/1.53	0.8	19.9	561
RF1047- VC4VC4V-450/750V-7G1.85	7×1.85	1/1.53	0.8	25.9	987
RF1047-VC4VC4V-450/750V-19G1.85	19×1.85	1/1.53	0.8	40.2	2375

SE 1047 Type 4 Concentric Signalling Screened LFH Sheathed Cables

Cable Code	No. of units& Nominal Conductor Cross Sectional Area No.×mm²	No. & Nominal Diameter of Strands No/mm	Nominal Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
RF1047-RC4Z1C4Z1-450/750V-1G1.85	1×1.85	1/1.53	0.8	11.0	184
RF1047-RC4Z1C4Z1-450/750V-3G1.85	3×1.85	1/1.53	0.8	18.6	487
RF1047-RC4Z1C4Z1-450/750V-7G1.85	7×1.85	1/1.53	0.8	24.1	875
RF1047-RC4Z1C4Z1-450/750V-19G1.85	19×1.85	1/1.53	0.8	37.2	2120

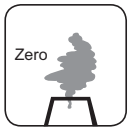
PVC Sheath

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

LSZH Sheath

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

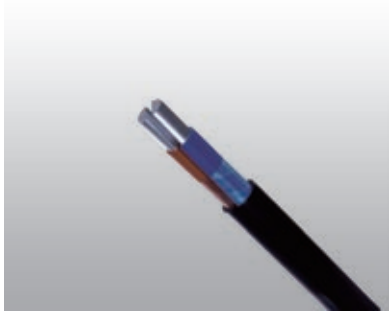
Low Corrosivity
EN 50267-2-2/NF C32-074
IEC 60754-2/NF C20-453

Low Toxicity

Trackside Signalling Aluminium Power Cables to BR880

Applications

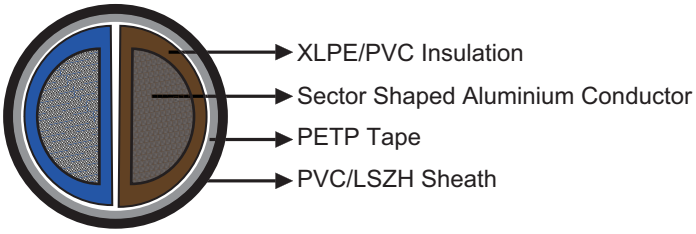
BR880 solid sector shaped conductors for trackside signalling power supplies.



Standards

- BR880
- BS 5467
- BS 6346
- UNE 21123

Construction



- Conductors: Sector shaped solid plain aluminium to IEC 60228 class 2 or 5.
- Insulation: XLPE type GP8 to BS 7655 or PVC type TI 1 to BS 7655.
- Core Wrapping: PETP (Polyethylene Terephthalate).
- Sheath: PVC type 9 to BS 7655 (LSZH can be offered as an option).

Electrical Characteristics at 20℃

Nominal Conductor Cross Section	mm²	16	25	35	50	70	95
Maximum Conductor Resistance	Ω/km	1.91*	1.2*	0.868*	0.641	0.443	0.32**
Voltage Rating	KV	0.6/1.0					

* Aluminium conductors 10mm² to 35mm² circular only.

** For single core cables, four sectoral shaped conductors may be assembled info a single circular conductor. The maximum resistance of the assembled conductor shall be 25% of that of the individual component conductors.

Mechanical and Thermal Properties

- Minimum Bending Radius: 10×OD
- Temperature Range: -30℃ to +70℃ (during operation); -10℃ +55℃ (during installation)

Core Identification

2 core: Brown/Blue

4 core: Blue/Brown/Black/Grey

Dimensions and Weight

Cable Code	No. of cores& Nominal Conductor Cross Sectional Area No.×mm²	Nominal Thickness of Insulation mm	Nominal Thickness of Sheath mm	Nominal Overall Diameter mm	Nominal Weight kg/km
RF880-RV-K-0.6/1KV-2G16AL	2×16	1.0	1.8	14.3	420
RF880-RV-K-0.6/1KV-2G25AL	2×25	1.2	1.8	16.6	455
RF880-RV-K-0.6/1KV-2G35AL	2×35	1.2	1.8	18.0	525
RF880-RV-K-0.6/1KV-2G50AL	2×50	1.4	1.8	20.4	620
RF880-RV-K-0.6/1KV-2G70AL	2×70	1.4	1.9	22.8	840
RF880-RV-K-0.6/1KV-2G95AL	2×95	1.6	2.0	26.2	1020
RF880-RV-K-0.6/1KV-4G70AL	4×70	1.4	2.0	30.6	1750
RF880-RV-K-0.6/1KV-4G95AL	4×95	1.6	2.2	35.5	2100

K is changed to U if the stranding class is changed from class 5 to class 2

PVC Sheath

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

LSZH Sheath

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

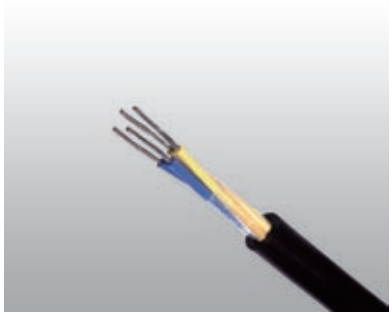
Low Corrosivity
EN 50267-2-2/NF C32-074
IEC 60754-2/NF C20-453

Low Toxicity

Point Heating Cables to NR/SP/ELP/40045

Applications

The cables are designed for power distribution in points heating system. These heavy duty cables offer protection from abrasion and mechanical impact whilst maintaining flexibility to ease installation.

