



• Introduction

Eastful specializes in the production of high-quality power cables specifically designed to meet the rigorous demands of rail transit systems. The railway transit power cable exemplifies the commitment to excellence in performance, safety, and reliability. This state-of-the-art solution for power distribution in rail transit applications combines superior materials with innovative design to deliver outstanding performance under challenging conditions.

• Application

DC Traction Power Distribution: Supplying power to trains and auxiliary systems within rail transit systems.
Connection Between Traction Power Substations and Overhead Lines or Third Rails: Ensuring reliable power transfer.
Power Supply for Signaling and Communication Systems: Supporting essential control and communication functions.
Lighting and Auxiliary Equipment: Powering station and platform lighting and other auxiliary systems.

• Advantages

Excellent Flame Retardancy:
Specialized halogen-free, low smoke, and flame-retardant materials meet both Class A and B1 flame retardancy requirements, significantly reducing the risk of injury in case of cable combustion.
Superior Water Resistance:
Unique structural design and material selection ensure excellent longitudinal water resistance.
Enhanced Protection:

Special tapes and sheathing materials provide outstanding protection against termites, rodents, UV rays, and water, minimizing external damage and enhancing operational safety.

Low Operating Costs:

Compared to AC lines, DC cables like ours offer lower investment costs for the same power transmission capacity and reliability, while also improving the operational reliability and dispatch flexibility of the power system.

• Performance

Voltage: 750/1500V
Specifications: Available in sizes from 120mm² to 400mm²
Operating Temperature: -15°C to 60°C
Storage Temperature: -15°C to 40°C

• Construction

Conductor: Stranded annealed bare or metal coated copper conductors.

Insulation: Cross-linked polyethylene (irradiated type) for superior thermal and electrical performance.

Sheath: Low smoke zero halogen (LSZH) polyolefin for enhanced environmental protection and safety.

Protective Layers: Special tapes and sheath materials provide protection against termites, rodents, UV rays, and water ingress.

• Specification

-IEC 60502: Specifies requirements for power cables with extruded insulation and their accessories.

-EN 50363: Sets construction and testing standards for railway power cables with a nominal voltage of 6 kV and above.

• Eastful Cable Lab



We have CNAS Accredited Facility to assure conformity assessment services with a focus on quality, expertise, and customer satisfaction.

CNAS has international mutual recognition among IAF, ILAC, APLAC and PAC.

• Accreditation

We meet the requirements of ISO9001, ISO14001, ISO45001 and ISO50001 and our cables have certificate of CCC, RoHS, CASC, UL, cUL, TÜV Rheinland and CCS.



• National Green Factory



Our facility has been awarded of National Green Factory by Ministry of Industry and Information Technology of China.

We are committed to the development of high-end, intelligent and green manufacturing industry.

*The overall energy consumption level of green factories is better than the energy efficiency benchmark level.

Technical Parameters

No. of Cores × Nominal Cross Section Area	No. / Nominal Dia. of Strands	Nominal Insulation Thickness	Nominal Sheath Thickness	Nominal Overall Dia.	Nominal Weight	Max. Resistance of Conductor at 20°C		Polarity
						Plain Wires	Metal Coated Wires	
No.xmm ²	No./mm	mm	mm	mm	kg/km	Ω/km	Ω/km	
Class 2 Conductor								
1 × 70	19/2.14	2.2	1.8	18.3	921	0.268	0.270	Positive
1 × 95	19/2.52	2.4	1.8	18.7	934	0.193	0.195	Positive
1 × 120	37/2.03	2.4	1.8	22.6	1529	0.153	0.154	Positive
1 × 150	37/2.25	2.4	1.8	24.2	1828	0.124	0.126	Positive
1 × 185	37/2.52	2.4	1.8	26.0	2233	0.0991	0.100	Positive
1 × 240	61/2.25	2.4	1.8	28.7	2856	0.0754	0.0762	Positive
1 × 300	61/2.52	2.4	2.0	31.5	3848	0.0601	0.0607	Positive
1 × 400	61/2.85	2.6	2.1	35.1	4491	0.0470	0.0475	Positive
1 × 500	91/2.65	2.8	2.9	40.2	5773	0.0366	0.0369	Positive
1 × 630	127/2.52	2.8	2.9	44.2	7293	0.0283	0.0286	Positive
1 × 800	127/2.85	2.8	2.9	48.5	9157	0.0221	0.0224	Positive
Class 5 Conductor								
1 × 70	360/0.5	2.2	1.8	18.3	921	0.272	0.277	Positive
1 × 95	475/0.5	2.4	1.8	18.7	934	0.206	0.210	Positive
1 × 120	608/0.5	2.4	1.8	22.6	1529	0.161	0.164	Positive
1 × 150	756/0.5	2.4	1.8	24.2	1828	0.129	0.132	Positive
1 × 185	925/0.5	2.4	1.8	26.0	2233	0.106	0.108	Positive
1 × 240	1221/0.5	2.4	1.8	28.7	2856	0.0801	0.0817	Positive
1 × 300	1525/0.5	2.4	2.0	31.5	3848	0.0641	0.0654	Positive
1 × 400	2013/0.5	2.6	2.1	35.1	4491	0.0486	0.0495	Positive
1 × 500	1769/0.6	2.8	2.9	40.2	5773	0.0384	0.0391	Positive
1 × 630	2257/0.6	2.8	2.9	44.2	7293	0.0287	0.0292	Positive

No. of Cores × Nominal Cross Section Area	No. / Nominal Dia. of Strands	Nominal Insulation Thickness	Nominal Sheath Thickness	Nominal Overall Dia.	Polarity
No.xmm ²	No./mm	mm	mm	mm	
1×70	19/2.14	4.0	19.4	1055	Negative
1×95	19/2.52	4.0	20.7	1307	Negative
1×120	37/2.03	4.0	22.6	1598	Negative
1×150	37/2.25	4.0	24.3	1913	Negative
1×185	37/2.52	4.0	26.3	2274	Negative
1×240	61/2.25	4.0	29.1	2893	Negative
1×300	61/2.52	4.0	32.3	3530	Negative
1×400	61/2.85	4.0	36.3	4532	Negative
1×500	91/2.65	4.0	40.3	5684	Negative
1×630	127/2.52	4.0	42.3	6400	Negative
1×800	127/2.85	4.0	46.5	8094	Negative