



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

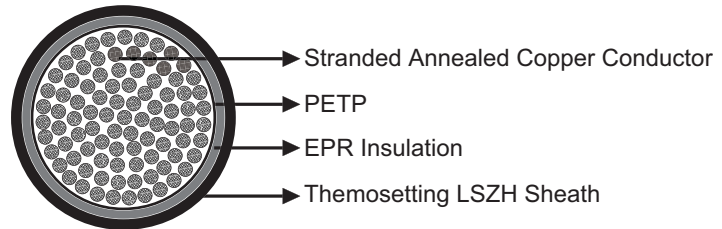
Construction

- 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°C

Nominal Conductor Cross Section	mm ²	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°C to +90°C (during operation); -25°C to +60°C (during installation)

➤ **Dimensions and Weight**

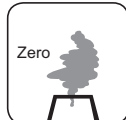
Cable Code	No. of cores & Nominal Conductor Cross Sectional Area No. × mm ²	No. & Nominal Diameter of Strands No./mm	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km	Polarity
RF6883-DZ1-U-1800P-1G70	1×70	19/2.14	4.0	2.0	20.3	1371	Positive
RF6883-DZ1-U-1800P-1G95	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