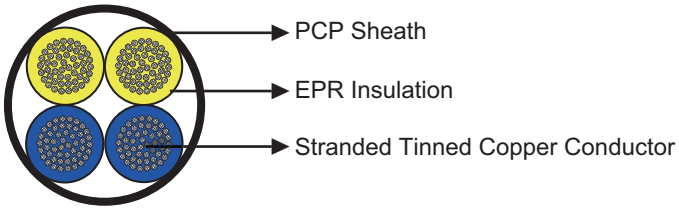


Standards

- NR/SP/ELP/40045 (formerly RT/E/PS/40045)
- BS 7919
- UNE 21027

Construction

- Conductors: Class 5 tinned copper conductors to BS 6360.
- Insulation: EPR type GP4 to BS 7655.
- Sheath: PCP type EM2 to BS 7655.



Electrical Characteristics at 20℃

Nominal Conductor Cross Section	mm²	1.5	2.5	4.0	6.0
Maximum Conductor Resistance	Ω/km	13.7	8.21	5.09	3.39
Voltage Rating	KV	0.3/0.5			

Mechanical and Thermal Properties

- Minimum Bending Radius: 7.5×OD
- Temperature Range: -30℃ to +70℃ (during operation); -10℃ +55℃ (during installation)

Core identification

4core yellow, yellow, blue, blue

8core yellow, yellow, blue, blue, Brown, brown, black, black

Dimensions and Weight

Cable Code	No. of cores& Nominal Conductor Cross Sectional Area No.×mm²	No. & Nominal Diameter of Strands No/mm	Nominal Thickness of Insulation mm	Nominal Overall Diameter mm	Nominal Weight kg/km
RF40045-H05RNF-300/500V-4G1.5	4×1.5	30/0.25	0.8	14.3	220
RF40045-H05RNF-300/500V-4G2.5	4×2.5	50/0.25	0.9	16.5	390
RF40045-H05RNF-300/500V-4G4	4×4.0	56/0.30	1.0	18.5	420
RF40045-H05RNF-300/500V-8G1.5	8×1.5	30/0.25	0.8	18.5	460
RF40045-H05RNF-300/500V-8G2.5	8×2.5	50/0.25	0.9	21.4	510
RF40045-H05RNF-300/500V-8G4	8×4.0	56/0.25	1.0	23.6	830
RF40045-H05RNF-300/500V-8G6	8×6.0	84/0.30	1.0	25.6	1040
RF40045-H05RNF-300/500V-8G10	8×10.0	75/0.40	1.2	31.7	1799
RF40045-H05RNF-300/500V-8G16	8×16.0	118/0.40	1.2	36.2	2480


Impact Resistant


Highly Flexible


Oil Resistant


Weather Resistant


Laid In Ducts

FTN Screening Conductor Cables

Applications

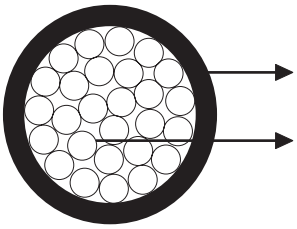
The cables are designed to be used for the purpose of screening telecommunication cables from electrical interference.

Standard

- NR/PS/TEL/31102(BR1817)
- BS 6485

Construction

- Conductors: Single core stranded aluminium to BS 215PT1.
- Insulation: PVC type 16 to BS 6485 or LSZH.



Electrical Characteristics at 20℃

Nominal Conductor Cross Section	mm²	150	250
Maximum DC Conductor Resistance	Ω/km	0.1825	0.1083

Mechanical and Thermal Properties

- Minimum Bending Radius: 9×OD
- Temperature Range: 0℃ to +70℃ (during operation);
  0℃ to +55℃ (during installation)

PVC Sheath

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

Dimensions and Weight

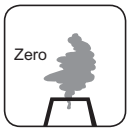
Cable Code	No. of cores& Nominal Conductor Cross Sectional Area No.×mm²	No. & Nominal Diameter of Strands No/mm	Nominal Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
RF31102-H07V-U-450/750V-1G150AL	1×150	19/3.25	1.6	19.45	629
RF31102-H07V-U-450/750V-1G250AL	1×250	19/4.22	1.6	24.30	995

U is changed to K if the stranding class is changed from class 2 to class 5

LSZH Sheath

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

NSGAFOU Cables

Applications

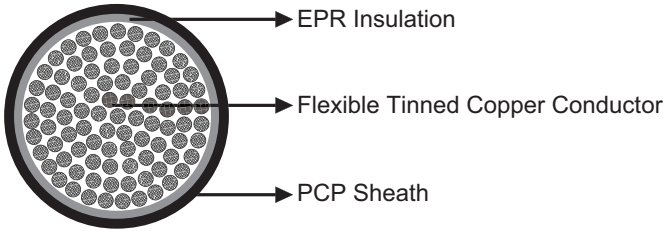
The cables are designed for use in switch cabinets, wiring of devices, trains and buses as well as in dry rooms.

Standards

- DIN VDE 0250-602

Construction

- Conductors: Flexible tinned copper to IEC 60228 class 5.
- Insulation: EPR type 3G13.
- Outer sheath: PCP type 5GM3.



Electrical Characteristics at 20℃

Nominal Conductor Cross Section	mm²	1.5	2.5	4.0	6.0	10	16	25	35
Conductor Resistance	Ω/km	13.7	8.21	5.09	3.39	1.95	1.24	0.795	0.565
Current Rating	A	31	41	58	75	103	145	194	240
Voltage Rating	KV	1.8/3							

Nominal Conductor Cross Section	mm²	50	70	95	120	150	185	240
Conductor Resistance	Ω/km	0.393	0.277	0.21	0.164	0.132	0.109	0.0817
Current Rating	A	301	372	456	528	607	639	821
Voltage Rating	KV	1.8/3						

Mechanical and Thermal Properties

- Minimum Bending Radius: 4×OD
- Temperature Range: -25℃ to +80℃ (during operation); -10℃ to +60℃ (during installation)

