RAILWAY SIGNALING & COMMUNICATION

GENERAL CABLE SOLUTIONS FOR RAILWAYS APPLICATIONS

General Cable manufactures an extensive range of cables for the railway industry. These infrastructures require a wide amount of different products for diverse applications. For these requirements, we consistently bring new innovative cabling concepts to the industry through better technology, superior safety, easier and faster installation and extended performance.

General Cable is capable to supply energy, signalling, communication cables and components for all these installations.

- For the electrification system: all energy trackside cables, feeders and diverse LV, MV or HV cables used for the whole power system.
- For this signalling system: a vast range of multiconductors, multipairs, quads for most of the European standards or specifications.
- For the communication: fibre optics, telephone, coaxial radiating cables and structured cabling systems products for LAN uses such in stations, or WAN systems.,
- For the reliability and security of railway infrastructures: balise cable for the European Rail Traffic Management System (ERTMS).

General Cable Europe & Med is homologated for most of major railway operator specifications including French standards (RATP, SNCF homologations), German standards for Deutsche Bahn (VDE homologations), Spanish standards for RENFE (ADIF homologations), British standard and many other standards for countries as Belgium, Romania, ...

For all products, we provide a long experience and know how in Low-Smoke, Halogen Free cables, strong fire performance, and electromagnetic protection.
Moreover, General Cable's innovative technologies are the best in class for powering your light rail, transmitting safety information and data through reliable or high speed infrastructures.

General Cable invests substantially in R&D to satisfy growing needs and solutions in the railway infrastructures, in order to be your key partner. We also are willing to cooperate in advising to engineering companies and operators to enhance specifications and standards.
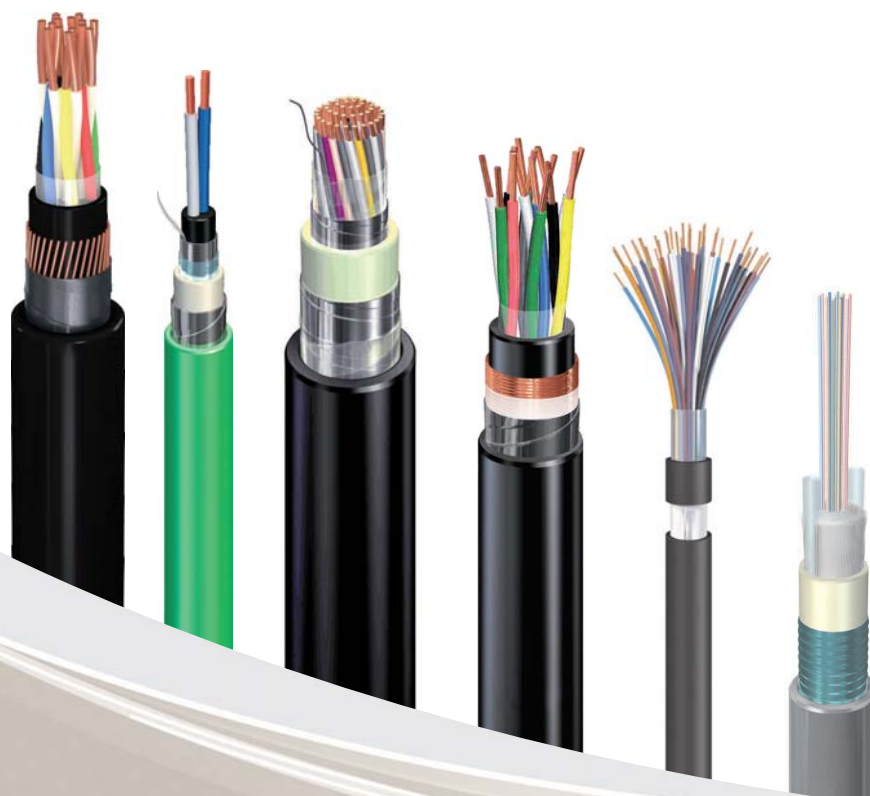
FRENCH STANDARDS

