



ZPAU COPPER CABLE FOR INDUSTRIAL NETWORKS

Intercity railway signal cable (LGV and AC-electrified lines)

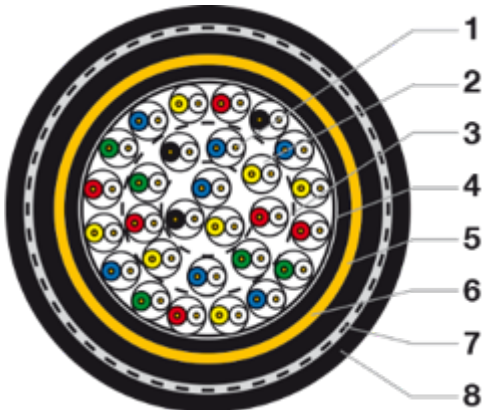
BENEFITS

- Protected against electromagnetic parasitic induction of the overhead line
- Anti-rodent

APPLICATIONS

- Links the centralised control station to the switchgear substations
- Installed in long lengths along 25,000V AC-electrified tracks

GENERAL CHARACTERISTICS



1. Red copper solid core – Class 1
2. Insulation: coloured polyethylene
3. Twisted pair wiring
4. Polyethylene or natural SH water-blocking internal sheath
5. Shielding with ringed copper tape
6. Polyethylene or natural SH separation sheath
7. Armour: 2 steel spiral strips
8. Outer black lead-free PVC or brown SH jacket + marking + metric

Mechanical

- Fire resistance NFC 32070.2.1 (flame retardant) and IEC 60332-1
- Euroclass B2ca-s1a, d2, a1 (ZPAU - SH cables)
- Operating temperature: 70°C
- Resistant to mineral oils, acids and bases
- Bending radius: static 8 x D, dynamic 16 x D
- Duct or buried installation

Electrical

- Linear resistance: 18.1Ω/km
- Operating voltage: 750V
- Capacitance: < 55nF/km
- Protected against electromagnetic interference: reduction factor at 170V/km < 0.24
- Characteristic impedance: 120Ω at 45KHz
- Linear attenuation: < 2.5dB/km at 45kHz

RANGE

PVC	Halogen free	Composition	Cross-sectional area of core (mm ²)	Composition of core Nb x Ømm	Diameter of sheath (mm)	Net weight (kg/km) PVC/ZH	Reel format Length (m)
U3983		1 p.	2.5	1 x 1,78	18,5	688	F 1000
U3771	U3791	4 p.	1	1 x 1,12	19,6	625/740	F 1000
U3772	U3792	7 p.	1	1 x 1,12	22,5	805/920	F 500
U3773	U3793	14 p.	1	1 x 1,12	27,1	1122/1330	F 500
U3774	U3794	21 p.	1	1 x 1,12	32	1496/1675	G 500
U3775	U3795	28 p.	1	1 x 1,12	34,4	1755/2140	G 500

- Other formats available on request
- Associated ranges: ZPAU with 1 p. and 2 p. 1mm², ZPAU with 1.5mm² and 2.5mm² cross-sections
- 2 special cables: ZPAU 2 p. x 1.5mm² TBL for Belgian LGV signalling, ZPAU 1 p. x 2.5mm² ERTMS for the Eurobalise system

NORMS AND STANDARDS

General standards

- SNCF CT 445 specification
- SNCF approved

RECOMMENDATIONS

DOCUMENTATION

- [CATALOGUE ACORAIL](#)