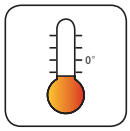
Dimensions and Weight

Cable Code	No. of cores& Nominal Conductor Cross Sectional Area No.×mm²	No. & Nominal Diameter of Strands No/mm	Nominal Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
RF602-NSGAFOU-1G1.5	1×1.5	30/0.25	1.3	6.5	59
RF602-NSGAFOU-1G2.5	1×2.5	50/0.25	1.3	6.8	74
RF602-NSGAFOU-1G4	1×4.0	56/0.3	1.3	7.7	94
RF602-NSGAFOU-1G6	1×6.0	84/0.3	1.3	8.3	118
RF602-NSGAFOU-1G10	1×10.0	80/0.4	1.5	9.2	163
RF602-NSGAFOU-1G16	1×16.0	126/0.4	1.5	10.1	220
RF602-NSGAFOU-1G25	1×25.0	196/0.40	1.8	12.5	336
RF602-NSGAFOU-1G35	1×35.0	276/0.40	1.8	14.0	470
RF602-NSGAFOU-1G50	1×50.0	396/0.40	1.8	15.5	581
RF602-NSGAFOU-1G70	1×70.0	360/0.50	1.8	17.0	772
RF602-NSGAFOU-1G95	1×95.0	475/0.50	2.2	19.5	1030
RF602-NSGAFOU-1G120	1×120.0	608/0.50	2.2	21.2	1280
RF602-NSGAFOU-1G150	1×150.0	756/0.50	2.2	23.5	1650
RF602-NSGAFOU-1G185	1×185.0	925/0.50	2.4	25.6	2050
RF602-NSGAFOU-1G240	1×240.0	1221/0.50	2.6	27.3	2590


Impact Resistant


Highly Flexible


Oil Resistant


Weather Resistant


Laid In Ducts

33KV Power Cables to BS 7835 NR/PS/ELP/00008

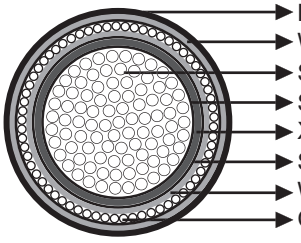
Applications

The cables are used to distribute three phase a.c. electrical power supplies at nominal system voltages of 33KV to traction substations on D.C. electrified lines.

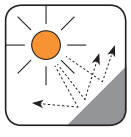
Standard

- NR/PS/ELP/00008(formerly RT/E/PS/00008)
- BS 6622, BS 6234, BS 7454
- IEC 60502-2, IEC60840

Construction



- Conductors: Class 1 circular solid aluminium (for 185 mm²) or class 2 compact circular stranded plain copper (for 300mm²) to BS EN 60228: 2005 (previously BS 6360).
- Conductor Screen: Extruded semi-conducting XLPE (Cross-Linked Polyethylene) solidly bonded.
- Insulation: XLPE (Cross-Linked Polyethylene).
- Insulation Screen: Extruded semi-conducting XLPE (Cross-Linked Polyethylene), solidly bonded and cold strippable.
- Separator: Semi conducting water blocking tape.
- Screen: Copper wire screen, helically wound with equalising copper tape.
- Separator: Semi conducting water blocking tape.
- Sheath: Graphite coated MDPE type TS2.


UV Resistant


Water Resistant

Electrical Characteristics at 20℃

Nominal Conductor Cross Section	mm²	185	300
Maximum DC Conductor Resistance	Ω/km	0.164	0.0601
Capacitance	μF/km	0.205	0.243
Voltage Rating	KV	19/33	19/33

Mechanical and Thermal Properties

- Minimum Bending Radius: 15×OD
- Temperature Range: 0℃ to +90℃ (during operation);
  0℃ to +60℃ (during installation)


Laid In Ducts


Buried in Ciround

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

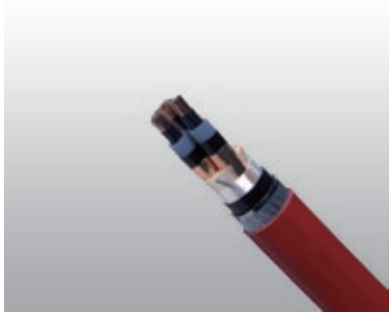
Dimensions and Weight

Cable Code	No. of cores& Nominal Conductor Cross Sectional Area No.×mm²	Nominal Thickness of Conductor Screen mm	Nominal Thickness of Insulation &Insulation Screen mm/mm	Nominal Overall Diameter mm	Nominal Weight kg/km
RF00008-RHZ1H16-19/33KV-1G185AL	1×185	0.9	8.0/0.6	45.0	2200
RF00008-RHZ1H16-19/33KV-1G300CU	1×300	0.9	8.0/0.6	50.0	4500

11KV LSZH Power Cables to BS 7835

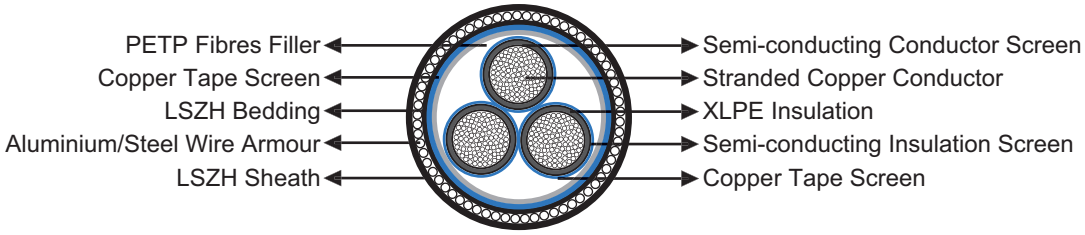
Applications

The cables are power cables for power networks, underground, outdoors and in cable ducting, in particular for installation where fire, smoke emission and toxic fumes create a potential threat.



Standard

- BS 7835
- BS EN 50267-2-1



Construction

- Conductor: Class 2 stranded plain copper conductor to BS EN 60228: 2005 (previously BS 6360).
- Conductor Screen: Semi-conducting material.
- Insulation: XLPE Type GP8 to BS 7655.
- Insulation Screen: Semi-conducting material.
- Metallic Screen: Individual and overall copper tape screen.
- Filler: PETP (Polyethylene Terephthalate) fibres.
- Separator: Binding tape.
- Bedding: LSZH.
- Armour: Aluminium wire armoured (AWA) (for single core cables) or steel wire armoured (SWA) (for multicore cables).
- Sheath: LSZH.