Cable	Standard	Applications / Characteristics
ZPAU ZPAU-SH* ZC03 ZC03-SH*	SNCF CT 445	Used for control and signalling circuits in railway networks. Connects the signalling equipment centre to the trackside equipment. Armoured cable along electrified lines. Cable with reduction factor.
ZPFU ZPFU-SH*	SNCF CT 445	Used for control and signalling circuits in railway networks. Connects the signalling equipment centre to the trackside equipment. Armoured cable.
ZPGU ZPGU-SH*	SNCF CT 445	Used for control and signalling circuits in railway networks. Cable for fixed equipment. Armoured cable.
SPGU	SNCF 698D	Used for signalling circuits. Usually installed in conduits or overhead.
T13	NF F 55-623	Used for signalling in tramway lines. Armoured cable.
K23*	NF F 55-623	Halogen free cable used in tunnel for signalling, control and transmission in underground railway networks. Armoured cable.
K24*	NF F 55-624	Halogen free cables used for telecommunications for local purposes in underground railway networks.
K13	NF F 55-633	Used for signalling in metro, local trains and tramway lines. Armoured cable.
ZUG ZUT SUG	SNCF CT 455	Connects the internal equipment in signalling circuits. Cables for indoor usage.
SCG SCG-S SCG-SH*	SNCF CT 466	Used in signalling local circuits or power supply cables for trackside.
CV ** CVZ** CV-S** CVZ-S**	SNCF CT 500	Used for internal signalling circuits. Cables for indoor usage in traffic control centre and equipment shelter.
SRS-13*	RATP Specification	Halogen free and watertight cable to install along the tracks. Armoured cable.
K209B*	RATP K209B	Optical fiber cable used in long distances. Armoured cable
CT2242	SNCF CT2242	Outdoor single trackside optical fiber cable for duct installation. Armoured cable.
CT2243	SNCF CT2243	Outdoor single mode trackside optical fiber cable for open trench installation.
K26*	RATP K26	Coaxial and radiating 50 ohms cable.

* Can be used in tunnels.   **Halogen free version on demand.

General Cable

SPANISH STANDARDS

Cable	Standard	Applications / Characteristics
EAP EAT*	ADIF E.T. 03.365.051.6	Used for signalling circuits in railway networks and can be installed in ducts.
EAPSP EATST	ADIF E.T. 03.365.051.6	Used for signalling circuits in railway networks and can be installed directly into the ground or in ducts. Armoured cable.
EAPSP (PI) EATST (PI)*	ADIF E.T. 03.365.051.6	Used for signalling circuits in railway networks and can be installed directly into the ground or in ducts. Armoured cable. Individual screening.
EAPSP-8	ADIF E.T. 03.365.051.6	Used for signalling circuits in railway networks. Self-supported cable.
EAPSP-R	ADIF E.T. 03.365.051.6	Used for signalling circuits in railway networks and can be installed directly into the ground or in ducts. Jelly filled and armoured cable.
CCPSSP-FR CCTSST-FR*	ADIF E.T. 03.365.051.6	Used for signalling circuits in railway networks and can be installed directly into the ground or in ducts. Armoured cable. Cable with reduction factor.
CCPSSP(PI) CCTSST(PI)*	ADIF E.T. 03.365.051.6	Used for signalling circuits in railway networks and can be installed directly into the ground or in ducts. Armoured cable. Cable with reduction factor. Individual screening.
CCPSSP-R-FR CCTSST-R-FR*	ADIF E.T. 03.365.051.6	Used for signalling circuits in railway networks and can be installed directly into the ground or in ducts. Jelly filled and armoured cable. Cable with reduction factor. Individual screening.

GERMAN STANDARDS

| Cable	Standard	Applications / Characteristics
A-2YY	DLK 1.013.102y	Used for signalling circuits in railway networks.
A-2Y2YB2Y	DB AG 416.0113 DLK 1.013.107y	Used for signalling circuits in railway networks and can be installed in ducts. Armoured cable.
A-2Y(St)YBY	DLK 1.013.201y	Used for signalling circuits in railway networks and can be installed in ducts. Armoured cable.
A-2Y(L)2YV A-2Y(L)HV*	DB AG 416.0115 DLK 1.013.109y	Used for signalling circuits in railway networks. Reinforced sheath.
A-2Y(L)HBH*	DB AG 416.0115 DLK 1.013.109y	Used for signalling circuits in railway networks and can be installed in ducts. Armoured cable in Halogen free version.
AJ-2Y(L)2YDB2Y AJ-2Y(L)HDBH*	DB AG 416.0115 DLK 1.013.109y	Used for signalling circuits in railway networks and can be installed in ducts. Armoured cable. Cable with reduction factor.
AJ-2YOF(L)2YDB2Y	DB AG 416.0115 DLK 1.013.109y	Used for signalling circuits in railway networks and can be installed directly into the ground or in ducts. Jelly filled and armoured cable. Cable with reduction factor.

* Can be used in tunnels.