Electrical Characteristics at 20℃

Nominal Conductor Cross Section	mm²	50	70	95	120	150	185	240
Maximum DC Conductor Resistance	Ω/km	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754
Voltage Rating	KV	11						

Nominal Conductor Cross Section	mm²	300	400	500	630	800	1000
Maximum DC Conductor Resistance	Ω/km	0.0601	0.047	0.0366	0.0283	0.0221	0.0176
Voltage Rating	KV	11					

Mechanical and Thermal Properties

- Minimum Bending Radius: 15×OD (for single core cables); 12×OD (for three core cables).
- Temperature Range: 0℃ to +90℃ (during operation); 0℃ to +60℃ (during installation)

Dimensions and Weight

Cable Code	No. of cores& Nominal Conductor Cross Sectional Area No.×mm²	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm/mm		Nominal Overall Diameter mm	Nominal Weight kg/km
			Inner	Outer		
Copper Conductor						
RF7835-RHZ1MZ1-6.35/11KV-1G50CU	1×50	3.4	1.2	1.8	28.5	1200
RF7835-RHZ1MZ1-6.35/11KV-1G70CU	1×70	3.4	1.2	1.9	30.0	1500
RF7835-RHZ1MZ1-6.35/11KV-1G95CU	1×95	3.4	1.2	1.9	31.7	1600
RF7835-RHZ1MZ1-6.35/11KV-1G120CU	1×120	3.4	1.2	2.0	33.9	2100
RF7835-RHZ1MZ1-6.35/11KV-1G150CU	1×150	3.4	1.2	2.1	35.7	2500
RF7835-RHZ1MZ1-6.35/11KV-1G185CU	1×185	3.4	1.2	2.1	37.5	2900
RF7835-RHZ1MZ1-6.35/11KV-1G240CU	1×240	3.4	1.2	2.2	40.0	3600
RF7835-RHZ1MZ1-6.35/11KV-1G300CU	1×300	3.4	1.2	2.2	43.0	4300
RF7835-RHZ1MZ1-6.35/11KV-1G400CU	1×400	3.4	1.2	2.4	45.8	5200
RF7835-RHZ1MZ1-6.35/11KV-1G500CU	1×500	3.4	1.3	2.5	50.5	6500
RF7835-RHZ1MZ1-6.35/11KV-1G630CU	1×630	3.4	1.4	2.6	54.8	8000
RF7835-RHZ1MZ1-6.35/11KV-1G800CU	1×800	3.4	1.5	2.7	59.2	9850
RF7835-RHZ1MZ1-6.35/11KV-1G1000CU	1×1000	3.4	1.6	2.9	64.3	12100
RF7835-RHZ1MZ1-6.35/11KV-3G25CU	3×25	3.4	1.3	2.4	48.8	4300
RF7835-RHZ1MZ1-6.35/11KV-3G35CU	3×35	3.4	1.3	2.5	51.6	4700
RF7835-RHZ1MZ1-6.35/11KV-3G50CU	3×50	3.4	1.4	2.6	54.6	5300
RF7835-RHZ1MZ1-6.35/11KV-3G70CU	3×70	3.4	1.4	2.7	58.5	6300
RF7835-RHZ1MZ1-6.35/11KV-3G95CU	3×95	3.4	1.5	2.8	62.6	7300
RF7835-RHZ1MZ1-6.35/11KV-3G120CU	3×120	3.4	1.6	3.0	66.6	8400
RF7835-RHZ1MZ1-6.35/11KV-3G150CU	3×150	3.4	1.6	3.1	69.8	9600
RF7835-RHZ1MZ1-6.35/11KV-3G185CU	3×185	3.4	1.7	3.2	74.1	11000
RF7835-RHZ1MZ1-6.35/11KV-3G240CU	3×240	3.4	1.8	3.4	81.2	14000
RF7835-RHZ1MZ1-6.35/11KV-3G300CU	3×300	3.4	1.9	3.6	87.0	16600
RF7835-RHZ1MZ1-6.35/11KV-3G400CU	3×400	3.4	2.0	3.8	95.0	19500
Aluminium Conductor						
RF7835-RHZ1MZ1-6.35/11KV-1G50AL	1×50	3.4	1.2	1.8	39.3	1740
RF7835-RHZ1MZ1-6.35/11KV-1G70AL	1×70	3.4	1.2	1.9	41.0	1850
RF7835-RHZ1MZ1-6.35/11KV-1G95AL	1×95	3.4	1.2	1.9	42.9	2100
RF7835-RHZ1MZ1-6.35/11KV-1G120AL	1×120	3.4	1.2	2.0	44.5	2250
RF7835-RHZ1MZ1-6.35/11KV-1G150AL	1×150	3.4	1.2	2.1	47.3	2600
RF7835-RHZ1MZ1-6.35/11KV-1G185AL	1×185	3.4	1.2	2.1	49.3	2850
RF7835-RHZ1MZ1-6.35/11KV-1G240AL	1×240	3.4	1.2	2.2	51.7	3150
RF7835-RHZ1MZ1-6.35/11KV-1G300AL	1×300	3.4	1.2	2.2	54.4	3600
RF7835-RHZ1MZ1-6.35/11KV-1G400AL	1×400	3.4	1.2	2.4	57.7	4000
RF7835-RHZ1MZ1-6.35/11KV-1G500AL	1×500	3.4	1.3	2.5	61.1	4500
RF7835-RHZ1MZ1-6.35/11KV-1G630AL	1×630	3.4	1.4	2.6	65.0	5250
RF7835-RHZ1MZ1-6.35/11KV-1G800AL	1×800	3.4	1.5	2.7	71.6	6150
RF7835-RHZ1MZ1-6.35/11KV-1G1000AL	1×1000	3.4	1.6	2.9	76.5	7200
RF7835-RHZ1MZ1-6.35/11KV-3G50AL	3×50	3.4	1.4	2.6	78.2	8300
RF7835-RHZ1MZ1-6.35/11KV-3G70AL	3×70	3.4	1.4	2.7	82.1	9050
RF7835-RHZ1MZ1-6.35/11KV-3G95AL	3×95	3.4	1.5	2.8	86.1	9800
RF7835-RHZ1MZ1-6.35/11KV-3G120AL	3×120	3.4	1.6	3.0	90.0	10600
RF7835-RHZ1MZ1-6.35/11KV-3G150AL	3×150	3.4	1.6	3.1	93.2	11350
RF7835-RHZ1MZ1-6.35/11KV-3G185AL	3×185	3.4	1.7	3.2	97.5	12250
RF7835-RHZ1MZ1-6.35/11KV-3G240AL	3×240	3.4	1.8	3.4	103.3	13700
RF7835-RHZ1MZ1-6.35/11KV-3G300AL	3×300	3.4	1.9	3.6	108.8	15500
RF7835-RHZ1MZ1-6.35/11KV-3G400AL	3×400	3.4	2.0	3.8	116.1	16750

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

12/20(24)KV Power Cables to CENELEC HD620 & C 33-226

Applications

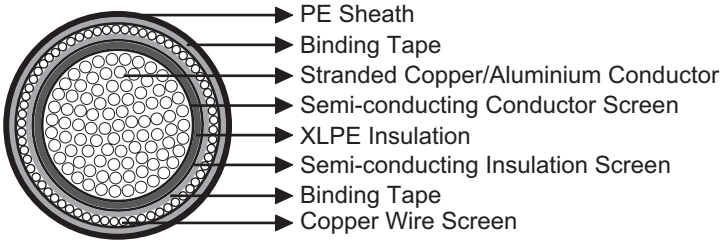
The cables are power cables for power networks, underground, outdoors and in cable ducting, in particular for installation where fire, smoke emission and toxic fumes create a potential threat.

Standard

- CENELEC HD 620
- C 33-226

Construction

- Conductor: Class 2 stranded plain copper / aluminium conductor to BS EN 60228: 2005 (previously BS 6360).
- Conductor Screen: Semi-conducting material.
- Insulation: XLPE.
- Insulation Screen: Semi-conducting material.
- Metallic Screen: Copper wire screen.
- Filler: PETP (Polyethylene Terephthalate) fibres.
- Separator: Binding tape.
- Sheath: PE.



Optional

Armoured Cables: Galvanized steel flat wire armoured cables can be offered as options.

Electrical Characteristics at 20℃

Copper Conductor

Nominal Conductor Cross Section	mm²	25	50	95	150	240	300	400	500	630
Maximum DC Conductor Resistance	Ω/km	0.727	0.387	0.193	0.124	0.0754	0.0601	0.047	0.0366	0.0283
Voltage Rating	KV	20								

Aluminium Conductor

Nominal Conductor Cross Section	mm²	95	150	240	300	400	500	630
Maximum DC Conductor Resistance	Ω/km	0.32	0.206	0.125	0.1	0.0778	0.0605	0.0469
Voltage Rating	KV	20						

Mechanical and Thermal Properties

- Minimum Bending Radius: 15×OD (for single core cables); 12×OD (for three core cables)
- Temperature Range: 0℃ to +90℃ (during operation); 0℃ to +60℃ (during installation)

Dimensions and Weight

XKDT Single Core 12/20KV Copper Conductor

Cable Code	No. of cores& Nominal Conductor Cross Sectional Area No.×mm²	No. & Nominal Diameter of Strands No/mm	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
RF33226-XKDT-12/20KV-1G25CU	1×25	7/2.14	5.5	1.8	27	740
RF33226-XKDT-12/20KV-1G50CU	1×50	19/1.78	5.5	2.0	29	1120
RF33226-XKDT-12/20KV-1G95CU	1×95	19/2.52	5.5	2.1	32	1640
RF33226-XKDT-12/20KV-1G150CU	1×150	37/2.25	5.5	2.2	35	2320
RF33226-XKDT-12/20KV-1G240CU	1×240	61/2.25	5.5	2.4	41	3360
RF33226-XKDT-12/20KV-1G300CU	1×300	61/2.52	5.5	2.5	43	4060
RF33226-XKDT-12/20KV-1G400CU	1×400	61/2.85	5.5	2.6	46	5040
RF33226-XKDT-12/20KV-1G500CU	1×500	91/2.65	5.5	2.7	50	6150
RF33226-XKDT-12/20KV-1G630CU	1×630	127/2.52	5.5	2.9	56	7830

XKDT–YT Three Core 12/20KV Copper Conductor

Cable Code	No. of cores& Nominal Conductor Cross Sectional Area No.×mm²	No. & Nominal Diameter of Strands No/mm	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
RF33226-XKDT-YT-12/20KV-3G25CU	3×25	7/2.14	5.5	2.9	62	2740
RF33226-XKDT-YT-12/20KV-3G50CU	3×50	19/1.78	5.5	3.0	65	3750
RF33226-XKDT-YT-12/20KV-3G95CU	3×95	19/2.52	5.5	3.3	72	5330
RF33226-XKDT-YT-12/20KV-3G150CU	3×150	37/2.25	5.5	3.5	79	7450
RF33226-XKDT-YT-12/20KV-3G240CU	3×240	61/2.25	5.5	3.8	91	10670
RF33226-XKDT-YT-12/20KV-3G300CU	3×300	61/2.52	5.5	4.0	98	13140