General Cable

BRITISH STANDARDS

Cable	Standard	Applications / Characteristics
AXLE COUNTER	NR/L2/SIG/30060	Used for signalling circuits in railway networks. Used in axle counter system.
UNIT TWIN COPPER TELECOMMUNICATONS	NR/PS/TEL/00015	Used for communications in railway networks. Jelly filled cable.
SCADA/PILOT	NR/PS/ELP/27220	Used for modem based supervisory systems operating in the VF range from 300 to 3000 Hz. Jelly Filled cable.
TWIN DATA LINK	BR 1932	Used in connections for Solid State Interlocking (SSI) systems.
G7621 A2 Type 1	LUL G7621 A2	Trackside communications cable used in open locations.
G7621 A2 Type 2*	LUL G7621 A2	Trackside communications cable used in tunnels or underground.
G7622 A2 Type 1	LUL G7622 A2	Trackside communications cable used in open locations.
G7622 A2 Type 2*	LUL G7622 A2	Trackside communications cable used in tunnels or underground.
G7623 A2*	LUL G7623 A2	Trackside communications cable used in tunnels or indoor applications.
TYPE A1, A2 and A3 TYPE B1 and B2 TYPE C1, C2 and C3 TYPE D1 and D2 TYPE E1, E2 and E3	NR/PS/SIG/00005	Used for signalling circuits in railway networks. Used in d.c. circuits where the nominal voltage to earth does not exceed 1100 volts.

OTHER STANDARDS

Cable	Standard	Applications / Characteristics
EUROBALISE	Specification	Used for control and signalling circuits in railway networks with reduction factor. Balise cable for ERTMS (European Rail Traffic Management System). Armoured cable.
SXCAV SXCAG*	INFRABEL S21	Used for control and signalling circuits in railways networks. Connects the signalling equipment centre to the track-side equipment. Armoured cable. Cable with reduction factor.
CSYEY	STAS 8779-86	Used for signalling circuits in railway networks.
CSYEAbzY	STAS 8779-86	Used for signalling circuits in railway networks. Armoured cable.
CSYEAlAbzY-F	STAS 8779-86	Used for signalling circuits in railway networks. Aluminum wires screening. Armoured cable. Cable with reduction factor.
CS2XEAlAbzY	STAS 8779-86	Used for signalling circuits in railway networks. Aluminum wires screening. Armoured cable. Cable with reduction factor.
TCEKPFLEZE	Specification	Used for signalling circuits. Usually installed along the tracks into the ground or in ducts. Armoured cable.

* Can be used in tunnels.

General Cable | ONE COMPANY
CONNECTING THE WORLD
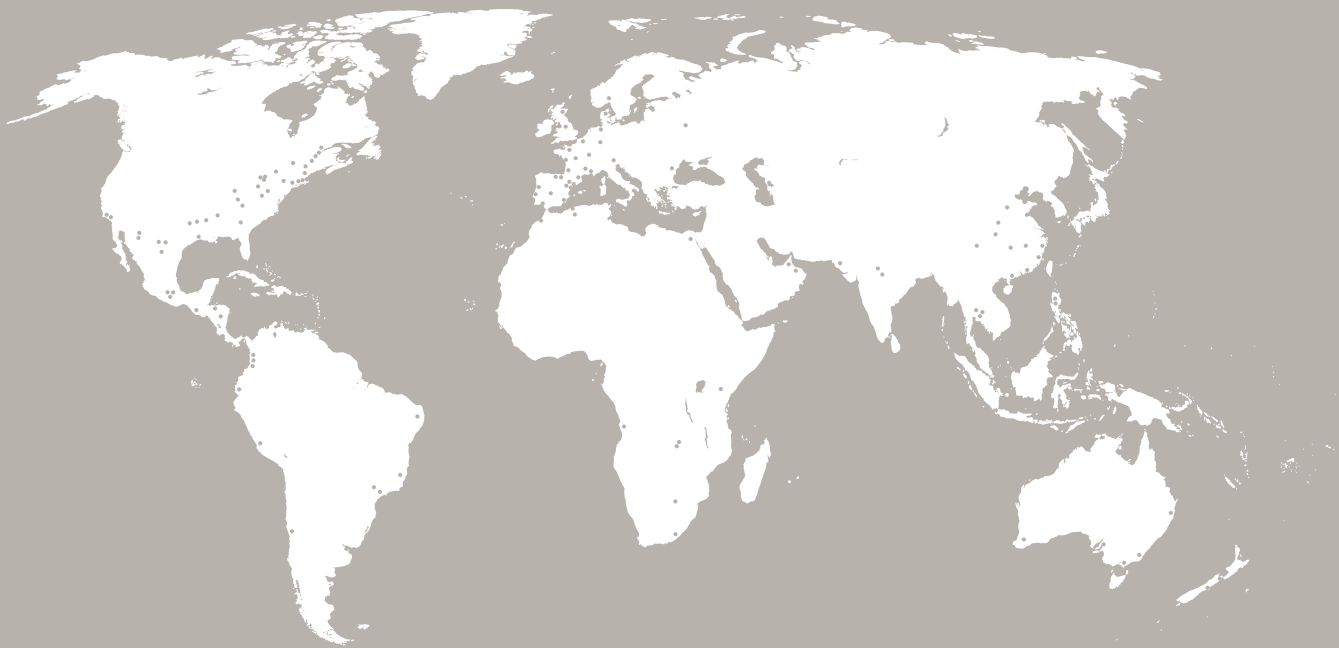
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