XKDT Single Core 12/20KV Aluminium Conductor

Cable Code	No. of cores& Nominal Conductor Cross Sectional Area No.×mm²	No. & Nominal Diameter of Strands No/mm	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
RF33226-XKDT-12/20KV-1G95AL	1×95	19/2.52	5.5	2.1	32	970
RF33226-XKDT-12/20KV-1G150AL	1×150	37/2.25	5.5	2.2	35	1310
RF33226-XKDT-12/20KV-1G240AL	1×240	61/2.25	5.5	2.4	40	1830
RF33226-XKDT-12/20KV-1G300AL	1×300	61/2.52	5.5	2.5	44	2140
RF33226-XKDT-12/20KV-1G400AL	1×400	61/2.85	5.5	2.6	47	2480
RF33226-XKDT-12/20KV-1G500AL	1×500	61/3.20	5.5	2.7	51	2920
RF33226-XKDT-12/20KV-1G630AL	1×630	127/2.52	5.5	2.9	56	3580

XKDT–YT Three Core 12/20KV Aluminium Conductor

Cable Code	No. of cores& Nominal Conductor Cross Sectional Area No.×mm²	No. & Nominal Diameter of Strands No/mm	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
RF33226-XKDT-YT-12/20KV-3G95AL	3×95	19/2.52	5.5	3.3	72	3310
RF33226-XKDT-YT-12/20KV-3G150AL	3×150	37/2.25	5.5	3.5	79	4360
RF33226-XKDT-YT-12/20KV-3G240AL	3×240	61/2.25	5.5	3.8	90	6020
RF33226-XKDT-YT-12/20KV-3G300AL	3×300	61/2.52	5.5	4.0	98	7000
RF33226-XKDT-YT-12/20KV-3G400AL	3×400	61/2.85	5.5	4.3	106	8010

XKDT–FT Three Core 12/20KV Copper Conductor Galvanized Steel Flat Wire Armoured

Cable Code	No. of cores& Nominal Conductor Cross Sectional Area No.×mm²	No. & Nominal Diameter of Strands No/mm	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm		Nominal Overall Diameter mm	Nominal Weight kg/km
				Inner	Outer		
RF33226-XKDT-FT-12/20KV-3G50CU	3×50	19/1.78	5.5	1.6	3.0	72.9	7470
RF33226-XKDT-FT-12/20KV-3G95CU	3×95	19/2.52	5.5	1.7	3.3	81.5	10100
RF33226-XKDT-FT-12/20KV-3G150CU	3×150	37/2.25	5.5	1.8	3.5	89.1	12800
RF33226-XKDT-FT-12/20KV-3G240CU	3×240	61/2.25	5.5	2.0	3.8	99.5	16850


UV Resistant


Water Resistant


Laid In Ducts

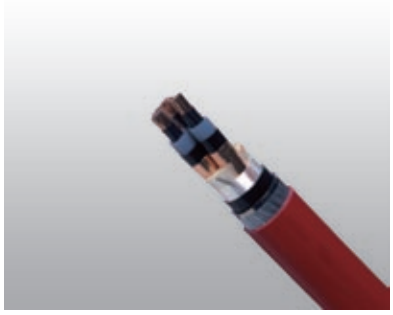

Buried in Ciround

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

33KV LSZH Power Cables to BS 6622/BS 7835

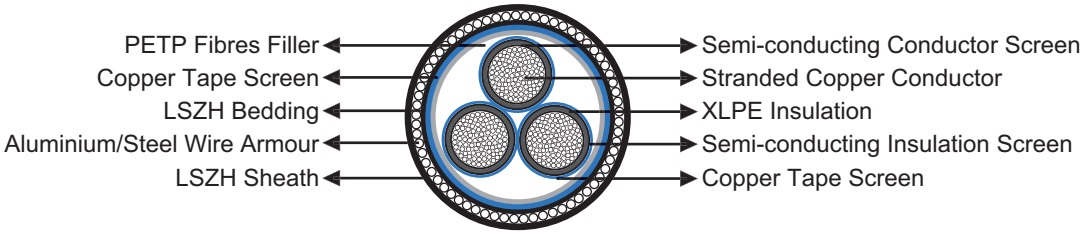
Applications

The cables are power cables for power networks, underground, outdoors and in cable ducting.



Standard

- BS 6622 (PVC)
- BS 7835 (LSZH)



Construction

- Conductor: Class 2 stranded plain copper conductor to BS EN 60228: 2005 (previously BS 6360).
- Conductor Screen: Semi-conducting material.
- Insulation: XLPE (Cross-Linked Polyethylene) Type GP8 to BS 7655.
- Insulation Screen: Semi-conducting material.
- Metallic Screen: Individual and overall copper tape screen to BS 6622.
- Filler: PETP (Polyethylene Terephthalate) fibres.
- Separator: Binding tape.
- Bedding: PVC Type TM1 to BS 7655 or LSZH.
- Armour: Aluminium wire armoured (AWA) (for single core cables) or steel wire armoured (SWA) (for multicore cables).
- Sheath: PVC Type TM1 to BS 7655 or LSZH.

Electrical Characteristics at 20℃

Nominal Conductor Cross Section	mm²	50	70	95	120	150	185	240
Maximum DC Conductor Resistance	Ω/km	0.387	0.268	0.193	0.153	0.124	0.0991	0.0754
Voltage Rating	KV	19/33						

Nominal Conductor Cross Section	mm²	300	400	500	630	800	1000
Maximum DC Conductor Resistance	Ω/km	0.0601	0.047	0.0366	0.0283	0.0221	0.0176
Voltage Rating	KV	19/33					

Mechanical and Thermal Properties

- Minimum Bending Radius: 15×OD (for single core cables); 12×OD (for three core cables).
- Temperature Range: 0℃ to +90℃ (during operation); 0℃ to +60℃ (during installation)

Dimensions and Weight

Cable Code	No. of cores& Nominal Conductor Cross Sectional Area No.×mm²	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm		Nominal Overall Diameter mm	Nominal Weight kg/km
			Inner	Outer		
Copper Conductor						
RF6622-RHVMV-19/33KV-1G70CU	1×70	8.0	1.2	2.2	41.0	2300
RF6622-RHVMV-19/33KV-1G95CU	1×95	8.0	1.2	2.3	42.9	2650
RF6622-RHVMV-19/33KV-1G120CU	1×120	8.0	1.2	2.3	44.5	3000
RF6622-RHVMV-19/33KV-1G150CU	1×150	8.0	1.3	2.4	47.3	3500
RF6622-RHVMV-19/33KV-1G185CU	1×185	8.0	1.3	2.5	49.3	4000
RF6622-RHVMV-19/33KV-1G240CU	1×240	8.0	1.3	2.5	51.7	4650
RF6622-RHVMV-19/33KV-1G300CU	1×300	8.0	1.4	2.6	54.4	5450
RF6622-RHVMV-19/33KV-1G400CU	1×400	8.0	1.4	2.7	57.7	6350
RF6622-RHVMV-19/33KV-1G500CU	1×500	8.0	1.5	2.8	61.1	7600
RF6622-RHVMV-19/33KV-1G630CU	1×630	8.0	1.5	2.9	65.0	9150
RF6622-RHVMV-19/33KV-1G800CU	1×800	8.0	1.6	3.0	71.6	11100
RF6622-RHVMV-19/33KV-1G1000CU	1×1000	8.0	1.7	3.2	76.5	13400
RF6622-RHVMV-19/33KV-3G50CU	3×50	8.0	1.8	3.4	78.2	9150
RF6622-RHVMV-19/33KV-3G70CU	3×70	8.0	1.8	3.5	82.1	10300
RF6622-RHVMV-19/33KV-3G95CU	3×95	8.0	1.9	3.6	86.1	11600
RF6622-RHVMV-19/33KV-3G120CU	3×120	8.0	2.0	3.7	90.0	12800
RF6622-RHVMV-19/33KV-3G150CU	3×150	8.0	2.0	3.8	93.2	14050
RF6622-RHVMV-19/33KV-3G185CU	3×185	8.0	2.1	3.9	97.5	15650
RF6622-RHVMV-19/33KV-3G240CU	3×240	8.0	2.2	4.1	103.3	18200
RF6622-RHVMV-19/33KV-3G300CU	3×300	8.0	2.3	4.3	108.8	21100
RF6622-RHVMV-19/33KV-3G400CU	3×400	8.0	2.4	4.5	116.1	24200
Aluminium Conductor						
RF6622-RHVMV-19/33KV-1G70AL	1×70	8.0	1.2	2.2	41.0	1850
RF6622-RHVMV-19/33KV-1G95AL	1×95	8.0	1.2	2.3	42.9	2100
RF6622-RHVMV-19/33KV-1G120AL	1×120	8.0	1.2	2.3	44.5	2250
RF6622-RHVMV-19/33KV-1G150AL	1×150	8.0	1.3	2.4	47.3	2600
RF6622-RHVMV-19/33KV-1G185AL	1×185	8.0	1.3	2.5	49.3	2850
RF6622-RHVMV-19/33KV-1G240AL	1×240	8.0	1.3	2.5	51.7	3150
RF6622-RHVMV-19/33KV-1G300AL	1×300	8.0	1.4	2.6	54.4	3600
RF6622-RHVMV-19/33KV-1G400AL	1×400	8.0	1.4	2.7	57.7	4000
RF6622-RHVMV-19/33KV-1G500AL	1×500	8.0	1.5	2.8	61.1	4500
RF6622-RHVMV-19/33KV-1G630AL	1×630	8.0	1.5	2.9	65.0	5250
RF6622-RHVMV-19/33KV-1G800AL	1×800	8.0	1.6	3.0	71.6	6150
RF6622-RHVMV-19/33KV-1G1000AL	1×1000	8.0	1.7	3.2	76.5	7200
RF6622-RHVMV-19/33KV-3G50AL	3×50	8.0	1.8	3.4	78.2	8300
RF6622-RHVMV-19/33KV-3G70AL	3×70	8.0	1.8	3.5	82.1	9050
RF6622-RHVMV-19/33KV-3G95AL	3×95	8.0	1.9	3.6	86.1	9800
RF6622-RHVMV-19/33KV-3G120AL	3×120	8.0	2.0	3.7	90.0	10600
RF6622-RHVMV-19/33KV-3G150AL	3×150	8.0	2.0	3.8	93.2	11350
RF6622-RHVMV-19/33KV-3G185AL	3×185	8.0	2.1	3.9	97.5	12250
RF6622-RHVMV-19/33KV-3G240AL	3×240	8.0	2.2	4.1	103.3	13700
RF6622-RHVMV-19/33KV-3G300AL	3×300	8.0	2.3	4.3	108.8	15500
RF6622-RHVMV-19/33KV-3G400AL	3×400	8.0	2.4	4.5	116.1	16750

PVC Sheath

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

LSZH Sheath

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

1800V DC Positive Traction Cables

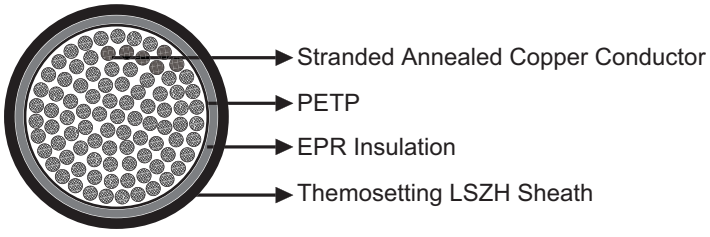
Applications

These DC power cables are used for urban railways for 1500V DC traction power system with feedback current and return current, suitable for fixed installation. The cables are suitable for installations in ducts, tunnels, and cable troughs or on the cable bridges etc.

Standard

- IEC60092
- BS 7655
- IEC60502
- BS 6883 Type 657 SW4

Construction



- Conductor: Class 2 stranded annealed bare copper conductors to BS EN 60228: 2005 (previously BS 6360).
- Core Wrapping: PETP (Polyethylene Terephthalate).
- Insulation: EPR, GP8 to BS 6899 / BS 7655 RS2 / ICEA S-95-658.
- Sheath: Thermosetting LSZH compound SW4 or LRS1 to BS 7655 / ICEA T-33-655, with enhanced oil resistance, and minimum tear resistance.

Electrical Characteristics at 20℃

Nominal Conductor Cross Section	mm²	70	95	120	150	185	240	300	400	500
Maximum DC Conductor Resistance	Ω/km	0.277	0.21	0.164	0.132	0.108	0.0817	0.0654	0.0495	0.0391
Minimum Insulation Resistance	MΩ.km	539	472	433	390	355	313	280	245	221
Assigned Continuous Current Rating	A	330	400	464	530	612	648	853	1010	1195
Conductor Short Circuit Current 1s	kA	10.0	13.5	17.1	21.4	26.4	34.3	42.9	57.2	71.5
Voltage Rating	KV	1.8								

Mechanical and Thermal Properties

- Minimum Bending Radius: 6×OD
- Temperature Range: -40℃ to +90℃ (during operation); -25℃ to +60℃ (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 Insulation Thickness mm	Nominal Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km	Polarity
RF6883-DZ1-U-1800P-1G70	1×70	19/2.14	4.0	2.0	20.3	1371	Positive
RF6883-DZ1-U-1800P-1G95	1×95	19/2.52	4.0	2.0	21.7	1641	Positive
RF6883-DZ1-U-1800P-1G120	1×120	37/2.03	4.0	2.2	23.6	1958	Positive
RF6883-DZ1-U-1800P-1G150	1×150	37/2.25	4.0	2.2	19.3	2295	Positive
RF6883-DZ1-U-1800P-1G185	1×185	37/2.52	4.0	2.3	27.3	2682	Positive
RF6883-DZ1-U-1800P-1G240	1×240	61/2.25	4.0	2.3	30.7	3341	Positive
RF6883-DZ1-U-1800P-1G300	1×300	61/2.52	4.0	2.4	33.3	4016	Positive
RF6883-DZ1-U-1800P-1G400	1×400	61/2.85	4.0	2.4	40.3	5071	Positive
RF6883-DZ1-U-1800P-1G500	1×500	91/2.65	4.0	2.5	42.3	6275	Positive
RF6883-DZ1-U-1800P-1G630	1×630	127/2.52	4.0	2.5	43.4	6980	Positive
RF6883-DZ1-U-1800P-1G800	1×800	127/2.85	4.0	2.7	50.6	8785	Positive

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

300V DC Negative Traction Cables

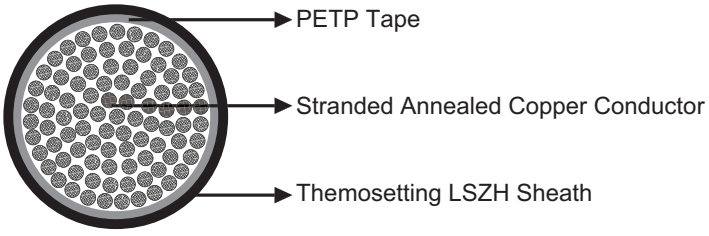
Applications

These DC power cables are used for urban railways for 1500V DC traction power system with feedback current and return current, suitable for fixed installation. The cables are suitable for installations in ducts, tunnels, and cable troughs or on the cable bridges etc.

Standard

- IEC60092
- BS 7655
- IEC60502
- BS 6883 Type 657 SW4

Construction



- Conductor: Class 2 stranded annealed bare copper conductors to BS EN 60228: 2005 (previously BS 6360).
- Core Wrapping: PETP (Polyethylene Terephthalate).
- Sheath: Thermosetting LSZH compound SW4 or LRS1 to BS 7655 / ICEA T-33-655 with enhanced oil resistance, and minimum tear resistance.

Electrical Characteristics at 20℃

Nominal Conductor Cross Section	mm²	70	95	120	150	185	240	300	400	500
Maximum DC Conductor Resistance	Ω/km	0.277	0.21	0.164	0.132	0.108	0.0817	0.0654	0.0495	0.0391
Minimum Insulation Resistance	MΩ.km	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Conductor Short Circuit Current 1s	kA	10.0	13.5	17.1	21.4	26.4	34.3	42.9	57.2	71.5
Voltage Rating	KV	0.3								

Mechanical and Thermal Properties

- Minimum Bending Radius: 6×OD
- Temperature Range: -40℃ to +90℃ (during operation); -25℃ to +60℃ (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 Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km	Polarity
RF6883-ES05Z1-U-300N-1G70	1×70	19/2.14	4.0	19.4	1055	Negative
RF6883-ES05Z1-U-300N-1G95	1×95	19/2.52	4.0	20.7	1307	Negative
RF6883-ES05Z1-U-300N-1G120	1×120	37/2.03	4.0	22.6	1598	Negative
RF6883-ES05Z1-U-300N-1G150	1×150	37/2.25	4.0	24.3	1913	Negative
RF6883-ES05Z1-U-300N-1G185	1×185	37/2.52	4.0	26.3	2274	Negative
RF6883-ES05Z1-U-300N-1G240	1×240	61/2.25	4.0	29.1	2893	Negative
RF6883-ES05Z1-U-300N-1G300	1×300	61/2.52	4.0	32.3	3530	Negative
RF6883-ES05Z1-U-300N-1G400	1×400	61/2.85	4.0	36.3	4532	Negative
RF6883-ES05Z1-U-300N-1G500	1×500	91/2.65	4.0	40.3	5684	Negative
RF6883-ES05Z1-U-300N-1G630	1×630	127/2.52	4.0	42.3	6400	Negative
RF6883-ES05Z1-U-300N-1G800	1×800	127/2.85	4.0	46.5	8094	Negative

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